

ST JAMES'S HOSPITAL  
**Annual Report 2019**







## St James's Hospital **Vision, Purpose and Values**

### **Vision**

To be a leading healthcare organisation, nationally and internationally, improving health outcomes through collaboration and innovation.

### **Purpose**

To provide the best care to every patient through our personal and shared commitment to excellence in clinical practice, education, research and innovation, while fostering our partnership with Trinity College Dublin.

### **Values**

#### **Patients matter most to us.**

We provide care that is safe, effective and accessible so that our patients achieve the best possible outcomes and experiences of care.

#### **Respecting people**

Being kind and honest, promoting diversity, collaboration, personal and professional development.

#### **Innovating and sharing knowledge**

We learn, teach, research and innovate to improve health and well-being.

#### **Using resources wisely**

Delivering value, working efficiently and protecting the environment.

### **SUMMARY:**

patients, respect, knowledge and resources

## 1 INTRODUCTION

### 6 1.1 Corporate Structure

Governance and Executive  
Executive Management Group

### 8 1.2 Legal and Banking

## 2 EXECUTIVE REPORT

### 10 2.1 Performance Highlights

## 3 CORPORATE DIRECTORATE REPORTS

### 12 3.1 Finance Department

Transaction Processing Units, including Accounts Payable/ Settlements, Accounts Receivable and Payroll. Technical Expertise Units; Compliance, SAP Support, and Procurement. The Decision Support Unit; Clinical Funding Unit and Management Accounts.

### 14 3.2 Human Resources

HR Business Teams, Centre for Learning & Development, Workforce Information, Occupational Health, Medical Workforce Unit, Employee Relations, and Superannuation.

### 18 3.3 Nursing Services

Nursing Administration, Breast Care Practice, End-of-Life-Care, Nursing Practice Development Unit.

### 21 3.4 Internal Audit

### 22 3.5 Informatics Directorate

### 24 3.6 Facilities Management

Catering, Housekeeping, Laundry, Security, Portering, Tele-communications, Environmental, Chaplaincy, Fire Safety Services, Organisational Health and Safety, Medical Records Management, Technical Services.

### 28 3.7 Capital Projects

## 4 CLINICAL DIRECTORATE REPORTS

### 30 4.1 Haematology, Oncology, Palliative Care (HOPE)

Haematology, Medical Oncology including Cancer Genetics, Palliative Care, Psychological Medicine and Radiation Oncology. The National Centre for Adult Bone Marrow Transplantation and the National Coagulation Centre.

### 38 4.2 Medicine for the Elderly (MedEl)

The Mercer's Institute for Successful Ageing Unit, Stroke Service, Bone Health and Osteoporosis, Unit, Falls and Blackout Unit, Local Asset Mapping Project, The Irish Longitudinal Study, on Ageing, Dementia Services Information and Development Centre.



#### 41 **4.3 Medical and Emergency (MED)**

Acute Floor (Accident & Emergency), Nurse Education, Clinical Placement, Advanced Nurse Practitioner Clinical Activity, Education Activity, Professional Development Activity and Representation, Emergency Department Activity, Cardiology, Dermatology, Endocrinology/ Diabetic Day Centre (DDC), Genito-Urinary Medicine and Infectious Diseases (GUIDe) Clinic, Hepatology Centre, Respiratory Medicine and the Respiratory Assessment Unit, Rheumatology, Neurology, Neurophysiology, Ophthalmology, Gastroenterology and Endoscopy Unit, Clinical Immunology, Nephrology and Dialysis.

#### 42 **4.4 Surgery, Anaesthesia and Critical Care (SACC)**

Anaesthesia and Pre-assessment, Breast Care, Cardiothoracic Surgery, Critical Care, Upper and Lower Gastrointestinal Surgery to include General Surgery, Gynaecology, Oral and Maxillofacial Surgery, Orthodontics, Prosthodontics and Cleft ambulatory care, Orthopaedics, Otolaryngology, Plastics, Reconstructive and Burn Surgery, Acute and Chronic Pain Management, Vascular Surgery and Urology and The Hospital Sterile Unit.

#### 44 **4.5 Laboratory Medicine (LabMed)**

Biochemistry (including Point of Care Testing), Cancer Molecular Diagnostics, Haematology (incorporating Coagulation and Cryobiology, Histopathology (incorporating Cytopathology), Immunology, The Irish Mycobacteria Reference Laboratory (IMRL) Microbiology (incorporating Virology and Infection Prevention and Control), The National MRSA Reference Laboratory (NMRSARL), Phlebotomy and Transfusion Medicine (incorporating Haemovigilance).

#### 46 **4.6 Diagnostic Imaging**

Imaging services include CT, MRI, ultrasound, breast imaging, nuclear medicine, PET/CT, interventional radiology and general X-ray. A radiographic service is also provided to the Cardiac Cath Lab, Endovascular Suite, Endoscopy, DXA and Theatres.

## 5 **CLINICAL SUPPORT SERVICES**

---

### 48 **5.1 Speech and Language Therapy, Medical Social Work, Clinical Nutrition, Occupational Therapy, Physiotherapy (SCOPE)**

Speech and Language Therapy, Medical Social Work, Clinical Nutrition, Occupational Therapy, Physiotherapy, Pharmacy Department, Clinical Pharmacy Service, Dispensary and Distribution Services, Aseptic/ Compounding Services, National Medicines Information Centre (NMIC), Centre for Advances.

### 50 **5.2 Pharmacy**

Pharmacy Department, Clinical Pharmacy Service, Dispensary and Distribution Service.

### 51 **5.3 National Medicines Information Centre (NMIC)**

## 6 **EDUCATION AND RESEARCH**

---

### 52 **6.1 The William Stokes Post-Graduate Centre**

## 7 **RESEARCH AND DEVELOPMENT HUB**

---

### 54 **7.1 Clinical Research Facility**

### 56 **7.2 Research and Innovation Office (R&I Office)**

## 8 **PATIENT GROUP**

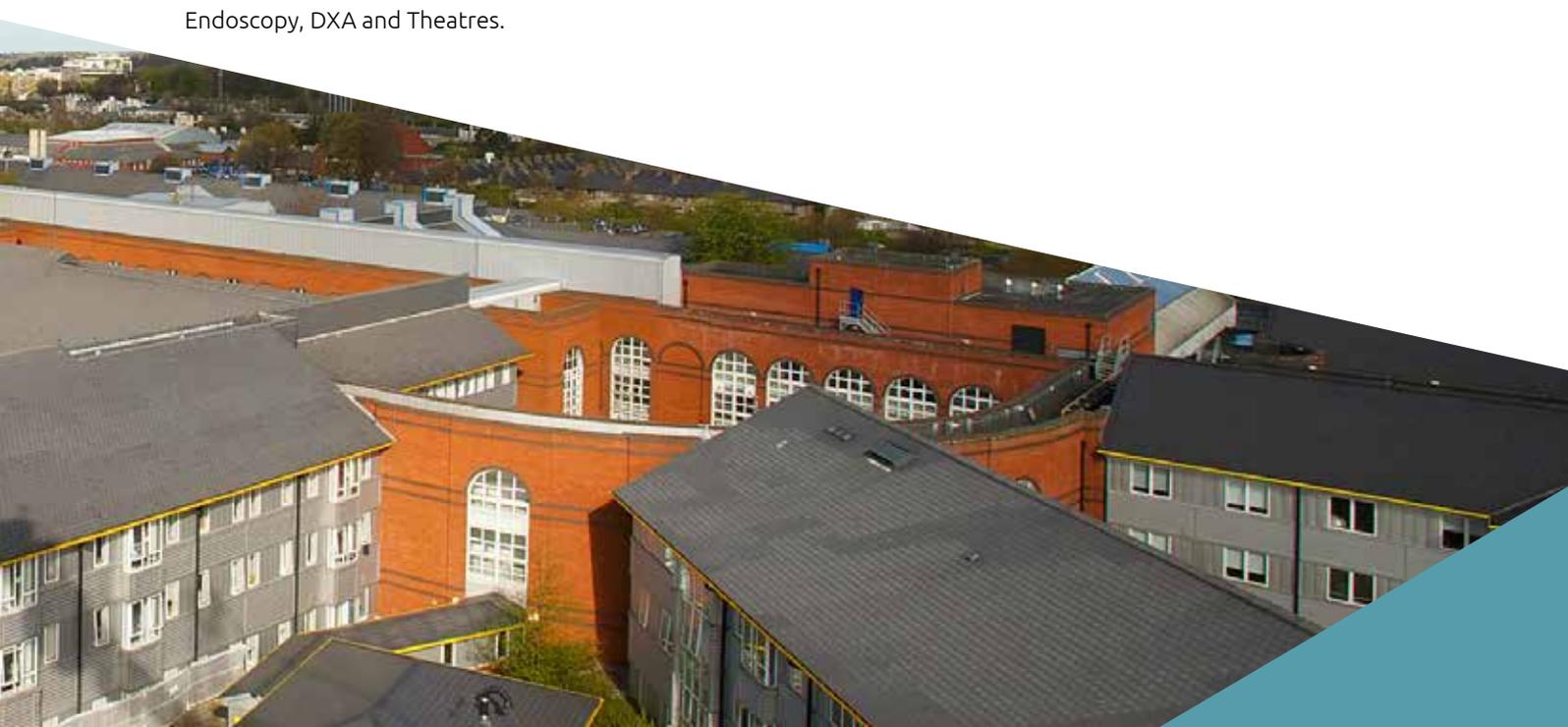
---

### 58 **8.1 Patient Representative Group**

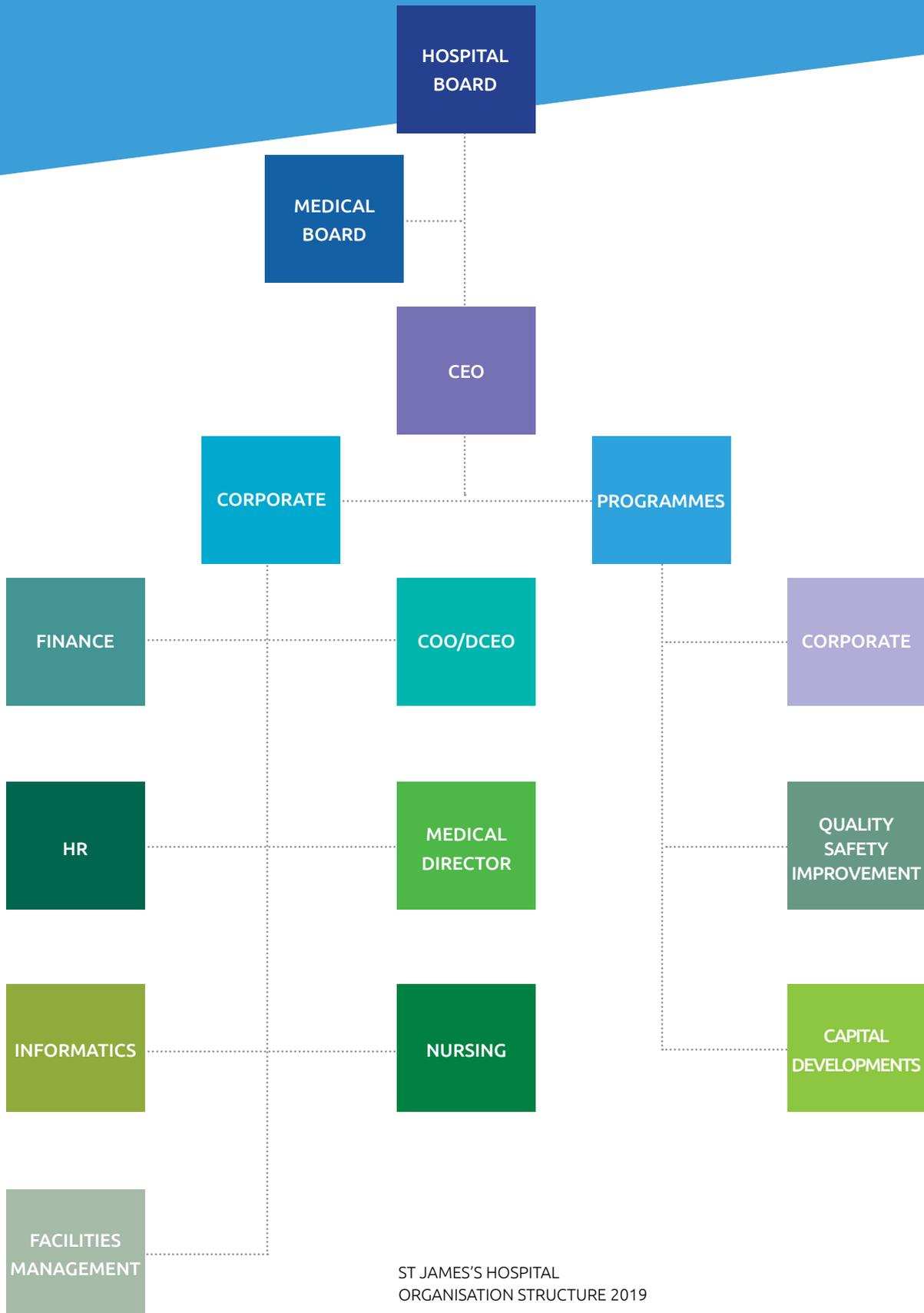
## 9 **PUBLICATIONS**

---

### 60 **9.1 Publications**



# 1.1 Corporate Structure



ST JAMES'S HOSPITAL  
ORGANISATION STRUCTURE 2019

# 1.1 Corporate Structure

## EMG members

1. Mr Lorcan Birthistle, CEO
2. Ms Ann Dalton, Deputy CEO
3. Dr Finbarr O'Connell, Executive Medical Director
4. Ms Sharon Slattery, Director of Nursing
5. Mr Simon Moores, Chief Operations Officer
6. Ms Joanna Bennett, Director of Finance
7. Dr Una Geary, Director of Quality, Safety and Improvement (QSID)
8. Mr Niall McElwee, Director of Capital Projects
9. Mr Vincent Callan, Director of Facilities Management
10. Mr Hugh Duggan, Director of Human Resources
11. Ms Gemma Garvan, Director of Informatics
12. Prof. Ciaran Johnson, Clinical Director, Diagnostic Imaging Directorate (DiagIm)
13. Prof. Conal Cunningham, Clinical, Director Medicine for the Elderly Directorate (MedEl)
14. Mr Vincent Young, Clinical, Director, Surgery, Anaesthesia and Critical Care Directorate (SACC)
15. Prof. Declan Byrne, Clinical Director, Medical and Emergency Directorate (MED)
16. Dr Brian O'Connell, Clinical, Director, Laboratory Medicine Directorate (LabMed)
17. Dr John Cooney, Clinical, Director, Haematology, Oncology and Palliative Care Directorate (HOPE)

## 1.2 Legal and Banking

### **Bankers**

Bank of Ireland  
85 James Street  
Dublin 8

### **Auditor**

Controller and Auditor General  
3A Mayor Street Upper  
Dublin 1  
D01 PF72

### **Solicitors**

A&L Goodbody Solicitors  
I.F.S.C.  
25/28 North Wall Quay  
Dublin 1

### **Insurance Broker**

AON Insurance





## 2.1 Performance Highlights

### ACTIVITY Levels for 2019

Period Jan - Dec 2019	2019 Activity	
	Acute Ward In-patient Discharges	Day Cases
Cardiology	3041	1712
Dermatology	15	2570
ENT	438	308
General Surgery	2497	4437
GUIDE	442	8053
Gynaecology	757	355
Haematology	1074	6864
Maxillo Facial	864	479
Medicine	6683	14920
Medicine for the Elderly	1400	2523
Oncology	1269	11095
Orthopaedics	1207	573
Plastic Surgery	994	2644
Radiotherapy	150	2
Rheumatology	628	232
Psychiatry	9	11
Cardio-Thoracic Surgery	922	33
Urology	649	1512
Vascular Surgery	375	590
<b>Total Acute Activity</b>	<b>23414</b>	<b>58913</b>

Period Jan - Dec 2019	2019 Non Acute Ward In-patient Discharges
Medicine for the Elderly	791
Medicine	26
Orthopaedics	1
Psychiatry	442
Rheumatology	1
<b>Total Non Acute Activity</b>	<b>1261</b>

Out-Patient Activity 2019		
	New	Return
Attendances	71505	236399



**71,505**  
NEW OUT-PATIENT  
ATTENDANCES



**23,414**  
ACUTE WARD  
IN-PATIENT DISCHARGES

Note 1: Medicine Inpatients includes Respiratory/Endocrine/Gastroenterology/Neurology/Nephrology/Immunology/Pain Management/General Medical/Emergency patients.

Note 2: Medicine Daycases includes Respiratory/Gastroenterology/Neurology/Nephrology/Pain Therapy/Anaesthesiology/General Medicine.

Note 3: Outpatient Consultant and Nurse Led Activity.

## 3.1 Finance Department

The Finance Directorate incorporates three main divisions: The Transaction Processing Unit, including Accounts Payable/ Settlements, Accounts Receivable and Payroll; The Technical Expertise Unit, comprising of the Compliance Unit, SAP Support Unit and the Procurement Unit; and The Decision Support Unit, which includes the Clinical Funding Unit and the Management Accounts Unit.

The Finance Directorate currently operates over two main sites; the Transaction Processing Unit, the Compliance Unit and SAP Support Unit are based offsite at the Brickfield Campus, with the remaining units based onsite within St James's Hospital.

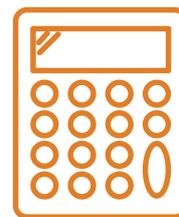
The Transaction Processing Units have significant experience and expertise in all transactions that are processed. The Payroll Unit processes payroll for over 5,000 employees and has extremely efficient controls and processes in place, most of which are either electronic or online.

The Accounts Payable/ Settlements Unit processes all invoices and again is predominantly receiving invoices electronically and allowing them to be directly uploaded, without human intervention. The Accounts Receivable Unit invoices and collects over €80m in revenue.

The Technical Expertise Unit which is based within the Finance Directorate, is second to none. The SAP Support Unit ensures the financial integrity of the SAP System and provides invaluable project management expertise. The Compliance Unit ensures that robust controls and processes are in place for all areas of transaction processing. The Procurement Unit provides procurement expertise, assists directorates in identifying value for money initiatives through market engagement, provides oversight of the National Factor Blood budget and ensures the hospital is compliant with all procurement legislation.

The Decision Support Unit has been a national leader in its ability to deliver information to end users. The core elements of the unit are developing expertise in patient level costing and the new funding model (Activity Based Funding) with a real focus on patient level data that drives accurate costing and ensures clinical activity is coded correctly which in turn drives the revenue.

The Management Accounts team, within the Decision Support Unit, encompasses several Business Partners who provide the directorates with a significant amount of financial expertise and guidance in service developments, identifying efficiencies and focusing on value for money initiatives. Finally, the Data Science team supports data driven decision-making, hospital-wide, through the development of visual dashboards and the automation of repetitive processes.



**THE ACCOUNTS RECEIVABLE UNIT  
INVOICES AND COLLECTS OVER  
€80M IN REVENUE**

## Performance Highlights

Key highlights in 2019 include the financial performance of the hospital. The Financial Statements for the reporting period 1 January, 2019 to 31 December, 2019 resulted in a deficit of €0.71m. The hospital's gross expenditure was €488.33m, while the income and exchequer funding amounted to €490.61m. The closing surplus now stands at €2.28m (2018: €3.0m).

The Finance Department continued to enhance current processes and functionality in 2019. During 2019, the Procurement Department developed and implemented a Contract Management System which enables centralised storage of all vendor contracts. This system is an active, searchable system which can issue fully customised email alerts to ensure that all relevant stakeholders will be informed of any contract milestones and timelines. The Contract Management System is also configured with analytical and reporting functionality, from which customised detailed information of contract performance, both on an individual contract and enterprise level, is easily made available. This system has revolutionised the procurement function capability and processes to no end.

Another successful project in 2019 was improving the communication channels with employees through the introduction of the interactive and innovative "Lets Chat" facility. This function allow employees have real time interaction with the Payroll Department through the E-Pay site, offering real-time transmission of text messages from sender to receiver. This has proved a major success in supporting employees with queries through their E-Pay account.

A further improvement in Finance processes in 2019 include the IRIS automated accounts payable invoice processing system which was upgraded with a new processing engine that uses artificial intelligence to capture data. This process was seamlessly managed by the SAP Support Unit and the Accounts Payable Unit, whereby all integrated SAP data downloads and connections had to be redirected and migrated to a new IRIS server environment, while maintaining business continuity, resulting in improved analysis and processing of invoices.

Finally, the Decision Support Unit and the Data Science Team continued to develop skills in the use of cutting edge data-science techniques in 2019. Key highlights included the redesign and automation of directorate visual dashboards to support directorate decision-making, and development of nursing dashboards. This improved insight generation from available financial data. These have been enhanced through stakeholder engagement and end user feedback. Robotic process automation capabilities continued to be developed, resulting in a successful pilot to use programmed Robotic Process Automation to automate some of the repetitive reporting and data extraction and improve process efficiency for specific tasks.



**ANOTHER SUCCESSFUL PROJECT IN  
2019 WAS IMPROVING THE  
COMMUNICATION CHANNELS  
WITH EMPLOYEES THROUGH THE  
INTRODUCTION OF THE INTERACTIVE  
AND INNOVATIVE  
"LETS CHAT" FACILITY**

## Key Objectives for 2020

The Finance Directorate aims to continue with this approach to constant improvement in all processes in the year ahead.

## 3.2 Human Resources

The Human Resources Directorate, (HRD), plays a central role in shaping the organisation through the planning and delivery of Human Resources (HR) programmes, processes and policies that support the hospital successfully meeting local and national key performance indicators (KPIs) in accordance with its mission, vision and values. Its divisions include;

- HR Service Teams
- Medical Workforce Unit
- Employee Relations
- Centre for Learning and Development
- Equality and Diversity
- Workforce Information and Planning Unit
- Occupational Health.

The focus of 2019 was to build on the pillars of the HR plan in improving our ability to; (i) source, (ii) engage and (iii) develop our staff together with (iv) improving our processes and programmes. A HR key objective was to monitor nursing attrition and sustain a high level of nurse recruitment and plan for the prelaunch of the Workforce Management (WFM) Programme, once Project Oak had bedded down.



2019 HIRES AS AT  
31 DECEMBER 2019

**575**

### Performance Highlights

#### HR Service Teams

- In order to meet the ongoing nursing recruitment challenges, we refocused our efforts on international recruitment to continue to attract highly skilled specialist nursing professionals

- Rollout of HR online forms – non-payroll
- Commenced implementation of Enhanced Nurse Contract (to be completed in 2020)
- Policy Review – Parental and Compassionate Leave
- Completed an initial spec for a new HR recruitment system, as when combined with our existing careers website, the current processes and technology are now limiting factors in our ability to recruit effectively
- 2019 hires as at 31 December 2019 = 575 (excluding medical)
- 2020 leavers as at 31 December 2019 = 342
- Despite significant challenges, we sustained an average of fill rate of over 90% for nursing positions, with significant overseas recruitment undertaken
- Completed retrospective Garda vetting of all staff

#### Medical Workforce Unit

The Medical Workforce Unit had a successful recruitment campaign for the July 2019 intake of Non Consultant Hospital Doctors (NCHDs) - circa 370 posts. Full recruitment and employment was achieved to deliver a safe service for the patients of St James's Hospital.

In terms of consultant recruitment, there were 16 permanent appointments made with the breakdown being; ten new posts and six replacement posts.

#### Employee Relations

We continue to work well with our union partners within the hospital addressing day to day developments and larger projects effectively, and continue to refine staff training courses like our Managing People training course.

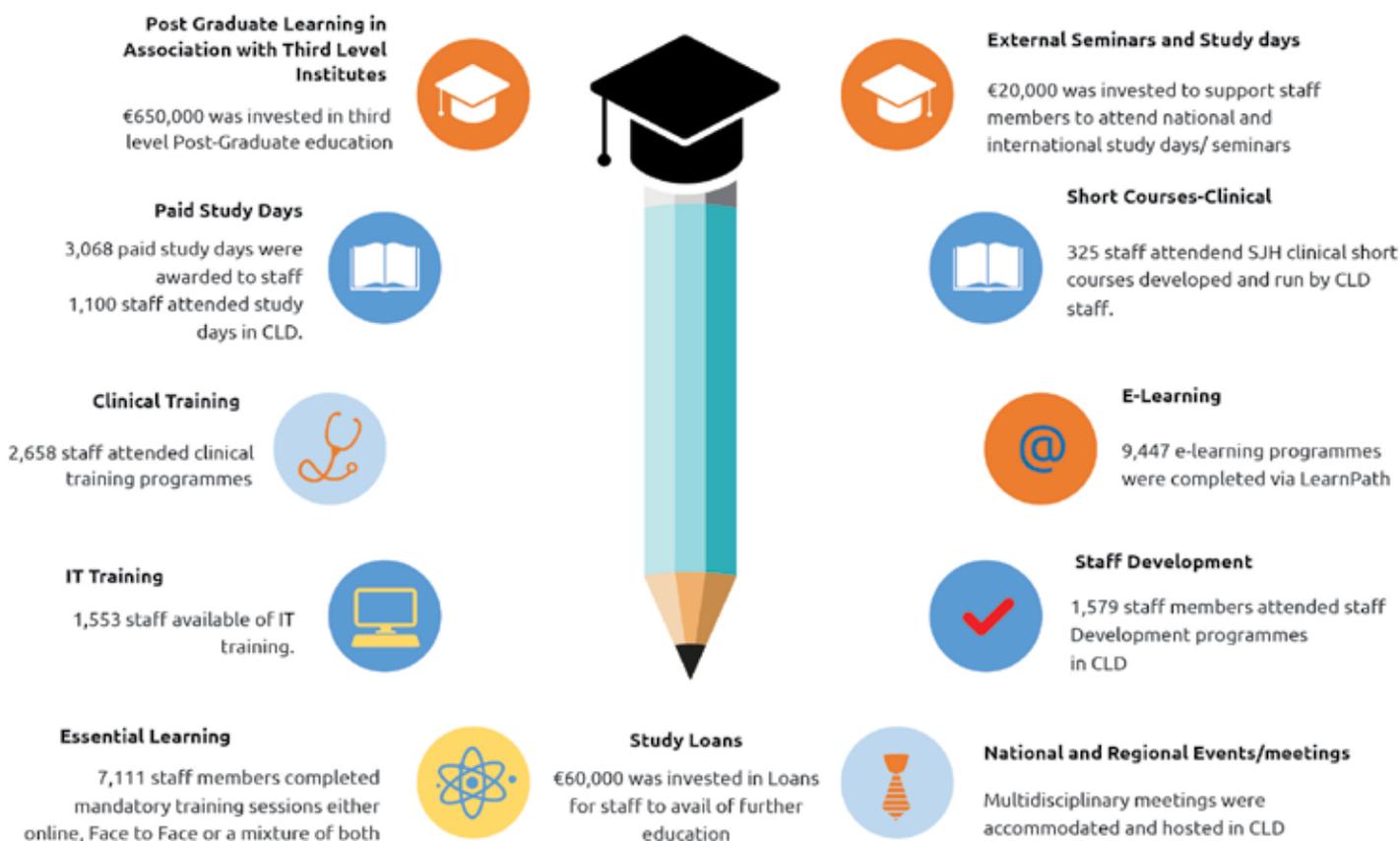
## Centre for Learning and Development (CLD)

CLD is focussed on enabling people to achieve their potential, enhancing the development of lifelong learning skills while exploring directions for further progression. During 2019, CLD continued to work in partnership with all our stakeholders and partner institutions – Trinity College Dublin (TCD), Quality and Qualifications Ireland (QQI) and University College

Dublin (UCD), in meeting the diverse learning and development needs of staff by providing a broad range of high-quality blended learning and development opportunities, to include general staff development programmes, mandatory training and clinical-based programmes.



## CLD Activity Review 2019



## Equality & Diversity

We continued to meet our compliance rate of 3% of total employees with a disability, as required by the Disability Act, and in addition to ongoing advice we:

- Delivered eight Dignity at Work awareness sessions

- One formal investigation was conducted under the Dignity at Work Policy**
- Supported a number of “Managing People” programmes for front line managers.

## Workforce Information Unit

### Salary Administration

All KPIs, monthly EMG and Board reports were produced on time in conjunction with all external reporting requirements. Three pay awards were also processed throughout the year. A January 2019 pay award equating to 1% was implemented for all staff earning up to €30,000, a FEMPI pay restoration was implemented in April for those earning in excess, while a general 1.75% pay award was implemented for all staff in September.

### Organisation Management

2019 was a busy year due to ongoing compliment reviews across many directorates in addition to 'business as usual' activity. Overall 95 new positions were created on the SAP HR system in 2019.

### SAP HR

In addition to day to day support to all SAP HR & payroll clients - which generated 890 calls, the team were asked to test and sign off 289 change requests in 2019 (legislative/ budget/HSE/system upgrades etc.). Additionally, a significant system change arose to support the implementation of the Revenue SMART PAYE Modernisation programme.

### WFM Project

A review of the workforce information management system was initiated in conjunction with the Kronos team, with a view to progressing the project which had been placed on hold while Project OAK was implemented.

## Occupational Health

- We were very pleased to increase our flu vaccine uptake to 60% of eligible staff members from 40% uptake two years earlier and we also vaccinated 634 contractors, agency staff and students.
- We have maintained a decrease in needle stick injuries this year
- Induction clinics have also been very busy and we welcomed 72 nursing students and 75 medical interns
- We looked after approximately 5,000 staff members
- We are hoping to open a satellite clinic in the main hospital to help staff members who want to attend, given our location at the rialto gate, and in the interim we have developed forms to allow and deliver support from this location to SJH staff.

## Objectives for 2020

### Medical Workforce Unit

Working with the Finance and Procurement Departments, we renegotiated the offering from Cardiac Services to improve the scheduling and attendance system offering from Kronos, agreeing to an upgrade to their newer 'Dimensions' platform. A key objective in 2020 is to continue to advance this project.

Our existing recruitment and candidate management system in HR is at risk of becoming a limiting factor on our ability to recruit effectively and we have started to review our system needs and plan to replace it.

---



## 3.3 Nursing Services

Nursing Administration and the Nursing Practice Development Unit (NPDU) oversee, co-ordinate and support all matters relating to professional nursing practice throughout the hospital. This includes the recruitment and retention of nursing and healthcare assistant (HCA) staff; nursing practice development initiatives and projects; co-ordinating networks of communication for nursing developments, the promotion of nursing audits and the development of clinical nursing research.

### Performance Highlights

#### Achievements in nursing in 2019

St James's hospital, as the first Irish hospital to become an Accredited Cancer Institute, provides great opportunity for nursing development and advancing roles over the next number of years. Thank you to all the nursing teams throughout the hospital who have been at the fore of this strategy, advocating for patients and ensuring that the nursing voice is articulated at the highest level.

The second VOICES paper Dying in Acute Hospitals: Voices of Bereaved Relatives, was published on the open access, peer-reviewed journal, BMC Palliative Care. This is an important piece of research that was conducted in partnership with the Mater Misericordiae University Hospital, TCD and UCD, and was launched in 2019. This survey of bereaved relatives has been one of the largest of its kind undertaken in Ireland and the results have demonstrated that bereaved relatives rated the overall quality of care in both hospitals at 87%.

2019 saw the launch of the patient care metrics on PowerBI. This enables nursing to audit live data in real-time, on a daily basis. The data can be accessed online from any PC in the hospital and the CNM/ADoN/DoN can view live metrics for their clinical areas, either by ward or by directorate. This has immense potential for both maintaining and improving patient care outcomes and is a welcomed addition to our quality nursing practices.

We launched our Nursing Strategy 2019 – 2022 in September 2019 at Nursing Grand Rounds. This nursing strategy builds on our strong nursing foundations and continues to focus on what matters most to our patients, families, staff and colleagues. As a team we will continue to lead, adapt and develop our practices through innovation and develop our skills and roles as professionals. None of this would have been possible without the ground swell of support from each and

every one of you and I want to say thank you most sincerely.

Throughout the year, ongoing recruitment campaigns, local, national and international were conducted for nursing and HCA's in all clinical areas.

Both industrial actions throughout 2019 were managed with professionalism by the nursing and HCA teams, ensuring patient safety throughout.

#### Undergraduate Nursing

- 75 first year nursing students commenced the BSc Nursing Programme where they undertook their first core placement from October to November 2019
- 72 second year and 69 third year nursing students respectively, undertook core and specialist placements both internally and externally
- St James's Hospital in conjunction with TCD School of Nursing and Midwifery, facilitated placements for four Erasmus nursing students from Malta, 14 external mental health nursing students and four intellectual disability nursing students
- 72 fourth year nursing interns successfully graduated in November 2019 and were eligible to register on the general nursing division with the Nursing & Midwifery Board of Ireland (NMBI). 50 nursing interns took up staff nurse positions in the hospital.



**72 FOURTH YEAR  
NURSING INTERNS  
SUCCESSFULLY GRADUATED  
IN NOVEMBER 2019**

## Post Graduate, Research and Advanced Practice Nursing

- Year three of the SJH Rotation Programme successfully facilitated eight newly qualified staff nurses to gain experience in both surgical and medical areas within their first year post-graduation. Due to demand, this programme has been extended to facilitate 16 newly qualified nurses for 2019/2020.
- In November 2019, the second year of the Catherine Deegan Nursing Research and Innovation Memorial Award, a tribute to one of our former colleagues, the late Catherine Deegan, who throughout her career advocated for the further development of nursing through active participation in research and quality improvement. Ms. Siobhán Part, CNM 3, Falls Management Coordinator, was the deserving recipient of this award in collaboration with John Houston Ward staff on their QI project entitled “The implementation of nurse-led initiation and maintenance of oxygen therapy on a respiratory ward for patients with chronic obstructive pulmonary disease”.

## International Nurses Day

To mark International Nurses Day on 13 May, Nurses and HCAs were invited to join with the Director of Nursing in a photo opportunity, wearing their county, province or country colours to celebrate the diversity of the SJH Nursing team. This was a great success with Nurses and HCAs from different counties, provinces and countries setting aside their competitive sporting rivalries and demonstrating the uniqueness and diversity of our Nursing team. Nursing teams were invited to submit QI projects which they had undertaken to improve patient outcomes. The Cardiothoracic Advanced Nurse Practitioners were the recipients of the Best Nursing Team Award with “Cardiothoracic Nurse-led Lung Cancer Surveillance & Survivorship Service, a new initiative in St James’s Hospital”.

## Nursing Research Access Committee

The *Nursing Research Access Committee* continues to engage and promote nursing research. The 13th Annual Research, Clinical Audit & Quality Improvement Seminar was held in May 2019, where multiple MDT abstracts were received and this was a great opportunity for all to network while in attendance. The Partnership Programme between SJH and TCD, designed to underpin and strengthen research capacity between both campuses, continues to improve clinical practice and research year on year. The model ensures that a St James’s Clinical Nurse Specialist or Advanced Nurse Practitioners working on research in practice are linked to a dedicated academic researcher in the

School of Nursing and Midwifery at TCD and have access to research infrastructure.

## Registered Nurse Prescribing

Registered Nurse Prescribing continues to develop pan-organisation. Site coordinators Ms Julie O’Grady and Ms Silvia Vijay continue to work with our nurse prescribers on collaborative practice agreement (CPA) development/ amendments and prescribing audits. From 2019, RNPs can now prescribe exempt medicinal products (HSE 2019). From October 2019, the NMBI no longer requires completion of a CPA document, however, this process is still under review by the Nurse Prescribing Sub-Committee and the Pharmacy and Therapeutics Committee. As of December 2019, there were 41 active registered nurse prescribers across varied specialties with four awaiting registration with NMBI. The HSE National Nurse Prescribing Policy was reviewed by the Nurse Prescribing Site Co-ordinators, Assistant Directors of Nursing, Nursing Practice Development Unit and the Director of Nursing.



**AS OF DECEMBER 2019,  
THERE WERE 41 ACTIVE REGISTERED  
NURSE PRESCRIBERS ACROSS VARIED  
SPECIALTIES**

## End of Life Care

End of Life care continues its dynamic and valuable work improving end-of-life-care for patients, relatives and staff. This is achieved through five work streams, namely education and training, audit and research, advocacy, improving the hospital environment and developing ongoing practical resources and support for relatives.

Advancing Nursing Practice continues with ongoing education support for nurses and HCAs. Two clinical practice facilitators for the general medical/ surgical wards were appointed in October 2019 to support the competency development and assessment of both registered nurses and HCAs. Three of 24 advanced nurse practitioners (ANPs) registered in 2019 with three candidate ANPs (cANPs) currently undertaking site prep to be eligible to register in 2020, with plans for further ANP service development aligned with Sláintecare.

## Nightingale Challenge

The 'Nightingale Challenge' is a global initiative that invited participation from healthcare employers, to provide leadership and development training for a group of nurses during 2020, which was designated the Year of the Nurse and the Midwife by the World Health Organisation. The challenge aimed to inspire, equip and empower the next generation of nurses and midwives as leaders, practitioners and advocates in health. St James's Hospital registered for the Nightingale Challenge in November 2019 and was the first hospital in Ireland to accept the challenge. 29 'Nightingale Nurses' were selected to participate in the year-long programme, which will be officially launched in January 2020.

## Staff Retirements

2019 saw the retirement of many nursing and HCA colleagues. Our Director of Nursing (DoN) would like to take this opportunity to wish all a happy and healthy retirement and thank each colleague for their work over the many years.

2019 was another exciting year for the SJH Nursing and Health Care Assistant (HCA) team. Our DoN would like to thank each and everyone one of you for your commitment, team spirit and providing safe and quality driven care to our patients and their families' on a daily basis.

## 2020 Objectives

2019 was an extremely busy year for nursing. We demonstrated our commitment to existing projects and we also involved ourselves in new and exciting organisational initiatives which required our involvement for them to be successful.

### In 2020 we will:

- improve all patients' experience in both the ambulatory and inpatient setting
- continue to be regarded as recognised as leaders in healthcare, nationally and internationally
- continue our engagement and commitment towards the OECI accreditation process
- continue to support nurses of all grades and HCAs in their personal and professional development
- provide ongoing support and development of nurse-led research
- continue to work on the retention, recruitment and development of nursing and HCA staff.

2020 provides the SJH Nursing team and our HCA colleagues with great opportunities with the introduction of the Safe Staffing and Skill Mix Framework and the upcoming celebrations for the Year of the Nurse. Together we will continue to develop our energetic and exciting nursing workforce and with the Nursing Executive team once again lead out as the best nursing team in Ireland. I look forward to working with you all so that we can achieve our goals.

---

## 3.4 Internal Audit

The Head of Internal Audit reports to the Chairperson of the Audit and Risk Committee, a hyphenate subcommittee of the Hospital Board, on all operational matters. This ensures independence and direct access to the Hospital Chairman and Board if necessary. The Head of Internal Audit reports to the CEO on all functional matters.

The Annual Internal Audit Programme is a vital document as it determines the internal audit work for the year ahead. This programme is informed by previous audits and outcomes, items identified by the Office of the Comptroller and Auditor General (C&AG) or the HSE on local and national issues.

### Performance Highlights

**The following audits were among those reported to the Audit and Risk Committee in 2019:**

- Internal Financial Controls
  - Follow up on previous recommendations
  - Codes of Conduct
  - Research Finances Management
  - The Process for Cancellations and Did Not Attends
  - Overpayments
-

## 3.5 Informatics Directorate

The Informatics Directorate (IMS), led by the Director of Informatics, Ms Gemma Garvan, constitutes a number of areas that all have a strong focus on the use and quality of technology, innovation and information in the care and treatment of patients, as well as supporting the corporate needs of the hospital.

The mission of the IMS Department is to provide an innovative and resilient framework of Information Services to support all aspects of the hospital's business. This includes the implementation and configuration of clinical and corporate IT systems, as well as support of the underlying technology. The department also delivers a Data Management and Business Intelligence Function for all directorates.

The department was restructured in 2019 to reflect the changing focus on digital across healthcare and within St James's hospital. The directorate now contains five pillars; Informatics Operations, Informatics Security, Data and Analytics, Engagement and Delivery and Enterprise Architecture.

The management team for the directorate includes:

- Finian Lynam, Chief Data Officer
  - John Nolan, Chief Information Security Officer
  - Miriam Roche, Engagement and Delivery Lead
  - Grainne Courtney, Chief Clinical Information Officer
  - Jo Murphy, Chief Informatics Operations Officer.
- 30,175 Service Desk calls for 2019, with 43% dealt with within 30 minutes
  - Service Desk profile review of metrics and services provided
  - Implementing a new Flu Fighters form and process was completed
  - Expanded the Clinical Photography service to complete.

### Performance Highlights

The Informatics Directorate continued to provide a professional and timely service to all end users. Highlights of the initiatives that were completed in 2019 and new ones that commenced in 2019 include:

- Implementation of a patient self-scheduling system for our GUIDE Clinic, which prevented the need for patients to queue unnecessarily for the walk-in clinics
- Increased electronic referrals from General Practitioners (GPs) by 30% and expanded it to 38 specialities
- Go-live with the upgraded version of the Emergency Department patient tracking Whiteboard System
- Implementation of Government Cloud Network to improve internet and some corporate system application performance and resilience
- Replaced all printer equipment throughout the campus
- Continued improvement and coverage of Hospital Wi-Fi and public/ guest access
- 24\*7 Security Operations Centre upgraded and a new encryption method applied
- PCs refresh, on-going upgrade and replacement of hardware inventory and upgrade of OS to Win 10

### Electronic Patient Record System (EPR)

Following the go-live of Project Oak in October 2018, the focus for 2019 for the directorate was for EPR stabilisation and optimisation. During 2019, our newly introduced EPR was bedded in across all our inpatient areas and several enhancements were made based on staff feedback and hospital requirements. One of these enhancements was the Meropenem Query List that was built to enable the hospital to identify patients on an antibiotic, critical for KPI in anti-microbial stewardship. The directorate also completed the Project Oak Benefits Realisation Report to demonstrate the benefits the hospital has achieved from implementing the EPR.

The hospital received sanction from the Department of Finance to allow us to procure a hosted, managed EPR environment to reduce risk and enable a code upgrade. This was a significant achievement in 2019 as it will allow the expansion of the EPR to outpatients which will see the hospital realise its goal of full EPR usage and the associated benefits for patients and hospital operations.

### Internet / Email

Our websites with 792,954 visitors (public website), are a source of information for its key audiences, focusing on patients, visitors, GPs/ healthcare profes-

sionals, job seekers and other major stakeholders. 2019 saw the introduction of Transport Layer Security (TLS) to manage all encryption and email services which attributed to the security mechanisms managed by IMS and ensuring staff are more vigilant.

### **Retirement**

2019 also saw the retirement of our Informatics Operations Manager, Marie Sinnott, after 35 years' service to St James's Hospital. Marie was a great loss to the team and we all wish her well in her retirement.

### **Objectives for 2020**

**The following identifies the Informatics Directorate's main objectives for 2020:**

- Future-proof our EPR system by procuring an upgrade for our EPR environment to include a technical managed service
  - Implement a Cardiovascular Information System
  - Increase communications with the community through the use of Healthmail and Secure TLS
  - Implement a patient engagement tool
  - Implement a secure messaging service for staff
  - Upgrade our Firewall and implement a security-managed service contract.
-

## 3.6 Facilities Management

The Facilities Management Directorate (FM) provides a full range of support services in an integrated manner that enhances the patient experience and supports the hospitals clinical staff in treating our patients.

The FM Directorate comprises of the following disciplines; Patient Hygiene Services, Concourse, Chaplaincy, Catering, Portering, Telecommunications, Facilities Management Administration, Security and Car Parking, Logistics, Fire Safety Services, Medical Records Management, Technical Services Department/FM Engineering, Support Services Contracts, Sustainability and Mobility.

### Performance Highlights

#### Catering Department

1. Introduced new patient menu
2. Meal reversal (main meal in evening)
3. The Catering Department was recognised at the Ministerial launch of the National Patient Experience Survey results for quality improvements
4. International Dysphasic Diets Standardisation (IDDSI) diets; multidisciplinary implementation committee established
5. Allergan information, Kcal and Ward Resource Pack completed
6. We changed over to fully compostable disposables in the Orchard House Restaurant
7. Environmental Health Officer (EHO) carried out unannounced audits and no non-compliance was noted
8. We migrated from to paper-based auditing system to electronic ECat System.

#### Key Objectives for 2020

1. Food Delivery Unit refurbishment to be completed
2. Launch of IDDSI
3. Introduce 'Red Tray' to highlight patients on textured modified diets
4. Continue to roll out ECat to all areas within the department

5. Continue to develop specific patient menus
6. Plan to introduce technological based meal ordering system.
7. Aim to achieve the Food Safety Assurance Award, demonstrate to wider public that we Food Safety
8. To launch 2goCup and eliminate single use disposable cups.
9. To reapply for the Bronze Healthy Heart Award.

#### Portering Services

1. Blood Transportation Course completed for all new members of staff to ensure safe delivery of blood products
2. Chemotherapy Safety Training recently introduced, has continued for Portering Service staff and introduction of Intrathecal Chemotherapy Training and inclusion of new staff on national register to collect & deliver product as per national safety policy.

#### Mobility and Sustainability

1. The uptake of the TaxSaver Ticket Scheme amongst staff increased by over 250% in the last three years and approximately 1,800 staff have availed of the Bike to Work Scheme
2. The lunchtime food market "The Fayre in the Square" returned in 2019

## Logistics

	2019
Total receipt value goods & services	€142,638,547
Stock reservations processed	14,939
Stock receipt value	€11,336,352
Consignment issue value	€6,394,943
Stock vendors	136
Stock purchase orders placed	5956
Managed stock lines	4624

## Environmental Services Department

In 2019 the following waste statistics were recorded:

**Risk waste** tonnage closed out at

	2018	2019	% Difference
<b>Normal</b>	445.55	341.42	-23%
<b>Special</b>	28.88	34.19	18%
			-5%

In April 2019, following the award of a National Risk Waste Collection and Destruction Contract, there was a 23% cost increase which will be held for the duration of the contract.

Non-risk waste tonnage closed out at 1657.85 tonnes in 2019 compared to 1705.91 tonnes in 2018, which represents a 2.82% decrease.

- Compostable waste increased by 14.16%
- Recycling waste decreased by 9.01%

There were two Dangerous Goods Safety Advisor audits carried out:

- 21st August, 2019
- 7th November, 2019

## Fire Services

- The key performance indicator was the attendance of 3,712 staff at fire safety training which equates to 85% of the total hospital staff complement in 2019
- Additional Fire Safety Training was provided to all contract staff to ensure competence in dealing with a fire emergency
- Every fire exit and fire alarm panel was inspected weekly, to ensure they operated correctly.

## Key Objectives for 2020

- To ensure every department and building test it's emergency preparedness, by carrying a fire evacuation drills.

## FM Engineering

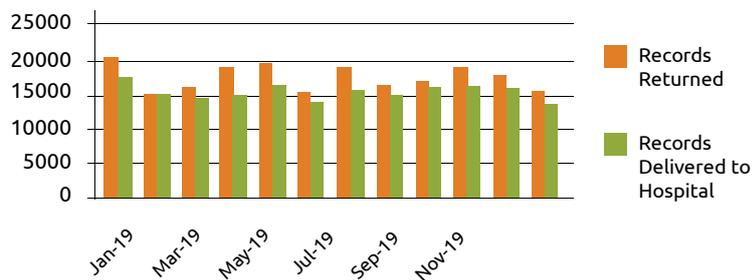
There was continuous progress of the Energy Performance Contract (EPC) in 2019. The technical meetings were finalised and the invitation to tender was issued to the three shortlisted companies. A preferred bidder was appointed and invited to proceed to the next stage of the procurement process. This work will continue in 2020 when the project agreement is finalised and agreed between Carbon Emission Fund, the preferred bidder and St James's Hospital.

## Medical Records Management

The Medical Records Centre houses almost 500,000 patient charts, over 2,000,000 laboratory slides/blocks and 10,000 microfilm tapes. In addition to medical records, the centre archives records for several departments across the hospital.

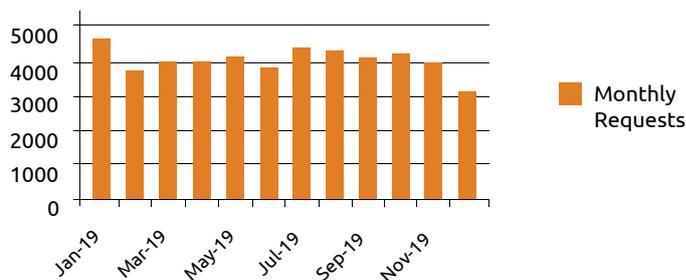
During 2019, the department delivered over 200,000 records to the hospital and refilled 190,000 records.

### 2019 Monthly Activity



In 2019, the department received almost 50,000 online requests for charts from services across the hospital. This represents an 8% increase on 2018.

### Online Requests 2019



During 2019, the Routine Access Department function of Medical Records, which manages the release of copy records to patients, other healthcare institutions, legal representatives, An Garda Síochána and other third parties, moved to the Access Information Office.

In 2019, the Medical Records Department underwent audit for retention of their ISO 9001: 2015 Certification for the Comprehensive Management of Medical Records, which was awarded to the department again.

### Key Objectives for 2020

We look forward to continuing to provide an excellent record management service in 2020.



## 3.7 Capital Projects

The Capital Projects and Estates Office provides the management of the St James's Hospital Board's Strategic Development Plan, which includes the management of major capital projects, major equipment replacement with the procurement and direction of the design team and construction teams for statutory compliance of these developments. The major capital projects range in value from €500k - €50m. The St James's Hospital Board holds several lease and licences for various properties and the Capital Project & Estates Office provides overview on these assets.

The Capital Project and Estates Office is led by Director, Niall McElwee and supported by the Project Manager, Philip Connaughton, with administration/finance support by Niall McCartney and Fiona O'Brien. The appointment of design and professional consultants is engaged on a case by case basis, subject to capital funding approvals.

### Key developments in 2019

The key developments undertaken by the Capital Projects and Estates Office during the year included; the adult hospital interface with the main works contract for the **National Paediatric Hospital** development, the major reconfiguration and expansion of the **Endoscopy Decontamination Unit**, the redesign for replacement of the equipment of the existing **Catherisation Laboratory** and provision for a future 3rd catheterisation laboratory, **Food Distribution Unit** expansion, **Haemophilia and Hepatology Assessment Bay** expansion and reconfiguration and major refurbishment of the **QSID Offices, Medical Physics Technical Workshop** and the **public toilets** in the main concourse. These projects were carried out in live hospital environments with significant infection control and patient and staff safety conditions maintained at all times.

Other projects included the opening of the **MISA gate** from the St James's Linear Park for staff and public to access the hospital and submittals for the landscaping proposals with Dublin City Council. As Chair of the multi-stakeholder Campus Access Group, which included the HSE, Dublin City Council (DCC), National Transport Authority (NTA), Children's Health Ireland (CHI), the National Paediatric Hospital Development Board (NPHDB), Transport Infrastructure Ireland (TII) and St James's Hospital, the director of the Capital Projects and Estates Office facilitated the oversight of the NTA preparations for proposals for the road widening, Bus Connects corridor route, cycleways and improved footpaths for pedestrians at entrances and through the campus.

For Trinity College Dublin, the SJH Capital Projects and Estates Office managed the internal works programme in the **Trinity Translational Medicine Institute (TTMI)** to facilitate the transfer of staff and

services from the SJH Central Pathology Laboratory (CPL) to the new laboratories in the TCD Health Science Building. In addition, for TCD, the Capital Projects Office provided the project management of the completion of the refurbishment of the **Clinical Research Facility (CRF) Cleanroom**, in conjunction with the TCD - IMM (Institute for Molecular Medicine) and SJH - CMD (Cancer Molecular Diagnostics).

During 2019, for the HSE directly, the SJH Capital Projects and Estates Office managed the 3rd phase of the **Anti-ligature Project** in the Acute Mental Health Facility in the Jonathan Swift Clinic. This was a complex project working in acute mental health wards to replace toilets, showers and bedroom furniture with contemporary approved anti-ligature fittings to conform with international safety standards.

### Summary of 2019 key developments 2019

- **Endoscopy Decontamination Unit Expansion and Upgrade**  
Works to upgrade the existing facility were required under Joint Advisory Group on Gastroenterology (JAG) accreditation recommendations and to meet the increased services activity of the Endoscopy Suite. This was a three-year project. Value: €2.4m. JAG accreditation visit took place on 24th September with an audit of service and facilities with successful outcome.
- **Third Cardiac Catherisation Laboratory (Cath Lab) – Reconfiguration of the Diagnostic Imaging Department (DID) and Cardiology Department.** Business case proposals submitted for existing Cath Lab replacement included improved patient flow for a possible third Cath Lab. The third Cath Lab will be subject to the National Cardiology Review, undertaken by the HSE. Capital project value: €2.4m.

- **Interface with new Children's Hospital Main Works Contractor (MWC) is ongoing.**
  - The NPHDB and SJH attend fortnightly Works Liaison Committee meetings on the interface issues with the main works contractor, BAM. Key elements on the campus, including; monitoring safety, patient access, deliveries, dust and noise are reviewed
  - Daily audit of safety issues and interface with the NPHDB Design team for the Capital Projects and Estates Office to review and approve the Risk Assessment Method Statements for works adjacent to or within the adult campus boundaries, is undertaken
  - The Capital Projects and Estates Office maintains liaison with neighbouring resident representatives through the Communications Office of SJH and the NPHDB
  - Major changes in main arterial road layout of campus was implemented in 2019 and the adult hospital's Emergency Department entrance road was altered to suit evolving works to the road network
  - Demolitions continued to the façade of adult Energy Centre, while maintaining the critical services (power, medical gases, water and steam) within the diverted utility tunnel linking the energy centre to the main hospital buildings.



**THE SJH CAPITAL PROJECTS  
AND ESTATES OFFICE  
MANAGED THE 3RD PHASE OF THE  
ANTI-LIGATURE PROJECT IN THE ACUTE  
MENTAL HEALTH FACILITY IN  
THE JONATHAN SWIFT CLINIC.**

## Key Objectives for 2020

The application to the HSE for funding to support major development on the campus, including the approval for the **Campus Development Plan** continues.

### Priority projects for 2020 include:

- The upgrade of the **ultrasound procedure rooms** in the Diagnostic Imaging Department
- Upgrading/ replacement of the **Neurology and Epilepsy Clinical Services Building** at Hospital 5
- The major reconfiguration of the **Catherisation Laboratory** area, with additional recovery bays.

These projects will be managed by the Capital Projects and Estates Office in conjunction with the ongoing liaison of the National Paediatric Hospital development on the campus.

# 4.1 Haematology, Oncology Palliative Care (HOPE)

The HOPE Directorate encompasses the specialties of Haematology, Medical Oncology, Cancer Genetics, Palliative Care, Psychological Medicine and Radiation Oncology. The Haematology Department incorporates the Haemoglobinopathy Service plus national specialities as follows:

- National Centre for Adult Bone Marrow Transplantation
- The National Coagulation Centre.

The directorate provides integrated care with St Luke’s Radiation Oncology Network (SLRON) and the Cancer Clinical Trials Programme and is supported by the Bone Marrow for Leukaemia Trust, the Irish Cancer Society and the Daffodil Centre. The HOPE Directorate continues to meet growing demands on its services while capacity still represents an ongoing challenge. The directorate aims to provide the best care for patients, based on patient experience, safety, clinical excellence and innovation.

## Performance Highlights 2019

### KPIs measured within the HOPE Directorate:

Pillar	KPI
Patient safety	<ul style="list-style-type: none"> <li>• Medication safety events</li> <li>• Adverse events</li> </ul>
Access	<ul style="list-style-type: none"> <li>• OPD wait times</li> <li>• Time to triage by speciality/consultant</li> <li>• Time to treatment</li> </ul>
Patient flow	<ul style="list-style-type: none"> <li>• Did not attend (DNA) rate</li> <li>• Outpatient and day case activity</li> <li>• Discharges</li> <li>• Length of stay</li> </ul>

### Other KPIs

#### Medical Oncology

Monthly reporting to the National Cancer Control Programme (NCCP), detailing:

- The total number of patients who received a new parenteral systemic therapy in the Haematology Oncology Day Care Ward (HODC)
- The number of patients who received a new parenteral systemic therapy in the day ward within 15 working days of the date of the finalised treatment plan.
- In 2019, 851 oncology patients received a new parenteral systemic therapy in HODC. 826 of these patients received treatment within 15 working days of the date that it is agreed that the patient was deemed ready to treat. Of the 25 patients that did not receive treatment within the 15 working days’ time to treat KPI, 17 breached for personal reasons, 5 medical and 3 for capacity reasons

#### Cancer Genetics

Quarterly reporting to the NCCP, detailing:

- Wait times for predictive and diagnostic testing
- Number and type of laboratory tests completed.

#### Palliative Care

Monthly reporting to the HSE detailing:

- Inpatient and outpatient activity
- Outcomes
- Wait times for inpatient and outpatient consults

#### Radiation Oncology

Monthly report:

- Radiotherapy admissions
- Radiotherapy discharges - a combination of previous months’ admissions and transfers to a radiotherapy consultant
- Bed occupancy.

#### National Adult Haematopoietic Stem Cell Transplant Unit:

- Detailed data is submitted on each transplant patient to the European Society of Blood and Bone Marrow Transplantation (EBMT).

#### Multidisciplinary Cancer Team Conferences (MDT):

- There are eight cancer multidisciplinary team conferences held weekly to establish consensus diagnosis and treatment plans for all cancer patients
- There has been a consistent rise in the number of cases discussed at MDT meetings year on year, in 2019, 10,622 cases were discussed

- In addition to the above, 776 patients with blood cancers and haematological malignancies were discussed at the Haempath meeting in 2019
- The number of cases discussed at MDT meetings 2010-2019 is shown **below**:

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Upper and Lower GI</b>	1059	1167	1109	1271	1203	1017	1228	1248	1361	1362
<b>Urology</b>	623	781	942	1320	1022	958	1029	1089	1088	1139
<b>Gynae</b>	1136	1158	1256	1275	1343	1238	1066	1112	1187	1060
<b>Breast</b>	1947	2122	1935	2420	2256	2143	2521	2615	2463	2848
<b>Lung</b>	1357	1587	1504	1599	1548	1573	1585	1609	1740	1567
<b>Head and Neck</b>	638	599	689	871	934	985	1085	1144	1327	1394
<b>Lymphoma</b>	388	387	429	438	453	444	436	459	467	559
<b>Skin</b>	1491	1599	369	190	243	411	651	617	566	693
<b>Haempath Meeting</b>	N/A	690	654	776						

## Staffing

- Jenny Kerlin retired from her Assistant Director of Nursing (ADON) position after over 30 years' service to St James's Hospital
- Audrey O'Halloran was appointed as Clinical Support Nurse for Donal Hollywood Ward
- Marie Roche was appointed as Clinical Nurse Manager I (CNM) for Denis Burkitt Ward
- Una Gibbons was appointed as CNMII for the Anticoagulation Service
- Deirdre Howley was appointed as Family History Cancer Genetic Nurse Coordinator
- Stephen McDermott was appointed as Clinical Nurse Specialist (CNS) in Palliative Care
- Laura Sweeney was appointed as CNS in Systemic Anti-Cancer Therapy (SACT)
- Sangeetha Tamilarasan was appointed as CNM II in HODC
- Eilish Duignan was appointed as CNM III in HODC
- Niamh O'Sullivan was appointed as CNS in Haematology
- Norma O'Riordan was appointed as ADON for the HOPE Directorate
- Sarah Molumby was appointed as Grade VI Cancer Genetics/MDT Manager

## Nursing Key Achievements 2019

- Posters presented by Ms Mairead Ni Chonghaile (Bone Marrow Transplant Coordinator) and Ms Aileen Smith (CNS Late Effects) and awarded first and second prize respectively at the Haematology Association of Ireland Conference.
- Ms Maria Boyle, Project Development CNS, in collaboration with Ms Elizabeth Breen, HOPE Clinical Pharmacist, presented the findings of an audit exploring dermatological toxicities with Paclitaxel administration in the treatment of breast cancer at the Trinity Health and Education International Research Conference Integrated Healthcare: Developing Person-Centred Health Systems. At the conference, Maria also presented a poster entitled "Coordinating care over the telephone: a hidden aspect of care provided by Clinical Nurse Specialists".
- Poster HAI 2019 TITLE - Educate together. Empowering the Haematology Staff Nurse.
- Marie Roche CNM1, Deirdre Byrne, CSN and Lekha Thomas, Staff Nurse.



**THERE HAS BEEN A CONSISTENT RISE  
IN THE NUMBER OF CASES DISCUSSED AT  
MDT MEETINGS YEAR ON YEAR, IN 2019,  
10,622 CASES WERE DISCUSSED**

## Nursing objectives for 2020

- Development of a new acute oncology haematology CNS role.
- This role will involve the implementation of the planned non-emergency department direct access route for oncology/haematology patients who are experiencing disease or treatment-related complications.
- Continued collaboration with Trinity College Dublin (TCD) School of Nursing and Midwifery and St James's Hospital who are building their capacity within nursing to make a more substantial contribution to leading the cancer nursing research agenda in Ireland.
- The first Fundamentals in Oncology Education Course is planned to take place in quarter 1 of 2020. This course will provide insight into advanced cancer management for all multi-disciplinary colleagues. Already this course has generated interest nationally from large acute general hospitals and the pharma industry.
- A qualitative research study, in collaboration with TCD, exploring the experience of patients on cancer treatment attending for unscheduled care, and the experience of staff who care for these patients, is due to commence in 2020. It is hoped the study will inform the development of a new acute oncology haematology service.
- Planning has also commenced from a nursing perspective for the roll-out of a Chimeric Antigen Receptor (CAR) T-cell Therapy Programme in the hospital. This is another exciting development in the treatment of patients with haematological malignancies.
- The focus of our nursing care is and will continue to be on quality, research, education and clinical competence.

## Haematology Oncology Day Care (HODC)

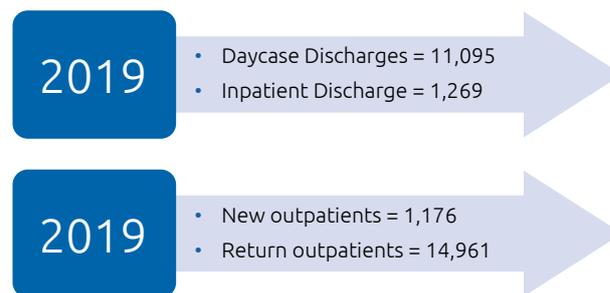
- There were 17,935 daycase attendances in HODC in 2019
- Quality improvement initiatives continue to be a priority for HODC
- GP phlebotomy support for HODC was piloted in October 2019 with an average of six patients per week. The appointments are electronic using Swift-Queue technology, so once the patient is booked into the system by the administrator, a text alert is automatically sent to the patient.

## HODC objectives 2020

- To expand capacity in HODC by increasing the number of treatment couches and to increase the staffing at medical and nursing levels to meet growing patient demand and improve patient experience
- To expand the GP Phlebotomy Support Service.

## Medical Oncology

Oncology outpatient and daycase activity remains high with 27,232 combined attendances in 2019.



## Key achievements in 2019

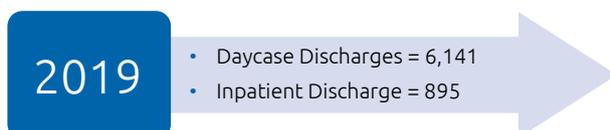
- Active involvement in OECI inspection in April 2019, leading to achieving OECI Cancer Centre accreditation
- Significant contribution by the medical oncology team into research activity and healthcare policy development at local, national and international levels
- The introduction of the Swift Queue Phlebotomy Service to HODC, a pilot project to reduce waiting times in HODC at registration and phlebotomy, which resulted in patients reporting improved satisfaction with the service.

## Objectives for 2020

- Prepare for the introduction of a National Cancer Information System (NCIS) in 2020, in collaboration with the NCCP
- Engage with key stakeholders to increase the number of cancer clinical trials available to patients and patients enrolled on a cancer clinical trial in 2020
- Continue to expand collaborative participation in translational clinical research
- Improve patient satisfaction and wait times through the introduction of telehealth consultations for patients deemed appropriate for this service
- Expand the use of the Swift Queue Phlebotomy Service for patients attending HODC in collaboration with the Laboratory Medicine Directorate
- Expansion and implementation of locally developed and NCCP KPIs related to improved safety and patient experience
- Introduction of a new digital dictation system to improve the capture and sharing of clinical patient information
- Introduction of a more efficient appointment scheduling system to improve patient flow and efficiencies.

## Haematology

- As the National Adult Haematopoietic Stem Cell Transplant Unit, the service carried out 146 transplants in 2019
- Outpatient and daycase activity increased on 2018, with 17,166 combined attendances in 2019.



Outpatient Activity Haematology 2015-2019					
	2015	2016	2017	2018	2019
<b>New</b>	744	1046	1104	702	794
<b>Return</b>	9439	9168	9387	9869	10231
<b>Total</b>	10183	10214	10491	10571	11025

## Chimeric Antigen Receptor-Therapy (CAR-T)

CAR-T is novel immunotherapy for the treatment of adult patients with relapsed or refractory large B-cell lymphoma after two or more lines of systemic therapy. There is also a CAR-T therapy for adults living with certain types of non-Hodgkin lymphoma.

- Two patients were referred to hospitals in the UK for CAR-T in 2019. This exciting new treatment is expected to be available to patients in St James's Hospital in near the future
- Education and training related to CAR-T have been provided to staff throughout the year in preparation for its introduction.
- Two new staff members have been appointed as CAR-T Co-ordinator and Grade V Administration Co-ordinator. They are expected to take up their posts in 2020.

## 2020 Objectives

- To address the issues raised during the JACIE inspection, including increased medical and specialist nursing manpower for the allogeneic transplant service
- To obtain JACIE accreditation of the Autologous Transplant Service.
- To formalise the Myeloid MDT Service to include all new myeloid diagnoses and marrow failure syndromes, to assist in the streamlining of treatment planning and to improve the triage and prioritisation of national transplant referrals
- The launch of a Myeloid Next-generation Sequencing Service to assist in assessment and counselling of patients with myeloid disorders for transplantation
- To formalise and provide greater structure for patients with bone marrow failure disorders, to include a more comprehensive diagnostic work-up, improved fertility preservation options and improve the nursing support for these patients
- To improve the models of care for the management of the expanding population of adult allogeneic transplant survivors. This will involve closer and more structured liaison with referring national haematological and oncological services
- Development of a service (AYA) directed towards young adults with haematological malignancies, including marrow failure syndromes.

## Quality Objectives for 2020

- To improve communications and data collection between SJH and referring centres through fully implementing standardised online patient referral forms for SCT and patient follow-up forms post SCT
- To establish a Patient Forum Group for the development of patient-centred improvements in service delivery
- To be fully prepared for the introduction of CAR-T therapy by Q3 2020, having completed staff training and developed associated SOPs
- To review all SCT policies and procedures in preparation for JACIE interim audit in 2022
- To increase the number of clinical audits undertaken in 2019.

## Cancer Genetics

### Key Achievements in 2019

- Service activity continued to rise with referrals received from all over the country
- 2019 marked the 25th year since the discovery of the lifesaving BRCA2 gene. The 'Structural Symmetries' sculpture by artist Chris Wilson was unveiled in the hospital concourse. This artwork celebrates the breakthrough work of staff at SJH and TCD, notably Prof Peter Daly, Nurse Wilma J Ormiston and Dr Ross Mc Manus who contributed to the discovery of the BRCA2 gene in 1994. It pays tribute to the families who participated in cancer genetics research, and the international effort led by Professor Sir Michael Stratton (Sanger Institute) in the discovery of the BRCA2 gene, leading to improved care for many worldwide
- The 7th Annual 'Gathering Around Cancer' conference had a central genetics component. The conference was led by Prof. David Gallagher (SJH) and Prof. John Mc Caffrey (Mater Hospital) with talks from international speakers including Dr Karen Cadoo (Memorial Sloan Kettering). The conference offered the opportunity for Irish people involved in many aspects of cancer care to gather for education, to exchange research ideas and develop collaborations

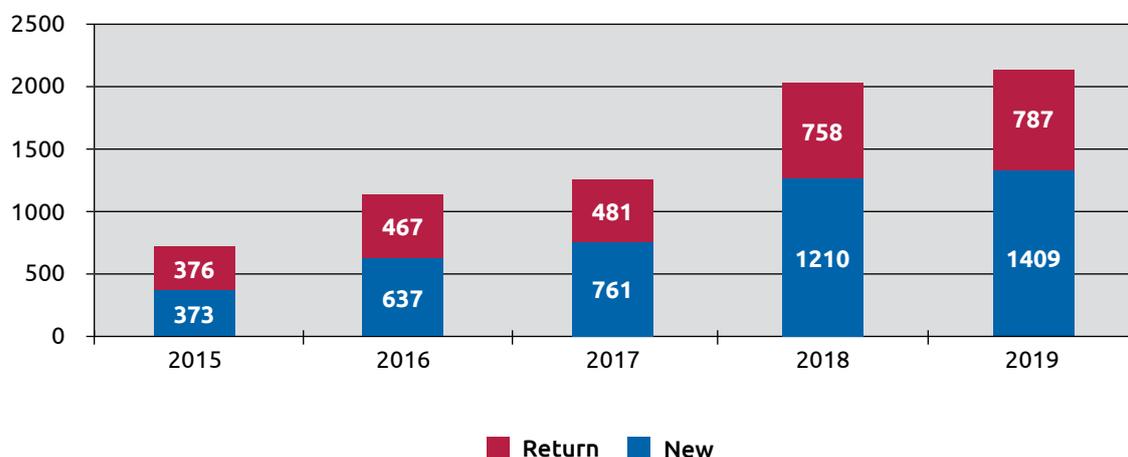
- The service welcomed two new genetic counsellors to the team, Claire Giffney and Aoife O' Shaughnessy-Kirwan
- The Cancer Genetics Service hosted student teaching placements for a medical student (RCSI) and MSc genetic counselling student (Cardiff University)
- A novel programme for MRI screening in Li-Fraumeni Syndrome patients was started with funding support from the Bobbie Bastow Genetic Foundation. Li-Fraumeni Syndrome is an inherited familial predisposition that increases the risk of developing several types of cancer.

### Key priorities 2020

- The service looks forward to a new consultant oncologist and cancer geneticist, Dr Karen Cadoo, who will join in 2020
- The growing waiting list is a major challenge for the service. Given the expanding indications for genetic testing, expanding the Cancer Genetics team in 2020 is necessary to meet service demands and reduce waiting times
- To integrate and implement Progeny software, risk modelling and pedigree-software, enabling family-linked records. Optimise resources and efficiencies by improving testing turn-around-time, electronic processes and reducing paper-based practice
- To develop a business model that facilitates remote telemedicine
- To continue to develop research collaborations.

Activity in the Cancer Genetics Service continues to rise, due to ever-increasing demands. **The table below shows increasing outpatient activity 2015-2019.**

### Cancer Genetics Outpatients 2015-2019



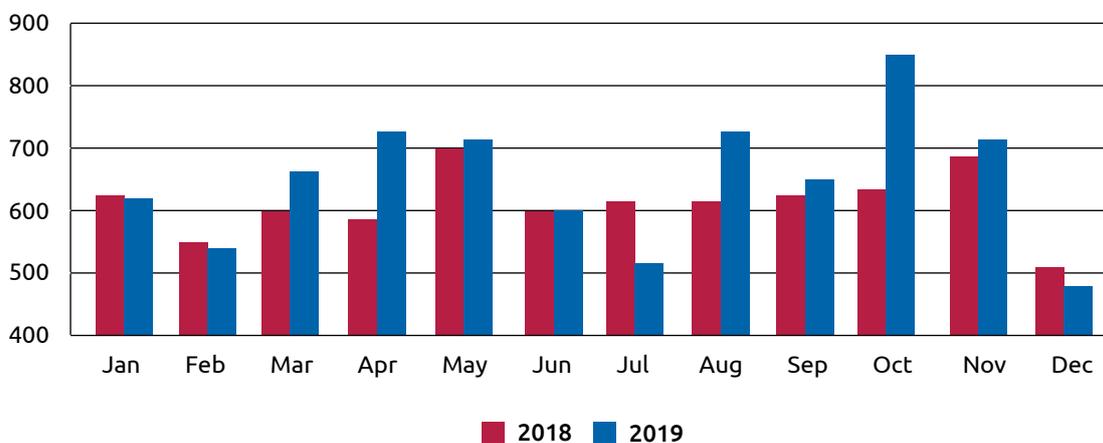
**National Coagulation Centre (NCC):**

- October 2019 saw go-live with Lighthouse project INDICI - New National Haemophilia Electronic Health Record
- Patients switched to new drug Hemlibri, following clinical trial, improving patient quality of life
- A gene therapy study commenced
- Dr Saad Ahmed started as a locum consultant
- Start of Patient Portal Implementation on INDICI-Phase 2
- Catherine Bergin was appointed Grade V Data Manager

- Nurse-led telephone clinics commenced
- Shaughnessy-Kirwan
- The Cancer Genetics Service hosted student teaching placements for a medical student (RCSI) and MSc genetic counselling student (Cardiff University)
- A novel programme for MRI screening in Li-Fraumeni Syndrome patients was started with funding support from the Bobbie Bastow Genetic Foundation. Li-Fraumeni Syndrome is an inherited familial predisposition that increases the risk of developing several types of cancer.

**NCC outpatient activity**

**Annual Clinic Activity Comparison  
2018 - 2019**



Comparison of overall clinic activity in 2018 and 2019, Inc. dental and anti-coagulation activity from Clintech/Indici

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>2018</b>	646	554	592	583	695	600	615	624	635	653	685	506	<b>7388</b>
<b>2019</b>	641	529	663	730	712	597	524	728	665	856	731	477	<b>7853</b>

**Red Cell/ Haemoglobinopathy Service**

- Demand for this service continues to rise, with over a 450% increase in activity over the past five years
- The team comprises of 1 WTE consultant, 2 WTE CNS, 1 WTE staff nurse, 0.5 WTE senior physiotherapist, 0.5 WTE social worker and 0.5 WTE senior psychologist
- A National Transition Programme has been established for patients transitioning from the paediatric services at Our Lady’s Children’s Hospital, Crumlin to the adult services in SJH

- The service has established close links with obstetric colleagues in the Coombe Hospital, managing high-risk pregnancies on a national level
- The Red Cell Service is a member of the Eurobloodnet, a collaborative network of institutions committed to improving healthcare services for patients with rare red cell disorders
- Patients have the opportunity to enrol in international clinical trials which are run in conjunction with colleagues in the Clinical Research Facility at SJH
- The Haemoglobinopathy Service continues to expand with increasing demands year on year.

## Key Objectives 2020

- Expansion of the Ambulatory Haemoglobinopathy Service
- Development of the Transition Service.

## Palliative Care

The Specialist Palliative Care Service looks after patients with life-threatening illness. It provides advice on symptom control and end of life care. It coordi-

nates specialist palliative care support for patients on discharge, and works closely with Our Lady's Hospice and Care Services and other specialist services.

- The Registered Advanced Nurse Practitioner (RANP) Clinics provided by Rory Wilkinson in the HODC continue to grow
- The annual remembrance service took place in 2019
- The Introduction to Specialist Palliative Care Education Programme remains very popular.

### *Outpatient activity continues to grow year on year:*

	2015	2016	2017	2018	2019
New	55	44	55	58	103
Return	199	170	243	315	415
<b>Total</b>	<b>254</b>	<b>214</b>	<b>298</b>	<b>373</b>	<b>518</b>

### *Team visits:*

	2015	2016	2017	2018	2019
Single	4,882	5,066	4,278	4,477	4,429
Joint	676	746	617	728	647
<b>Total</b>	<b>5,558</b>	<b>5,812</b>	<b>4,895</b>	<b>5,205</b>	<b>5,076</b>

## Radiation Oncology

- The Stereotactic Ablative Body Radiotherapy Programme (SABR) continued to grow with greater emphasis on complex centrally placed tumours and oligometastatic disease
- Following data gathered across the St Luke's Radiation Oncology Network (SLRON), all patients with mediastinal lymphoma received radiotherapy using a deep inspiration breath hold (DIBH) technique where appropriate. This potentially permits greater sparing of normal tissue irradiation and will likely lead to a reduction in late normal tissue damage
- All women with left-sided breast cancer (and some with right-sided tumours where cardiac irradiation cannot easily be avoided) and/or the need to treat internal mammary lymph nodes now receive radiotherapy using the same technique (DIBH). This is in keeping with international best practice and should reduce late normal heart damage

- The Physics Department in the St James's Centre held an International 3D Printing Bolus Conference in 2019; the first of its kind. 3D printing bolus is an advanced technique that permits the delivery of radiation to more superficial areas of the body in a much more accurate way than was previously achievable
- Despite significant staff shortages, the SLRON continued to recruit patients to clinical trials (approximately 3% of all). Of note, the international endometrial cancer trial PORTEC-4a, opened. This is the first trial to introduce molecular factors into the adjuvant treatment of endometrial cancer and relied on close collaboration with an international validation of the SJH Histopathology Department. PORTEC-4a will show if omitting treatment in cases of favourable molecular profiles is safe and cost-effective
- Data for treatment delivered 2012-2019 are captured in the table below and reflect the increasingly complex nature of the specialty.

Year	Number of New Treatment Starts	Number of Fractions Delivered	% of treatments that are VMAT	SABR Treatments (no of patients)	SABR Treatments (no of fractions)
2012	823	19,303	10	N/A	N/A
2013	1,160	23,127	27	N/A	N/A
2014	1,450	26,322	30	35	156
2015	1,407	24,887	50.8	56	259
2016	1,395	26,036	73.3	75	360
2017	1,377	23,463	74.3	139	754
2018	1445	21676	76.6	128	669
2019	1427	21910	72.9	171	880

### Psychological Medicine

The Psychological Medicine service provides care for all cancers; haematology, oncology, medical and surgical cancer patients.

#### Key Achievements in 2019

- Integration of the SJH Psych-Oncology Service delivery model by the NCCP for the development of psycho-oncology services nationally
- The input of staff from the SJH service in implementing the National Psycho-Oncology Strategy
- Further development of the Radiation Oncology Specialist Service
- Development of management expertise within the service and the appointment from within the Psychological Medicine Service of the lead for service delivery within the HOPe Directorate.

#### Clinical Trials

- We enrolled 49 patients in 2019 onto 13 different clinical trials
- We opened 12 new clinical trials in 2019 in the areas of lung, breast, GI, GYN and myelofibrosis. Three of which were Phase II, with the remainder being Phase III. All were pharmaceutical company sponsored and funded.

### Key Priorities for 2020

- To improve the environment for the provision of clinical services
- There is a need for a senior psychiatry trainee (senior registrar) within the service, to ensure the continued development of psychiatric expertise for cancer patient care
- The development of methods to capture service activity. One of the strengths of the service 'on the ground' has been its flexibility in responding to patient need, for example seeing patients on the HODC while they attend their haematology-oncology appointment rather than requiring them to attend a separate Psycho-Oncology outpatient department. This approach, while promoting a flexible clinical approach, has meant that much of the service activity is not measured. With the activation of the electronic patient record (EPR), there is now the possibility of capturing activity more practically, and this will be a focus over the next year.

## 4.2 Medicine for the Elderly (MedEl)

Mercers Institute for Successful Ageing (MISA) offers clinical services, spanning a thriving ambulatory care service which operates a one-site-one-stop model for up to 30,000 attendees per year, in addition to avant-garde rehabilitation facilities and cutting edge inpatient care delivered in single room occupancy.

Ambulatory care services include; the Falls and Syncope Unit (FASU), Memory Clinic, Bone Health Unit, Stroke Service, and a busy General Outpatient Clinic. Home FIRSt is a specialist older persons team, based in the Emergency Department (ED). The ED FASU Service covers all ages. Mercers Institute for Research on Ageing (MIRA) is the research pillar of MISA and is Ireland's largest clinical research facility for older people, dedicated to developing new models of clinical care, technological innovations and highest quality research, education and training in healthcare for older adults.

One of our recent exciting developments has been the introduction of a social prescribing programme which is now embedded into not only clinics for older patients, but also general medical clinics throughout the hospital.

The directorate is planning a new Parkinson's Disease ambulatory care service for 2020.

### Highlights 2019



**Pictured:** Minister for Mental Health & Older People, Jim Daly, attending the Social Prescribing Network of Ireland Conference lead by Dr David Robinson, Consultant Geriatrician (right).



**Pictured:** Dr David Robinson, Consultant Geriatrician, discussing the LAMP Project with The Prince of Wales at Clarence House in London on 3 April, 2019.



**Dr Paul Claffey with the Jack Flanagan Medal 2019 winning team**

*Pictured L-R: Dr Paul Claffey, Claudine Howard-James, Anna Coulter, Shriya Varghese, Max Waterstone.*

## Clinical Pillar

In 2019, the directorate's day facility, Robert Mayne Day Hospital (RMDH), underwent a complete make-over, creating an acute four bay clinical treatment area equipped with monitors, three infusion stations, additional doctors work stations and consultation rooms, creating a space to deliver acute care effectively meeting the need of growing acuteness of the patients presenting for treatment. The day hospital provided comprehensive geriatric assessment, rehabilitation and acute medical care to our elderly community cohort and provides access to a wide range of specialist support services.

The Memory Service continues to be busy and has now introduced online Healthlink referrals, which was developed and agreed by all national stakeholders. The FASU developed a new model of service delivery in the ED which has enabled access to quality care for patients of all ages who present with falls or loss of consciousness, which is one of the single commonest presentations to emergency departments. The new model provides a same-day, day case assessment and management with consequent significant reduction in hospital admissions, bed days and length of stay.

## Training and Education Pillar

### Programme of training:

- Five-day Foundation Course in Gerontological Nursing
- International Conference on Falls, Frailty, Polypharmacy & Sarcopenia
- National Stroke Conference
- International Biogerontology for Clinicians Conference
- Bone Health and Osteoporosis Conference
- Artificial Intelligence in Healthcare Technology

2019 was a significant year for the Dementia Services Information and Development Centre (DSIDC) with the launch of two guidance documents for health and social care practitioners. In conjunction with the

National Dementia Office (NDO), the DSIDC was delighted to announce the launch of "The Next Steps: Dementia post-diagnostic support guidance". The document provides guidance on the development and ongoing facilitation of dementia post-diagnostic psycho-educational programmes for people with dementia and family care partners.

## Research Pillar (MIRA)

### FRAILMatics:

Funding was awarded for a research programme called FRAILMatics: Mathematical research and big data analytics towards the development of the next generation of transdisciplinary diagnostics for the assessment of physiological vulnerability in older adults: challenge-based disruptive technology initiative. The programme commenced in December 2019 and runs until 2024.

### The Sense-Cog Trial:

This trial is a 36-week randomised, controlled, parallel-group, observer-blind, multicentre, superiority intervention to standard care, to improve quality of life in people with dementia, and their companions. Prof. Iracema Leroi is the chief investigator and the principal investigator is Professor Brian Lawlor.

### The effects of an extensive exercise programme on the progression of Mild Cognitive Impairment (MCI):

Dr Coen (Neuro-psychologist who worked in the Memory Clinic) was involved in an advisory capacity regarding the cognitive assessment aspects of this multicentre study in three countries (PI Prof Stefan Schneider, Institute for Movement and Neurosciences at the German Sport University in Cologne). Sub-studies were undertaken by Kate Devenney (TCD, academic supervisor Prof Brian Lawlor, with input from Dr Coen) and Kate successfully completed her PhD.

## Creative Life Pillar

Our unique creative life hub has provided wellbeing initiatives in creativity for both the elderly in patients and those in the community. Staff have also been included in these programmes developed in conjunction with Creative Ireland and the Arts Council.

### Creative Life events:

- National College of Art and Design (NCAD) Studio + Group 1 Public showcase in MISA
- Dublin Castle – end of workshop series – invited showcase in Dublin Castle
- MISA Choir (Director Norah Walsh) rehearsals and public performances
- Irish Therapy Dogs weekly visits
- NCAD and MISA guest public lunchtime art talks series -6 lectures
- Age of Arts and GBHI expert hub – concept, co planned and delivered in 2 locations at the one time in TCD and an online audience- MISA Choir 1st choir to perform in Paccar Theatre.
- Creative Life area – Tai Chi classes, and meetings.
- DIT-TU art workshop – students working with older people participating in arts
- Outlandish Theatre – artists working with SCOPE/ SALT staff and Martha Whiteway with patients.
- Bealtaine festival
- Café BÁS with the Irish Hospice Foundation
- Bealtaine Discussion – National event – NCAD – IMMA –MISA CL
- IMMA - Collaboration with SCOPE Physio team - mark making workshop for patients
- Connect- Social Prescribing MISA with IMMA meetings.
- Cantando choir (Director Orla Barry) performance in MISA
- MISA Choir performances for Alzheimer's Society Ireland – Advocacy Group National Meeting and DCC Culture Night, St James's Church.
- Age and Opportunity - national artists in residence.
- Age well art participatory workshop series, for patients and carers with a public art showcase (collaboration) TCD and HOPE
- Dublin International Film Screening – (Elvis) Film /Jail House Rock (collaboration) – for patients on MISA wards.
- "Poems and Piano in the key of Elsewhere" performance by Dr Anne Marie O'Dwyer and Maeve O Sullivan (public event)

## Creative Life Pillar

- Develop Community Integration Initiatives
  - Development of Movement Disorder Service
  - Expansion of the Robert Mayne Day Hospital Services to meet patient needs in the community
  - Memory Clinic expansion
-

## 4.3 Medical and Emergency (MED)

The Medical and Emergency Directorate (MED) comprises all Internal medicine specialties. It is organised into four administrative pillars; Acute Floor, Inpatient Care, Day Procedures and Ambulatory Care. Its mission is to provide the best care for all patients based on safety, clinical excellence and the patient experience. The agreed management process is a clinically-led cycle for continuous improvement.

Its aims focus on optimal acute and ambulatory care for all patients in the following specialties; emergency medicine, acute and internal medicine, cardiology, dermatology, endocrinology, endoscopy, gastroenterology and hepatology, clinical immunology, GU medicine and infectious diseases, ophthalmology, nephrology, neurology and clinical neurophysiology, respiratory medicine and the Respiratory Assessment Unit and rheumatology.

### Performance Highlights

2019 brought changes to the MED Directorate.

#### Appointments

- Prof. Declan Byrne was appointed as Clinical Director
- Aisling Collins was appointed as Operations Manager
- Carolyn Conroy was appointed as ADON for the Ambulatory Pillar

The Narcolepsy Sleep Unit opened as planned in 2019.

#### Key appointments linked to the Narcolepsy Unit:

- Dr Brian Kent was appointed as a Respiratory consultant
- Dr Deirdre O' Rourke was appointed as a Neurology consultant
- Dr Arthur Hennessy was appointed as an Emergency Medicine consultant

The Endoscopy Unit retained JAG accreditation after a successful audit visit by the JAG Accreditors in September, 2019.

#### Retirements:

Dr Brendan Foley, Consultant Cardiologist, retired in early 2019. It is planned to fill this post by early 2020.

#### Key objectives for 2020

- Implementation of the cardiovascular information system (CVIS)
- Completion of the Endoscopy Decontamination Unit.

## 4.4 Surgery, Anaesthesia and Critical Care (SACC)

The Surgery, Anaesthesia and Critical Care Directorate (SACC) provides a range of services and specialties at a local, regional and national level. SACC's mission is to provide safe, timely and personal care to all patients.

Services provided are Anaesthesia and Pre-assessment, Breast Care, Cardiothoracic Surgery, Critical Care, Upper and Lower Gastro-intestinal Surgery to include General Surgery, Gynaecology, Oral and Maxillofacial Surgery, Orthodontics, Prosthodontics and Cleft Ambulatory Care, Orthopaedics, Otolaryngology, Plastics, Reconstructive and Burn Surgery, Acute and Chronic Pain Management, Vascular Surgery and Urology. SACC is also responsible for the Hospital Sterile Supplies Unit (HSSU).

### Performance Highlights

The start of the year saw the retirement of the directorate's Clinical Director, Dr Jeanne Moriarty. Mr Vincent Young, Consultant Cardiothoracic Surgeon, was appointed as the new Clinical Director.

The start of the year saw the retirement of the directorate's Clinical Director, Dr Jeanne Moriarty. Mr Vincent Young, Consultant Cardiothoracic Surgeon, was appointed as the new Clinical Director.

There were a number of new consultant appointments to the directorate, Mr Gary Fitzmaurice, Thoracic Surgeon, joined the team, and Ms Lisa Smyth, Urological Surgeon, commenced her joint role between St James's Hospital (SJH) and Tallaght University Hospital.

There was also a high turnover of Assistant Director of Nursing (ADON) staff members within the directorate. Ms Catherine Tobin, ADON for Critical Care, transferred to her new role in Human Resources, with Ms Charlotte Stuart, ADON for Ambulatory Care, Ms Jane Murphy ADON for the surgical ward areas and Ms Rynagh Gilligan, ADON for Critical Care and The National Burns Unit, all commencing their roles in the directorate. We welcome them, and all new staff who joined the directorate in 2019.

2019 was also a year of great sadness for the directorate as we lost a dear friend and colleague, Ms Orla Beggs. Orla completed her nurse training in SJH and was CNM3 for the directorate ward areas. Orla's commitment and contribution to both the hospital and the directorate was unquestionable. She was an amazing character and she certainly left a lasting impression on all of her colleagues.

Theatre access continued to be a challenge, with a deficit in both nursing and consultant anaesthetic posts, requiring the need for the continuation of rolling theatre closures.

### 2020 Key Objectives

**The key areas for development within the directorate for 2020 are as follows:**

- Opening of unfunded, unstaffed main operating theatres
- Improved theatre access for both inpatient and day surgical theatre
- Improved Rapid Access Prostate Service delivery
- Increasing our critical care capacity
- Continued improvement in the delivery of the Day of Surgery Admission (DOSA) pathway.



## 4.5 Laboratory Medicine (LabMed)

The St James's Hospital Centre for Laboratory Medicine and Molecular Pathology (LabMed Directorate) is a fully accredited service. It comprises the clinical laboratory disciplines of; Biochemistry (including Point of Care Testing), Cancer Molecular Diagnostics, Haematology (incorporating Coagulation and Cryobiology), Histopathology (incorporating Cytopathology), Immunology, The Irish Mycobacteria Reference Laboratory (IMRL), Microbiology (incorporating Virology, (Interim) Gonococcal Reference Laboratory (GCRL) and Infection Prevention and Control), The National MRSA Reference Laboratory (NMRSARL), Phlebotomy and Transfusion Medicine (incorporating Haemovigilance). In addition to this, the laboratory engages in clinical research and is actively involved in clinical audit and improvement.

### Performance Highlights of 2019

All laboratory departments were successful in retaining their accreditation status to ISO 15189: 2012 (Medical Laboratories: Requirements for Quality and Competence) in 2019 for another five-year cycle (2019 – 2024). The laboratory's Near-Patient Testing Service is also accredited to ISO22870:2016 POCT Requirements for Quality and Competence. The whole directorate is assessed on an annual basis by the Irish National Accreditation Board (INAB) for continuing compliance with these international standards.

Additional extensions to the scope of laboratory testing repertoire are continuously delivered which contribute to patient care, the quality and commitment of the laboratory teams and the integrated Quality Management System across all departments. The Cryobiology Laboratory is licensed as a Tissue Establishment by the Health Protection Regulatory Authority (HPRA) and in 2019, completed laboratory assessment and inspection to obtain accreditation from the Joint Accreditation Committee ISCT-Europe and EBMT (JACIE) as Europe's only official accreditation body in the field of haematopoietic stem cell transplantation (HSCT) and cellular therapy.

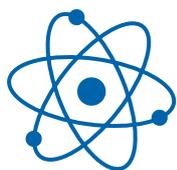
The directorate's workload is rising year on year, averaging at 7% in overall testing figures, leading to a total test volume of just under 10.5 million in 2019. The increase in workload (varying from 1-18%) is distributed across multiple laboratory disciplines, including increases in Phlebotomy Services.

Laboratory personnel continue to engage in the development of the National Medical Laboratory Information System (MedLIS) Project and the National MedLIS Project Board. This is a long-term project with high levels of complexity and unique challenges impacting the hospital (the provisional go-live date for SJH is Q1, 2021). The delivery of this project will create a national laboratory record for patients to drive improvements in patient care in Ireland.

### Some specific developments in Laboratory Services in 2019 include:

- **The Haematology Department** continues to manage the expansion of the Haemoglobinopathy Services for adults across the entire laboratory workload, with increased test complexity as well as increased activity in the Haematinics and Transplant Drug Monitoring Laboratory area and the National Coagulation Laboratory.
- **The Microbiology Department** had an overall increase in workload of 17% over the same period in 2018, comprising General Microbiology (42% of workload), compared to Virology (Molecular & Serology; 58% of workload). Specific areas of development included STI screening and as well as Bacteriology screening (CPE/VRE). The end of 2019 also saw increased routine and urgent flu screening which was managed well by the Molecular Department. In addition, the GCRL continued to offer reference laboratory services to external hospitals for N. gonorrhoea susceptibility testing and resistance monitoring.

- **The Phlebotomy Department** is working to expand the Phlebotomy Appointment System for the Outpatient Department (OPD) phlebotomy patients and SwiftQueue services to the Haematology/Oncology Day Ward (provisional completion by Q2 2021).
- **The Immunology Laboratory** at St James's Hospital (SJH) remains by far the largest diagnostic immunology service in Ireland, providing a complete repertoire of immunology diagnostic tests, a supporting clinical service and translational research activity. The laboratory team continues to provide a high-quality service to SJH as well as local GPs and external users from across the country. Translational research projects undertaken with MISA, Neurology, Respiratory, Rheumatology Departments and paediatric Allergy & Immunology specialists in CHI have added to our repertoire. These tests cover a range of disorders including Primary Immunodeficiency, Neuro-degeneration, Autoimmune Encephalopathy and general Autoimmunity.
- **The Cancer Molecular Diagnostics Laboratory** was relocated to the Trinity Translational Medicine Institute (TTMI) on the SJH campus in August 2019, with increased laboratory workspace. This required equipment revalidation as well as additions to equipment inventory for automated library preparation, cell-free DNA extraction system and EGFR mutation detection. Service development will continue in 2020 to expand the panel repertoire for mutation detection.



**THE MICROBIOLOGY DEPARTMENT**  
**HAD AN OVERALL INCREASE IN WORKLOAD OF**  
**17% OVER THE SAME PERIOD IN 2018,**  
**COMPRISING GENERAL MICROBIOLOGY**

## Objectives for 2020 include:

1. Development and implementation of a new five-year strategic plan consistent with SJH and HSE strategic priorities
2. Continued infrastructure developments to support service needs including the area of Phlebotomy and development of a BioBank with Trinity College Dublin and BioBank Ireland Trust
3. Continued expansion of CMD repertoire and laboratory development
4. Progress implementation of the Equipment Management Programme in key areas such as Histopathology, PTTS System.
5. Continued IT development, driving improvements in connectivity, functionality and interfacing of analysers. This includes validation of the MedLIS System and electronic results management (internally and with external hospitals)
6. Develop strategies for recruitment, development and retention of staff in conjunction with the HR Department

## 4.6 Diagnostic Imaging (DiagIm)

The DiagIm Directorate provides a diagnostic imaging service to the patients and clinicians of St James's Hospital. Imaging services provided include CT, MRI, ultrasound, breast imaging, nuclear medicine, PET/CT, interventional radiology and general X-ray. A service is also provided to GPs as well as tertiary care to hospitals. A radiographic service is also provided to the Cardiac Catheterisation Laboratory, Endovascular Suite, Endoscopy Dept., DXA and Theatres. The provision of education and training is a key function of the directorate. A training programme for specialist radiology registrars is delivered in addition to ongoing clinical training of undergraduate and postgraduate radiography students.

### Performance Highlights of 2019

The demand for diagnostic imaging services, in particular CT, MRI, ultrasound, mammography and PET/CT, continued to increase in 2019. The directorate aims to

provide timely patient access to all diagnostic imaging services. There was a continued focus on improving our wait times for all procedures in 2019. The overall activity of the department increased by 5%, with a 16% increase in MRI and a 14% increase in CT.

Imaging Modality	2018	2019	Variance
General Radiology + Max Fax	114,116	115,788	1%
G.I.	852	816	-4%
Mammography	7,507	7,668	2%
Ultrasound	20,880	21,122	1%
C.T.	37,641	43,062	14%
Interventional Radiology	3,369	3,432	2%
Nuclear Medicine	4,833	4,919	2%
M.R.I	10,395	12,098	16%
PET/CT	3,211	3,220	0%
<b>TOTALS</b>	<b>202,804</b>	<b>212,125</b>	<b>5%</b>

### **PET/CT Service:**

PET/CT PSMA scans are the most sensitive scans available for detection of prostate tumour recurrence following therapy and have a valuable role in staging patients with high-risk prostate cancer at the outset. The PET/CT PSMA Service commenced in 2019 at St James's Hospital. To support this new service, a new laminar flow cabinet was installed in the Nuclear Medicine Department. Currently, one to three scans are performed on two days per week, depending on generator age (two to six scans per week). The scan number is variable because the radioactivity obtained from the generator decreases with time (each generator lasts approximately six months). The national demand for this service significantly exceeds the available capacity as St James's Hospital is the only PET/CT Department currently offering this service in the country.

### **New appointments**

In 2019, Prof Ciaran Johnston commenced his term as the Clinical Director of the Diagnostics Directorate.

Karen O'Leary was appointed to the position of Superintendent Radiographer. There were three appointments to Clinical Specialist Radiographer grade: Elaine Doyle (Radiation Safety Officer), Vindhya Madappa (Mammography) and Aoibheann Gormley (Ultrasound).

### **Other 2019 highlights**

In 2019, the new graduate entry MSc in Diagnostic Radiography Programme commenced at Trinity College Dublin. The programme was established by radiography staff in the directorate. The course director is Suzanne Dennan, Radiographic Services Manager and the course coordinator is Laura Kenny, Deputy Radiographic Services Manager. St James's Hospital is the largest clinical placement site for radiography students on this programme.

During 2019, radiographers at St James's Hospital successfully completed the MSc in Medical Imaging Programme (Nuclear Medicine strand) at Trinity College Dublin.

The St James's Radiographers' Education Group also facilitated the following skills courses:

- Radiation Protection for Non-Radiology Medical Practitioners and Hospital Personnel
  - IV Skills Training for Radiographers
-

## Speech and Language Therapy, Medical Social Work, Clinical Nutrition, Occupational Therapy, Physiotherapy (SCOPE)

The SCOPE Health & Social Care Professionals (HSCP) Directorate comprises of five departments; Speech and Language Therapy (SLT), Medical Social Work, Clinical Nutrition, Occupational Therapy and Physiotherapy. SCOPE provides a multidisciplinary client-centred holistic inpatient and outpatient service. 14,496 new and 29,928 return outpatients and 26,115 new and 132,710 return inpatients were seen in 2019. Currently, there are 185 WTE HSCPs, 10.00WTE clerical/admin and 10.70WTE attendants working in the directorate.

### Performance Highlights of 2019

#### SCOPE

- National Treatment Purchase Fund (NTPF) funded weekend Dietetics, Occupational Therapy, Physiotherapy and Speech and Language Therapy services commenced
- SCOPE services referred out to the Community Rapid Response Team (CRT)
- HSCP's Clinical Specialist Forum was established with the aim to expand HSCPs scope of practice to improve access and wait times for patients
- "Kindness at work bundle" was developed
- Involvement in OECL accreditation audit in 'supportive care and survivorship'.

#### Clinical Nutrition

- Collaboration with SLT, nursing, catering and multidisciplinary colleagues in preparation for International Dysphagia Diet Standardisation Initiative (IDDSI) transition
- Implementation of Nutrition Focused Physical Examination (NFPE), enhancing malnutrition diagnosis and informing patient care
- 0.5WTE Clinical Specialist Dietitian secured for IBS care-pathway after pilot demonstrating €103,953 cost savings and reduced waiting list for endoscopy
- Initiation of dietetic service to National Narcolepsy and Related Sleep Disorders Adult Service
- Temporary senior dietetic approved to meet growth in head and neck cancer patients requiring intensive dietetic input
- Increased patient numbers established on home enteral nutrition in UGI Surgery and Haematology Oncology Day Care (HODC), optimising nutritional status and enabling patients to go home and remain at home during treatment.

#### Medical Social Work

- Senior social workers were appointed to the following services:
  - Delayed transfers
  - Inclusion Health team
  - Bereavement service and follow up for families where a post mortem is required
- Children First child protection policies and procedures completed.

#### Occupational Therapy (OT)

- The National Treatment Purchase Fund funded OT-led advanced practice elective orthopaedic waiting list initiative was extended to the Plastic Surgery Outpatient Departments
- Therapeutic group-work became fully embedded in MISA OT rehabilitation programmes, with groups running weekly; Homeward Bound, Extend Chair Exercises and Breakfast Group.
- Clinical pathways for driving assessment and intervention were established in MISA, including the Robert Mayne Day Hospital.

#### Physiotherapy

- Established first 'OpFit Prehabilitation Service' nationally for patients undergoing major cancer surgery
- Delivered first contact Advanced Practice Physiotherapy Service in ED over a 5-month period
- Delivered pilot specialised Gynae-oncology Service funded by Emer Casey Foundation
- Championed inpatient flow initiatives through continuation of End PJ Paralysis and Red to Green.

## Speech & Language Therapy

- Securing new temporary senior post to Head/Neck Oncology service March 2019
- Commencement of SLT Emergency Mobile Phone Service for laryngectomy patients with urgent communication and voice prosthesis issues
- Involvement in:
  - Patient signage project QI Committee
  - Audit of diet orders process
  - QI project targeting mealtime experiences for patients in MISA
- Initiation of a Head/Neck training module for undergraduates in both TCD and University of Malta.

## Awards

### 2019 INDI Research in Practice Dietitian of the Year Competition

- **\*Winner\*** Michelle Fanning, Clinical Specialist Dietitian in Upper GI Surgery, St James's Hospital. *'A join dietitian and surgeon clinic dedicated to investigating and managing symptoms of mal-absorption after oesophageal and gastric cancer surgery'*.

### Physiotherapy

- Grainne Sheill was recognised by the Irish Cancer Society with the award 'Postdoc Researcher of the Year'.
- Awarded minor beneficiary of TCD Med Day for physiotherapy post-operative breast cancer care.

### Postgraduate Awards

- Kate Devenney completed a PhD with TCD supported by Prof B. Lawlor: 'The Effects of an Extensive Exercise Programme on the Progression of Mild Cognitive Impairment (MCI)'
- Sinead Coleman completed a MSc by research with RCSI: 'Progressive Resistance Training in a Post-acute, Older, Inpatient Population: A Feasibility Randomised Controlled Trial'
- Bronagh Conroy completed part-time MSc by research with RCSI: 'Examining the Variables Associated with Community Ambulation in an Elderly Day Hospital Population.'

## 2020 Objectives

### SCOPE

- Continue NTPF service provision seven days per week
- Engage in Cancer Survivorship Initiatives.

### Clinical Nutrition

- International Dysphagia Diet Standardisation Initiative (IDDSI) transition
- Intestinal Failure Service for SJH patients and young adults transitioning from paediatric services
- Secure temporary dietetic post approved to optimise nutritional management of increased head and neck cancer surgery patient numbers diagnosed and treated in SJH.

### Medical Social Work

- Continue to provide a high quality social work service to patients and families
- Update departmental policies and procedures in all areas of practice
- Continuing professional development for all staff in areas relevant for social work.

### Occupational Therapy

- Secure temporary clinical specialist post in orthopaedics – NTPF-funded, OT-led Outpatient Department (OPD) waiting list initiative
- Secure temporary post for SMART – Specialised Memory and Attention Rehabilitation Therapy cognitive rehabilitation programme for people with dementia.

### Physiotherapy

- Pursue opportunities to extend Lymphoedema/ Gynae-oncology Service
- Re-establish ED APP initiative
- Explore how to develop survivorship Physiotherapy Service.



**2019 INDI RESEARCH IN PRACTICE  
DIETITIAN OF THE YEAR COMPETITION**

**MICHELLE FANNING**

*Clinical Specialist Dietitian in Upper GI Surgery*

## 5.2 Pharmacy

The Pharmacy Department works as an integral part of the multi-disciplinary team and provides a pharmacy service that optimises patient outcomes through the safe, judicious, clinically effective, appropriate and cost-effective use of medicines.

We source and procure, clinically review, dispense and distribute medicines and selected non-medicinal products within the hospital. A full suite of pharmaceutical services is provided to the hospital and its patients. These include; pharmacy procurement, medicines management, clinical pharmacy services including specialist Haematology Oncology (HOPE) and Department of Genitourinary Medicine (GUIDe) clinical pharmacy services and aseptic compounding services (ACU). A pharmacy outpatient service is provided to Tuberculosis (TB) patients and GUIDe patients. We provide pharmaceutical services, both products and staff to St Luke's Hospital, Rathgar. Both pharmacies are registered with the Pharmaceutical Society of Ireland, under the Pharmacy Act. The Pharmacy Department actively contributes to the education of nursing, medical and pharmacy staff within the hospital and at undergraduate level.

### Performance Highlights of 2019

A key highlight of 2019 was the Pharmacy Department winning two awards at the Hospital Professional Awards.

- Hospital Pharmacy Team of the Year
- Aseptic Compounding Team of the Year

Medicines Management and ACU Services successfully continued throughout 2019 to provide:

- 980,139 packs purchased via Pharmacy Procurement Office to a value of €83 million
- 424,923 transactions processed through Medicines Management Dispensary Services
- Medication tenders and contracts continued, resulting in significant savings to the hospital
- 27,765 items were manufactured or processed through the Aseptic Compounding Unit
- Lean Ward Medicines Management continued throughout the hospital
- The successful introduction of the Falsified Medicines Directive.

The Clinical Pharmacy Service continued to provide medicines reconciliation on admission. A total of 16,750 medication reconciliation episodes were completed in 2019; 33% of which were completed within 24 hours, 76% were completed within 72 hours, a clinical review of medication for inpatients, medicines information, promoted cost-effective use of medication and patient medication education.

Three medication safety audits were completed in tandem with the Medication Safety Facilitator:

- Management of Acute Hyperkalaemia
- Management of Hypoglycaemia
- Review of Clinical Pharmacists Interventions.

The Clinical Pharmacy Team and Medication Safety Facilitator in conjunction with the Renal and Endocrinology Teams collaborated and facilitated the introduction of an algorithm for the treatment of acute hyperkalaemia.

### 2020 Objectives

In 2020, the department aims to build on the progress achieved in 2019:

- Utilise EPMAR to develop best in class workflows for our Clinical Pharmacy and Medicine Management Services and to support staff in the safe prescribing and administration of medication
- Expand our procurement activity, increase our expertise and harness greater value for money
- Demonstrate the quality and cost-effectiveness of our Pharmacy Service by relevant KPIs and research
- Review of Aseptic Compounding Services with a view to implementing NCIS and robotics.

2019 was another exciting, challenging and busy year for the Pharmacy Department. The department met these challenges, maintained its core activity and also managed to expand services. In 2020, the department will continue to build and expand upon those achievements.

## 5.3 National Medicines Information Centre (NMIC)

The National Medicines Information Centre (NMIC) provides independent, evidence-based information and advice to healthcare professionals throughout Ireland. The aim of the NMIC Service is to promote the safe, effective and efficient use of medicines through information provision, mainly by means of a Clinical Enquiry Answering Service (CEAS) and proactive information provision through our publications; Therapeutics Today and the NMIC therapeutics bulletins. Its team of pharmacists and doctors are trained in information retrieval and analysis and use a range of information sources including specialist texts, information databases and primary journals.

Both NMIC publications are available on [www.nmic.ie](http://www.nmic.ie) and are distributed nationally to healthcare professionals. The NMIC also has an educational role in promoting safe and effective use of medicines. This is demonstrated through NMIC's involvement in teaching various groups including medical and pharmacy undergraduate and postgraduate students, GP trainees, NCHDs and GPs.

### Performance Highlights of 2019

2019 was a busy and productive year in the NMIC. We continued to provide information support to healthcare professionals to assist them in the management of patients with increasingly complex pharmacotherapeutic needs. Some key performance highlights include:

- Over 80% of enquiries to our CEAS originated in primary care
- Over 99% of enquiries to our CEAS were patient-centred
- Information and advice was most commonly requested about the choice of therapy, drug interactions, dose and adverse drug reactions
- Monthly user satisfaction surveys indicated a high level of confidence in the quality of the information provided via the NMIC CEAS. In 2019, 100% of respondents stated they would use the service again.
- Education and training sessions on therapeutics delivered to GP trainees, NCHDs, undergraduate and postgraduate pharmacy, medical and dental students (TCD) and final year medical students (UCD).
- Continued collaboration with, and support to organisations, such as the Department of Health, HPRA, HSE Medicines Management Programme, ICGP, HSE and RCPI.
- Ongoing contribution to the work of the SJH Pharmacy & Therapeutics, Medication Safety, and New Drugs Committees.

### Staff changes:

Claudine Hughes (Chief II Pharmacist) was seconded to the Clinical Effectiveness Unit at the National Patient Safety Office, Department of Health. Gráinne O'Malley was appointed as Chief II Pharmacist. Dr MaryJo MacAvin became full-time Medical Advisor.



**OVER 99% OF ENQUIRES  
TO OUR CEAS WERE PATIENT-CENTRED**

### Key Objectives for 2020

- We will endeavour to continue to provide a high-quality service that remains patient-focused and responsive to the needs of our users.
- Further engagement with the GP training programmes/GP faculties nationwide to increase awareness of the NMIC as an important resource to support GPs in their everyday practice.

## 6.1 The William Stokes Post-Graduate Centre

St James's Hospital supports a large number of doctors, both in structured training programmes in the disciplines of medicine and surgery and in standalone posts, and takes great pride in its top class teaching and education of postgraduate students. As a level four training hospital, teaching obligations and responsibilities are delivered in many guises across disciplines and specialties, including Medical and Surgical Grand Rounds, medical updates, formal intern and senior house officer (SHO) teaching, specialty journal clubs, multidisciplinary teams (MDTs), bedside tutorials, research meetings, case conferences and seminars etc.

The Postgraduate Centre facilities are available to deliver and support medical education programmes and the centre plays a key role in the organisation, coordination and ongoing development of medical education, in close liaison with Trinity College Dublin (TCD), the Royal College of Physicians of Ireland (RCPI), Royal College of Surgeons in Ireland (RCSI) and our community partners in General Practice.

### Performance Highlights

Dr Nicola Raftery was awarded the Intern Medal from the Intern Class of 2019. This medal is an accolade which acknowledges a specific research or project interest which is developed and presented in the intern year.

2019 saw a change in the management of the Postgraduate Centre, which was previously aligned to the Medical Workforce Unit within the Human Resources Directorate, both from a funding and management perspective.

### Key Objectives for 2020

Plans throughout 2019 focussed on planning and development of inter-professional simulation training in 2020.

---



## 7.1 Clinical Research Facility (CRF)

The Wellcome Health Research Board (HRB) Clinical Research Facility (CRF) at St James's Hospital (SJH) supports Trinity College (TCD) and SJH based investigators conducting clinical research involving patients of the hospital. This is accomplished by providing access to purpose built facilities, equipment and specialist services that enable high-quality clinical research to take place.

The CRF is funded by the Wellcome Trust and the HRB and is jointly governed by the hospital and TCD. The CRF is a clinical area and includes clinical assessment rooms, an exercise physiology room, a neurophysiology suite, isolation rooms, a six-bed day ward, a dispensary and aseptic compounding suite and a sample processing laboratory. The services provided by the CRF include; advice on the preparation of protocols and funding applications, contract negotiations, research pharmacy, research nursing, regulatory affairs advice and sample processing.

The CRF is open to a wide range of research, which includes experimental medicine and early phase (Phase I and II) clinical trials, Phase III clinical trials, studies involving exercise physiology/physiotherapy and electrophysiology. In 2019, the CRF supported clinical studies and trials in the areas of cardiology, dermatology, gastroenterology, geriatric medicine, haematology, hepatology, immunology, nephrology, neurology, oncology and psychiatry.

### Performance Highlights of 2019

#### Notable examples of high impact clinical studies and trials started in 2019 include:

1. The COVINCE Trial for stroke patients led by the HRB funded Stroke Network.  
Principal Investigator (PI): Professor Joe Harbison
2. Studies looking at the natural history of neurodegenerative diseases like MND, ALS using EEG data recorded in the CRF's neurophysiology lab  
PI: Professors Orla Hardiman and Colin Doherty
3. SENSECOG: A trial looking at how the provision of glasses and hearing aids can slow down cognitive decline in the elderly  
PI: Professor Iracema Leroi
4. RENEW: A medical device trial to measure the impact of external counter pulsation therapy (ECPT) on the progression of mild cognitive impairment and Alzheimer's Disease  
PI: Professor Brian Lawlor.

2. Late in 2019, the CRF recruited a further senior pharmacist to assist with gene therapy trials in early 2020
3. Preparing for a gene therapy trial for the treatment of Haemophilia A in early 2020
4. Commencing research clinics for specific patient cohorts (e.g. vasculitis).
5. Preparing for a Phase 1 trial of a novel therapy for ALS in 2020
6. Appointing a Quality and Regulatory Affairs Manager to support investigators wishing to conduct trials sponsored by TCD
7. Fostering CRF's relationship with the University of Birmingham's School of Health and Dental Sciences, with a joint meeting taking place in May 2019 involving clinicians from St James's Hospital.

The eventual achievement of some of these objectives was subsequently disrupted by the COVID-19 pandemic. Despite this, 2020 saw the Phase I trial of a treatment for ALS started, the Haemophilia A Gene Therapy Trial (the first in Ireland), completed by three St James's Hospital patients, and the relocation of cancer clinical activity to the CRF.

### Key Objectives

#### In 2019, the CRF focused on the following objectives:

1. Planning for the integration and alignment of the CRF with the Cancer Clinical Trials Office on the St James's campus. To this end, the hospital funded a senior clinician (0.3FTE) to become an associate director of the CRF with a mandate to increase the amount of haematology/ oncology clinical trials being supported by the CRF and with a view of fostering integration and alignment of the Cancer Clinical Trials Unit with the CRF



## 7.2 Research and Innovation (R&I) Office

The Research and Innovation (R&I) Office is a joint venture between the hospital and the Wellcome-HRB Clinical Research Facility (CRF). It entered its fifth year of operation in 2019 and acts to maintain oversight of hospital-based research activity, in addition to working to support and strengthen the research culture on campus.

An online R&I Research Application Form must be completed and submitted for review before starting any study and applies to all forms of research, audit and quality improvement projects. Support is provided in a “sign-posting” capacity and includes guidance on local procedures and the available local resources, in addition to assistance with study classification, and clarification of any associated documentation or further approvals required. A guidance document is available on the R&I Office webpage on the intranet (and website), explaining how to complete an R&I application, and a number of document templates are also located there (e.g. Ethics Application Information, Data Protection Impact Assessment forms, Nursing Research Access Study Protocol, etc.).

An R&I Steering Committee, jointly chaired by Ann Dalton (SJH Deputy CEO) and Professor Martina Hennessey (CRF Director), meets quarterly, to monitor trends in activity, share information across disciplines and plan for the future development of the R&I Office. The Committee met four times in 2019.

### Performance Highlights of 2019

There were 353 studies registered with the R&I Office in 2019. This is an increase of 57% from 2018 (n=225). The breakdown can be seen in **Figure 1** below. **Figure 2** outlines the ‘Non-research’ categories, while **Figure 3** outlines the breakdown of research categories:

### Application Type 2019 - Total 353

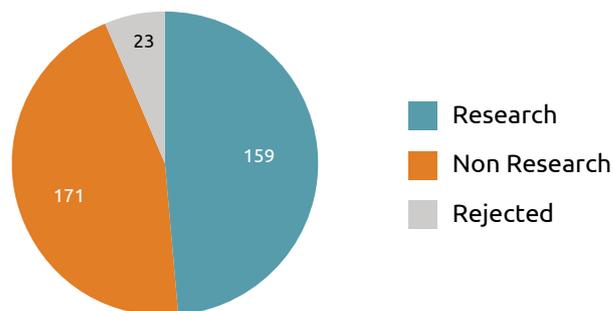


Figure 1

### Non-research application types 2019

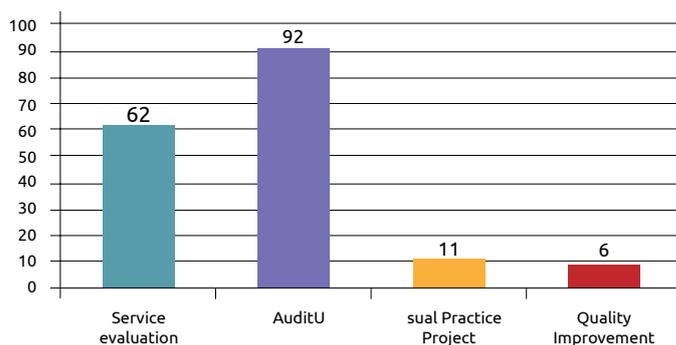


Figure 2

## Research Application Types 2019

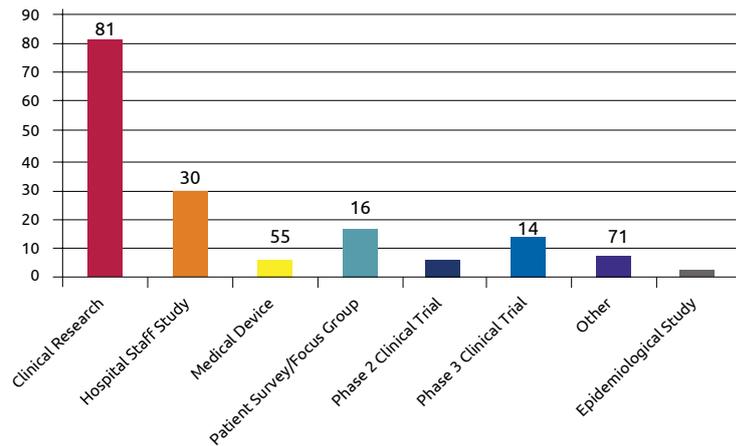


Figure 3

Claire Temple, who has previously worked as a pharmacist for the SJH Cancer Clinical Trials Office, took up the position of R&I Programme Manager in Jan 2019.

In 2019, the R&I online application form was re-designed and went live in March. Additional data protection questions were included to ensure compliance with GDPR. The updated version of the form assists in correctly classifying projects as either research or service evaluation/ audit. The R&I Programme Manager, DCEO & CRF Director established regular meetings with the SJH/ Tallaght University Hospital (TUH) Joint Research Ethics Committee (JREC). These meetings aimed to improve communication and processes. This proved to be very successful as the process was more stratified and JREC now request an R&I reference number for all SJH applications.

The R&I programme manager presented at various educational sessions to explain the purpose of R&I and to outline the processes involved e.g. at SCOPe Research Café, Nursing Grand Rounds, Clinical Research Education Day and intern training sessions. The programme manager also:

- Assisted with the requirements of the Health Research Regulation for existing research, including contributing to Health Research Consent Declaration Committee applications and worked with the Data Protection Office to produce a GDPR compliant consent form checklist
- Raised patient awareness of SJH research including the Clinical Trials Day patient and public event in May 2019 and the development of a clinical research patient information leaflet.

## Key Objectives for 2020

Looking ahead to 2020, the R&I Office will focus on the following objectives:

- Work with the SJH/TUH Joint Research Ethics Committee (JREC) with the introduction of an IT system to improve the ethics application processes
- To continue to implement the objectives of the Hospital Research Governance and Support Framework
- To build upon the work that has commenced on ensuring compliance with data protection legislation impacting research
- To strengthen communication within the research community in SJH.

# 8.1 Patient Representative Group

The Patient Representative Group (PRG) was formed in March 2016. The Representatives serve as an advisory resource to staff of the hospital and help the staff to see the hospital from the patient perspective. The Patient Representative Group (PRG) provides a forum for patients and family members to engage with hospital staff to provide feedback and advice and contribute to the hospital's decision making processes.

## Performance Highlights

- The PRG was visited by Quality Improvement fellows from the Imperial College in London and healthcare professionals participating in the HOPE European Health Care Exchange Programme. During these meetings they shared their experiences of being PRG members and patients in St James's Hospital and the Irish healthcare system
- Three PRG members met with auditors during the Organisation of European Cancer Institutes' Accreditation visit to demonstrate the model of partnership in place in the hospital
- Members represented the PRG at the Hospital's Campus Mobility Management Committee, Garden Committee, Person Centred Care Governance Committee and the Clinical Research Facility Board of Management
- In October, two members of the QSID team and a member of the PRG participated in a HSE Master Class, entitled 'Partnering with Patients'
- Ten PRG staff engagement meetings were held in 2019
- The group developed a promotional video and pro-

vided considerable input to development of the hospital's new website

- The PRG developed and administered a survey evaluating the group's work. The survey provided helpful feedback to inform the group's further work.
- **Key findings included:**
  - People engaged with the PRG to hear the patient voice
  - Satisfaction rating with the PRG was rated on average as 8.5/10
  - The waiting time to attend a PRG meeting was perceived to be acceptable (90% happy)
  - Most staff went on to modify patient resources after engagement with PRG
  - 77% of respondents would like to see the work of the PRG expand

## 2020 Objectives

- The group's plans for 2020 include developing a strategy to drive their work and support more effective patient engagement in the hospital.



Mr Damien Nee



Mr Peter Hartnett



Ms Orlaith Brennan



Mr Pat Rooney



Mr Joe Bowden



Ms Lora Ruth Wogu



Mr Michael Foley

### Other members

Ms Rosanna Farrell  
Ms Sheila Elmes  
Mr Derek Ward



# 9.1 Publications

## Nursing services

### MEDEL DIRECTORATE: LIST OF NURSING PUBLICATIONS/ RESEARCH PAPERS/POSTER PRESENTATIONS/LECTURES, AT A NATIONAL AND INTERNATIONAL LEVEL FOR THE 2019 ANNUAL REPORT

## HOPe Directorate

Greenan, E., Vandenberghe, E., Murphy, C.C. (2019). Refractory recurrent ocular graft versus host disease. *BMJ case reports*, 12(12)

González-Barca, E., Boumendil, A., Blaise, D. and 26 more (...) (2019). Outcome in patients with diffuse large B-cell lymphoma who relapse after autologous stem cell transplantation and receive active therapy. A retrospective analysis of the Lymphoma Working Party of the European Society for Blood and Marrow Transplantation (EBMT). *Bone Marrow Transplantation*

Case Report. Hairy cell leukaemia Masquerading as Pancytopenia in Pregnancy.

Case Rep Hematol. 2019; 2019: 3238168. Published online 2019 Aug 21. doi: 10.1155/2019/3238168

Louisa Shackleton, 1 Stephen E. Langabeer, 2 David O'Brien, 1 Sarah L. McCarron, 2 Bridgette Byrne, 3 Rupert Barry, 4 Richard Flavin, 5 C. Larry Bacon, 1 and Catherine M. Flynn 1

Crampe M, Kearney L, O'Brien D, Bacon CL, O'Shea D, Langabeer SE. Molecular Monitoring in Adult Philadelphia Chromosome-Positive Acute Lymphoblastic Leukemia with the Variant e13a3 BCR-ABL1 Fusion. *Case Rep Hematol*. 2019 Jun 27;2019:9635070. doi: 10.1155/2019/9635070.

Crampe M, Langabeer SE, O'Brien D, Ryan E, Bacon CL. Philadelphia chromosome-positive acute lymphoblastic leukemia with an e14a3 BCR-ABL1 fusion: The role of molecular monitoring. *Hematol Oncol Stem Cell Ther*. 2019 May 28. pii: S1658-3876(19)30039-1. doi: 10.1016/j.hemonc.2019.04.001.

Minogue S, Gillham C, Kearney M, Mullaney L. Intravenous contrast media in radiation therapy planning computed tomography scans - Current practice in Ireland. *Tech Innov Patient Support Radiat Oncol*. 2019 Dec 16;12:3-15.

Cawley DT, Barrett P, Moran B, McGoldrick NP, Gillham C, Codd M, O'Toole GC, Kieser DC. Primary appendicular soft-tissue sarcoma resection: What tumour parameters affect wound closure planning? *Int Wound J*. 2019 Oct 13.

Uí Dhuibhir P, Barrett M, O'Donoghue N, Gillham C, El Beltagi N, Walsh D. Self-reported and objective taste and smell evaluation in treatment-naive solid tumour patients. *Support Care Cancer*. 2019 Sep 5.

Tan LT, Pötter R, Sturdza A, Fokdal L, Haie-Meder C, Schmid M, Gregory D, Petric P, Jürgenliemk-Schulz I, Gillham C, Van Lim-

bergen E, Hoskin P, Tharavichitkul E, Villafranca E, Mahantshetty U, Kirisits C, Lindegaard J, Kirchheiner K, Tanderup K. Change in patterns of failure after image-guided brachytherapy for cervical cancer: analysis from the RetroEMBRACE study. *Int J Radiat Oncol Biol Phys*. 2019 Mar 30.

Armstrong K, Ward J, Dunne M, Rock L, Westrup J, Mascott CR, Thirion P, Mihai AM. Linac-Based Radiosurgery for Patients With Brain Oligometastases From a Breast Primary, in the Trastuzumab Era-Impact of Tumor Phenotype and Prescribed SRS Dose. *Front Oncol*. 2019 May 28;9:377.

Inder S, Bates M, Ni Labhraí N, McDermott N, Schneider J, Erdmann G, Jamerson T, Flores AN, Prina-Mello A, Thirion P, Manecksha PR, Cormican D, Finn S, Lynch T, Marignol L. Multiplex profiling identifies clinically relevant signalling proteins in an isogenic prostate cancer model of radioresistance. *Inder S. Sci Rep*. 2019 Nov 22;9(1):17325.

Barrett S, Thirion P, Harper D, Simpkin AJ, Leech M, Hickey K, Ryan L, Marignol L, Barrett S. Dosimetric impact of uncorrected systematic yaw rotation in VMAT for peripheral lung SABR. *Rep Pract Oncol Radiother*. 2019 Nov-Dec;24(6):520-527.

Kenny C, Regan J, Balding L, Higgins S, O'Leary N, Kelleher F, McDermott R, Armstrong J, Mihai A, Tiernan E, Westrup J, Thirion P, Walsh D, Kenny C. Dysphagia Prevalence and Predictors in Cancers Outside the Head, Neck, and Upper Gastrointestinal Tract. *J Pain Symptom Manage*. 2019 Dec;58(6):949-958.e2.

Lee KA, Rangaswamy G, Lavan NA, Dunne M, Collins CD, Small C, Thirion P. ICORG 06-35: a prospective evaluation of PET-CT scan in patients with non-operable or non-resectable non-small cell lung cancer treated by radical 3-dimensional conformal radiation therapy: a phase II study. *Ir J Med Sci*. 2019 Nov;188(4):1155-1161.

Ryan SL, Beard S, Barr MP, Umezawa K, Heavey S, Godwin P, Gray SG, Cormican D, Finn SP, Gately KA, Davies AM, Thompson EW, Richard DJ, O'Byrne KJ, Adams MN, Baird AM. Targeting NFκB-mediated inflammatory pathways in cisplatin-resistant NSCLC. *Lung Cancer*, 135:217-227, 2019. PMID: 31446998.

Barr MP. Patient-oriented Biobanking for Cancer Research. *Cancer Stud Ther J*, 4(3):1-2, 2019.

Felley-Bosco E, Gray SG. Mesothelioma Driver Genes, Ferroptosis and Therapy. *Front Oncol*, 9:1318, 2019. PMID: 31828040.

Thunnissen E, Kerr KM, Dafni U, Bubendorf L, Finn SP, Soltermann A, Biernat W, Cheney R, Verbeken E, Warth A, Marchetti A, Speel EM, Pokharel S, Quinn AM, Monkhurst K, Navarro A, Madsen LB, Tsourti Z, Geiger T, Kammler R, Peters S, Stahel RA; European Thoracic Oncology Platform Lungscape Consortium. Programmed death-ligand 1 expression influenced by tissue sample size. Scoring based on tissue microarrays' and cross-validation with resections, in patients with, stage I-III, non-small cell lung carcinoma of the European Thoracic Oncology Platform Lungscape cohort. *Mod Pathol*, 33(5):792-801, 2020. PMID: 31740722.

Kerr KM, Thunnissen E, Dafni U, Finn SP, Bubendorf L, Soltermann A, Verbeken E, Biernat W, Warth A, Marchetti A, Speel EM, Pokha-

rel S, Quinn AM, Monkhorst K, Navarro A, Madsen LB, Radonic T, Wilson J, De Luca G, Gray SG, Cheney R, Savic S, Martorell M, Muley T, Baas P, Meldgaard P, Blackhall F, Dingemans AM, Dziadziuszko R, Vansteenkiste J, Weder W, Polydoropoulou V, Geiger T, Kammler R, Peters S, Stahel R; Lungscape Consortium. A retrospective cohort study of PD-L1 prevalence, molecular associations and clinical outcomes in patients with NSCLC: Results from the European Thoracic Oncology Platform (ETOP) Lungscape Project. *Lung Cancer*, 131:95-103, 2019. PMID: 31027705.

O'Brien O, Wright MC, O'Brien C, Geoghegan O, Leonard N, Nicholson S, Cuffe S, Fabre A, Jochum W, Joerger M, Gray SG, Finn SP. Cost-Efficient and Easy to Perform PCR-Based Assay to Identify Met Exon 14 Skipping in Formalin-Fixed Paraffin-Embedded (FFPE) Non-Small Cell Lung Cancer (NSCLC) Samples. *Diagnostics (Basel)*,9(1), 2019. PMID: 30669306.

Malone T, Schäfer L, Simon N, Heavey S, Cuffe S, Finn S, Moore G, Gately K. Current perspectives on targeting PIM kinases to overcome mechanisms of drug resistance and immune evasion in cancer. *Pharmacol Ther*, 11:107454, 2019. PMID: 31836451.

Molina-Vila MA, Stahel RA, Dafni U, Jordana-Ariza N, Balada-Bel A, Garzón-Ibáñez M, García-Peláez B, Mayo-de-Las-Casas C, Felip E, Curioni Fontecedro A, Gautschi O, Peters S, Massutí B, Palmero R, Ponce Aix S, Carcereny E, Früh M, Pless M, Papat S, Cuffe S, Bidoli P, Kammler R, Roschitzki-Voser H, Tsourti Z, Karachaliou N, Rosell R. Evolution and Clinical Impact of EGFR Mutations in Circulating Free DNA in the BELIEF Trial. *J Thorac Oncol*, 15(3):416-425, 2020. PMID: 31812754.

Reck M, Rodríguez-Abreu D, Robinson AG, Hui R, Csőszi T, Fülöp A, Gottfried M, Peled N, Tafreshi A, Cuffe S, O'Brien M, Rao S, Hotta K, Vandormael K, Riccio A, Yang J, Pietanza MC, Brahmer JR. Updated Analysis of KEYNOTE-024: Pembrolizumab Versus Platinum-Based Chemotherapy for Advanced Non-Small-Cell Lung Cancer With PD-L1 Tumor Proportion Score of 50% or Greater. *J Clin Oncol*, 37(7):537-546, 2019. PMID: 30620668.

Dziadziuszko R, Smit EF, Dafni U, Wolf J, Wasąg B, Biernat W, Finn SP, Kammler R, Tsourti Z, Rabaglio M, Ruepp B, Roschitzki-Voser H, Stahel RA, Felip E, Peters S. Afatinib in NSCLC With HER2 Mutations: Results of the Prospective, Open-Label Phase II NICHE Trial of European Thoracic Oncology Platform (ETOP). *J Thorac Oncol*. Jun;14(6):1086-1094, 2019. PMID: 30825613.

Zhao J, Gray SG, Greene CM, Lawless MW. Unmasking the diagnostic and therapeutic potential of histone deacetylases for liver cancer. *Expert Rev Gastroenterol Hepatol*, 13(3):247-256, 2019. PMID: 30791763.

Gray SG. Squaring the circle: Sponging miRNAs in Gastric Cancer (Editorial). *Transl Cancer Res*, 8(Suppl 2):S183-S187, 2019.

Qi H, Wang S, Wu J, Yang S, Gray S, Ng CSH, Du J, Underwood MJ, Li MY, Chen GG. EGFR-AS1/HIF2A regulates the expression of FOXP3 to impact the cancer stemness of smoking-related non-small cell lung cancer. *Ther Adv Med Oncol*, 11:1758835919855228, 2019. PMID: 31275431.

Gaule P, Mukherjee N, Corkery B, Eustace AJ, Gately K, Roche S, O'Connor R, O'Byrne KJ, Walsh N, Duffy MJ, Crown J, O'Donovan N. Dasatinib Treatment Increases Sensitivity to c-Met Inhibition in Triple-Negative Breast Cancer Cells. *Cancers (Basel)*,11(4):548, 2019, PMID: 30999598.

Greene J, Baird AM, Casey O, Brady L, Blackshields G, Lim M, O'Brien O, Gray SG, McDermott R, Finn SP. Circular RNAs are differentially expressed in prostate cancer and are potentially associated with resistance to enzalutamide. *Sci Rep*, 9(1):10739, 2019.

PMID: 31341219.

O'Reilly E, Tuzova AV, Walsh AL, Russell NM, O'Brien O, Kelly S, Dhomhnallain ON, DeBarra L, Dale CM, Brugman R, Clarke G, Schmidt O, O'Meachair S, Patil D, Pellegrini KL, Fleschner N, Garcia J, Zhao F, Finn S, Mills R, Hanna MY, Hurst R, McEvoy E, Gallagher WM, Manecksha RP, Cooper CS, Brewer DS, Bapat B, Sanda MG, Clark J, Perry AS. epiCaPture: A Urine DNA Methylation Test for Early Detection of Aggressive Prostate Cancer. *JCO Precis Oncol*, 2019:PO.18.00134. PMID: 30801051.

Pernar CH, Ebot EM, Pettersson A, Graff RE, Giunchi F, Ahearn TU, Gonzalez-Feliciano AG, Markt SC, Wilson KM, Stopsack KH, Gazeeva E, Lis RT, Parmigiani G, Rimm EB, Finn SP, Giovannucci EL, Fiorentino M, Mucci LA. A Prospective Study of the Association between Physical Activity and Risk of Prostate Cancer Defined by Clinical Features and TMPRSS2:ERG. *Eur Urol*, 76(1):33-40, 2019. PMID: 30301696.

Smith Aileen, ANP Late Effects poster: **Survivorship post Haematopoietic Stem Cell Transplantation (HSCT)**

Shona Brady, Snehal Prabhukuluskar, Niamh Larkin, Noreen Bolland, Janet Cleary, Deirdre Gorman, Catherine Buckley, Julie Benson, Dr. Kevin Ryan, NCC, poster: **Developing a Nurse-Led Telephone Clinic for Patients with Mild Bleeding disorders**

Mairad Ni Chonghaile, HSCT Coordinator: **Identifying and comparing the self-perceived education needs of haematology nurses in Ireland and across a European setting**

HAI 2019 – Submitted abstract and accepted as Oral presentation

**NURSE-LED FACTOR VIII PHARMACOKINETIC CLINICS OFFER RAPID GENERATION OF PHARMACOKINETIC PROFILES FOR PATIENTS WITH SEVERE HAEMOPHILIA A – THE iPATH STUDY** -Niamh Larkin<sup>1</sup>, Evelyn Singleton<sup>1</sup>, Mary Byrne<sup>1</sup>, Michelle Lavin<sup>2</sup>, Brian O'Mahony<sup>4</sup>, Kevin Ryan<sup>1</sup>, Peter L. Turecek<sup>3</sup>, Niamh M. O'Connell<sup>1</sup>, James S. O'Donnell<sup>1,2</sup>

Lowery, M.A., Goff, L.W., Keenan, B.P. and 13 more (...) (2019). Second-line chemotherapy in advanced biliary cancers: A retrospective, multicenter analysis of outcomes. *Cancer*,125(24) 4426-4434

Dinneen, K., Ryan, C., Grant, C. and 5 more (...) (2019). Impact and importance of a centralised review panel for lymphoma diagnostics in the WHO era: A single-centre experience. *Journal of Clinical Pathology*,72(7) 506-509

Lowery, M.A. (2019).Genotype-phenotype correlation in BRCA1/2 mutation-associated pancreatic cancer. *British Journal of Cancer*, Lowery, M.A., Bradley, M., Chou, J.F. and 17 more (...) (2019).Binimetinib plus gemcitabine and cisplatin phase I/II trial in patients with advanced biliary cancers. *Clinical Cancer Research*,25(3) 937-945

Lowery, M.A., Burris, H.A., Janku, F. and 19 more (...) (2019). Safety and activity of ivosidenib in patients with IDH1- mutant advanced cholangiocarcinoma: a phase 1 study. *The Lancet Gastroenterology and Hepatology*,4(9) 711-720

Lavin M, O'Donnell JS. How I treat low von Willebrand factor levels. *Blood*. 2019 Feb 21;133(8):795-804. doi: 10.1182/blood-2018-10-844936. Epub 2018 Dec 21. PMID: 30578256.

Ward S, O'Sullivan JM, O'Donnell JS. von Willebrand factor sialylation-A critical regulator of biological function. *J Thromb Haemost*. 2019 Jul;17(7):1018-1029. doi: 10.1111/jth.14471. Epub 2019 May 30. PMID: 31055873.

O'Donnell JS, O'Sullivan JM. von Willebrand factor promotes wound healing. *Blood*. 2019 Jun 13;133(24):2553-2555. doi: 10.1182/blood.2019001175. PMID: 31196875.

O'Donnell JS, Lavin M. Perioperative management of patients with von Willebrand disease. *Hematology Am Soc Hematol Educ Program*. 2019 Dec 6;2019(1):604-609. doi: 10.1182/hematology.2019000065. PMID: 31808837; PMCID: PMC6913501. Aguila S, Lavin M, Dalton N, Patmore S, Chion A, Trahan GD, Jones KL, Keenan C, Brophy TM, O'Connell NM, Ryan K, Byrne M, Nolan M, Patel A, Preston RJS, James P, Di Paola J, O'Sullivan JM, O'Donnell JS. Increased galactose expression and enhanced clearance in patients with low von Willebrand factor. *Blood*. 2019 Apr 4;133(14):1585-1596. doi: 10.1182/blood-2018-09-874636. Epub 2019 Feb 15. PMID: 30770394.

Dunne E, Qi QM, Shaqfeh ES, O'Sullivan JM, Schoen I, Ricco AJ, O'Donnell JS, Kenny D. Blood group alters platelet binding kinetics to von Willebrand factor and consequently platelet function. *Blood*. 2019 Mar 21;133(12):1371-1377. doi: 10.1182/blood-2018-06-855528. Epub 2019 Jan 14. PMID: 30642918.

Aguila S, O'Donnell JS. Novel therapies for hemophilia A - the role of the von Willebrand factor chaperone. *J Thromb Haemost*. 2019 Mar;17(3):426-428. doi: 10.1111/jth.14353. Epub 2019 Jan 16. PMID: 30652400.

Fogarty H, Doyle MM, Campbell R, Keenan C, White B, Ryan K, O'Donnell JS, Slevin J, O'Keefe D, O'Connell NM, Lavin M. Management of combined factor V and factor VIII deficiency in pregnancy. *J Obstet Gynaecol*. 2019 Feb;39(2):271-272. doi: 10.1080/01443615.2018.1448766. Epub 2018 Apr 18. PMID: 29667457.

Doherty D, Singleton E, Byrne M, Ryan K, O'Connell NM, O'Donnell JS, Lavin M. Missed at first Glanz: Glanzmann thrombasthenia initially misdiagnosed as Von Willebrand Disease. *Transfus Apher Sci*. 2019 Feb;58(1):58-60. doi: 10.1016/j.transci.2018.11.008. Epub 2018 Dec 5. PMID: 30551951. 28

Physical activity and haemophilic joint arthropathy amongst adults with severe haemophilia in Ireland: The Irish personalised approach to the treatment of haemophilia (IPATH) study. M Kennedy, S Roche, m Mc Gowan, E Singelton, A Patel, R C Jones, B O Mahony, K Ryan, N M O Connell, M Lavin, P L Turecek, J S O Donnell, J Gormley. P208 Haemophilia (2019) Vol 25, Supplement 1

Barriers to physical activity amongst adults with moderate and severe haemophilia in Ireland: The Irish personalised approach to the treatment of haemophilia (IPATH) study. M Kennedy, S Roche, m Mc Gowan, E Singelton, A Patel, R C Jones, B O Mahony, K Ryan, N M O Connell, M Lavin, P L Turecek, J S O Donnell, J Gormley. P209 Haemophilia (2019) Vol 25, Supplement 1

Insights into the evolution of haemophilic arthropathy: The Irish personalised approach to the treatment of haemophilia (IPATH) study. M Lavin, R C Jones, E Singelton, S Roche, A Patel, M Kennedy, K Ryan, B O Mahony, J Gormley, N M O Connell, P L Turecek, J S O Donnell. P213 Haemophilia (2019) Vol 25, Supplement 1

The Effect of Inhibitors on Quality of Life and Pain in Adult Patients with Severe Haemophilia in the PROBE Cohort. D. Noone; C. Chai-Adisaksoha; R. Curtis; N. Frick; M. Nichol; B. O'Mahony; D. Page; J. Stonebraker; A. Iorio; M.W. Skinner; PROBE (2018), Abstract PB162. *Res Pract Thromb Haemost*, 2: 1-368. doi:10.1002/rth2.12125

Interferon- $\gamma$ -Inducible protein 10 levels are altered in patients with Haemophilia with Advanced Haemophilic Arthropathy. C Byrne, H Hawerkamp, E Hams, N Larkin, A Patel, M Nolan, S Roche, M Mc Gowan, M Byrne, K Ryan, B Gangadharan, B O Mahony, NM O Connell, PL Turecek, JS O Donnell, Bm Reipert, PG Fallon, M Lavin

A- 1052-0038-01168. ISTH Conference 201

## Medicine for the Elderly (MedEl)

### Falls and Syncope Unit

Briggs R, Carey D, Claffey P, McNicholas T, Newman L, Nolan H, Kennelly SP, Kenny RA. The Association between Frontal Lobe Perfusion and Depressive Symptoms in Later Life. *Br J Psychiatry* 2019;214(4):230-236.

Briggs R, McCarroll K, O'Halloran A, Healy M, Kenny RA, Laird E. Vitamin D Deficiency Is Associated With an Increased Likelihood of Incident Depression in Community-Dwelling Older Adults. *J Am Med Dir Assoc* 2019;20(5):517-523.

Gannon J, Claffey P, Laird E, Newman L, Kenny RA, Briggs R. The cross-sectional association between diabetes and orthostatic hypotension in community-dwelling older people. *Diabet Med* 2019;26.

Briggs R, Carey D, Claffey P, McNicholas T, Donoghue O, Kennelly SP, Kenny RA. Do Differences in Spatiotemporal Gait Parameters Predict the Risk of Developing Depression in Later Life? *J Am Geriatr Soc* 2019;67(5):1050-1056.

Age and Ageing, Volume 48, Issue Supplement\_3, September 2019, Pages iii17–iii65 <https://doi.org/10.1093/ageing/afz103.101>

McNicholas T, Claffey P, O'Callaghan S, Briggs R, Newman L, Tobin K, Kenny RA. Atrial Fibrillation, Orthostatic Hypotension and Cerebral Perfusion – Data from The Irish Longitudinal Study on Ageing, Age and Ageing, 2019; 48(suppl\_3):1-16. (IGS 2019)

Claffey P, Pérez Denia L, Rivasi G, Finucane C, Kenny RA. Near-infrared Spectroscopy in Evaluating Psychogenic Pseudosyncope – A novel diagnostic approach. *QJM: An International Journal of Medicine*, 2019 Oct 9 (pii: hcz257) [doi:10.1093/qjmed/hcz257].

Gannon J, Claffey P, Laird E, Newman L, Kenny RA, Briggs R. The cross-sectional association between diabetes and orthostatic hypotension in community-dwelling older people. *Diabetic Med*. 2019 Nov 26. [doi: 10.1111/dme.14187]

Briggs R, Carey D, Claffey P, McNicholas T, Donoghue O, Kennelly SP, Kenny RA. Do Differences in Spatiotemporal Gait Parameters Predict the Risk of Developing Depression in Later Life? *Journal of the American Geriatrics Society*. 2019 Feb 5.

Briggs R, Carey D, Claffey P, McNicholas T, Newman L, Nolan H, Kennelly SP, Kenny RA. The association between frontal lobe perfusion and depressive symptoms in later life. *The British Journal of Psychiatry*. 2019 Jan 4:1-7.

Claffey P, Pérez Denia L, Rivasi G, Ungar A, Finucane C, Kenny RA. Near-infrared Spectroscopy (NIRS) in the evaluation of Psychogenic Pseudosyncope – Moving towards a simplified diagnostic pathway. *European Heart Journal*, Volume 40, Issue Supplement\_1, October 2019, ehz746.0620

Macdonald S H-F, Travers J, Ní Shé É, Bailey J, Romero-Ortuno R, Keyes M, O'Shea D, Cooney MT, Primary care interventions to address physical frailty among community-dwelling adults aged 60 years or older: A meta-analysis, *PLOS ONE*, 2020 Journal Article, 2020 URL

McCarthy K, Ward M, Romero-Ortuno R, Kenny RA, Syncope, Fear of falling and quality of life among older adults: findings from The Irish Longitudinal Study on Ageing (TILDA), *Frontiers in Cardiovascular Medicine*, 2020 Journal Article, 2020 URL

Oscaño TJ, Amado J, Vidal X, Romero-Ortuno R, Angiotensin-Re-

- ceptor Blockers (ARBs) and risk of Alzheimer's Disease: A meta-analysis, *Current Clinical Pharmacology*, 2020 Journal Article, 2020 URL
- Evans NR, Wall J, To B, Wallis SJ, Romero-Ortuno R, Warburton EA, Clinical frailty independently predicts early mortality after ischaemic stroke, *Age and Ageing*, 2020 Journal Article, 2020 URL
- Romero-Ortuno R, Kenny RA, McManus R, Collagens and elastin genetic variations and their potential role in aging-related diseases and longevity in humans, *Experimental Gerontology*, 129, 2019, p110781 - Journal Article, 2019 DOI URL
- Hartley P, Costello P, Fenner R, Gibbins N, Quinn E, Kuhn I, Keevil VL, Romero-Ortuno R, Change in skeletal muscle associated with unplanned hospital admissions in adult patients: a systematic review and meta-analysis, *PLOS One*, 2019 Journal Article, 2019 URL
- Frailty in older persons in, editor(s)O'Hanlon S, Smith M, *A Comprehensive Guide to Rehabilitation of the Older Patient 4e*, Elsevier, 2019, [Roe L, Williamson W, Romero-Ortuno R] Book Chapter, 2019
- Mobility and Frailty in, editor(s)Gu D, Dupre M, *Encyclopedia of Gerontology and Population Aging*, Springer, Cham, 2019, [Hartley P, Romero-Ortuno R] Book Chapter, 2019 URL
- Pickard S, Lloyd L, Vanhoutte B, Danely J, Leon-Salas J, Lacleulle H, Cluley V, Romero-Ortuno R, *New Horizons in Frailty: the contingent, the existential and the clinical*, *Age and Ageing*, 2019 Journal Article, 2019 URL
- Romero-Ortuno R, Scarlett S, O'Halloran A, Kenny RA, Is phenotypical prefrailty all the same? A longitudinal investigation of two prefrailty subtypes in The Irish Longitudinal Study of Ageing (TILDA), *Age and Ageing*, 2019 Journal Article, 2019 URL
- Rivasi G, Kenny RA, Ungar A, Romero-Ortuno R, Effects of benzodiazepines on orthostatic blood pressure in older people, *European Journal of Internal Medicine*, 2019 Journal Article, 2019 URL
- Dent E, Martin FC, Bergman H, Woo J, Romero-Ortuno R, Walston J, *The Management of Frailty: Opportunities, Challenges, and Future Directions*, *The Lancet*, 2019 Journal Article, 2019 URL
- Lyons A, Romero-Ortuno R, Hartley P, *Functional Mobility Trajectories of Hospitalized Older Adults Admitted to the Acute Geriatric Wards: A Retrospective Observational Study in an English University Hospital*, *Geriatrics and Gerontology International*, 2019 Journal Article, 2019 URL
- Rivasi G, Kenny RA, Ungar A, Romero-Ortuno R, Predictors of incident fear of falling in community-dwelling older adults, *Journal of the American Medical Directors Association*, 2019 Journal Article, 2019 URL
- Martin F, Romero-Ortuno R, *Longitudinal studies of ageing: from insights to impacts: Commentary to accompany themed collection on longitudinal studies*, *Age and Ageing*, 2019 Journal Article, 2019 URL
- Duggan E, Romero-Ortuno R, Kenny RA, *Admissions for Orthostatic Hypotension: an Analysis of NHS England Hospital Episode Statistics Data*, *BMJ Open*, 2019 Journal Article, 2019 URL
- Moore K, Hughes CF, Hoey L, Wad M, Cunningham C, Molloy AM, Strain JJ, McCarroll K, Casey MC, Tracey F, Laird E, O'Kane M, McNulty H. B-vitamins in Relation to Depression in Older Adults Over 60 Years of Age: The Trinity Ulster Department of Agriculture (TUDA) Cohort Study. *J Am Med Dir Assoc*. 2019 May;20(5):551-557. PMID: 30692033
- Porter KM, Ward M, Hughes CF, O'Kane M, Hoey L, McCann A, Molloy AM, Cunningham C, Casey MC, Tracey F, Strain S, McCarroll K, Laird E, Gallagher AM, McNulty H. Hyperglycemia and Metformin Use Are Associated With B Vitamin Deficiency and Cognitive Dysfunction in Older Adults. *J Clin Endocrinol Metab*. 2019 Oct 1;104(10):4837-4847
- Oliveira IM, Hernandez B, Kenny RA, Reilly RB. Automatic Disability Categorisation based on ADLs among Older Adults in a Nationally Representative Population using Data Mining Methods. *Conf Proc IEEE Eng Med Biol Soc*. 2019 Jul; 2019:2466-2469. doi: 10.1109/EMBC.2019.8856780. PubMed PMID: 31946397.
- Hirst RJ, Setti A, Kenny RA, Newell FN. Age-related sensory decline mediates the Sound-Induced Flash Illusion: Evidence for reliability weighting models of multisensory perception. *Sci Rep*. 2019 Dec 18;9(1):19347. doi:10.1038/s41598-019-55901-5. PubMed PMID: 31852954; PubMed Central PMCID PMC6920348.
- O'Connor JD, O'Connell MDL, Nolan H, Newman L, Knight SP, Kenny RA. Impact of Standing Speed on the Peripheral and Central Hemodynamic Response to Orthostasis: Evidence From the Irish Longitudinal Study on Ageing. *Hypertension*. 2020 Feb;75(2):524-531. doi: 0.1161/HYPERTENSIONAHA.119.14040. Epub 2019 Dec 16. PubMed PMID: 31838912.
- Peters R, Yasar S, Anderson CS, Andrews S, Antikainen R, Arima H, Beckett N, Beer JC, Bertens AS, Booth A, van Boxtel M, Brayne C, Brodaty H, Carlson MC, Chalmers J, Corrada M, DeKosky S, Derby C, Dixon RA, Forette F, Ganguli M, van Gool WA, Guaita A, Hever AM, Hogan DB, Jagger C, Katz M, Kawas C, Kehoe PG, Keinanen-Kiukkaanniemi S, Kenny RA, Köhler S, Kunutsor SK, Laukkanen J, Maxwell C, McFall GP, van Middelaar T, Moll van Charante EP, Ng TP, Peters J, Rawtaer I, Richard E, Rockwood K, Rydén L, Sachdev PS, Skoog I, Skoog J, Staessen JA, Stephan BCM, Seibert S, Thijs L, Trompet S, Tully PJ, Tzourio C, Vaccaro R, Vaaramo E, Walsh E, Warwick J, Anstey KJ. Investigation of antihypertensive class, dementia, and cognitive decline: A meta-analysis. *Neurology*. 2020 Jan 21;94(3): e267-e281. doi: 10.1212/WNL.0000000000008732. Epub 2019 Dec 11. PubMed PMID: 31827004.
- Laird E, O'Halloran AM, Fedorowski A, Melander O, Hever A, Sjögren M, Carey D, Kenny RA. Orthostatic hypotension and novel blood pressure associated gene variants in older adults: data from the TILDA Study. *J Gerontol A Biol Sci Med Sci*. 2019 Dec 10. pii: glz286. doi: 10.1093/gerona/glz286. [Epub ahead of print] PubMed PMID: 31821404.
- Newman L, Nolan H, Carey D, Reilly RB, Kenny RA. Age and sex differences in frontal lobe cerebral oxygenation in older adults-Normative values using novel, scalable technology: Findings from the Irish Longitudinal Study on Ageing (TILDA). *Arch Gerontol Geriatr*. 2019 Nov 18;87:103988. doi: 10.1016/j.archger.2019.103988. [Epub ahead of print] PubMed PMID: 31775091.
- Donoghue OA, Briggs R, Moriarty F, Kenny RA. Association of Antidepressants With Recurrent, Injurious and Unexplained Falls is Not Explained by Reduced Gait Speed. *Am J Geriatr Psychiatry*. 2019 Oct 11. pii: S1064-7481(19)30529-9. doi: 10.1016/j.jagp.2019.10.004. [Epub ahead of print] PubMed PMID: 31727515.
- Donoghue OA, Savva GM, Börsch-Supan A, Kenny RA. Reliability, measurement error and minimum detectable change in mobility measures: a cohort study of community-dwelling adults aged 50 years and over in Ireland. *BMJ Open*. 2019 Nov 11;9(11):e030475. doi: 10.1136/bmjopen-2019-030475. PubMed PMID: 31719075; PubMed Central PMCID: PMC6858113.

- Moriarty F, Bennett K, Kenny RA, Fahey T, Cahir C. Comparing Potentially Inappropriate Prescribing Tools and Their Association With Patient Outcomes. *J Am Geriatr Soc.* 2019 Nov 1. doi: 10.1111/jgs.16239. [Epub ahead of print] PubMed PMID: 31675114.
- Hernández B, Setti A, Kenny RA, Newell FN. Individual differences in ageing, cognitive status, and sex on susceptibility to the sound-induced flash illusion: A large-scale study. *Psychol Aging.* 2019 Nov;34(7):978-990. doi:10.1037/pag0000396. Epub 2019 Oct 17. PubMed PMID: 31621358.
- Dyer AH, Murphy C, Lawlor B, Kennelly SP; NILVAD Study Group. Cognitive Outcomes of Long-term Benzodiazepine and Related Drug (BDZR) Use in People Living With Mild to Moderate Alzheimer's Disease: Results From NILVAD. *J Am Med Dir Assoc.* 2020 Feb;21(2):194-200. doi: 10.1016/j.jamda.2019.08.006. Epub 2019 Oct 8. PubMed PMID: 31604674.
- McCrary C, Fiorito G, McLoughlin S, Polidoro S, Cheallaigh CN, Bourke N, Karisola P, Alenius H, Vineis P, Layte R, Kenny RA. Epigenetic Clocks and Allostatic Load Reveal Potential Sex-Specific Drivers of Biological Aging. *J Gerontol A Biol Sci Med Sci.* 2020 Feb 14;75(3):495-503. doi: 10.1093/gerona/glz241. PubMed PMID: 31603985.
- Hernández B, Reilly RB, Kenny RA. Investigation of multimorbidity and prevalent disease combinations in older Irish adults using network analysis and association rules. *Sci Rep.* 2019 Oct 10;9(1):14567. doi: 10.1038/s41598-019-51135-7. PubMed PMID: 31601959; PubMed Central PMCID: PMC6787335.
- Claffey P, Pérez-Denia L, Rivasi G, Finucane C, Kenny RA. Near-Infrared Spectroscopy in Evaluating Psychogenic Pseudosyncope - A novel diagnostic approach. *QJM.* 2019 Oct 9. pii: hcz257. doi: 10.1093/qjmed/hcz257. [Epub ahead of print] PubMed PMID: 31596496.
- 24: Scarlett S, Nolan H, Kenny RA, O'Connell MD. Objective Sleep Duration in Older Adults: Results From The Irish Longitudinal Study on Ageing. *J Am Geriatr Soc.* 2020 Jan;68(1):120-128. doi: 10.1111/jgs.16177. Epub 2019 Oct 3. PubMed PMID: 31579942.
- Holton A, Boland F, Gallagher P, Fahey T, Moriarty F, Kenny RA, Cousins G. Potentially serious alcohol-medication interactions and falls in community-dwelling older adults: a prospective cohort study. *Age Ageing.* 2019 Nov 1;48(6):824-831. doi: 10.1093/ageing/afz112. PubMed PMID: 31579905; PubMed Central PMCID: PMC6814088.
- Marron L, Segurado R, Kenny RA, McNicholas T. The association between benzodiazepine use and falls, and the impact of sleep quality on this association: Data from the TILDA study. *QJM.* 2019 Aug 19. pii: hcz217. doi: 10.1093/qjmed/hcz217. [Epub ahead of print] PubMed PMID: 31424520.
- O'Halloran AM, Laird EJ, Feeney J, Healy M, Moran R, Beatty S, Nolan JM, Molloy AM, Kenny RA. Circulating Micronutrient Biomarkers Are Associated With 3 Measures of Frailty: Evidence From the Irish Longitudinal Study on Ageing. *J Am Med Dir Assoc.* 2019 Aug 7. pii: S1525-8610(19)30497-9. doi: 10.1016/j.jamda.2019.06.011. [Epub ahead of print] PubMed PMID: 31401047.
- Carey D, Nolan H, Kenny RA, Meaney J. Dissociable age and memory relationships with hippocampal subfield volumes in vivo: Data from the Irish Longitudinal Study on Ageing (TILDA). *Sci Rep.* 2019 Jul 29;9(1):10981. doi: 10.1038/s41598-019-46481-5. PubMed PMID: 31358771; PubMed Central PMCID: PMC6662668.
- Hase Y, Polvikoski TM, Firbank MJ, Craggs LJ, Hawthorne E, Platten C, Stevenson W, Deramecourt V, Ballard C, Kenny RA, Perry RH, Ince P, Carare RO, Allan LM, Horsburgh K, Kalaria RN. Small vessel disease pathological changes in neurodegenerative and vascular dementias concomitant with autonomic dysfunction. *Brain Pathol.* 2019 Jul 29. doi: 10.1111/bpa.12769. [Epub ahead of print] PubMed PMID: 31357238.
- Orr J, Tobin K, Carey D, Kenny RA, McGarrigle C. Religious Attendance, Religious Importance, and the Pathways to Depressive Symptoms in Men and Women Aged 50 and Over Living in Ireland. *Res Aging.* 2019 Jul 22:164027519860270. doi: 10.1177/0164027519860270. [Epub ahead of print] PubMed PMID: 31331248.
- Laird EJ, McNicholas T, O'Halloran AM, Healy M, Molloy AM, Carey D, O'Connor D, McCarroll K, Kenny RA. Vitamin D Status Is Not Associated With Orthostatic Hypotension in Older Adults. *Hypertension.* 2019 Jul 22: HYPERTENSIONAHA11913064. doi: 10.1161/HYPERTENSIONAHA.119.13064. [Epub ahead of print] PubMed PMID: 31327261.
- Peeters G, Cooper R, Tooth L, van Schoor NM, Kenny RA. A comprehensive assessment of risk factors for falls in middle-aged adults: co-ordinated analyses of cohort studies in four countries. *Osteoporos Int.* 2019 Jun 15. doi: 10.1007/s00198-019-05034-2. [Epub ahead of print] PubMed PMID: 31201482.
- Peeters G, Feeney J, Carey D, Kennelly S, Kenny RA. Fear of falling: A manifestation of executive dysfunction? *Int J Geriatr Psychiatry.* 2019 Apr 29. doi: 10.1002/gps.5133. [Epub ahead of print] PubMed PMID: 31034696.
- Fiorito G, McCrary C, Robinson O, Carmeli C, Rosales CO, Zhang Y, Colicino E, Dugué PA, Artaud F, McKay GJ, Jeong A, Mishra PP, Nøst TH, Krogh V, Panico S, Sacerdote C, Tumino R, Palli D, Matullo G, Guarrera S, Gandini M, Bochud M, Dermitzakis E, Muka T, Schwartz J, Vokonas PS, Just A, Hodge AM, Giles GG, Southey MC, Hurme MA, Young I, McKnight AJ, Kunze S, Waldenberger M, Peeters A, Schwettmann L, Lund E, Baccarelli A, Milne RL, Kenny RA, Elbaz A, Brenner H, Kee F, Voortman T, Probst-Hensch N, Lehtimäki T, Elliot P, Stringhini S, Vineis P, Polidoro S; BIOS Consortium; Lifepath consortium. Socioeconomic position, lifestyle habits and biomarkers of epigenetic aging: a multi-cohort analysis. *Aging (Albany NY).* 2019 Apr 14;11(7):2045-2070. doi: 10.18632/aging.101900. PubMed PMID: 31009935; PubMed Central PMCID: PMC6503871.
- McHugh Power JE, Hannigan C, Carney S, Feeney J, Kenny RA, Kee F, Lawlor BA. Lonely SARTs: loneliness and sustained attention in the Irish longitudinal study of aging. *Neuropsychol Dev Cogn B Aging Neuropsychol Cogn.* 2019 Apr 18:1-10. doi:10.1080/1382558.5.2019.1602705. [Epub ahead of print] PubMed PMID: 30999806.
- McHugh Power J, Tang J, Kenny RA, Lawlor BA, Kee F. Mediating the relationship between loneliness and cognitive function: the role of depressive and anxiety symptoms. *Aging Ment Health.* 2019 Apr 7:1-8. doi: 10.1080/13607863.2019.1599816. [Epub ahead of print] PubMed PMID: 30955348.
- Power JEM, Sjöberg L, Kee F, Kenny RA, Lawlor B. Comparisons of the discrepancy between loneliness and social isolation across Ireland and Sweden: findings from TILDA and SNAC-K. *Soc Psychiatry Psychiatr Epidemiol.* 2019 Mar 12. doi: 10.1007/s00127-019-01679-w. [Epub ahead of print] PubMed PMID: 30863870.
- McCrary C, Fiorito G, Ni Cheallaigh C, Polidoro S, Karisola P, Alenius H, Layte R, Seeman T, Vineis P, Kenny RA. How does socio-economic position (SEP) get biologically embedded? A comparison of allostatic load and the epigenetic clock(s). *Psychoneuroendocrinology.* 2019 Jun; 104:64-73. doi: 10.1016/j.psyneuen.2019.02.018. Epub 2019 Feb 16. PubMed PMID: 30818253.
- Seppala LJ, van der Velde N, Masud T, Blain H, Petrovic M, van

der Cammen TJ, Szczerbińska K, Hartikainen S, Kenny RA, Ryg J, Eklund P, Topinková E, Mair A, Laflamme L, Thaler H, Bahat G, Gutiérrez-Valencia M, Caballero-Mora MA, Landi F, Emmelot-Vonk MH; EuGMS Task and Finish Group on Fall-Risk-Increasing Drugs, Cherubini A, Baeyens JP, Correa-Pérez A, Gudmundsson A, Maren-goni A, O'Mahony D, Parekh N, Pisa FE, Rajkumar C, Wehling M, Ziery G; EuGMS Special Interest Group on Pharmacology. EuGMS Task and Finish group on Fall-Risk-Increasing Drugs (FRIDs): Position on Knowledge Dissemination, Management, and Future Research. *Drugs Aging*. 2019 Apr;36(4):299-307. doi: 10.1007/s40266-018-0622-7. PubMed PMID:30741371; PubMed Central PMCID: PMC6435622.

Ní Bhuachalla B, McGarrigle CA, O'Leary N, Akuffo KO, Peto T, Beatty S, Kenny RA. Orthostatic blood pressure variability is associated with lower visual contrast sensitivity function: Findings from The Irish Longitudinal Study on Aging. *Exp Gerontol*. 2019 May; 119:14-24. doi: 10.1016/j.exger.2019.01.009. Epub 2019 Jan 22. PubMed PMID: 30677467.

Holton A, Boland F, Gallagher P, Fahey T, Kenny RA, Cousins G. Longitudinal prevalence of potentially serious alcohol-medication interactions in community-dwelling older adults: a prospective cohort study. *Eur J Clin Pharmacol*. 2019 Apr;75(4):569-575. doi: 10.1007/s00228-018-02608-7. Epub 2018 Dec 19. PubMed PMID: 30569283.

Carey D, Nolan H, Kenny RA, Meaney J. Cortical covariance networks in ageing: Cross-sectional data from the Irish Longitudinal Study on Ageing (TILDA). *Neuropsychologia*. 2019 Jan;122:51-61. doi: 10.1016/j.neuropsychologia.2018.11.013. Epub 2018 Nov 27. PubMed PMID: 30500662.

### Memory Clinic

Loughrey DG, Mihelj E, Lawlor BA. Age-related hearing loss associated with altered response efficiency and variability on a visual sustained attention task. *Neuropsychol Dev Cogn B Aging Neuropsychol Cogn*. 2019 Dec 23;1-25. doi:10.1080/13825585.2019.1704393. [Epub ahead of print] PubMed PMID: 31868123.

Walsh S, Pertl M, Gillespie P, Lawlor B, Brennan S, O'Shea E. Factors influencing the cost of care and admission to long-term care for people with dementia in Ireland. *Aging Ment Health*. 2019 Dec 17:1-9. doi:10.1080/13607863.2019.1699901. [Epub ahead of print] PubMed PMID: 31847539.

Loughrey DG, Pakhomov SVS, Lawlor BA. Altered verbal fluency processes in older adults with age-related hearing loss. *Exp Gerontol*. 2019 Nov 30; 130:110794. doi: 10.1016/j.exger.2019.110794. [Epub ahead of print] PubMed PMID: 31790801.

Aspell N, Laird E, Healy M, Lawlor B, O'Sullivan M. Vitamin D Deficiency Is Associated With Impaired Muscle Strength And Physical Performance In Community-Dwelling Older Adults: Findings From The English Longitudinal Study Of Ageing. *Clin Interv Aging*. 2019 Oct 15;14:1751-1761. doi: 10.2147/CIA.S222143. eCollection 2019. PubMed PMID: 31686797; PubMed Central PMCID: PMC6800555.

Power C, Duffy R, Mahon J, McCarroll K, Lawlor BA. Bones of Contentment: A Comprehensive Literature Review of Non-SSRI Antidepressant Use and Bone Health. *J Geriatr Psychiatry Neurol*. 2019 Oct 30:891988719882091. doi:10.1177/0891988719882091. [Epub ahead of print] PubMed PMID: 31665962.

Dyer AH, Murphy C, Segurado R, Lawlor B, Kennelly SP; NILVAD Study Group. Is Ongoing Anticholinergic Burden Associated with Greater Cognitive Decline & Dementia Severity in Mild to Moderate Alzheimer Disease? *J Gerontol A Biol Sci Med Sci*. 2019 Oct 15. pii: glz244. doi: 10.1093/gerona/glz244. [Epub ahead of print]

PubMed PMID: 31613323.

Dyer AH, Murphy C, Lawlor B, Kennelly SP; NILVAD Study Group. Cognitive Outcomes of Long-term Benzodiazepine and Related Drug (BDZR) Use in People Living With Mild to Moderate Alzheimer's Disease: Results From NILVAD. *J Am Med Dir Assoc*. 2019 Oct 8. pii: S1525-8610(19)30615-2. doi: 10.1016/j.jamda.2019.08.006. [Epub ahead of print] PubMed PMID: 31604674.

Walrath D, Lawlor B. Dementia: towards a new republic of hope. *Lancet*. 2019 Sep 21;394(10203):1002-1003. doi: 10.1016/S0140-6736(19)32099-9. PubMed PMID:31544739.

de Heus RAA, Olde Rikkert MGM, Tully PJ, Lawlor BA, Claassen JAHR; NILVAD Study Group. Blood Pressure Variability and Progression of Clinical Alzheimer Disease. *Hypertension*. 2019 Nov;74(5):1172-1180. doi: 10.1161/HYPERTENSIONAHA.119.13664. Epub 2019 Sep 23. PubMed PMID: 31542965.

Loughrey DG, Parra MA, Lawlor BA. Visual short-term memory binding deficit with age-related hearing loss in cognitively normal older adults. *Sci Rep*. 2019 Aug 29;9(1):12600. doi: 10.1038/s41598-019-49023-1. PubMed PMID: 31467387; PubMed Central PMCID: PMC6715732.

Pertl MM, Sooknarine-Rajpatty A, Brennan S, Robertson IH, Lawlor BA Caregiver Choice and Caregiver Outcomes: A Longitudinal Study of Irish Spousal Dementia Caregivers. *Front Psychol*. 2019 Aug 13; 10:1801. doi:10.3389/fpsyg.2019.01801. eCollection 2019. PubMed PMID: 31456713; PubMed Central PMCID: PMC6700469.

Glynn K, Coen R, Lawlor BA. Is the Quick Mild Cognitive Impairment Screen (QMCI) more accurate at detecting mild cognitive impairment than existing short cognitive screening tests? A systematic review of the current literature. *Int J Geriatr Psychiatry*. 2019 Dec;34(12):1739-1746. doi: 10.1002/gps.5201. Epub 2019 Aug 22. Review. PubMed PMID: 31418473.

Kunkle BW, et al Author Correction: Genetic meta-analysis of diagnosed Alzheimer's disease identifies new risk loci and implicates A $\beta$ , tau, immunity and lipid processing. *Nat Genet*. 2019 Sep;51(9):1423-1424. doi: 10.1038/s41588-019-0495-7. PubMed PMID: 31417202.

Bracken-Scally M, Keogh B, Daly L, Pittalis C, Kennelly B, Hynes G, Gibb M, Cole N, McMahan CG, Lawlor B, McCarron M, Brady AM. Assessing the impact of dementia inclusive environmental adjustment in the emergency department. *Dementia (London)*. 2019 Jul 17:1471301219862942. doi: 10.1177/1471301219862942. [Epub ahead of print] PubMed PMID: 31315452.

Devenney KE, Guinan EM, Kelly ÁM, Mota BC, Walsh C, Olde Rikkert M, Schneider S, Lawlor B. Acute high-intensity aerobic exercise affects brain-derived neurotrophic factor in mild cognitive impairment: a randomised controlled study. *BMJ Open Sport Exerc Med*. 2019 Jun 11;5(1): e000499. doi: 10.1136/bmjsem-2018-000499. eCollection 2019. PubMed PMID: 31258928; PubMed Central PMCID: PMC6563898.

de Jong DLK, de Heus RAA, Rijpma A, Donders R, Olde Rikkert MGM, Günther M, Lawlor BA, van Osch MJP, Claassen JAHR. Effects of Nilvadipine on Cerebral Blood Flow in Patients With Alzheimer Disease. *Hypertension*. 2019 Aug;74(2):413-420. doi:10.1161/HYPERTENSIONAHA.119.12892. Epub 2019 Jun 17. PubMed PMID: 31203725.

Wilson L, Power C, Owens R, Lawlor B. Psychiatric consultation in the nursing home: reasons for referral and recognition of delirium. *Ir J Psychol Med.* 2019 Jun;36(2):121-127. doi: 10.1017/ipm.2017.71. PubMed PMID: 31187721.

Kelly ME, Lawlor BA, Coen RF, Robertson IH, Brennan S. Cognitive rehabilitation for early stage Alzheimer's disease: a pilot study with an Irish population. *Ir J Psychol Med.* 2019 Jun;36(2):105-119. doi: 10.1017/ipm.2017.23. PubMed PMID: 31187720.

Aspell N, Laird E, Healy M, Shannon T, Lawlor B, O'Sullivan M. The Prevalence and Determinants of Vitamin D Status in Community-Dwelling Older Adults: Results from the English Longitudinal Study of Ageing (ELSA). *Nutrients.* 2019 Jun 1;11(6). pii: E1253. doi: 10.3390/nu11061253. PubMed PMID: 31159411; PubMed Central PMCID: PMC6627050.

de Heus RAA, Donders R, Santoso AMM, Olde Rikkert MGM, Lawlor BA, Claassen JAHR, Nilvad Study Group. Blood Pressure Lowering With Nilvadipine in Patients With Mild-to-Moderate Alzheimer Disease Does Not Increase the Prevalence of Orthostatic Hypotension. *J Am Heart Assoc.* 2019 May 21;8(10): e011938. doi:10.1161/JAHA.119.011938. PubMed PMID: 31088188; PubMed Central PMCID: PMC6585342.

McHugh Power JE, Hannigan C, Carney S, Feeney J, Kenny RA, Kee F, Lawlor BA. Lonely SARTs: loneliness and sustained attention in the Irish longitudinal study of aging. *Neuropsychol Dev Cogn B Aging Neuropsychol Cogn.* 2019 Apr 18:1-10. doi: 10.1080/13825585.2019.1602705. [Epub ahead of print] PubMed PMID: 30999806.

McHugh Power J, Tang J, Kenny RA, Lawlor BA, Kee F. Mediating the relationship between loneliness and cognitive function: the role of depressive and anxiety symptoms. *Aging Ment Health.* 2019 Apr 7:1-8. doi:10.1080/13607863.2019.1599816. [Epub ahead of print] PubMed PMID: 30955348.

Power JEM, Sjöberg L, Kee F, Kenny RA, Lawlor B. Comparisons of the discrepancy between loneliness and social isolation across Ireland and Sweden: findings from TILDA and SNAC-K. *Soc Psychiatry Psychiatr Epidemiol.* 2019 Sep;54(9):1079-1088. doi: 10.1007/s00127-019-01679-w. Epub 2019 Mar 12. PubMed PMID: 30863870.

Kunkle BW, et al. Genetic meta-analysis of diagnosed Alzheimer's disease identifies new risk loci and implicates A $\beta$ , tau, immunity and lipid processing. *Nat Genet.* 2019 Mar;51(3):414-430. doi: 10.1038/s41588-019-0358-2.

Epub 2019 Feb 28. Erratum in: *Nat Genet.* 2019 Sep;51(9):1423-1424. PubMed PMID: 30820047; PubMed Central PMCID: PMC6463297.

Wolfe H, Mela V, Minogue AM, Miller AM, McGuigan C, Williams L, Lohan D, Lawlor BA, Lynch MA. Monocytes exposed to plasma from patients with Alzheimer's disease undergo metabolic reprogramming. *Neurosci Res.* 2019 Nov; 148:54-60. doi: 10.1016/j.neures.2019.01.001. Epub 2019 Jan 12. PubMed PMID: 30641113.

Doherty CP, O'Keefe E, Keaney J, Lawlor B, Coen RF, Farrell M, Campbell M. Neuropathology as a result of severe traumatic brain injury? *Clin Neuropathol.* 2019 Jan/Feb;38(1):14-22. doi: 10.5414/NP301131. PubMed PMID:30336803.

Bilchick K, Moss T, Welch T, Levy W, Stukenborg G, Lawlor BT, Reigle J, Thomas SC, Brady C, Bergin JD, Kennedy JLW, Abuannadi M, Scully K, Mazimba S. Improving Heart Failure Readmission Costs and Outcomes With a Hospital-to-Home Readmission Intervention Program. *Am J Med Qual.* 2019 Mar/Apr;34(2):127-135. doi:10.1177/1062860618788436. Epub 2018 Jul 19. PubMed

PMID: 30024279.

Bowe AK, Owens M, Codd MB, Lawlor BA, Glynn RW. Physical activity and mental health in an Irish population. *Ir J Med Sci.* 2019 May;188(2):625-631. doi:10.1007/s11845-018-1863-5. Epub 2018 Jul 17. PubMed PMID: 30019096.

Doherty, C.P., O'Keefe, E., Keaney, J., Lawlor, B.A., Coen, R.F., Farrell, M., Campbell, M. (2019) Neuropathology as a result of severe traumatic brain injury? *Clinical Neuropathology*, 38(1), 14-22 doi: 10.5414/NP301131

Lombard Vance, R., Coen, R.F., O'Keefe, F., Desmond, D., Ryall, N., Gallagher, P. (2019) Comprehensive Neuropsychological Assessment of cognitive functioning in adults with lower limb amputations in rehabilitation. *Archives of Physical Medicine and Rehabilitation*, 100(2), 278-288.e2 doi: 10.1016/j.apmr.2018.07.436

Glynn, K., Coen R.F., Lawlor, B.A. (2019) Is the Quick Mild Cognitive Impairment Screen (QMCI) more accurate at detecting mild cognitive impairment than existing short cognitive screening tests? A systematic review of the current literature. *International Journal of Geriatric Psychiatry*, 1 8. <https://doi.org/10.1002/gps.5201> (early view)

Devenney K.E., Guinan, E.M., Kelly, Á.M., Mota, B.C., Walsh, C., Rikkert, M.O., Scneider, S., Lawlor, B.A., the NeuroExercise study group incl R.F. Coen. (2019) Acute high-intensity aerobic exercise affects brain-derived neurotrophic factor in mild cognitive impairment: a randomised controlled study, *BMJ Open Sport & Exercise Medicine*, 5, 1-8. e000499. doi:10.1136/bmjsem-2018-000499

Fitzgerald, M.C.C., Carton, S., O'Keefe, F., Coen, R.F., Kelly, S., Dockree, P. (2019) Rehabilitation of Emergent Awareness of Errors Post Traumatic Brain Injury: A Pilot Intervention. *Neuropsychological Rehabilitation*, 29(6); 821-843. DOI: 10.1080/09602011.2017.1336102

Laird, E., Hoey, L., McCarroll, K., Hughes, C.F., Ward, M., Coen, R.F., Strain, J.J., Casey, M.C., Cunningham, C, McNulty, H, Molloy, A.M. Impaired cognition is associated with low vitamin B-12 status but is not exacerbated by combined high folate status in older adults living in a voluntary food-fortification setting. (Submitted to *American Journal of Clinical Nutrition*)

January – December 2019: conference presentations with published abstract

Presented (P.O'G., poster) at the International Liver Congress, Vienna, April 2019: O'Gorman, P., Ferguson, D., Strahan, O., Monaghan, A., Kennedy, M., Bergin, C., McKiernan, S., Coen, R.F., Doherty, C.P., Forde, C., Gormley, J., Norris, S. (2019) Improvement in cognitive impairment following 12 weeks of aerobic exercise in individuals with non-cirrhotic chronic hepatitis C. *Journal of Hepatology*, 70(1, Suppl), e501-e502. DOI 10.1016/S0168-8278(19)30990-9

## Bone Health Unit

Vitamin D Status is Not Associated With Orthostatic Hypotension in Older Adults. Laird EJ, McNicholas T, O'Halloran AM, Healy M, Molloy AM, Carey D, O'Connor D, McCarroll K, Kenny RA. *Hypertension.* 2019 Sep;74(3):639-644.

Bone of Contention: A Comprehensive Literature Review of Non-SSRI Antidepressant Use and Bone Health. Power C, Duffy R, Mahon J, McCarroll K, Lawlor BA. *J Geriatr Psychiatry Neurol.* 2019

Vitamin D Deficiency Is Associated With Increased Likelihood of Incident Depression In Community Dwelling Older Adults Briggs R, McCarroll K, O'Halloran A, Healy M, Kenny RA, Laird E. *J Am Med Dir Assoc.* 2019 May;20(5):517-523.

Hyperglycemia and Metformin Use Are Associated With B Vitamin Deficiency and Cognitive Dysfunction in Older Adults Porter KM, Ward M, Hughes CF, O'Kane M, Hoey L, McCann A, Molloy AM, Cunningham C, Casey MC, Tracey F, Strain S, McCarrroll K, Laird E, Gallagher AM, McNulty H. *J Clin Endocrinol Metab.* 2019 Oct 1;104(10):4837-4847

B-vitamins in Relation to Depression in Older Adults Over 60 Years of Age: The Trinity Ulster Department of Agriculture (TUDA) Cohort Study. Briggs R, McCarrroll K, O'Halloran A, Healy M, Kenny RA, Laird E. *J Am Med Dir Assoc.* 2019 May;20(5):517-523.

#### Stroke Service

Concannon E, Fitzgerald L, Canniff E, Birrane J, Harbison J, Shelley O. Neuroimaging provides relevant clinical information in patients with burn injuries. *Burns.* 2019 Nov 28. pii: S0305-4179(19)30423-1

Schnabel RB, Haeusler KG, Healey JS, Freedman B, Boriani G, Brachmann J, Brandes A, Bustamante A, Casadei B, Crijs HJGM, Doehner W, Engström G, Fauchier L, Friberg L, Gladstone DJ, Glotzer TV, Goto S, Hankey GJ, Harbison JA, Hobbs FDR, Johnson LSB, Kamel H, Kirchhof P, Korompoki E, Krieger DW, Lip GYH, Løchen ML, Mairesse GH, Montaner J, Neubeck L, Ntaios G, Piccini JP, Potpara TS, Quinn TJ, Reiffel JA, Ribeiro ALP, Rienstra M, Rosenqvist M, Sakis T, Sinner MF, Svendsen JH, Van Gelder IC, Wachter R, Wijeratne T, Yan B. Searching for Atrial Fibrillation Poststroke: A White Paper of the AF-SCREEN International Collaboration. *Circulation.* 2019 Nov 26;140(22):1834-1850.

Murphy SJ, Lim ST, Kinsella JA, Tierney S, Egan B, Feeley TM, Doolley C, Kelly J, Murphy SM, Walsh RA, Collins R, Coughlan T, O'Neill D, Harbison JA, Madhavan P, O'Neill SM, Colgan MP, Meaney JF, Hamilton G, McCabe DJ. Simultaneous assessment of plaque morphology, cerebral micro-embolic signal status and platelet biomarkers in patients with recently symptomatic and asymptomatic carotid stenosis. *J Cereb Blood Flow Metab.* 2019 Nov 11:271678X19884427.

Kelly PJ, Camps-Renom P, Giannotti N, Martí-Fàbregas J, Murphy S, McNulty J, Barry M, Barry P, Calvet D, Coutts SB, Cronin S, Delgado-Mederos R, Dolan E, Fernández-León A, Foley S, Harbison J, Horgan G, Kavanagh E, Marnane M, McDonnell C, O'Donohoe M, Sharma V, Walsh C, Williams D, O'Connell M. Carotid Plaque Inflammation Imaged by 18F-Fluorodeoxyglucose Positron Emission Tomography and Risk of Early Recurrent Stroke. *Stroke.* 2019 Jul;50(7):1766-1773.

Murphy SJX, Lim ST, Kinsella JA, Tierney S, Egan B, Feeley TM, Murphy SM, Walsh RA, Collins DR, Coughlan T, O'Neill D, Harbison JA, Madhavan P, O'Neill SM, Colgan MP, Cox D, Moran N, Hamilton G, McCabe DJH. Increased Leucocyte-Platelet Complex Formation in Recently Symptomatic versus Asymptomatic Carotid Stenosis Patients and in Micro-emboli Negative Subgroups. *Thromb Haemost.* 2019 May;119(5):821-833.

Walsh ME, Galvin R, Williams DJP, Harbison JA, Murphy S, Collins R, McCabe DJH, Crowe M, Horgan NF. The experience of recurrent fallers in the first year after stroke. *Disabil Rehabil.* 2019 Jan;41(2):142-149

Coveney S, Murphy S, Belton O, Cassidy T, Crowe M, Dolan E, de Gaetano M, Fitzgibbon M, Harbison J, Horgan G, Marnane M, McCabe J, Merwick A, Noone I, Williams D, Kelly P. Inflammatory cytokines, CRP, and risk of 1-year vascular events and death after stroke and transient ischemic attack. *In Press: Stroke*

Loughrey DG, Mihelj E, Lawlor BA. Age-related hearing loss associated with altered response efficiency and variability on a visual

sustained attention task. *Neuropsychol Dev Cogn B Aging Neuropsychol Cogn.* 2019 Dec 23:1-25. doi:10.1080/13825585.2019.1704393. [Epub ahead of print] PubMed PMID: 31868123.

Walsh S, Pertl M, Gillespie P, Lawlor B, Brennan S, O'Shea E. Factors influencing the cost of care and admission to long-term care for people with dementia in Ireland. *Aging Ment Health.* 2019 Dec 17:1-9. doi:10.1080/13607863.2019.1699901. [Epub ahead of print] PubMed PMID: 31847539.

Loughrey DG, Pakhomov SVS, Lawlor BA. Altered verbal fluency processes in older adults with age-related hearing loss. *Exp Gerontol.* 2019 Nov 30; 130:110794. doi: 10.1016/j.exger.2019.110794. [Epub ahead of print] PubMed PMID: 31790801.

Aspell N, Laird E, Healy M, Lawlor B, O'Sullivan M. Vitamin D Deficiency Is Associated With Impaired Muscle Strength And Physical Performance In Community-Dwelling Older Adults: Findings From The English Longitudinal Study Of Ageing. *Clin Interv Aging.* 2019 Oct 15;14:1751-1761. doi: 10.2147/CIA.S222143.eCollection 2019. PubMed PMID: 31686797; PubMed Central PMCID: PMC6800555.

Power C, Duffy R, Mahon J, McCarrroll K, Lawlor BA. Bones of Contention: A Comprehensive Literature Review of Non-SSRI Antidepressant Use and Bone Health. *J Geriatr Psychiatry Neurol.* 2019 Oct 30:891988719882091. doi:10.1177/0891988719882091. [Epub ahead of print] PubMed PMID: 31665962.

Dyer AH, Murphy C, Segurado R, Lawlor B, Kennelly SP; NILVAD Study Group. Is Ongoing Anticholinergic Burden Associated with Greater Cognitive Decline & Dementia Severity in Mild to Moderate Alzheimer Disease? *J Gerontol A Biol Sci Med Sci.* 2019 Oct 15. pii: glz244. doi: 10.1093/gerona/glz244. [Epub ahead of print] PubMed PMID: 31613323.

Dyer AH, Murphy C, Lawlor B, Kennelly SP; NILVAD Study Group. Cognitive Outcomes of Long-term Benzodiazepine and Related Drug (BDZR) Use in People Living With Mild to Moderate Alzheimer's Disease: Results From NILVAD.

*J Am Med Dir Assoc.* 2019 Oct 8. pii: S1525-8610(19)30615-2. doi: 10.1016/j.jamda.2019.08.006. [Epub ahead of print] PubMed PMID: 31604674.

Walrath D, Lawlor B. Dementia: towards a new republic of hope. *Lancet.* 2019 Sep 1;394(10203):1002-1003. doi: 10.1016/S0140-6736(19)32099-9. PubMed PMID:31544739.

de Heus RAA, Olde Rikkert MGM, Tully PJ, Lawlor BA, Claassen JAHR; NILVAD Study Group. Blood Pressure Variability and Progression of Clinical Alzheimer Disease. *Hypertension.* 2019 Oct;74(5):1172-1180. doi: 10.1161/HYPERTENSIONAHA.119.13664. Epub 2019 Sep 23. PubMed PMID: 31542965.

Loughrey DG, Parra MA, Lawlor BA. Visual short-term memory binding deficit with age-related hearing loss in cognitively normal older adults. *Sci Rep.* 2019 Aug 29;9(1):12600. doi: 10.1038/s41598-019-49023-1. PubMed PMID: 31467387; PubMed Central PMCID: PMC6715732.

Pertl MM, Sooknarine-Rajpatty A, Brennan S, Robertson IH, Lawlor BA. Caregiver Choice and Caregiver Outcomes: A Longitudinal Study of Irish Spousal Dementia Caregivers. *Front Psychol.* 2019 Aug 13;10:1801. doi:10.3389/fpsyg.2019.01801. eCollection 2019. PubMed PMID: 31456713; PubMed Central PMCID: PMC6700469.

Glynn K, Coen R, Lawlor BA. Is the Quick Mild Cognitive Impairment Screen (QMCI) more accurate at detecting mild cognitive

- impairment than existing short cognitive screening tests? A systematic review of the current literature. *Int J Geriatr Psychiatry*. 2019 Dec;34(12):1739-1746. doi: 10.1002/gps.5201. Epub 2019 Aug 22. Review. PubMed PMID: 31418473.
- Kunkle BW, Grenier-Boley B, Sims R, Bis JC, Damotte V, Naj AC, Boland A, Vronskaya M, et al Author Correction: Genetic meta-analysis of diagnosed Alzheimer's disease identifies new risk loci and implicates A $\beta$ , tau, immunity and lipid processing. *Nat Genet*. 2019 Sep;51(9):1423-1424. doi: 10.1038/s41588-019-0495-7. PubMed PMID: 31417202.
- Bracken-Scally M, Keogh B, Daly L, Pittalis C, Kennelly B, Hynes G, Gibb M, Cole N, McMahon CG, Lawlor B, McCarron M, Brady AM. Assessing the impact of dementia inclusive environmental adjustment in the emergency department. *Dementia (London)*. 2019 Jul 17:1471301219862942. doi: 10.1177/1471301219862942. [Epub ahead of print] PubMed PMID: 31315452.
- Devenney KE, Guinan EM, Kelly ÁM, Mota BC, Walsh C, Olde Rikkert M, Schneider S, Lawlor B. Acute high-intensity aerobic exercise affects brain-derived neurotrophic factor in mild cognitive impairment: a randomised controlled study. *BMJ Open Sport Exerc Med*. 2019 Jun 11;5(1):e000499. doi:10.1136/bmjsem-2018-000499. eCollection 2019. PubMed PMID: 31258928; PubMed Central PMCID: PMC6563898.
- de Jong DLK, de Heus RAA, Rijpma A, Donders R, Olde Rikkert MGM, Günther M, Lawlor BA, van Osch MJP, Claassen JAHR. Effects of Nilvadipine on Cerebral Blood Flow in Patients With Alzheimer Disease. *Hypertension*. 2019 Aug;74(2):413-420. doi: 10.1161/HYPERTENSIONAHA.119.12892. Epub 2019 Jun 17. PubMed PMID: 31203725.
- Wilson L, Power C, Owens R, Lawlor B. Psychiatric consultation in the nursing home: reasons for referral and recognition of delirium. *Ir J Psychol Med*. 2019 Jun;36(2):121-127. doi: 0.1017/ipm.2017.71. PubMed PMID: 31187721.
- Kelly ME, Lawlor BA, Coen RF, Robertson IH, Brennan S. Cognitive rehabilitation for early stage Alzheimer's disease: a pilot study with an Irish population. *Ir J Psychol Med*. 2019 Jun;36(2):105-119. doi: 10.1017/ipm.2017.23. PubMed PMID: 31187720.
- Aspell N, Laird E, Healy M, Shannon T, Lawlor B, O'Sullivan M. The Prevalence and Determinants of Vitamin D Status in Community-Dwelling Older Adults: Results from the English Longitudinal Study of Ageing (ELSA). *Nutrients*. 2019 Jun 11;11(6). pii: E1253. doi: 10.3390/nu11061253. PubMed PMID: 31159411; PubMed Central PMCID: PMC6627050.
- de Heus RAA, Donders R, Santoso AMM, Olde Rikkert MGM, Lawlor BA, Claassen JAHR; Nilvad Study Group. Blood Pressure Lowering With Nilvadipine in Patients With Mild-to-Moderate Alzheimer Disease Does Not Increase the Prevalence of Orthostatic Hypotension. *J Am Heart Assoc*. 2019 May 21;8(10):e011938. doi:10.1161/JAHA.119.011938. PubMed PMID: 31088188; PubMed Central PMCID: PMC6585342.
- McHugh Power JE, Hannigan C, Carney S, Feeney J, Kenny RA, Kee F, Lawlor BA. Lonely SARTs: loneliness and sustained attention in the Irish longitudinal study of aging. *Neuropsychol Dev Cogn B Aging Neuropsychol Cogn*. 2019 Apr 18:1-10. doi:10.1080/13825585.2019.1602705. [Epub ahead of print] PubMed PMID: 30999806.
- McHugh Power J, Tang J, Kenny RA, Lawlor BA, Kee F. Mediating the relationship between loneliness and cognitive function: the role of depressive and anxiety symptoms. *Aging Ment Health*. 2019 Apr 7:1-8. doi:10.1080/13607863.2019.1599816. [Epub ahead of print] PubMed PMID: 30955348.
- Power JEM, Sjöberg L, Kee F, Kenny RA, Lawlor B. Comparisons of the discrepancy between loneliness and social isolation across Ireland and Sweden: findings from TILDA and SNAC-K. *Soc Psychiatry Psychiatr Epidemiol*. 2019 Sep;54(9):1079-1088. doi: 10.1007/s00127-019-01679-w. Epub 2019 Mar 12. PubMed PMID: 30863870.
- Kunkle BW, Grenier-Boley B, Sims R, Bis JC, Damotte V, Naj AC, et al Alzheimer Disease Genetics Consortium (ADGC); European Alzheimer's Disease Initiative (EADI), Cohorts for Heart and Aging Research in Genomic Epidemiology Consortium (CHARGE), Genetic and Environmental Risk in AD/Defining Genetic, Polygenic and Environmental Risk for Alzheimer's Disease Consortium (GERAD/PERADES), Genetic meta-analysis of diagnosed Alzheimer's disease identifies new risk loci and implicates A $\beta$ , tau, immunity and lipid processing. *Nat Genet*. 2019 Mar;51(3):414-430. doi: 10.1038/s41588-019-0358-2. Epub 2019 Feb 28. Erratum in: *Nat Genet*. 2019 Sep;51(9):1423-1424. PubMed PMID: 30820047; PubMed Central PMCID: PMC6463297.
- Wolfe H, Mela V, Minogue AM, Miller AM, McGuigan C, Williams L, Lohan D, Lawlor BA, Lynch MA. Monocytes exposed to plasma from patients with Alzheimer's disease undergo metabolic reprogramming. *Neurosci Res*. 2019 Nov; 148:54-60. doi: 10.1016/j.neures.2019.01.001. Epub 2019 Jan 12. PubMed PMID: 30641113.
- Doherty CP, O'Keefe E, Keaney J, Lawlor B, Coen RF, Farrell M, Campbell M. Neuropathology as a result of severe traumatic brain injury? *Clin Neuropathol*. 2019 Jan/Feb;38(1):14-22. doi: 10.5414/NP301131. PubMed PMID: 30336803.
- Bilchick K, Moss T, Welch T, Levy W, Stukenborg G, Lawlor BT, Reigle J, Thomas SC, Brady C, Bergin JD, Kennedy JLW, Abuannadi M, Scully K, Mazimba S. Improving Heart Failure Readmission Costs and Outcomes With a Hospital-to-Home Readmission Intervention Program. *Am J Med Qual*. 2019 Mar/Apr;34(2):127-135. doi:10.1177/1062860618788436. Epub 2018 Jul 19. PubMed PMID: 30024279.
- Bowe AK, Owens M, Codd MB, Lawlor BA, Glynn RW. Physical activity and mental health in an Irish population. *Ir J Med Sci*. 2019 May;188(2):625-631. doi:10.1007/s11845-018-1863-5. Epub 2018 Jul 17. PubMed PMID: 30019096.
- LAMP:**
- Claffey P, McNicholas T, Briggs R, et al. The Impact of Acute Specialised Geriatric Take in a Large Teaching Hospital over Three Years. *Age and Ageing*. 2018;47(suppl\_5).
- Coen R, Hannigan O, Glynn K, et al. Free and Cued Selective Reminding (FCSRT) and Delayed Word Recall (DWR) Concordance for Hippocampal Signature Amnesic Mild Cognitive Impairment (MCI). *Age and Ageing*. 2018;47(suppl\_5):v13-v60.
- Collins P, McDonough A, Robinson D. Fasting Before Cardiac Procedures Under Conscious Sedation Hunger Without Cause? Paper presented at: IRISH JOURNAL OF MEDICAL SCIENCE 2018.
- Hannigan O, McNicholas T, McCarroll K, Cunningham C, Robinson D. 208Life Expectancy and Place of Death of Patients Discharged from Hospital to Long Term Care. *Age and Ageing*. 2018;47(suppl\_5).
- McMahon CG, Foley MP, Robinson D, et al. High prevalence of frequent attendance in the over 65s. *European Journal of Emergency Medicine*. 2018;25(1):53-57.
- Prosopagnosia as a Type of Conversion Disorder.
- Power C, Hannigan O, Coen R, Bruce I, Gibb M, McCarthy M, Rob-

inson D, Lawlor BA.

Case Rep Psychiatry. 2018 Feb 13; 2018:5972954. PMID: 29666739  
Medical Physics and Bioengineering

SP Juraschek, A Taylor, G W Evans, R Townsend, E Miller, T Plan-  
te, W Cushman, T Gure, W Haley, I Moinuddin, J Nord, S Oparil, C  
Pedley, C Roumie, J Whittle, A Wiggers, C Finucane, RA Kenny, LJ  
Appel, JT Wright. Orthostatic Hypotension, Cardiovascular Out-  
comes, and Adverse Events: Results from SPRINT, Hypertension,  
December 2019 (In press).

Claffey P, Pérez-Denia L, Rivasi G, Finucane C, Kenny RA. Near-In-  
frared Spectroscopy in Evaluating Psychogenic Pseudosyncope -  
A novel diagnostic approach. QJM. 2019 Oct 9. pii: hcz257. doi:  
10.1093/qjmed/hcz257. PMID: 31596496

Finucane C, van Wijnen VK, Fan CW, Soraghan C, Byrne L, Wester-  
hof BE, Freeman R, Fedorowski A, Harms MPM, Wieling W, Kenny  
R. A practical guide to active stand testing and analysis using con-  
tinuous beat-to-beat non-invasive blood pressure monitoring. Clin  
Auton Res. 2019 Aug;29(4):427-441. doi: 10.1007/s10286-019-  
00606-y. Epub 2019 May 10. Review. PMID: 31076939

L Perez-Denia, P Claffey, RA Kenny, C Finucane 'Is cerebral auto-  
regulation altered in ageing? A review'. BGS, Leicester, 6-8 Novem-  
ber 2019.

P Claffey, L Perez-Denia, G Rivasi, A Ungar, C Finucane, RA Kenny  
P5678 Near-infrared spectroscopy (NIRS) in the evaluation of psy-  
chogenic pseudosyncope-Moving towards a simplified diagnostic  
pathway. European Heart Journal 40 (Supplement\_1), ehz746.  
0620

C Finucane, R Kenny. Time to redefine initial orthostatic hypoten-  
sion in older adults? Age and Ageing, Volume 48, Issue Supple-  
ment\_1, February 2019, Pages i24-i25, [https://doi.org/10.1093/  
ageing/afy200.01](https://doi.org/10.1093/ageing/afy200.01)

D Moloney, L Perez Denia, R Kenny. Todd's Paresis following Vaso-  
vagal Syncope provoked by Tilt Table Testing. BMJ Case Reports,  
2019 (In review).

S. Naimimohasses, L Perez Denia, C. Rice, C. Finucane, S. Norris,  
R. A. Kenny. A pilot study evaluating cerebral perfusion oxygena-  
tion and orthostatic blood pressure regulation in patients with  
advanced, non-cirrhotic Non-Alcoholic Fatty Liver Disease (NA-  
FLD), the European Association for the Study of the Liver Annual  
Meeting, London, 2019.

## TILDA

Briggs, R, Carey, D, Claffey, P, McNicholas, T, Newman, L, Nolan,  
H, Kennelly, SP, Kenny, RA. The association between frontal lobe  
perfusion and depressive symptoms in later life. The British Jour-  
nal of Psychiatry: The Journal of Mental Science. 214(4):230-23.

Briggs, R, Carey, D, Claffey, P, McNicholas, T, Donoghue, OA, Ken-  
nelly, SP, Kenny, RA. Do Differences in Spatiotemporal Gait Pa-  
rameters Predict the Risk of Developing Depression in Later Life?  
Journal of the American Geriatrics Society 67(5):1050-1056.

Briggs, R, McCarroll, K, O'Halloran, A, Healy, M, Kenny, RA, Laird,  
E. Vitamin D Deficiency Is Associated With an Increased Likelihood  
of Incident Depression in Community-Dwelling Older Adults. JAM-  
DA. 20(5):517-523.

Byrne, P, Cullinan, J, Gillespie, P, Perera, R and Smith, SM. Statins  
for primary prevention of cardiovascular disease: modelling  
guidelines and patient preferences based on an Irish cohort. Brit-  
ish Journal of Geriatric Practice. 69(683):e373-e380.

Carey, D, Nolan, H, Kenny, RA, Meaney, J. Cortical covariance net-

works in ageing: cross-sectional data from the Irish Longitudinal  
Study on Ageing (TILDA). Neuropsychologia. 122:51-61.

Carey, D, Nolan, H, Kenny, RA, Meaney, J. Dissociable age and  
memory relationships with hippocampal subfield volumes in vivo:-  
Data from the Irish Longitudinal Study on Ageing (TILDA). Scientif-  
ic Reports. 9: 10981.

Cattelani L, Belvederi Murri M, Chesani F, Chiari L, Bandinelli S,  
Palumbo. Risk Prediction Model for Late Life Depression: Devel-  
opment and Validation on Three Large European Datasets. IEEE  
Journal of Biomedical and Health Informatics. 23(5):2196-2204

Connolly, S, Whyte, R. Uptake of cancer screening services among  
middle and older ages in Ireland: the role of healthcare eligibility.  
Public Health. 173:42-4.

Corish CA, Bardon LA. Malnutrition in older adults: screening  
and determinants. The Proceedings of the Nutrition Society.  
78(3):372-379

Cruise, SM, Hughes, J, Bennett, K, Kouvonen, A, Kee, F. The Impact  
of Risk Factors for Coronary Heart Disease on Related Disability in  
Older Irish Adults. J Aging Health. 31(1):165-184.

Curran E, Rosato M, Cooper J, McGarrigle CA, Leavey G. Symp-  
tom profiles of late-life anxiety and depression: The influence  
of migration, religion and loneliness. Depression and Anxiety.  
36(9):824-833

Domènech-Abella, J, Mundó, J, Maria Haro, J, Rubio-Valeraef, M.  
Anxiety, depression, loneliness and social network in the elderly:  
Longitudinal associations from The Irish Longitudinal Study on  
Ageing (TILDA). Journal of Affective Disorders. 246:82-88.

Donati, L, Fongo, D, Cattelani, L, Chesani, F. Prediction of Decline in  
Activities of Daily Living Through Deep Artificial Neural Networks  
and Domain Adaptation. In: Alviano M., Greco G., Scarcello F. (eds)  
AI\*IA 2019 – Advances in Artificial Intelligence. Lecture Notes in  
Computer Science, vol 11946, pp 376-391. Available at: [https://  
link.springer.com/chapter/10.1007/978-3-030-35166-3\\_27](https://link.springer.com/chapter/10.1007/978-3-030-35166-3_27).

Donoghue, OA, Savva, GM, Börsch-Supan, A, Kenny RA. Reliability,  
measurement error and minimum detectable change in mobility  
measures: a cohort study of community-dwelling adults aged 50  
years and over in Ireland. BMJ Open. 9(11):e030475.

Donoghue OA, McGarrigle CA, Kenny RA. The Irish Longitudinal  
Study on Ageing. In: Gu D., Dupre M. (eds) Encyclopedia of Ger-  
ontology and Population Aging. Springer, Cham. ISBN 978-3-319-  
69892-2. Available at: [https://link.springer.com/referenceworken-  
try/10.1007/978-3-319-69892-2\\_340-1](https://link.springer.com/referenceworkentry/10.1007/978-3-319-69892-2_340-1).

Donoghue OA, McGarrigle CA, Kenny RA. Who's in the driver's  
seat? Impact on social participation and psychosocial wellbeing in  
adults aged 50 and over. Transportation Research Part F: Traffic  
Psychology and Behaviour. 64:522-531.

Fiorito, G, McCrory, C, Robinson, O, Carmeli, C, Rosales,, CO,  
Zhang, Y, Colicino, E, Dugué, PA, Artaud, F, McKay, GJ, Jeong, A,  
Mishra, PP, Nøst, TH, Krogh, V, Panico, S, Sacerdote, C, Tumino,  
R, Palli, D, Matullo, G, Guarrera, S, Gandini, M, Bochud, M, Der-  
mitzakis, E, Muka, T, Schwartz, J, Vokonas, PS, Just, A, Hodge, AM,  
Giles, GG, Southey, MC, Hurme, MA, Young, I, McKnight, AJ, Kunze,  
S, Waldenberger, M, Peters, A, Schwettmann, L, Lund, E, Baccarel-  
li, A, Milne, RL, Kenny, RA, Elbaz, A, Brenner, H, Kee, F, Voortman,  
T, Probst-Hensch, N, Lehtimäki, T, Elliot, P, Stringhini, S, Vineis, P,  
Polidoro, S; BIOS Consortium;

- Lifepath consortium. Socioeconomic position, lifestyle habits and biomarkers of epigenetic aging: a multi-cohort analysis. *Aging*. 11(7):2045-2070.
- Gordon, BR, McDowell, CP, Lyons, M, Herring, MP. Associations between grip strength and generalized anxiety disorder in older adults: Results from the Irish longitudinal study on ageing. *Journal of affective disorders*. 255:136-141.
- Gormley, M, O'Neill, D. Driving as a Travel Option for Older Adults: Findings From the Irish Longitudinal Study on Aging. *Frontiers in Psychology*. 64:522-531.
- Holton, A, Boland, F, Gallagher, P, Fahey, T, Kenny, R, Cousins, G. Life Course Transitions and Changes in Alcohol Consumption Among Older Irish Adults: Results From The Irish Longitudinal Study on Ageing (TILDA). *Journal of aging and health*. 31(9):1568-1588.
- Hernández, B, Reilly, RB, Kenny, RA. Investigation of multimorbidity and prevalent disease combinations in older Irish adults using network analysis and association rules. *Scientific Reports*. 9, 14567.
- Hernández, B, Setti, A, Kenny, RA, Newell, FN. Individual differences in ageing, cognitive status, and sex on susceptibility to the sound-induced flash illusion: A large-scale study. *Psychology and Aging*. 34(7):978-990.
- Hirst, RJ, Setti, A, Kenny, RA, Newell, FN. Age-related sensory decline mediates the Sound-Induced Flash Illusion: Evidence for reliability weighting models of multisensory perception. *Scientific Reports*. 9, 19347.
- Holton, A, Boland, F, Gallagher, P, Fahey, T, Kenny, R, Cousins, G. Longitudinal prevalence of potentially serious alcohol-medication interactions in community-dwelling older adults: a prospective cohort study. *European Journal of Clinical Pharmacology*. 75(4):569-575.
- Huang, C, Sun, S, Tian, X, Wang, T, Wang, T, Duan, H, Wu, Y. Age modify the associations of obesity, physical activity, vision and grip strength with functional mobility in Irish aged 50 and older. *Archives of gerontology and geriatrics*. 84:103895.
- Laird, EJ, McNicholas, T, O'Halloran, AM, Healy, M, Molloy, AM, Carey, D, O'Connor, D, McCarroll, K, Kenny, RA. Vitamin D Status Is Not Associated With Orthostatic Hypotension in Older Adults. *Hypertension*. 74(3):639-644.
- Layte, R, McCrory, C, Ni Cheallaigh, C, Bourke, N, Kivimaki, M, Ribeiro, AI, Stringhini, S, Vineis, P. A Comparative Analysis of the Status Anxiety Hypothesis of Socio-economic Inequalities in Health Based on 18,349 individuals in Four Countries and Five Cohort Studies. *Scientific Reports*. 9(796).
- Lindsay, L, Coleman, SA, Kerr, D, Taylor, BJ, Moorhead, A. Classification of Health Risk Factors to Predict the Risk of Falling in Older Adults. *International Journal of Medical and Health Sciences*. 13(6):306-309.
- May, P, Johnston, BM, Normand, C, Higginson, IJ, Kenny, RA, Ryan, K. Population-based palliative care planning in Ireland: how many people will live and die with serious illness to 2046?. *HRB Open Research*. 2:35.
- Mayburd, AL, Baranova, A. Increased lifespan, decreased mortality, and delayed cognitive decline in osteoarthritis. *Scientific Reports*. 9(1):18639.
- McCrory C, Fiorito G, Ni Cheallaigh C, Polidoro S, Karisola P, Aenius H, Layte R, Seeman T, Vineis P, Kenny RA. How does socio-economic position (SEP) get biologically embedded? A comparison of allostatic load and the epigenetic clock(s). *Psychoneuroendocrinology*. 104:64-73.
- McDowell, CP, Gordon, BR, Andrews, KL, MacDonncha, C, Herring, MP. Associations of physical activity with anxiety symptoms and status: results from The Irish longitudinal study on ageing. *Epidemiology and psychiatric sciences*. 28(4):436-445.
- McDowell, CP, Gordon, BR, Herring, MP. Sex-related differences in the association between grip strength and depression: Results from the Irish Longitudinal Study on Ageing. *Experimental Gerontology*. 104:147-152.
- McDowell, CP, Gordon, BR, MacDonncha, C, Herring, MP. Physical activity correlates among older adults with probable generalized anxiety disorder: Results from The Irish Longitudinal Study on Ageing. *General Hospital Psychiatry*. 59:30-36.
- McGarrigle, L, Irving, K, van Boxtel, MPJ, Boran, L. Cognitive Reserve Capacity: Exploring and Validating a Theoretical Model in Healthy Ageing. *Journal of the International Neuropsychological Society*. 25(6):603-617.
- McMullan, I, Bunting, B, McDonough, S, Tully, M, Casson, K. Changes in physical activity predict changes in a comprehensive model of balance in older community-dwelling adults. A longitudinal analysis of the TILDA study. *Journal of Frailty, Sarcopenia and Falls*. 4(4):102-110.
- Mohan, G, Nolan, A, Lyons, S. An investigation of the effect of accessibility to General Practitioner services on healthcare utilisation among older people. *Social Science and Medicine*. 220:254-263.
- Ní Bhuachalla, B, McGarrigle, CA, O'Leary, N, Akuffo, KO, Peto, T, Beatty, S, Kenny, RA. Orthostatic blood pressure variability is associated with lower visual contrast sensitivity function: Findings from The Irish Longitudinal Study on Aging. *Experimental Gerontology*. 119:14-24.
- Nivakoski, S, Barrett, A. Estimating, and Interpreting, Retirement Income Replacement Rates. *Economic and Social Review*. 50(3):507-609.
- Nivakoski, S. Does the exchange motive influence intergenerational transfers? Evidence from Ireland. *Review of the Economics of the Household*. 17(3):1049-1079.
- Nolan, A, Barrett, A. The role of self-employment in Ireland's older workforce. *The Journal of the Economics of Ageing*. 14, 2019, 100201
- Nolan, A, Barrett, A. Working Beyond age 65 in Ireland. *Journal of Population Ageing*. 12(3):299-326
- Nolan, A, McCrory, C, Moore, P. Personality and preventive health-care utilisation: Evidence from the Irish Longitudinal Study on Ageing. *Preventative Medicine*. 120:107-112
- O'Neill, KN, McHugh, SM, Kearney, PM. Cycle of Care for people with diabetes: an equitable initiative? . *HRB Open Research*. 2:3.
- O'Sullivan, M, Brennan, S, Lawlor, BA, Hannigan, C, Robertson, IH, Pertl, MM. Cognitive functioning among cognitively intact dementia caregivers compared to matched self-selected and population controls . *Aging and Mental Health*. 23(5):566-573.
- Oliveira, IM, Hernández, B, Kenny, RA, Reilly, RB. Automatic Disability Categorisation based on ADLs among Older Adults in a Nationally Representative Population using Data Mining Methods.

41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC). 2466-2469.

Orr, J, Layte, R, O'Leary, N. Sexual Activity and Relationship Quality in Middle and Older Age: Findings From The Irish Longitudinal Study on Ageing (TILDA). *J Gerontol B Psychol Sci Soc Sci*. 74(2):287-297.

Orr, J, Tobin, K, Carey, D, Kenny, RA, McGarrigle, C. Religious Attendance, Religious Importance, and the Pathways to Depressive Symptoms in Men and Women Aged 50 and Over Living in Ireland. *Research on Aging*. 41(9):891-911.

Peeters, G, Feeney, J, Carey, D, Kennelly, S, Kenny, RA. A comprehensive assessment of risk factors for falls in middle-aged adults: co-ordinated analyses of cohort studies in four countries. *Osteoporosis International* 30(10):2099-2117.

Peeters, G, Feeney, J, Carey, D, Kennelly, S, Kenny, RA. Fear of falling: a manifestation of executive dysfunction?. *International journal of geriatric psychiatry*. 34(8):1275-1282.

Power, JEM, Sjöberg, L, Kee, F, Kenny, RA, Lawlor, B. Comparisons of the discrepancy between loneliness and social isolation across Ireland and Sweden: findings from TILDA and SNAC-K. *Social psychiatry and psychiatric epidemiology*. 54(9):1079-1088.

Santini, ZI, Joyangi, AI, Tyrovolas, S, Haro, JM, Koushede, V. The association of social support networks and loneliness with negative perceptions of ageing: evidence from the Irish Longitudinal Study on Ageing (TILDA). *Ageing and Society*. 39(5):1070-1090

Scanlon, G, McCartney, D, Butler, JS, Loskutova, E, Loughman, J. Identification of Surrogate Biomarkers for the Prediction of Patients at Risk of Low Macular Pigment in Type 2 Diabetes. *Current Eye Research*. 44(12):1369-1380.

Schuch, FB, Stubbs, B, Meyer, J, Heissel, A, Zech, P, Vancampfort, D, Rosenbaum, S, Deenik, J, Firth, J, Ward, PB, Carvalho, AF, Hiles, SA. Physical activity protects from incident anxiety: A meta-analysis of prospective cohort studies. *Depression and Anxiety*. 44(12):1369-1380.

Walsh, CA, Cahir, C, Bennett, KE. Association between adherence to antihypertensive medications and health outcomes in middle and older aged community dwelling adults; results from the Irish longitudinal study on ageing. *European Journal of Clinical Pharmacology*. 75(9):1283-1292.

Ward, M, McGarrigle, CA, Kenny, RA. More than health: quality of life trajectories among older adults-findings from The Irish Longitudinal Study on Ageing (TILDA). *Qual Life Res*. 28(2):429-439.

## TUDA

Moore K, Hughes CF, Hoey L, Ward M, Cunningham C, Molloy AM, Strain JJ, McCarroll K, Casey MC, Tracey F, Laird E, O'Kane M, McNulty H. B-vitamins in Relation to Depression in Older Adults Over 60 Years of Age: The Trinity Ulster Department of Agriculture (TUDA) Cohort Study. *J Am Med Dir Assoc*. 2019 May;20(5):551-557.e1. doi: 10.1016/j.jamda.2018.11.031. Epub 2019 Jan 25. PMID:30692033

Porter KM1, Ward M1, Hughes CF1, O'Kane M2, Hoey L1, McCann A3, Molloy AM4, Cunningham C5, Casey MC5, Tracey F6, Strain S1, McCarroll K5, Laird E4, Gallagher AM1, McNulty H1. Hyperglycemia and Metformin Use Are Associated With B Vitamin Deficiency and Cognitive Dysfunction in Older Adults. *J Clin Endocrinol Metab*. 2019 Oct 1;104(10):4837-4847. doi: 10.1210/je.2018-01791.

## Surgery, Anaesthesia and Critical Care

1. Expert statement on the ICU management of patients with thrombotic thrombocytopenic purpura. Azoulay E, Bauer PR, Mariotte E, Russell L, Knoebl P, Martin-Loeches I, Pène F, Puxty K, Povoas P, Barratt-Due A, Garnacho-Montero J, Wendon J, Munshi L, Benoit D, von Bergwelt-Baildon M, Maggiorini M, Coppo P, Cataland S, Veyradier A, Van de Louw A; Nine-i Investigators. *Intensive Care Med*. 2019 Nov;45(11):1518-1539. doi: 10.1007/s00134-019-05736-5. Epub 2019 Oct 7. PMID: 31588978
2. Incidence and outcome of invasive candidiasis in intensive care units (ICUs) in Europe: results of the EUCANDICU project. Bassetti M, Giacobbe DR, Vena A, Trucchi C, Ansaldi F, Antonelli M, Adamkova V, Alicino C, Almyroudi MP, Atchade E, Azzini AM, Carannante N, Carnelutti A, Corcione S, Cortegiani A, Dimopoulos G, Dubler S, Garcia-Garmendia JL, Girardis M, Cornely OA, Ianniruberto S, Kullberg BJ, Lagrou K, Le Bihan C, Luzzati R, Malbrain MLNG, Merelli M, Marques AJ, Martin-Loeches I, Mesini A, Paiva JA, Peghin M, Raineri SM, Rautemaa-Richardson R, Schouten J, Brugnaro P, Spapen H, Tasioudis P, Timsit JF, Tisa V, Tumbarello M, van den Berg CHSB, Veber B, Venditti M, Voiriot G, Wauters J, Montravers P. *Crit Care*. 2019 Jun 14;23(1):219. doi: 10.1186/s13054-019-2497-3. PMID: 31200780 Free PMC article.
3. Bhatt NR, Mohammed W, Wagner P, Elkhailifa A, Flynn RJ, Thomas AZ, Manecksha RP. Urinary catheters in the emergency department: a prospective audit to improve quality control. *Cent European J Urol*. 2019;72(1):62-65. doi: 10.5173/ceju.2019.1731.
4. "Glossoptosis in Pierre Robin Sequence" KC Cahill, DJA Orr *Archives of Diseases in Childhood* 2019 Jul; 104(7): 693 PMID: 29728421
5. Influenza Infections and Emergent Viral Infections in Intensive Care Unit. Cantan B, Luyt CE, Martin-Loeches I. *Semin Respir Crit Care Med*. 2019 Aug;40(4):488-497. doi: 10.1055/s-0039-1693497. Epub 2019 Oct 4. PMID: 31585475 Free PMC article. Review.
6. Coleman E, O'Connor E. The role of WhatsApp® in medical education; a scoping review and instructional design model. *BMC Med Ed*. 2019; 19: 279.
7. Correction to: Procalcitonin levels in candidemia versus bacteremia: a systematic review. Cortegiani A, Misseri G, Ippolito M, Bassetti M, Giarratano A, Martin-Loeches I, Einav S. *Crit Care*. 2019 Oct 11;23(1):322. doi: 10.1186/s13054-019-2598-z. PMID: 31604474 Free PMC article.
8. Prevalence and Etiology of Community-acquired Pneumonia in Immunocompromised Patients. Di Pasquale MF, Sotgiu G, Gramegna A, Radovanovic D, Terraneo S, Reyes LF, upp J, González Del Castillo J, Blasi F, Aliberti S, Restrepo MI; GLIMP Investigators. *Clin Infect Dis*. 2019 Apr 24;68(9):1482-1493. doi: 10.1093/cid/ciy723. PMID: 31222287 Free PMC article.
9. CT-guided Lung Biopsy: Effect of Biopsy-side Down Position on Pneumothorax and Chest Tube Placement. Drumm O, Joyce EA, de Blacam C, Gleeson T, Kavanagh J, McCarthy E, McDermott R, Beddy P. *Radiology*. 2019 Jul;292(1):190-196. doi: 10.1148/radiol.2019182321. Epub 2019 May 14. PMID: 31084480
10. Ventilator-Associated Pneumonia and PaO2/FIO2 Diagnostic Accuracy: Changing the Paradigm? Ferrer M, Sequeira T, Cilloniz C, Dominedo C, Bassi GL, Martin-Loeches I, Torres A. *J Clin Med*. 2019 Aug 14;8(8):1217. doi: 10.3390/jcm8081217. PMID: 31416285 Free PMC article.
11. Lynch OE, Redmond EJ, Inder MS, Flynn RJ, Thomas AZ, Smyth LG, Manecksha RP. The utility of stent on strings in clinical practice. *Ir J Med Sci*. 2020 Feb;189(1):283-287. doi: 10.1007/s11845-019-02079-4.

12. Inder S, Bates M, Ni Labhrai N, McDermott N, Schneider J, Erdmann G, Jamerson T, Flores AN, Prina-Mello A, Thirion P, Manecksha PR, Cormican D, Finn S, Lynch T, Marignol L. Multi-plex profiling identifies clinically relevant signalling proteins in an isogenic prostate cancer model of radioresistance. *Sci Rep.* 2019 Nov 22;9(1):17325. doi: 10.1038/s41598-019-53799-7.
13. Ceftolozane-tazobactam versus meropenem for treatment of nosocomial pneumonia (ASPECT-NP): a randomised, controlled, double-blind, phase 3, non-inferiority trial. Kollef MH, Nováček M, Kivistik Ü, Réa-Neto Á, Shime N, Martin-Loeches I, Timsit JF, Wunderink RG, Bruno CJ, Huntington JA, Lin G, Yu B, Butterson JR, Rhee EG. *Lancet Infect Dis.* 2019 Dec;19(12):1299-1311. doi: 10.1016/S1473-3099(19)30403-7. Epub 2019 Sep 25. PMID: 31563344 Clinical Trial.
14. Thinking forward: promising but unproven ideas for future intensive care. Marini JJ, DeBacker D, Gattinoni L, Ince C, Martin-Loeches I, Singer P, Singer M, Westphal M, Vincent JL. *Crit Care.* 2019 Jun 14;23(Suppl 1):197. doi: 10.1186/s13054-019-2462-1. PMID: 31200781 Free PMC article.
15. Conventional amphotericin B must be avoided in Candida infections. Martin-Loeches I, De Waele JJ, Timsit JF, Bassetti M. *Intensive Care Med.* 2020 Mar;46(3):560-561. doi: 10.1007/s00134-019-05784-x. Epub 2019 Nov 29. PMID: 31784799 No abstract available.
16. Antibiotic prophylaxis in the ICU: to be or not to be administered for patients undergoing procedures? Martin-Loeches I, Leone M, Einav S. *Intensive Care Med.* 2020 Feb;46(2):364-367. doi: 10.1007/s00134-019-05870-0. Epub 2019 Nov 28. PMID: 31781837 Free PMC article. No abstract available.
17. The association of cardiovascular failure with treatment for ventilator-associated lower respiratory tract infection. Martin-Loeches I, Torres A, Povoia P, Zampieri FG, Salluh J, Nseir S, Ferrer M, Rodriguez A; TAVeM study Group. *Intensive Care Med.* 2019 Dec;45(12):1753-1762. doi: 10.1007/s00134-019-05797-6. Epub 2019 Oct 16. PMID: 31620836
18. Focus on infection. Martin-Loeches I, Poulakou G, Nseir S. *Intensive Care Med.* 2019 Aug;45(8):1127-1129. doi: 10.1007/s00134-019-05672-4. Epub 2019 Jun 18. PMID: 31214742 No abstract available.
19. O'Connor E. Cognitive apprenticeship in the ICU: Ward round activities to enhance student learning. *Med Teach* 2019; 41: 116.
20. O'Reilly E, Tuzova AV, Walsh AL, Russell NM, O'Brien O, Kelly S, Dhomhnallain ON, DeBarra L, Dale CM, Brugman R, Clarke G, Schmidt O, O'Meachair S, Patil D, Pellegrini KL, Fleshner N, Garcia J, Zhao F, Finn S, Mills R, Hanna MY, Hurst R, McEvoy E, Gallagher WM, Manecksha RP, Cooper CS, Brewer DS, Bapat B, Sanda MG, Clark J, Perry AS. epiCaPture: A Urine DNA Methylation Test for Early Detection of Aggressive Prostate Cancer. *JCO Precis Oncol.* 2019;2019:PO.18.00134. doi: 10.1200/PO.18.00134.
21. Current gaps in sepsis immunology: new opportunities for translational research. Rubio I, Osuchowski MF, Shankar-Hari M, Skirecki T, Winkler MS, Lachmann G, La Rosée P, Monneret G, Venet F, Bauer M, Brunkhorst FM, Kox M, Cavillon JM, Uhle F, Weigand MA, Flohé SB, Wiersinga WJ, Martin-Fernandez M, Almansa R, Martin-Loeches I, Torres A, Giamarellos-Bourboulis EJ, Girardis M, Cossarizza A, Netea MG, van der Poll T, Scherag A, Meisel C, Scheffold JC, Bermejo-Martín JF. *Lancet Infect Dis.* 2019 Dec;19(12):e422-e436. doi: 10.1016/S1473-3099(19)30567-5. Epub 2019 Oct 17. PMID: 31630991 Review.
22. Pascoe C, Duncan C, Lamb BW, Davis NF, Lynch TH, Murphy DG, Lawrentschuk N. Current management of radiation cystitis: a review and practical guide to clinical management. *BJU Int.* 2019 Apr;123(4):585-594. doi: 10.1111/bju.14516
23. Quinn M, Courtney A, Smyth CC, Healy ML, Pazderska A, O'Connor E. St James's hospital intensive care unit insulin discharge policy – a quality improvement project, *Endocrine Abstracts.* 2019; 65; P254.
24. Redmond EJ, Manecksha RP. Re: Intravesical Gentamicin Treatment for Recurrent Urinary Tract Infections Caused by Multidrug Resistant Bacteria. *J Urol.* 2019 Oct;202(4):823-824. doi: 10.1097/JU.0000000000000364.
25. Redmond EJ, Murphy CF, Leonard J, Faulds K, Abdelfadil S, Crowley VE, Lynch TH, Manecksha RP. The influence of dietary supplementation with cranberry tablets on the urinary risk factors for nephrolithiasis. *World J Urol.* 2019 Mar;37(3):561-566. doi: 10.1007/s00345-018-2344-1.
26. Roche EC, Redmond EJ, Yap LC, Manecksha RP. Seasonal Variation in the Frequency of Presentation with Acute Ureteral Colic and Its Association with Meteorologic Factors. *J Endourol.* 2019 Dec;33(12):1046-1050. doi: 10.1089/end.2019.0400.
27. Non-Interventional Factors Influencing Velopharyngeal Function For Speech In Initial Cleft Palate Repair: A Systematic Review Protocol. Sainsbury D, Williams C, de Blacam C, Mullen J, Chadha A, Wren Y, Hodgkinson P; Cleft Multidisciplinary Collaborative. *Syst Rev.* 2019 Nov 5;8(1):261. doi: 10.1186/s13643-019-1141-2. PMID: 31690349
28. Ventilator-associated tracheobronchitis: an update. Salluh JIF, Souza-Dantas VC, Martin-Loeches I, Lisboa TC, Rabello LSCF, Nseir S, Póvoa P. *Rev Bras Ter Intensiva.* 2019 Oct-Dec;31(4):541-547. doi: 10.5935/0103-507X.20190079. PMID: 31967230 Free PMC article. Review.
29. Sullivan JV, Cubison T, Dziewulski P, Shelley OP. Spare part surgery is often overlooked! *Burns.* 2020 Jun;46(4):986. doi: 10.1016/j.burns.2019.11.014. Epub 2019 Dec 13. PMID: 31839505.
30. Yap LC, Lynch TH, Manecksha RP. MRI for clinically suspected prostate cancer-the disparity between private and public sectors. *Ir J Med Sci.* 2020 May;189(2):461-465. doi: 10.1007/s11845-019-02103-7.
31. Zilahi G, O'Connor E. Information sharing between intensive care and primary care after an episode of critical illness; A mixed methods analysis. *PLoS One.* 2019; 14: e0212438.
32. White-Gibson A, Lennon P, O'Regan E, Timon C. More than meets the eye. *BMJ Case Reports CP.* 2019;12(2).
33. Thong G, Doody J, Barry C, Timon C, Lennon P, Carey B, et al. Incidental Finding of Medullary Thyroid Carcinoma Metastatised to Cervical Nodes in a Neck Dissection Specimen. *Irish medical journal.* 2019;112(2):877.
34. McLean S, Lennon P, Glare P. Internet search query analysis can be used to demonstrate the rapidly increasing public awareness of palliative care in the USA. *BMJ supportive & palliative care.* 2019;9(1):40-4.
35. Mandapathil M, Lennon P, Ganly I, Patel SG, Shah JP. Significance and management of incidentally diagnosed metastatic papillary thyroid carcinoma in cervical lymph nodes in neck dissection specimens. *Head & neck.* 2019;41(11):3783-7.
36. Dunne S, Coffey L, Sharp L, Desmond D, Cullen C, O'Connor J, et al. Investigating the impact of self-management behaviours on quality of life and fear of recurrence in head and neck cancer survivors: A population-based survey. *Psycho-oncology.* 2019;28(4):742-9.
37. Conlon B, Hamilton C, Hughes S, Meade E, Hall DA, Vanneste S, et al. Noninvasive Bimodal Neuromodulation for the Treatment of Tinnitus: Protocol for a Second Large-Scale Double-Blind Randomized Clinical Trial to Optimize Stimulation Parameters. *JMIR Res Protoc.* 2019;8(9):e13176.
38. Boland L, Bennett K, Cuffe, Gleeson N, Grant C, Kennedy J, Connolly D. Cancer survivors' experience of OptiMal, a 6-week, occupation-based, self management intervention *British Journal of Occupational Therapy* 2019; 82(2): 90-100. <https://doi.org/10.1177/0308022618804704>
39. Scholl S, Popovic M, de la Rochefordiere A, Girard E, Dureau S, Mandic A, Koprivsek K, Samet N, Craina M, Margan M, Samuels S, Zijlmans H, Kenter G, Hillemanns P, Dema S, Dema A, Malenkovic G, Djuran B, Floquet A, Garbay D, Guyon F, Colombo PE, Fabbro M, Kerr C, Ngo C, Lecuru F, Rivin del Campo E, Coutant C, Marchal F, Mesgouez-Nebout N, Fourchette

- V, Guillaume Feron J, Morice P, Deutsch E, Wimberger P, Classe J-M, Gleeson N, von der Leyen H, Minsat M, Dubot C, Gestraud P, Kereszt A, Nagy I, Balint B, Berns (Petronella) B, Jordanova E, de Saint-Jorre N, Savignoni A, Servant N, Hupe P, de Koning L, Fumoleau P, Rouzier R, Kamal M. Clinical and genetic landscape of treatment naive cervical cancer: Alterations in PIK3CA and in epigenetic modulators associated with sub-optimal outcome In *E-Biomedicine (Lancet)* 2019; 43: 253-260. <https://doi.org/10.1016/j.ebiom.2019.03.069>
40. Maguire PJ, Sobota A, Mulholland D, Ryan JM, Gleeson N. Incidence, management, and sequelae of ureteric obstruction in women with cervical cancer *Supportive Care in Cancer* <https://doi.org/10.1007/s00520-019-04851-9>
  41. Marchocki Z, Norris L.A., Abu Saadeh F, Gleeson N. Recurrence of venous thromboembolism in patients with gynaecological malignancies: incidence, risk factors and impact on survival. *European Journal of Gynaecological Oncology* 2019; 40 (30): doi 10. 128921.ejog4271.2019
  42. Marchocki Z, Norris L, O'Toole S, Gleeson N, Abu Saadeh F. Patients' experience and compliance with extended low molecular weight heparin prophylaxis post-surgery for gynaecological cancer. A prospective observational study. *International Journal of Gynaecological Cancer*. 2019; 209:802-9 [doi.org/10.1136/ijgc-2019-000284](https://doi.org/10.1136/ijgc-2019-000284)

### Presentations and Posters

#### Dr Enda O'Connor

1. The pharmacokinetics of critical illness. St Luke's Symposium, October 13 2019. Royal College of Physicians of Ireland

### Oral Presentations 2019

#### Dr C de Blacam

1. Management of Robin Sequence without Mandibular Distraction Osteogenesis C de Blacam, E Francis, L Duggan, S Javadpour, D Orr American Cleft Palate Association Tucson AZ, USA, April 2019 and Irish Association of Plastic Surgeons Cork, May 2019.

### Presentations and Posters

- 2 - 5th November 2019, Athens, Greece Cyto-reductive Surgery for Tubo-Ovarian Carcinoma: A study of Surgical Outcomes with Primary Surgery Shahabuddin Y., Daly R., Thompson C., Gleeson N ePoster for 21st European Congress on Gynaecological Oncology by European Society of Gynaecological Oncology (ESGO)
- Scholl S, Popovic M, de la Rochefordiere A et al. Clinical and genetic landscape of treatment naive cervical cancer: Alterations in PIK3CA and in epigenetic modulators associated with sub-optimal outcome. *E BioMedicine (Lancet)* 2019 May; 43:253-260. doi: 10.1016/j.ebiom.2019.03.069. Epub 2019 Apr 2.
- Fullston E, Abu Saadeh F, Gleeson N, Thompson C Surgery for early cervical cancer: a 10-year retrospective outcome comparison between laparoscopic and open radical hysterectomy in an Irish centre
- *International Journal of Gynecological Cancer* 2019; 29 S4. [doi.org/10.1136/ijgc-2019-ESGO.352](https://doi.org/10.1136/ijgc-2019-ESGO.352)
- Feras Saadeh, Feras Abu; Riain, Ciaran O; Mc Cormack, Ciara; Gleeson, Noreen; Lung metastases from benign uterine leiomyoma: does 18-FDG-PET/CT have a role to play? *Irish Journal of Medical Science* 2019;188(2):619-24
- Petch, Sarah; Sobota, Aleksandra; Saadeh, Feras Abu.
- Sister Mary Joseph nodule: an unusual site for endometrioid cancer metastasis *BMJ Case Reports* 2019;12(5): e229187
- Perez, Eilis; Mohamed, Bashir; Di Capua, Danny; Gleeson, Noreen; Thompson, Claire; Abu Saadeh, Feras; Martin, Cara; Norris, Lucy; O'Riain, Ciaran; Bates, Mark; High Expression Of Neuromedin U In High Grade Serous Ovarian Cancer *Confers*

A Progression Free Survival Advantage LABORATORY INVESTIGATION 2019;99

- Corbett, G; Garry, N; Roche, D; Halpin, S; Thompson, C; Saadeh, F Abu; PATTERNS OF HISTOLOGICAL SUBTYPE, TREATMENT AND SURVIVAL IN ENDOMETRIAL CANCER BASED ON AGE *Journal of Geriatric Oncology* 2019; 10(6): S37
- Garry, N; Corbett, G; Thompson, C; Saadeh, F Abu; A REVIEW OF THE PATHOLOGICAL PATTERNS, TREATMENT AND OUTCOMES OF ELDERLY WOMEN DIAGNOSED WITH CERVICAL CANCER IN A TERTIARY GYNECOLOGICAL ONCOLOGY REFERRAL CENTRE *Journal of Geriatric Oncology* 2019; 10(6): S45-46
- O'Toole, S; Foley, M; Rizmee, S; Norris, L; Kamran, W; Ibrahim, N; Ward, M; Thompson, C; Murphy, C; Anglim, M; EP592 HE4 has a role in identifying high risk prognostic factors in endometrial cancer *IJGC* 2019.

### 2019 Published Abstracts

- S O'Toole, M Foley, S Rizmee, L Norris, W Kamran, N Ibrahim, M Ward, C Thompson, C Murphy, M Anglim, T D'Arcy, N Farah, H O'Connor, J O'Leary, F AbuSaadeh, N Gleeson. HE4 has a role identifying high risk prognostic factors in endometrial cancer. *International Journal of Gynecologic Cancer* 2019; 29 (Suppl 4).

### LabMed

#### Cancer Molecular Diagnostics laboratory

1. Asp J, Skov V, Bellosillo B, Kristensen T, Lippert E, Dicker F, Schwarz J, Wojtaszewska M, Palmqvist L, Akiki S, Aggerholm A, Andersen MT, Girodon F, Kjaer L, Oppliger Leibundgut E, Pancrazzi A, Vorland M, Andrikovics H, Kralovics R, Cassinat B, Coucelo M, Eftimov A, Haslam K, Kusec R, Link-Lenczowska, Lode L, Matiakowska K, Naguib D, Navaglia F, Novotny GW, Percy MJ, Sudarikov A, Hermouet S & Pallisgaard N (2019) International external quality assurance of JAK2 V617F quantification. *Annals of Hematology*, 98, 1111-1118.
2. Broderick V, Waghorn K, Langabeer SE, Jeffers M, Cross NCP & Hayden PH (2019) Molecular response to imatinib in KIT F522C-mutated systemic mastocytosis. *Leukemia Research*, 77, 28-29.
3. Brodie R, Langabeer SE, Quinn J, McMenamin ME & Hayden PJ (2019) Sorafenib for relapsed FLT3-ITD-positive acute myeloid leukemia post-allogeneic stem cell transplantation presenting as leukemia cutis. *Clinical Case Reports*, 7, 2579-2580.
4. Crampe M, Kearney L, O'Brien D, Bacon CL, O'Shea D & Langabeer SE (2019) Molecular monitoring in adult Philadelphia chromosome-positive acute lymphoblastic leukemia with the variant e13a3 BCR-ABL1 fusion. *Case Reports in Hematology*, 2019, 9635070.
5. Kelly D, Burke L, O'Brien C, Kearns R, Rafee S, Power D, O'Reilly S, O'Mahony D & Bambury R (2019) Co-occurrence of EGFR sensitizing and resistance mutations at diagnosis in NSCLC. *Irish Journal of Medical Science*, 188, 405-408.
6. Langabeer SE (2019) Aquagenic pruritus and the JAK2 V617F mutation. *Clinical & Experimental Dermatology*, 44, e33.
7. Langabeer SE (2019) JAK2 V617F mutation in cervical cancer related to HPV & STIs – Letter. *Journal of Cancer Prevention*, 24, 59-60.
8. Langabeer SE (2019) The JAK2 V617F mutation in retinal vein or artery occlusion. *EXCLI Journal*, 18, 127-128.
9. Langabeer SE (2019) No indication for CALR mutation analysis in Irish patients presenting with deep vein thrombosis or pulmonary embolism. *Irish Journal of Medical Science*, 188, 1459-1460.

10. Langabeer SE (2019) The mutational landscape of atypical chronic myeloid leukemia. *EXCLI Journal*, 18, 256-258.
11. Langabeer SE (2019) Hypercalcemia as a biomarker of myeloproliferative neoplasms? *EXCLI Journal*, 18, 777-778.
12. Langabeer SE (2019) Detecting JAK2 mutations in myeloproliferative neoplasms: can you please all the people all of the time? *Hematology & Medical Oncology*, 4, 1-2.
13. Langabeer SE, Crampe M & Durney T (2019) The impact of sample processing delay on deep molecular responses in chronic myeloid leukaemia. *Irish Journal of Medical Science*, 188, 351-352.
14. Langabeer SE & Haslam K (2019) Neutrophilia and the JAK2 V617F mutation. *Pathology & Oncology Research*, 25, 437-438.
15. Langabeer SE, Haslam K, Crampe M, MacDonagh B & McHugh J (2019) Sub-optimal molecular response to tyrosine kinase inhibition associated with acquisition of a T240A ABL1 kinase domain mutation in a patient with chronic myeloid leukemia. *Experimental Oncology*, 41, 82-83.
16. O'Brien O, Wright MC, O'Brien C, Geoghegan O, Leonard N, Nicholson S, Cuffe S, Fabre A, Jochum W, Joerger M, Gray SG & Finn SP (2019) Cost-efficient and easy to perform PCR-based assay to identify MET exon 14 skipping in formalin-fixed paraffin-embedded (FFPE) non-small cell lung cancer (NSCLC) samples. *Diagnostics*, 9, 13.
17. Shackleton L, Langabeer SE, O'Brien D, McCarron SL, Byrne B, Barry R, Flavin R, Bacon CL & Flynn CM (2019) Hairy cell leukemia masquerading as pancytopenia in pregnancy. *Case Reports in Hematology*, 2019, 3238168.
7. Kerr KM, Thunnissen E, Dafni U, Finn SP, Bubendorf L, Soltermann A, Verbeken E, Biernat W, Warth A, Marchetti A, Speel EM, Pokharel S, Quinn AM, Monkhorst K, Navarro A, Madsen LB, Radonic T, Wilson J, De Luca G, Gray SG, Cheney R, Savic S, Martorell M, Muley T, Baas P, Meldgaard P, Blackhall F, Dingemans AM, Dziadziuszko R, Vansteenkiste J, Weder W, Polydoropoulou V, Geiger T, Kammler R, Peters S, Stahel R; Lungscape Consortium. (2019) A retrospective cohort study of PD-L1 prevalence, molecular associations and clinical outcomes in patients with NSCLC: Results from the European Thoracic Oncology Platform (ETOP) Lungscape Project. *Lung Cancer* May;131:95-103. doi: 10.1016/j.lungcan.2019.03.012. Epub 2019 Mar 15. PMID: 31027705.
8. Pernar CH, Ebot EM, Pettersson A, Graff RE, Giunchi F, Ahearn TU, Gonzalez-Feliciano AG, Markt SC, Wilson KM, Stopsack KH, Gazeeva E, Lis RT, Parmigiani G, Rimm EB, Finn SP, Giovannucci EL, Fiorentino M, Mucci LA. (2019) A Prospective Study of the Association between Physical Activity and Risk of Prostate Cancer Defined by Clinical Features and TMPRSS2:ERG. *Eur Urol*. Jul;76(1):33-40. doi:10.1016/j.eururo.2018.09.041. Epub 2018 Oct 6. PMID: 30301696
9. Brodie R, Lanabeer SE, Quinn J, McMenamin ME, Hayden PJ. (2019) Sorafenib for relapsed FLT3-ITD-positive acute myeloid leukemia postallogeic stem cell transplantation presenting as leukemia cutis. *Clin Case Rep* 7(12):2579-2580.
10. Smyth E, Ramsey M, Fay J, Doyle B, Flavin R, O'Neill JP, McCardle O, Murphy P, Quinn J. (2019) Pediatric-type follicular lymphoma-Complete metabolic remission with radiation therapy. *Hematol Oncol*. Dec;37(5):638-640. doi: 10.1002/hon.2689. Epub 2019 Nov 15. PMID: 31663140 No abstract available.

#### Histopathology Laboratory

1. Greene J, Baird AM, Casey O, Brady L, Blackshields G, Lim M, O'Brien O, Gray SG, McDermott R, Finn SP. (2019) Circular RNAs are differentially expressed in prostate cancer and are potentially associated with resistance to enzalutamide. *Sci Rep*. Jul 24;9(1):10739. doi: 10.1038/s41598-019-47189-2. PMID: 31341219
2. Dziadziuszko R, Smit EF, Dafni U, Wolf J, Wasąg B, Biernat W, Finn SP, Kammler R, Tsourtis Z, Rabaglio M, Ruepp B, Roschitzki-Voser H, Stahel RA, Felip E, Peters S. (2019) Afatinib in NSCLC with HER2 Mutations: Results of the Prospective, Open-Label Phase II NICHE Trial of European Thoracic Oncology Platform (ETOP). *J Thorac Oncol*. Jun;14(6):1086-1094. doi: 10.1016/j.jtho.2019.02.017. Epub 2019 Feb 27. PMID: 30825613.
3. Ryan SL, Beard S, Barr MP, Umezawa K, Heavey S, Godwin P, Gray SG, Cormican D, Finn SP, Gately KA, Davies AM, Thompson EW, Richard DJ, O'Byrne KJ, Adams MN, Baird AM. (2019) Targeting NF-κB-mediated inflammatory pathways in cisplatin-resistant NSCLC. *Lung Cancer*. Sep; 135:217-227. doi: 10.1016/j.lungcan.2019.07.006. Epub 2019 Jul 12. PMID: 31446998.
4. O'Reilly E, Tuzova AV, Walsh AL, Russell NM, O'Brien O, Kelly S, Dhomhnallain ON, DeBarra L, Dale CM, Brugman R, Clarke G, Schmidt O, O'Meachair S, Patil D, Pellegrini KL, Fleshner N, Garcia J, Zhao F, Finn S, Mills R, Hanna MY, Hurst R, McEvoy E, Gallagher WM, Manecksha RP, Cooper CS, Brewer DS, Bapat B, Sanda MG, Clark J, Perry AS. (2019) epiCaPtture: A Urine DNA Methylation Test for Early Detection of Aggressive Prostate Cancer. *JCO Precis Oncol*. PO.18.00134. doi:10.1200/PO.18.00134. Epub 2019 Jan 14. PMID: 30801051; PMCID: PMC6383793.
5. Baird AM, Easty D, Jarzabek M, Shiels L, Soltermann A, Klebe S, Raeppl S, MacDonagh L, Wu C, Griggs K, Kirschner MB, Stanfill B, Nonaka D, Goparaju CM, Murer B, Fennell DA, O'Donnell DM, Barr MP, Mutti L, Reid G, Finn S, Cuffe S, Pass HI, Opitz I, Byrne AT, O'Byrne KJ, Gray SG. (2019) When RON MET TAM in Mesothelioma: All Druggable for One, and One Drug for All? *Front Endocrinol (Lausanne)* Feb 26; 10:89. doi: 10.3389/fendo.2019.00089. PMID: 30863365
11. Mooney C., Byrne M., Kapuya P., Pentony L., De la Salle B., Cambridge T., Foley D. (on behalf of the British Society for Haematology Guideline) (2019) Point of care testing in general haematology. *British Journal of Haematology*, 2019,187,296–306.
2. Shackleton L., Langabeer S.E., O'Brien D., McCarron S.L., Byrne B., Barry R., Flavin R., Bacon L.C., Flynn C.M. (2019) Case Report: Hairy Cell Leukemia Masquerading as Pancytopenia in Pregnancy. *Case Reports in Hematology*. August 2019.

#### Haematology (including Coagulation, Haemostasis Molecular Diagnostic and Cryobiology) Laboratory

1. Mooney C., Byrne M., Kapuya P., Pentony L., De la Salle B., Cambridge T., Foley D. (on behalf of the British Society for Haematology Guideline) (2019) Point of care testing in general haematology. *British Journal of Haematology*, 2019,187,296–306.
2. Shackleton L., Langabeer S.E., O'Brien D., McCarron S.L., Byrne B., Barry R., Flavin R., Bacon L.C., Flynn C.M. (2019) Case Report: Hairy Cell Leukemia Masquerading as Pancytopenia in Pregnancy. *Case Reports in Hematology*. August 2019.

3. Crampe M., Kearney L., O'Brien D., Bacon L.C., O'Shea D. Langabeer S.E. (2019) Case Report: Molecular Monitoring in Adult Philadelphia Chromosome-Positive Lymphoblastic Leukemia with the Variant e13a3 BCR-ABL1 Fusion. *Case Reports in Hematology*. Case Reports in Hematology. 27 June 2019.
4. Crampe M., Langabeer S.E., O'Brien D., Ryan E., Bacon L.C. (2019) Philadelphia chromosome-positive acute lymphoblastic leukemia with an e14a35BCR-ABL1 fusion: The role of molecular monitoring. *Hematol Oncol Stem Cell Ther*. 2019 May 28.
5. Aguila S, Lavin M, Dalton N, Patmore S, Chion A, Trahan GD, Jones KL, Keenan C, Brophy TM, O'Connell NM, Ryan K, Byrne M, Nolan M, Patel A, Preston RJS, James P, Di Paola J, O'Sullivan JM, O'Donnell JS. (2019) Increased galactose expression and enhanced clearance in patients with low von Willebrand factor. *Blood* Apr 4;133(14):1585-1596.
6. Fogarty H, Doyle MM, Campbell R, Keenan C, White B, Ryan K, O'Donnell JS, Slevin J, O'Keefe D, O'Connell NM, Lavin M. (2019) Management of combined factor V and factor VIII deficiency in pregnancy. *J Obstet Gynaecol*. Feb;39(2):271-272.
7. Brodie, R. & Lee, G. & Broderick, V. & Higgins, E. & Flavin, R., Gardiner, N., Browne, P., Hayden, P., Conneally, E., Tuohy, E., Flynn, C., Bacon, C., Vandenberghe, E. (2019) A National Retrospective Analysis of Clinical Outcomes following Allogeneic Transplantation for High Grade B-Cell Lymphoma (HGBL). *Hematological Oncology*. 37: 441.
8. Aguila S, Lavin M, Dalton N, Patmore S, Chion A, Trahan GD, Jones KL, Keenan C, Brophy TM, O'Connell NM, Ryan K, Byrne M, Nolan M, Patel A, Preston RJS, James P, Di Paola J, O'Sullivan JM, O'Donnell JS. Increased galactose expression and enhanced clearance in patients with low von Willebrand factor. *Blood*. 2019 Apr 4;133(14):1585-1596.
9. Fogarty H, Doyle MM, Campbell R, Keenan C, White B, Ryan K, O'Donnell JS, Slevin J, O'Keefe D, O'Connell NM, Lavin M. Management of combined factor V and factor VIII deficiency in pregnancy. *J Obstet Gynaecol*. 2019 Feb;39(2):271-272
7. role of the liver in the migration of parasites of global significance. *Parasit Vectors* Nov 8;12(1):531. doi: 10.1186/s13071-019-3791-2. PMID: 31703729
8. Huggard D, Koay WJ, Kelly L, McGrane F, Ryan E, Lagan N, Roche E, Balfe J, Leahy TR, Franklin O, Moreno-Oliveira A, Melo AM, Doherty DG, Molloy EJ. (2019) Altered Toll-Like Receptor Signalling in Children with Down Syndrome. *Mediators Inflamm*. 2019 Sep 12;2019: 4068734. doi: 10.1155/2019/4068734. eCollection 2019.
9. Doherty DG. (2019) Antigen-specific immune tolerance in the liver. *Nat Biomed Eng*. 2019 Oct;3(10):763-765. doi: 10.1038/s41551-019-0445-9.

#### Microbiology (including IMRL, NMRSAL & GCRL) laboratory

#### Immunology Laboratory

1. Dorjbal B, Stinson JR, Ma CA, Weinreich MA, Miraghazadeh B, Hartberger JM, Frey-Jakobs S, Weidinger S, Moebus L, Franke A, Schäffer AA, Bulashevskaya A, Fuchs S, Ehl S, Limaye S, Arkwright PD, Briggs TA, Langley C, Bethune C, Whyte AF, Alachkar H, Nejentsev S, DiMaggio T, Nelson CG, Stone KD, Nason M, Brittain EH, Oler AJ, Veltri DP, Leahy TR, Conlon N, Poli MC, Borzutzky A, Cohen JI, Davis J, Lambert MP, Romberg N, Sullivan KE, Paris K, Freeman AF, Lucas L, Chandrakasan S, Savic S, Hambleton S, Patel SY, Jordan MB, Theos A, Lebensburger J, Atkinson TP, Torgerson TR, Chinn IK, Milner JD, Grimbacher B, Cook MC, Snow AL (2019) Hypomorphic caspase activation and recruitment domain 11 (CARD11) mutations associated with diverse immunologic phenotypes with or without atopic disease. *J Allergy Clin Immunol*. 2019 Apr;143(4):1482-1495. doi: 10.1016/j.jaci.2018.08.013. Epub 2018 Aug 28.
2. Farrell A, Judge C, Redenbaugh V, Awad H, Conlon N. (2019) Food-dependent exercise-induced reactions: lessons from a 15-year retrospective study. *Ir J Med Sci*. 201 Aug;188(3):815-819. doi: 10.1007/s11845-019-01965-1. Epub 2019 Jan
3. McDermott MSJ, Conlon N, Browne BC, et al. (2019) HER2-Targeted Tyrosine Kinase Inhibitors Cause Therapy-Induced-Senescence in Breast Cancer Cells. *Cancers* (Basel). 2019;11(2):197. doi:10.3390/cancers11020197
4. Coakley JD, Breen EP, Moreno-Oliveira A, Al-Harbi AI, Melo AM, O'Connell B, McManus R, Doherty DG, Ryan T. (2019) Dysregulated T helper type 1 (Th1) and Th17 responses in elderly hospitalised patients with infection and sepsis. *PLoS One* Oct 28;14(10):e0224276. doi: 10.1371/journal.pone.0224276. eCollection 2019.
5. Deslyper G, Doherty DG, Carolan JC, Holland CV. (2019) The role of the liver in the migration of parasites of global significance. *Parasit Vectors* Nov 8;12(1):531. doi: 10.1186/s13071-019-3791-2. PMID: 31703729
1. Mok, S, Hannan MM, Nolke L, Stapleton P, O Sullivan N, Murphy P, McLaughlin AM, Mc Namara E, Fitzgibbon MM, Rogers TR. (2019); "Antimicrobial susceptibility of clinical and environmental Mycobacterium chimaera Isolates" *Antimicrob Agents Chemother*; 63 (9) pii: e00755-19.
2. Deasy EC, Brennan GI, Tecklenborg SC, Umeh C, Coleman DC, Shore AC. A molecular epidemiological investigation of methicillin-susceptible Staphylococcus aureus causing bloodstream infections in Ireland, 2006-2017. *Eur J Clin Microbiol Infect Dis*. 2019 May;38(5):927-936. doi: 10.1007/s10096-019-03523-0. Epub 2019 Mar 23. PMID: 30904995.
3. Earls MR, Shore AC, Brennan GI, Simbeck A, Schneider-Brachert W, Vremerà T, Dorneanu OS, Slickers P, Ehrlich R, Monecke S, Coleman DC. A novel multidrug-resistant PVL-negative CC1-MRSA-IV clone emerging in Ireland and Germany likely originated in South-Eastern Europe. *Infect Genet Evol*. 2019 Apr; 69:117-126. doi: 10.1016/j.meegid.2019.01.021. Epub 2019 Jan 21. PMID: 30677533.
4. Moloney EM, Deasy EC, Swan JS, Brennan GI, O'Donnell MJ, Coleman DC. Whole-genome sequencing identifies highly related Pseudomonas aeruginosa strains in multiple wash-basin U-bends at several locations in one hospital: evidence for trafficking of potential pathogens via wastewater pipes. *J Hosp Infect*. 2020 Apr;104(4):484-491. doi: 10.1016/j.jhin.2019.11.005. Epub 2019 Nov 15. PMID: 31738988.
5. Steinig EJ, Duchene S, Robinson DA, Monecke S, Yokoyama M, Laabei M, Slickers P, Andersson P, Williamson D, Kearns A, Goering RV, Dickson E, Ehrlich R, Ip M, O'Sullivan MVN, Coombs GW, Petersen A, Brennan G, Shore AC, Coleman DC, Pantosti A, de Lencastre H, Westh H, Kobayashi N, Heffernan H, Strommenger B, Leyer F, Weber S, Aamot HV, Skakni L, Peacock SJ, Sarovich D, Harris S, Parkhill J, Massey RC, Holden MTG, Bentley SD, Tong SYC. Evolution and Global Transmission of a Multidrug-Resistant, Community-Associated Methicillin-Resistant Staphylococcus aureus Lineage from the Indian Subcontinent. *mBio*. 2019 Nov 26;10(6):e01105-19. doi: 10.1128/mBio.01105-19. PMID: 31772058; PMCID: PMC6879714.
6. National Surveillance Report HPSC: Gonorrhoea antimicrobial resistance in Ireland, 2010-2017: Summary January 2019
7. RESIST Newsletter: Antimicrobial Resistance and Infection Control Team: July 2019 Ed 8 The rise of antibiotic resistant gonorrhoea
8. Epi Insight Volume 20, Issue 12 December 2019 Response to the threat of multi and extensively-drug resistant gonorrhoea: How are we doing?
9. Article for HSE Resist newsletter, Edition 3, July 2019: "Gonorrhoea antimicrobial resistance: A World Health Organization priority"
10. HPSC news article, March 2019: "Recent updates on gonorrhoea antimicrobial resistance in Ireland"

## Biochemistry Laboratory

1. Redmond EJ, Murphy CF, Leonard J, Faulds K, Abdelfadil S, Crowley VE, Lynch TH, Manecksha RP. (2019) The influence of dietary supplementation with cranberry tablets on the urinary risk factors for nephrolithiasis. *World J Urol.* Mar;37(3):561-566. doi: 10.1007/s00345-018-2344-1. PMID: 30039387 Clinical Trial.

## Poster Presentations

- "The Molecular Basis of Acute Porphyrria and familial Cutanea Tarda in the ROI" at the British and Irish Porphyrria Network (BIPNET) 2019 (Dublin)
- "Implementation of single-unit Transfusion Policy in an Adult Allogeneic Transplant Unit" Sarah Darcy, Julie McCabe, Deirdre Gough, Adele Maguire, Ann Marie McCann, Kevin Ryan, Diarmaid O'Donghaile
- "How secure is your electronic patient identification system in transfusion?" J McCabe, S Darcy, D Gough, A Maguire, AM McCann, D O'Donghaile, Kevin Ryan
- "Audit of Appropriate Use of O Rh Negative Red Cells in a large Teaching Hospital" C Buckley, AM McCann, D O'Sullivan, D O'Donghaile

## Other Research activities

- "Development and validation of LDL Cholesterol genetic risk score for polygenic hypercholesterolemia in ROI" by Chemical pathology trainee specialist registrar 2019-2020
- "Optimisation of a Laboratory Developed Test for PPOX variant scanning for Variegated Porphyrria and Review of Acute Hepatic Porphyrria Variant Pathogenicity in an Irish Cohort" MSc in Molecular Medicine, TCD, undertaken by Basic grade Medical scientist working in Biochemical genetics. 2019
- "Investigation of prevalence of ApoE genotypes in Irish Blood Donor population" MSc in Clinical Biochemistry, TCD, undertaken by chemical pathology NCHD, 2018-2019
- "Genetic Characterisation of Copy Number Variants in the LDLR Gene and Assessment of the Prevalence of ABOB p.R3527Q Variant in an Irish Population" Undergraduate project BSc. Biomedical Science, DIT.

## SCOPE

### Clinical Nutrition

- The "Mikidney" smartphone app pilot study: Empowering patients with Chronic Kidney Disease. Nuala Doyle<sup>1</sup>, Mairead Murphy<sup>1</sup>, Laura Brennan<sup>2</sup>, Alice Waugh<sup>3</sup>, Margaret McCann<sup>4</sup>, Geraldine Prizeman<sup>4</sup>, George Mellotte<sup>5</sup>. <sup>1</sup>Renal Unit, St. James's Hospital, Dublin, Ireland, <sup>2</sup>Department of Clinical Nutrition, St. James's Hospital, Dublin, Ireland, <sup>3</sup>Department of Physiotherapy, St. James's Hospital, Dublin, Ireland, <sup>4</sup>Trinity Centre for Practice and Healthcare Innovation, School of Nursing and Midwifery, Trinity College Dublin, Dublin, Ireland, <sup>5</sup>Department of Nephrology, St. James's Hospital, Dublin, Ireland. *Journal of renal care.* 2019 Sep;45(3):133-40.
- Investigating whether consuming meals in a dining room impacts patients' mood, level of interaction, and subsequent nutrient intake on a stroke rehabilitation ward. S Abouhajar<sup>1</sup>, G Bennett<sup>1</sup>, L Dooley<sup>2</sup>, T Waldron<sup>2</sup>, K Walsh<sup>3</sup>, S Murphy<sup>3</sup>, A McMorrow<sup>2</sup> and SL Doyle<sup>1</sup>. <sup>1</sup>School of Biological Sciences, Dublin Institute of Technology, <sup>2</sup>Department of Clinical Nutrition, St James's Hospital, <sup>3</sup>Department of Speech and Language Therapy, St. James's Hospital. *Sure-J: Science Undergraduate Research Journal.* 2019;1(1):7.

## Physiotherapy

- Quinn, G., Comber, L., Galvin, R. and Coote, S., 2018. The ability of clinical balance measures to identify falls risk in multiple sclerosis: a systematic review and meta-analysis. *Clinical Rehabilitation*, 32(5), pp.571-582.
- Quinn, G., Comber, L., McGuigan, C., Galvin, R. and Coote, S., 2019. Discriminative ability and clinical utility of the Timed Up and Go (TUG) in identifying falls risk in people with multiple sclerosis: a prospective cohort study. *Clinical Rehabilitation*, 33(2), pp.317-326.
- Quinn, G., Comber, L., O'Malley, N., McGuigan, C., Galvin, R. and Coote, S., 2019. An Exploration of Falls and Dual Tasking: A Prospective Cohort Study of People With Multiple Sclerosis. *Topics in Geriatric Rehabilitation*, 35(3), pp.190-198.
- Lucinda Edge, Brian O'Rourke, Conal Cunningham Frances Horgan. Revisiting Comprehensive Geriatric Assessment in the Emergency Department. September 2019, *Age and Ageing* 48 (Supplement 3):iii17-iii65.
- Pilot Study Profiling Frailty and Ageing in a Population of Older Adults Living with Human Immunodeficiency Virus. September 2018, *Age and Ageing* 47, (suppl 5):v13-v60. Chiara Reddin, Rose Galvin, Frances Horgan, Colm Bergin.
- Does the Shoe Really Fit? Characterising Ill-Fitting Footwear among Community Dwelling Older Adults. September 2018, *Age and Ageing* 47, (suppl 5):v13-v60. Brian O'Rourke, Rachael Brophy, Shanice Vallely, Frances Horgan

## Speech & Language Therapy

Two Clinical Specialist SLT's were involved in inputting into the discipline specific section of the HSE Palliative Care Competence Framework 2014

## Current Research Projects

### Physiotherapy

- Lucinda Edge is enrolled in a part-time MSc by research with RCSI in Sept 2019, working title: 'Revisiting Comprehensive Geriatric Assessment in the Emergency Department'
- Gemma Foley has commenced a part-time MSc by research with TCD: 'An investigation of the impact of impaired orthostatic blood pressure responses on gait in an older population using gait laboratory analysis.'
- Kieron Connolly was awarded a grant from The Irish Research Council and is currently completing a fulltime research MSc with RCSI: 'Prevalence of Sarcopenia and its effect on older adults attending a day hospital service in Ireland'

## Oral Presentations

### Clinical Nutrition

- \*Awarded highly commended\* A dietetic initiative to reduce DNA rates and optimise dietetic time for the Irritable Bowel Syndrome service at an acute teaching hospital. P McNamara<sup>1</sup>, S Brady<sup>1</sup>, F MacCarthy<sup>2</sup>, D Kevans<sup>2</sup>, S McKeirnan<sup>2</sup> and C Dunne<sup>2</sup>. <sup>1</sup> Department of Clinical Nutrition, St James's Hospital, <sup>2</sup> Department of Gastroenterology, St James's Hospital.
- An Audit of the Clinical Nutrition Service to Patients with Head & Neck Cancer in an Acute Teaching Hospital. M Fitzmaurice<sup>1</sup>, P Lennon<sup>2</sup>, S Brady<sup>1</sup>, M Merrick<sup>1</sup> and G Kennedy<sup>1</sup>. <sup>1</sup>Department of Clinical Nutrition, St James's Hospital, <sup>2</sup>Head & Neck Surgeon, St James's Hospital.
- Changes over time: Review of Clinical Nutrition input on a discharge planning ward in the first 10 months of operation in an acute teaching hospital. C Hughes<sup>1</sup>, S Brady<sup>1</sup>, R Ashline<sup>1</sup>, R McGowan<sup>1</sup> and J Browne<sup>2</sup>. <sup>1</sup>Department of Clinical Nutrition, <sup>2</sup>Consultant Physician and Geriatrician, St James's Hospital.
- Change in practice to Clinical Nutrition service provision to

Maxillo-Facial Trauma patients. Niamh Flanagan, Senior Dietitian, St James's Hospital.

- Going Home on NG or NJ Feeding: Experience from a Specialist Oesophagogastric Centre. D Tynan<sup>1</sup>, M Fanning<sup>1</sup>, A McMorrow<sup>1</sup>, N Ravi<sup>2</sup>, JV Reynolds<sup>2</sup>. <sup>1</sup>Department of Clinical Nutrition, St James's Hospital, <sup>2</sup>Department of Surgery, St. James's Hospital.
- Epilepsy and bone health. L Healy<sup>1</sup>, E Doran<sup>2</sup>, J Banks<sup>2</sup>, C Synnott<sup>2</sup>, C Doherty<sup>2</sup>. <sup>1</sup>Department of Clinical Nutrition, St James's Hospital, <sup>2</sup>Department of Surgery, St. James's Hospital.
- Investigating whether consuming meals in a dining room impacts patients' mood, level of interaction, and subsequent nutrient intake on a stroke rehabilitation ward. S Abouhajar<sup>1</sup>, G Bennett<sup>1</sup>, L Dooley<sup>2</sup>, T Waldron<sup>2</sup>, K Walsh<sup>3</sup>, S Murphy<sup>3</sup>, A McMorrow<sup>2</sup> and SL Doyle<sup>1</sup>. <sup>1</sup>School of Biological Sciences, Dublin Institute of Technology, <sup>2</sup>Department of Clinical Nutrition, St James's Hospital, <sup>3</sup>Department of Speech and Language Therapy, St. James's Hospital.
- Evaluation of the effect of blue plates on the nutritional intake in older persons in an acute setting. A O'Donoghue<sup>1,2</sup>, M O'Sullivan<sup>2</sup>, T Waldron<sup>3</sup>, A McMorrow<sup>3</sup>, C O'Keefe<sup>3</sup>, N Cole<sup>3</sup>, S Carroll<sup>3</sup>, A Edwards<sup>3</sup>, J Reilly<sup>3</sup>, B Doherty<sup>3</sup>, T O'Brien<sup>3</sup>. <sup>1</sup>Dublin Institute of Technology, <sup>2</sup>Trinity College Dublin, <sup>3</sup>St James's Hospital Dublin.

#### **AUGIS 2019 (Association of Upper Gastrointestinal Surgeons of Great Britain and Ireland)**

##### **Posters**

- Going Home on NG or NJ Feeding: Experience from a Specialist Oesophagogastric Centre. M Fanning<sup>1</sup>, D Tynan<sup>1</sup>, A McMorrow<sup>1</sup>, N Ravi<sup>2</sup>, JV Reynolds<sup>2</sup>. <sup>1</sup>Department of Clinical Nutrition, St James Hospital, Dublin 8, <sup>2</sup>Department of Surgery, St James Hospital, Dublin 8. *British Journal of Surgery* (Vol. 106, pp. 73).
- Home Enteral Nutrition Discharges - a 2 year snapshot from a specialist oesophagogastric service. A McMorrow<sup>1</sup>, M Fanning<sup>1</sup>, E O'Connor<sup>1</sup>, R McGowan<sup>1</sup>, H Mellett<sup>1</sup>, N Ravi<sup>2</sup> and JV Reynolds<sup>2</sup>. <sup>1</sup>Department of Clinical Nutrition, <sup>2</sup>Department of Surgery, St James's Hospital, Dublin 8, Ireland. *British Journal of Surgery* (Vol. 106, pp. 74-75).
- Percutaneous endoscopic jejunostomy (PEJ): Early experience in patients with a previous oesophagectomy and jejunopexy. Fanning M1, Ismael G2, Reynolds JV2, Ravi N2. <sup>1</sup>Department of Clinical Nutrition, <sup>2</sup>Department of Surgery, St James's Hospital, Dublin 8, Ireland. *British Journal of Surgery* (Vol. 106, pp. 72-73).
- Continuous glucose monitoring and a low glycaemic index diet in reactive hypoglycaemia post oesophagectomy: a case series. M Fanning<sup>1</sup>, CF Murphy<sup>2</sup>, JA Elliott<sup>2</sup>, N Ravi<sup>2</sup>, JV Reynolds<sup>2</sup>. <sup>1</sup>Department of Clinical Nutrition, St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College Dublin and St. James's Hospital, Dublin 8, Ireland. *British Journal of Surgery* (Vol. 106, pp. 73).
- A novel, multidisciplinary, approach to personalised patient care in oesophageal cancer survivorship. CF Murphy<sup>1,2</sup>, M Fanning<sup>3</sup>, N Raftery<sup>1</sup>, CW le Roux<sup>2</sup>, N Ravi<sup>1</sup>, JV Reynolds<sup>1</sup>. <sup>1</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College Dublin and St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Metabolic Medicine Group, Conway Institute of Biomedical and Biomolecular Research, University College Dublin, Dublin 4, Ireland, <sup>3</sup>Department of Clinical Nutrition, St James's Hospital, Dublin 8, Ireland. *British Journal of Surgery* (Vol. 106, pp. 65).
- Assessing micronutrient status in a consecutive cohort before and after curative oesophagectomy for oesophageal cancer. N Raftery<sup>1</sup>, CF Murphy<sup>1,2</sup>, M Fanning<sup>3</sup>, N Ní Leathlobhair<sup>1</sup>, D Koshy<sup>1</sup>, N Ravi<sup>1</sup>, JV Reynolds<sup>2</sup>. <sup>1</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College

Dublin and St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Conway Institute of Biomedical and Biomolecular Research, University College Dublin, Dublin 4, Ireland, <sup>3</sup>Department of Clinical Nutrition, St James's Hospital, Dublin 8, Ireland. *British Journal of Surgery* (Vol. 106, pp. 83).

- Iron status before and after curative oesophagectomy for oesophageal cancer, and its relation to anaemia, transfusion and postoperative outcomes. N Raftery<sup>1</sup>, CF Murphy<sup>1,2</sup>, M Fanning<sup>3</sup>, N Ní Leathlobhair<sup>1</sup>, D Koshy<sup>1</sup>, N Ravi<sup>1</sup>, JV Reynolds<sup>1</sup>. <sup>1</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College Dublin and St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Metabolic Medicine Group, Conway Institute of Biomedical and Biomolecular Research, University College Dublin, Dublin 4, Ireland, <sup>3</sup>Department of Clinical Nutrition, St James's Hospital, Dublin 8, Ireland. *British Journal of Surgery* (Vol. 106, pp. 84).

#### **IRSPEN 2019 (The Irish Society for Clinical Nutrition and Metabolism)**

##### **Posters**

- A novel, multidisciplinary, approach to personalised patient care in oesophageal cancer survivorship. CF Murphy<sup>1,2</sup>, M Fanning<sup>3</sup>, N Raftery<sup>1</sup>, CW le Roux<sup>2</sup>, N Ravi<sup>1</sup>, JV Reynolds<sup>1</sup>. <sup>1</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College Dublin and St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Metabolic Medicine Group, Conway Institute of Biomedical and Biomolecular Research, University College Dublin, Dublin 4, Ireland, <sup>3</sup>Department of Clinical Nutrition, St James's Hospital, Dublin 8, Ireland.
- Assessing micronutrient status in a consecutive cohort before and after curative oesophagectomy for oesophageal cancer. N Raftery<sup>1</sup>, CF Murphy<sup>1,2</sup>, M Fanning<sup>3</sup>, N Ní Leathlobhair<sup>1</sup>, D Koshy<sup>1</sup>, N Ravi<sup>1</sup>, JV Reynolds<sup>2</sup>. <sup>1</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College Dublin and St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Conway Institute of Biomedical and Biomolecular Research, University College Dublin, Dublin 4, Ireland, <sup>3</sup>Department of Clinical Nutrition, St James's Hospital, Dublin 8, Ireland.
- Iron status before and after curative oesophagectomy for oesophageal cancer, and its relation to anaemia, transfusion and postoperative outcomes. N Raftery<sup>1</sup>, CF Murphy<sup>1,2</sup>, M Fanning<sup>3</sup>, N Ní Leathlobhair<sup>1</sup>, D Koshy<sup>1</sup>, N Ravi<sup>1</sup>, JV Reynolds<sup>1</sup>. <sup>1</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College Dublin and St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Metabolic Medicine Group, Conway Institute of Biomedical and Biomolecular Research, University College Dublin, Dublin 4, Ireland, <sup>3</sup>Department of Clinical Nutrition, St James's Hospital, Dublin 8, Ireland

#### **St James's Hospital 12th Annual Multidisciplinary Research, Clinical Audit & Quality Improvement Seminar Book of Abstracts**

##### **Posters**

- \*2nd Prize Poster Competition Winner\* Epilepsy and bone health. L Healy<sup>1</sup>, E Doran<sup>2</sup>, J Banks<sup>2</sup>, C Synnott<sup>2</sup>, C Doherty<sup>2</sup>. <sup>1</sup>Department of Clinical Nutrition, St James's Hospital, <sup>2</sup>Department of Surgery, St. James's Hospital.
- Project Oak and Clinical Nutrition – the successes, challenges and experiences of Dietitians. H Mellett, Á Higgins, J Mc Anulty, O O'Brien, Department of Clinical Nutrition, St James's Hospital.

## Health and Social Care Professions Conference 2019 – Connections, Confidence, Collaboration

- Pen to pad: HSCP come together to lead and drive change from paper to electronic records at St. James's Hospital. Deirdre Gilchrist<sup>1</sup> and Aine Higgins<sup>2</sup>. <sup>1</sup>Department of Speech and Language Therapy, <sup>2</sup>Department of Clinical Nutrition, St James's Hospital.

### 26th Sylvester O'Halloran Perioperative Scientific Symposium Oral presentation

- Iron status before and after curative oesophagectomy for oesophageal cancer, and its relation to anaemia, transfusion and postoperative outcomes. N Raftery<sup>1</sup>, CF Murphy<sup>1,2</sup>, M Fanning<sup>3</sup>, N Ní Leathlobhair<sup>1</sup>, D Koshy<sup>1</sup>, N Ravi<sup>1</sup>, JV Reynolds<sup>1</sup>. <sup>1</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College Dublin and St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Metabolic Medicine Group, Conway Institute of Biomedical and Biomolecular Research, University College Dublin, Dublin 4, Ireland, <sup>3</sup>Department of Clinical Nutrition, St James's Hospital, Dublin 8, Ireland. Mesentery Peritoneum 2019;3:AB134.

### Poster

- Colonic interposition for oesophageal reconstruction: a case series. Naomi Fearon<sup>1</sup>, Michelle Fanning<sup>2</sup>, Narayanasamy Ravi<sup>1</sup>, John Reynolds<sup>1</sup>. <sup>1</sup>Department of Upper GI Surgery, <sup>2</sup>Department of Clinical Nutrition, St James's Hospital, Dublin, Ireland. Mesentery Peritoneum 2019;3:AB159.

### Sir Peter Freyer Surgical Symposium 2019

#### Oral presentation

- Assessing micronutrient status in a consecutive cohort before and after curative oesophagectomy for oesophageal cancer. N Raftery<sup>1</sup>, CF Murphy<sup>1,2</sup>, M Fanning<sup>3</sup>, N Ní Leathlobhair<sup>1</sup>, D Koshy<sup>1</sup>, N Ravi<sup>1</sup>, JV Reynolds<sup>2</sup>. <sup>1</sup>Department of Surgery, Trinity Centre for Health Sciences, Trinity College Dublin and St. James's Hospital, Dublin 8, Ireland, <sup>2</sup>Conway Institute of Biomedical and Biomolecular Research, University College Dublin, Dublin 4, Ireland, <sup>3</sup>Department of Clinical Nutrition, St James's Hospital, Dublin 8, Ireland.

### Poster

- Percutaneous endoscopic jejunostomy (PEJ): Early experience in patients with a previous oesophagectomy and jejunopexy. Fanning M1, Ismael G2, Reynolds JV2, Ravi N2. <sup>1</sup>Department of Clinical Nutrition, <sup>2</sup>Department of Surgery, St James's Hospital, Dublin 8, Ireland.

### HISI 2019 (Health Informatics Society of Ireland)

#### Oral presentation

- Dabbling in data – HSCPs experiences. Higgins Á1, Lavan S2. <sup>1</sup>Department of Clinical Nutrition, <sup>2</sup>Department of Speech and Language Therapy, on behalf of SCOPE and IMS, St James's Hospital Dublin.

### ESPEN 2019 (European Society for Clinical Nutrition and Metabolism)

#### Poster

- Prevalence of Sarcopenia in Community-Dwelling Older Adults in Ireland: Comparison of EWGSOP1 and EWGSOP2 Definitions. Murphy CH1, McMorro AM1,2, Flanagan EM1, Cummins H1, McCarthy SN3, McGowan MJ4, Rafferty S5, Egan B6, De Vito G1, Corish CA1, Roche HM1. <sup>1</sup>University College Dublin, <sup>2</sup>St James's Hospital Dublin, <sup>3</sup>Teagasc Re-

search Centre, <sup>4</sup>HSE CHO6, <sup>5</sup>HSE CHO9, <sup>6</sup>Dublin City University. Clinical Nutrition. 2019 Sep 1;38:S301.

### Occupational Therapy

- Griffin, A. (2019) Specialised Memory and Attention Rehabilitation Therapy (SMART). The International Dementia Conference, Dublin.
- Griffin, A. (2019) Specialised Memory and Attention Rehabilitation Therapy (SMART). The Irish Gerontological Society Annual Conference, Cork.
- O' Carroll, S (2019) Manual Analytical Progressive Sequential (MAPS) Therapy. The Irish Hand Surgeon's Society Annual Conference, Dublin.
- Hill, O (2019) Development & Implementation of a Hand Therapy Led Clinic in the Emergency Department. An ePoster at the Irish Accident and Emergency Annual Conference, Sligo.
- O' Donnell, M (2019) Clinical Outcomes of Ligamentotaxor for Intra-articular PIPJ injuries. . The Irish Hand Surgeon's Society Annual Conference, Dublin.
- Norris, L and O' Carroll, S (2019) Functional Dystonia- Case Study of Treatment. . The Irish Hand Surgeon's Society Annual Conference, Dublin.
- O' Donnell, M and Eadie, P (2019) 25 years of Hand Therapy and Surgery at St. James's Hospital at the first SCOPE Clinical Specialists meeting.
- Lavery, P, Smith, F and Peele, M (2019) Steps towards a more dementia friendly medicine for the older person acute admission ward. The Irish Gerontological Society Annual Conference, Cork.
- Lavery, P and O' Connor, S (2019) "Playing our part" – Are the Occupational Therapist completing a Comprehensive Geriatric Assessment? The Irish Gerontological Society Annual Conference, Cork.

### Speech & Language Therapy

- Sarah Lavan co presented with Aine Higgins "Dabbling in Data" at the HISI conference Nov 2019 (on behalf of SCOPE QI ICT group)
- Deirdre Gilchrist presented at the Inaugural HSPC conference 2019 (on behalf of SCOPE QI ICT group)
- Ailis Brunton presented on the role of the SLT at the SJH Stroke Study Day

### Clinical Research Facility

#### Research Papers

- Juliette Hussey, John Reynolds, Joanne Dowds, John Reynolds et alia, Quantifying postoperative mobilisation following oesophagectomy. Physiotherapy 2019 Mar;105(1):126-133.
- Roisin Mackin, Stefan Dukic, Amina Coffey, Peter Bede, Niall Pender, Orla Hardiman et alia. Dysfunction of attention switching networks in amyotrophic lateral sclerosis. Neuroimage Clinical 2019; 22: 101707.
- Holland JF, Cosgrove D, Whitton L, Harold D, Corvin A, Gill M et alia. Beyond C4: Analysis of the complement gene pathway shows enrichment for IQ in patients with psychotic disorders and healthy controls. Genes and Brain Behaviour. 2019 Nov; 18(8).
- Aguila S, Lavin M, O'Connell NM, Ryan K, Nolan M, O'Donnell JS et alia. Increased galactose expression and enhanced clearance in patients with low von Willebrand factor. Blood 2019 Apr. 4: 133 (14): 1585-1596.
- Coghlan M, O'Leary A, Melanophy G, Bergin C, Norris S. Pharmacist-led pre-treatment assessment, management and

outcomes in a Hepatitis C treatment patient cohort. *International Journal of Clinical Pharmacology* 2019 Oct; 41(5): 1227-1238.

- Torres A, Chalmers JD, Dela CruzCS, Dominedó C, Koller M, Martin-Loeches I, Niederman M, Wunderink RG. Challenges in severe community-acquired pneumonia: a point-of-view review. *Intensive Care Medicine* 2019 Feb; 45(2): 159-171.

#### Poster Presentations

**Una Coleman:** How to ace your monitor visit report card, UK Clinical Research Facility Network, 15th Annual Conference, Nottingham UK, July 2019. **Awarded First Prize.**

#### Informatics Directorate

##### Awards

1. **Healthcare Centre Awards** - Winner in Best Use of information Technology category

##### Publications

1. **259 The Electronic Patient Record as an Enabler for Hospital Wide Delirium and Dementia Screening - Lessons Learned from a Clinical Implementation** Lucy Chapman, Mel Corbett, Grainne Courtney, Brian Lawlor *Age and Ageing*, Volume 48, Issue Supplement\_3, September 2019, Pages iii17–iii65
2. **252 Physicians' Perceptions to Electronic Alerts for Delirium and Dementia Screening - Qualitative Analysis of Bypass Reasons in an Electronic Patient Record** Darragh Rice, Lucy Chapman, Mel Corbett, Grainne Courtney, Brian Lawlor *Age and Ageing*, Volume 48, Issue Supplement\_3, September 2019, Pages iii1–iii16,

##### Presentations at National and International Conferences

1. **Health Informatics Society of Ireland**
  - How St James's Hospital became the first Digital Acute General Hospital in Ireland – Gemma Garvan
  - St James's Hospital background and everyday journey with EPR – Kama Stokes
2. **Digital Government Conference**  
Data Driven Healthcare – Gemma Garvan
3. **Health Managers Institute**  
Standards for the future of EPR and patient centred care – Grainne Courtney
4. **Cerner European Community Forum**
  - St James's Hospital Training Delivery Acute Hospital Setting: "Perspectives on the challenges and lessons learned in delivery of training for an EPR implementation in a large multi-speciality acute teaching hospital"
  - Cerner ECF19 - Alison Donohoe, Kate Bentley
  - Leaping the Valley of Despair with Proactive Quality Improvement Measures
  - Cerner ECF19 - Kama Stokes, Ruth Hughes
5. **European Health Interoperability Forum**  
Implementation Challenges in eHealth Interoperability at St James's Hospital, Dublin, Ireland.

#### Medical and Emergency Directorate (MED)

1. Human genetics and neuropathology suggest a link between miR-218 and amyotrophic lateral sclerosis pathophysiology (2019) *Science Translational Medicine*, 11 (523), art. no. eaav5264, . Cited 2 times. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85080837788&doi=10.1126%2fscitranslmed.aav5264&partnerID=40&md5=fbf8912b-c6a6d796efeb44cead8eadea> DOI: 10.1126/scitranslmed.aav5264
2. Goggins, M.R., Conway, R., Durcan, L.J., Johnston, C., Cunnane, G. High prevalence of abnormalities on chest radiography in rheumatoid arthritis (2019) *Clinical Rheumatology*, 38 (12), pp. 3375-3380. Cited 1 time.
3. Usher, C., McCullagh, L., Tilson, L., Barry, M. Analysis of Health Technology Assessments of Orphan Drugs in Ireland from 2012 to 2017 (2019) *PharmacoEconomics - Open*, 3 (4), pp. 583-589.
4. Ryan, M., Heverin, M., McLaughlin, R.L., Hardiman, O. Lifetime Risk and Heritability of Amyotrophic Lateral Sclerosis (2019) *JAMA Neurology*, 76 (11), pp. 1367-1374. Cited 19 times.
5. Irvine, A.D., Mina-Osorio, P. Disease trajectories in childhood atopic dermatitis: an update and practitioner's guide (2019) *British Journal of Dermatology*, 181 (5), pp. 895-906. Cited 6 times.
6. Finegan, E., Chipika, R.H., Li Hi Shing, S., Doherty, M.A., Hengeveld, J.C., Vajda, A., Donaghy, C., McLaughlin, R.L., Pender, N., Hardiman, O., Bede, P. The clinical and radiological profile of primary lateral sclerosis: a population-based study (2019) *Journal of Neurology*, 266 (11), pp. 2718-2733. Cited 21 times.
7. Fragoulis, G.E., Conway, R., Nikiphorou, E. Methotrexate and interstitial lung disease: Controversies and questions. A narrative review of the literature (2019) *Rheumatology (United Kingdom)*, 58 (11), pp. 1900-1906. Cited 16 times.
8. Dukic, S., McMackin, R., Buxo, T., Fasano, A., Chipika, R., Pinto-Grau, M., Costello, E., Schuster, C., Hammond, M., Heverin, M., Coffey, A., Broderick, M., Iyer, P.M., Mohr, K., Gavin, B., Pender, N., Bede, P., Muthuraman, M., Lalor, E.C., Hardiman, O., Nasserolslami, B. Patterned functional network disruption in amyotrophic lateral sclerosis (2019) *Human Brain Mapping*, 40 (16), pp. 4827-4842. Cited 15 times.
9. Leu, C., Stevelink, R., Smith, A.W., Goleva, S.B., Kanai, M., Ferguson, L., Campbell, C., Kamatani, Y., Okada, Y., Sisodiya, S.M., Cavalleri, G.L., Koeleman, B.P.C., Lerche, H., Jehi, L., Davis, L.K., Najm, I.M., Palotie, A., Daly, M.J., Busch, R.M., Lal, D., Feng, Y.-C.A., Howrigan, D.P., Abbott, L.E., Tashman, K., Cerrato, F., Churchhouse, C., Gupta, N., Neale, B.M., Berkovic, S.F., Goldstein, D.B., Lowenstein, D.H., Cossette, P., Cotsapas, C., De Jonghe, P., Dixon-Salazar, T., Guerrini, R., Hakonarson, H., Heinzen, E.L., Helbig, I., Kwan, P., Marson, A.G., Petrovski, S., Kamalakaran, S., Stewart, R., Weckhuysen, S., Depondt, C., Dlugos, D.J., Scheffer, I.E., Striano, P., Freyer, C., Krause, R., May, P., McKenna, K., Regan, B.M., Bellows, S.T., Bennett, C.A., Johns, E.M.C., Macdonald, A., Shilling, H., Burgess, R., Weckhuysen, D., Bahlo, M., O'Brien, T.J., Todaro, M., Stamberger, H., Andrade, D.M., Sadoway, T.R., Mo, K., Krestel, H., Gallati, S., Papacostas, S.S., Kousiappa, I., Tanteles, G.A., Šterbová, K., Vlcková, M., Sedláčková, L., Laššuthová, P., Klein, K.M., Rosenow, F., Reif, P.S., Knake, S., Kunz, W.S., Zsurka, G., Elger, C.E., Bauer, J., Rademacher, M., Pendziwiat, M., Muhle, H., Rademacher, A., Van Baalen, A., Von Spiczak, S., Stephani, U., Afawi, Z., Korczyn, A.D., Kanaan, M., Canavati, C., Kurlemann, G., Müller-Schlüter, K., Kluger, G., Häusler, M., Blatt, I., Lemke, J.R., Krey, I., Weber, Y.G., Wolking, S., Becker, F., Hengsbach, C., Rau, S., Maisch, A.F., Steinhoff, B.J., Schul-

- ze-Bonhage, A., Schubert-Bast, S., Schreiber, H., Borggräfe, I., Schankin, C.J., Mayer, T., Korinthenberg, R., Brockmann, K., Dennig, D., Madeley, R., Kälviäinen, R., Auvinen, P., Saarela, A., Linnankivi, T., Lehesjoki, A.-E., Rees, M.I., Chung, S.-K., Pickrell, W.O., Powell, R., Schneider, N., Balestrini, S., Zagaglia, S., Braatz, V., Johnson, M.R., Auce, P., Sills, G.J., Baum, L.W., Sham, P.C., Cherny, S.S., Lui, C.H.T., Barišić, N., Delanty, N., Doherty, C.P., Shukralla, A., McCormack, M., El-Naggar, H., Canafoglia, L., Franceschetti, S., Castellotti, B., Granata, T., Zara, F., Iacomino, M., Madia, F., Vari, M.S., Mancardi, M.M., Salpietro, V., Bisulli, F., Tinuper, P., Licchetta, L., Pippucci, T., Stipa, C., Muccioli, L., Minardi, R., Gambardella, A., Labate, A., Annesi, G., Manna, L., Gagliardi, M., Parrini, E., Mei, D., Vetro, A., Bianchini, C., Montomoli, M., Doccini, V., Marini, C., Suzuki, T., Inoue, Y., Yamakawa, K., Birute, T., Ruta, M., Algirdas, U., Ruta, P., Jurgita, G., Ruta, S., Sadleir, L.G., King, C., Mountier, E., Caglayan, S.H., Arslan, M., Yapici, Z., Yis, U., Topaloglu, P., Kara, B., Turkdogan, D., Gundogdu-Eken, A., Bebek, N., Ugur-Iseri, S., Baykan, B., Salman, B., Haryanyan, G., Yücesan, E., Kesim, Y., Özkara, Ç., Sheidley, B.R., Shain, C., Poduri, A., Buono, R.J., Ferraro, T.N., Sperling, M.R., Lo, W., Privitera, M., French, J.A., Schachter, S., Kuzniecky, R.I., Devinsky, O., Hegde, M., Khankhanian, P., Helbig, K.L., Ellis, C.A., Spalletta, G., Piras, F., Piras, F., Gili, T., Ciullo, V. Polygenic burden in focal and generalized epilepsies (2019) *Brain*, 142 (11), pp. 3473-3481. Cited 9 times.
10. Murray, D., Rooney, J., Campion, A., Fenton, L., Hammond, M., Heverin, M., Meldrum, D., Moloney, H., Tattersall, R., Hardiman, O. Longitudinal analysis of sniff nasal inspiratory pressure assessed using occluded and un-occluded measurement techniques in amyotrophic lateral sclerosis and primary lateral sclerosis (2019) *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration*, 20 (7-8), pp. 481-489. Cited 4 times.
  11. Shefner, J.M., Cudkowicz, M.E., Hardiman, O., Cockroft, B.M., Lee, J.H., Malik, F.I., Meng, L., Rudnicki, S.A., Wolff, A.A., Andrews, J.A. A phase III trial of tirasemtiv as a potential treatment for amyotrophic lateral sclerosis (2019) *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration*, 20 (7-8), pp. 584-594. Cited 7 times.
  12. Higgins, A., Downes, C., Varley, J., Doherty, C.P., Begley, C., Elliott, N. Supporting and empowering people with epilepsy: Contribution of the Epilepsy Specialist Nurses (SENSE study) (2019) *Seizure*, 71, pp. 42-49. Cited 11 times.
  13. Coghlan, M., O'Leary, A., Melanophy, G., Bergin, C., Norris, S. Pharmacist-led pre-treatment assessment, management and outcomes in a Hepatitis C treatment patient cohort (2019) *International Journal of Clinical Pharmacy*, 41 (5), pp. 1227-1238.
  14. Sadlier, C., O'rouke, A., Carr, A., Bergin, C. An integrated vaccine clinic; a novel model of care to improve vaccine uptake in at-risk patient groups (2019) *Irish Medical Journal*, 112 (9), art. no. P1010,
  15. Schwartz, C., Moran, T., Saunders, S.P., Kaszlikowska, A., Floudas, A., Bom, J., Nunez, G., Iwakura, Y., O'Neill, L., Irvine, A.D., McKenzie, A.N.J., Ogg, G., Walsh, P.T., Demengeot, J., Fallon, P.G. Spontaneous atopic dermatitis in mice with a defective skin barrier is independent of ILC2 and mediated by IL-1 $\beta$  (2019) *Allergy: European Journal of Allergy and Clinical Immunology*, 74 (10), pp. 1920-1933. Cited 14 times.
  16. Van Eijk, R.P.A., Rooney, J., Hardiman, O., Van Den Berg, L.H. Two heads are better than one: Benefits of joint models for ALS trials (2019) *Journal of Neurology, Neurosurgery and Psychiatry*, 90 (9), pp. 1071-1072. Cited 4 times.
  17. McMackin, R., Muthuraman, M., Groppa, S., Babiloni, C., Taylor, J.-P., Kiernan, M.C., Nasserouleslami, B., Hardiman, O. Measuring network disruption in neurodegenerative diseases: New approaches using signal analysis (2019) *Journal of Neurology, Neurosurgery and Psychiatry*, 90 (9), pp. 1011-1020. Cited 14 times.
  18. Vermeulen, F.M., Gerbens, L.A.A., Bosma, A.L., Apfelbacher, C.J., Irvine, A.D., Arents, B.W.M., Barbarot, S., Deleuran, M., Eichenfield, L.F., Manca, A., Schmitt, J., Vestergaard, C., Wall, D., Weidinger, S., Middelkamp-Hup, M.A., Spuls, P.I., Flohr, C. TREATment of Atopic eczema (TREAT) Registry Taskforce: consensus on how and when to measure the core dataset for atopic eczema treatment research registries (2019) *British Journal of Dermatology*, 181 (3), pp. 492-504. Cited 10 times.
  19. Conway, R., Byrne, D., O'Riordan, D., Silke, B. Outcomes in acute medicine - Evidence from extended observations on readmissions, hospital length of stay and mortality outcomes (2019) *European Journal of Internal Medicine*, 66, pp. 69-74. Cited 4 times.
  20. Visser, A.E., D'Ovidio, F., Peters, S., Vermeulen, R.C.H., Beghi, E., Chiò, A., Veldink, J.H., Logroscino, G., Hardiman, O., Van Den Berg, L.H. Multicentre, population-based, case-control study of particulates, combustion products and amyotrophic lateral sclerosis risk (2019) *Journal of Neurology, Neurosurgery and Psychiatry*, 90 (8), pp. 854-860. Cited 6 times. 319779&partnerID=40&md5=ee28765ae7ce15d6ddee845c488eb245 DOI: 10.1136/jnnp-2018-319779
  21. Doherty, C.P., Rheims, S., Assenza, G., Boero, G., Chaves, J., McMurray, R., Villanueva, V. Eslicarbazepine acetate in epilepsy patients with psychiatric comorbidities and intellectual disability: Clinical practice findings from the Euro-Esli study (2019) *Journal of the Neurological Sciences*, 402, pp. 88-99. Cited 5 times.
  22. Allen, N., Faherty, C., Davies, A., Lyons, A., Scarry, M., Bohan Keane, M., Boyle, N., O'Connell, S., McCarthy, E., Keady, D., Bergin, C., Lee, J., Fleming, C., Gallagher, D., Tuite, H. Opt-out bloodborne virus screening: A cross-sectional observational study in an acute medical unit (2019) *BMJ Open*, 9 (7), art. no. e022777,
  23. Ryan, M., Zaldívar Vaillant, T., McLaughlin, R.L., Doherty, M.A., Rooney, J., Heverin, M., Gutierrez, J., Lara-Fernández, G.E., Pita Rodríguez, M., Hackembruch, J., Perna, A., Vazquez, M.C., Musio, M., Ketzoian, C.N., Logroscino, G., Hardiman, O. Comparison of the clinical and genetic features of amyotrophic lateral sclerosis across Cuban, Uruguayan and Irish clinic-based populations (2019) *Journal of Neurology, Neurosurgery and Psychiatry*, 90 (6), pp. 659-665. Cited 7 times. DOI: 10.1136/jnnp-2018-319838
  24. Ferenci, P., Bourgeois, S., Buggisch, P., Norris, S., Curescu, M., Larrey, D., Marra, F., Kleine, H., Dorr, P., Charafeddine, M., Crown, E., Bondin, M., Back, D., Flisiak, R. Real-world safety and effectiveness of ombitasvir/paritaprevir/ritonavir  $\pm$  dasabuvir  $\pm$  ribavirin in hepatitis C virus genotype 1- and 4-infected patients with diverse comorbidities and comedications: A pooled analysis of post-marketing observational studies from 13 countries (2019) *Journal of Viral Hepatitis*, 26 (6), pp. 685-696. Cited 2 times.
  25. O'Shea, M.P., Harkin, K., Sulaiman, H.M., Hennessy, M., Barry, M., Kennedy, C. More teaching – not more exams: Interns' views in improving prescribing safety (2019) *Irish Medical Journal*, 112 (5), p. 943.
  26. Byrne, J.-P., Power, R., Kiersey, R., Varley, J., Doherty, C.P., Sarris, A.J., Lambert, V., Fitzsimons, M. The rhetoric and reality of integrated patient-centered care for healthcare providers: An ethnographic exploration of epilepsy care in Ireland (2019) *Epilepsy and Behavior*, 94, pp. 87-92. Cited 9 times.
  27. Leshem, Y.A., Bissonnette, R., Paul, C., Silverberg, J.I., Irvine, A.D., Paller, A.S., Cork, M.J., Guttman-Yassky, E. Optimization of placebo use in clinical trials with systemic treatments for atopic dermatitis: an International Eczema Council survey-based position statement (2019) *Journal of the European Academy of Dermatology and Venereology*, 33 (5), pp. 807-815. Cited 3 times.
  28. Finegan, E., Chipika, R.H., Shing, S.L.H., Hardiman, O., Bede, P. Primary lateral sclerosis: a distinct entity or part of the ALS spectrum? (2019) *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration*, 20 (3-4), pp. 133-145. Cited 32

- times.
29. Kennedy, C., Duggan, E., Bennett, K., Williams, D., Barry, M. Reader response to IMJ article: "codeine usage in Ireland – a timely discussion on an imminent epidemic" by E. McDonnell (2019) *Irish Medical Journal*, 112 (4), p. 926.
  30. Sadlier, C., O'Connell, S., Kelleher, M., Bergin, C. Incidence and risk factors for invasive pneumococcal disease in HIV-positive individuals in the era of highly active antiretroviral therapy (2019) *International Journal of STD and AIDS*, 30 (5), pp. 472-478.
  31. McDowell, R.D., Bennett, K., Moriarty, F., Clarke, S., Barry, M., Fahey, T. Prescriber Variation in Relation to Prescribing Trends within the Preferred Drugs Initiative in Ireland (2012–2015): An Interrupted Time-Series Study Using Latent Curve Models (2019) *Medical Decision Making*, 39 (3), pp. 278-293.
  32. Peters, S., Visser, A.E., D'Ovidio, F., Beghi, E., Chiò, A., Logroscino, G., Hardiman, O., Kromhout, H., Huss, A., Veldink, J., Vermeulen, R., Van Den Berg, L.H. Associations of Electric Shock and Extremely Low-Frequency Magnetic Field Exposure with the Risk of Amyotrophic Lateral Sclerosis (2019) *American Journal of Epidemiology*, 188 (4), pp. 796-805. Cited 8 times.
  33. Hawkes, C.P., Grimberg, A., Kenny, L.C., Kiely, M., Hourihane, J.O.B., Irvine, A.D., McPhaul, M.J., Caulfield, M.P., Zemel, B.S., Murray, D.M. The relationship between IGF-I and -II concentrations and body composition at birth and over the first 2 months (2019) *Pediatric Research*, 85 (5), pp. 687-692. Cited 2 times. x
  34. Gerbens, L.A.A., Apfelbacher, C.J., Irvine, A.D., Barbarot, S., de Boon, R.J., Boyce, A.E., Deleuran, M., Eichenfield, L.F., Hof, M.H., Middelkamp-Hup, M.A., Roberts, A., Schmitt, J., Vestergaard, C.,
  35. Wall, D., Weidinger, S., Williamson, P.R., Flohr, C., Spuls, P.I. TREATment of Atopic eczema (TREAT) Registry Taskforce: an international Delphi exercise to identify a core set of domains and domain items for national atopic eczema photo- and systemic therapy registries (2019) *British Journal of Dermatology*, 180 (4), pp. 790-801. Cited 8 times.
  36. Finegan, E., Chipika, R.H., Li Hi Shing, S., Hardiman, O., Bede, P. Pathological Crying and Laughing in Motor Neuron Disease: Pathobiology, Screening, Intervention (2019) *Frontiers in Neurology*, 10, art. no. 260, . Cited 12 times.
  37. Chipika, R.H., Finegan, E., Li Hi Shing, S., Hardiman, O., Bede, P. Tracking a Fast-Moving Disease: Longitudinal Markers, Monitoring, and Clinical Trial Endpoints in ALS (2019) *Frontiers in Neurology*, 10, art. no. 229, . Cited 37 times.
  38. Harkins, C.P., Holden, M.T.G., Irvine, A.D. Antimicrobial resistance in atopic dermatitis: Need for an urgent rethink (2019) *Annals of Allergy, Asthma and Immunology*, 122 (3), pp. 236-240. Cited 5 times.
  39. Conway, R., O'Neill, L., McCarthy, G.M., Murphy, C.C., Veale, D.J., Fearon, U., Killeen, R.P., Heffernan, E.J., Molloy, E.S. Performance characteristics and predictors of temporal artery ultrasound for the diagnosis of giant cell arteritis in routine clinical practice in a prospective cohort (2019) *Clinical and experimental rheumatology*, 37 (2), pp. 72-78. Cited 3 times.
  40. McAleer, M.A., Jakasa, I., Hurault, G., Sarvari, P., McLean, W.H.I., Tanaka, R.J., Kezic, S., Irvine, A.D. Systemic and stratum corneum biomarkers of severity in infant atopic dermatitis include markers of innate and T helper cell-related immunity and angiogenesis (2019) *British Journal of Dermatology*, 180 (3), pp. 586-596. Cited 26 times.
  41. Davidson, W.F., Leung, D.Y.M., Beck, L.A., Berin, C.M., Boguniewicz, M., Busse, W.W., Chatila, T.A., Geha, R.S., Gern, J.E., Guttman-Yassky, E., Irvine, A.D., Kim, B.S., Kong, H.H., Lack, G., Nadeau, K.C., Schwaninger, J., Simpson, A., Simpson, E.L., Spergel, J.M., Togias, A., Wahn, U., Wood, R.A., Woodfolk, J.A., Ziegler, S.F., Plaut, M. Report from the National Institute of Allergy and Infectious Diseases workshop on "Atopic dermatitis and the atopic march: Mechanisms and interventions" (2019) *Journal of Allergy and Clinical Immunology*, 143 (3), pp. 894-913. Cited 34 times. 126) Twelves, S., Mostafa, A., Dand, N., Burri, E., Farkas, K., Wilson, R., Cooper, H.L., Irvine, A.D., Oon, H.H., Kingo, K., Köks, S., Mrowietz, U., Puig, L., Reynolds, N., Tan, E.S.-T., Tanew, A., Torz, K., Trattner, H., Valentine, M., Wahie, S., Warren, R.B., Wright, A., Bata-Csörgő, Z., Szell, M., Griffiths, C.E.M., Burden, A.D., Choon, S.-E., Smith, C.H., Barker, J.N., Navarini, A.A., Capon, F. Clinical and genetic differences between pustular psoriasis subtypes (2019) *Journal of Allergy and Clinical Immunology*, 143 (3), pp. 1021-1026. Cited 32 times.
  42. Byrne, D., Conway, R., Cournane, S., O'Riordan, D., Silke, B. Admission and readmission rate incidences from deprived areas—impact of a classical or multi-dimensional model (2019) *Irish Journal of Medical Science*, 188 (1), pp. 303-310.
  43. Tazelaar, G.H.P., Dekker, A.M., van Vugt, J.J.F.A., van der Spek, R.A., Westeneng, H.-J., Kool, L.J.B.G., Kenna, K.P., van Rheenen, W., Pulit, S.L., McLaughlin, R.L., Sproviero, W., Iacongeli, A., Hübers, A., Brenner, D., Morrison, K.E., Shaw, P.J., Shaw, C.E., Panadés, M.P., Mora Pardina, J.S., Glass, J.D., Hardiman, O., Al-Chalabi, A., van Damme, P., Robberecht, W., Landers, J.E., Ludolph, A.C., Weishaupt, J.H., van den Berg, L.H., Veldink, J.H., van Es, M.A. Association of NIPA1 repeat expansions with amyotrophic lateral sclerosis in a large international cohort (2019) *Neurobiology of Aging*, 74, pp. 234.e9-234.e15. Cited 9 times.
  44. Alhusaini, S., Kowalczyk, M.A., Yasuda, C.L., Semmelroch, M.K., Katsurayama, M., Zabin, M., Zanão, T., Nogueira, M.H., Alvim, M.K.M., Ferraz, V.R., Tsai, M.-H., Fitzsimons, M., Lopes-Cendes, I., Doherty, C.P., Cavalleri, G.L., Cendes, F., Jackson, G.D., Delanty, N. Normal cerebral cortical thickness in first-degree relatives of temporal lobe epilepsy patients (2019) *Neurology*, 92 (4), pp. E351-E358. Cited 6 times.
  45. Grant, C., O'Connell, S., Lillis, D., Moriarty, A., Fitzgerald, I., Dalby, L., Bannan, C., Tuite, H., Crowley, B., Plunkett, P., Kennedy, U., McMahon, G., McKiernan, S., Norris, S., Hughes, G., Shields, D., Bergin, C. Opt-out screening for HIV, hepatitis B and hepatitis C: Observational study of screening acceptance, yield and treatment outcomes (2019) *Emergency Medicine Journal*, . Cited 2 times.
  46. Conway, R., Byrne, D., Cournane, S., O'Riordan, D., Silke, B. The problems with risk prediction during an emergency medical admission using laboratory data – Evidence from potassium (2019) *Acute Medicine*, 18 (1), pp. 20-26. Cited 1 time.
  47. Akasheh, N., Byrne, D., Coss, P., Conway, R., Cournane, S., O'Riordan, D., Silke, B. Lung function and outcomes in emergency medical admissions (2019) *European Journal of Internal Medicine*, 59, pp. 34-38. Source: Scopus
  48. McCarthy, K., Conway, R., Byrne, D., Cournane, S., O'Riordan, D., Silke, B. Hyponatraemia during an emergency medical admission as a marker of illness severity & case complexity (2019) *European Journal of Internal Medicine*, 59, pp. 60-64. Cited 5 times.
  49. Shing, S.L.H., Chipika, R.H., Finegan, E., Murray, D., Hardiman, O., Bede, P. Post-polio Syndrome: More than just a lower motor neuron disease (2019) *Frontiers in Neurology*, 10 (JUL), art. no. 773, . Cited 5 times.
  50. Burke, T., O'Raghallaigh, J.W., Maguire, S., Galvin, M., Heverin, M., Hardiman, O., Pender, N. Group interventions for amyotrophic lateral sclerosis caregivers in Ireland: A randomised controlled trial protocol (2019) *BMJ Open*, 9 (9), art. no. e030684, . Cited 1 time.
  51. Byrne, D., Cournane, S., Conway, R., O'Riordan, D., Silke, B. Socio-Economic Status and Multi-Original morbidity - Fact or Fiction? (2019) *Acute Medicine*, 18 (2), pp. 64-70.
  52. Bede, P., Chipika, R.H., Finegan, E., Li Hi Shing, S., Doherty, M.A., Hengeveld, J.C., Vajda, A., Hutchinson, S., Donaghy, C., McLaughlin, R.L., Hardiman, O. Brainstem pathology in amyotrophic lateral sclerosis and primary lateral sclerosis: A longi-

- tudinal neuroimaging study (2019) *NeuroImage: Clinical*, 24, art. no. 102054, . Cited 20 times.
53. McMackin, R., Bede, P., Pender, N., Hardiman, O., Nasserolelami, B. Neurophysiological markers of network dysfunction in neurodegenerative diseases (2019) *NeuroImage: Clinical*, 22, art. no. 101706, . Cited 7 times.
  54. Cournane, S., Brunell, E., Rowan, M. Establishing how patient size and degree of miscentring affect CTDIvol, using patient data from a dose tracking system (2019) *British Journal of Radiology*, 92 (1099), art. no. 20180992, . Cited 2 times.
  55. Low, C., Conway, R. Current advances in the treatment of giant cell arteritis: the role of biologics (2019) *Therapeutic Advances in Musculoskeletal Disease*, 11, . Cited 4 times.
  56. Finegan, E., Li Hi Shing, S., Chipika, R.H., Doherty, M.A., Hengeveld, J.C., Vajda, A., Donaghy, C., Pender, N., McLaughlin, R.L., Hardiman, O., Bede, P. Widespread subcortical grey matter degeneration in primary lateral sclerosis: a multimodal imaging study with genetic profiling (2019) *NeuroImage: Clinical*, 24, art. no. 102089, . Cited 15 times. 142) Clowry, J., Irvine, A.D., McLoughlin, R.M. Next-generation anti-Staphylococcus aureus vaccines: A potential new therapeutic option for atopic dermatitis? (2019) *Journal of Allergy and Clinical Immunology*, 143 (1), pp. 78-81. Cited 8 times.
  57. McMackin, R., Dukic, S., Broderick, M., Iyer, P.M., Pinto-Grau, M., Mohr, K., Chipika, R., Coffey, A., Buxo, T., Schuster, C., Gavin, B., Heverin, M., Bede, P., Pender, N., Lalor, E.C., Muthuraman, M., Hardiman, O., Nasserolelami, B. Dysfunction of attention switching networks in amyotrophic lateral sclerosis (2019) *NeuroImage: Clinical*, 22, art. no. 101707, .Cited 8 times.
  58. Doherty, C.P., O'Keeffe, E., Keaney, J., Lawlor, B., Coen, R.F., Farrell, M., Campbell, M. Neuropathology as a result of severe traumatic brain injury? (2019) *Clinical Neuropathology*, 38 (1), pp. 14-22. Cited 2 times.
  59. Paller, A.S., Spergel, J.M., Mina-Osorio, P., Irvine, A.D. The atopic march and atopic multimorbidity: Many trajectories, many pathways (2019) *Journal of Allergy and Clinical Immunology*, 143 (1), pp. 46-55. Cited 51 times
  60. D'Ovidio, F., Rooney, J.P.K., Visser, A.E., Manera, U., Beghi, E., Logroscino, G., Vermeulen, R.C.H., Veldink, J.H., Van Den Berg, L.H., Hardiman, O., Chiò, A. Association between alcohol exposure and the risk of amyotrophic lateral sclerosis in the Euro-MOTOR study (2019) *Journal of Neurology, Neurosurgery and Psychiatry*, 90 (1), pp. 11-19. Cited 7 times.
  61. Delaney, S., O'Connor, G., Reardon, W., Murphy, S.J.X., Tierney, S., Ryan, B.M., Delaney, H., Doherty, C.P., Guiney, M., Brennan, P., Tobin, W.O., McCabe, D.J.H. Extracranial and intracranial vasculopathy with "moyamoya phenomenon" in association with alagille syndrome (2019) *Frontiers in Neurology*, 10 (JAN), art. no. 1194
  62. Paller, A.S., Kong, H.H., Seed, P., Naik, S., Scharschmidt, T.C., Gallo, R.L., Luger, T., Irvine, A.D. The microbiome in patients with atopic dermatitis (2019) *Journal of Allergy and Clinical Immunology*, 143 (1), pp. 26-35. Cited 75 times.
  63. Al-Chalabi, A., Shaw, P., Leigh, P.N., Van Den Berg, L., Hardiman, O., Ludolph, A., Aho, V.V., Sarapohja, T., Kuoppamäki, M. Oral levosimendan in amyotrophic lateral sclerosis: A phase II multicentre, randomised, double-blind, placebo-controlled trial (2019) *Journal of Neurology, Neurosurgery and Psychiatry*, . Cited 8 times. 150) Hartnell, F., Brown, A., Capone, S., Kopycinski, J., Bliss, C., Makvandi-Nejad, S., Swadling, L., Ghaffari, E., Cicconi, P., Sorbo, M.D., Sbrocchi, R., Esposito, I., Vassilev, V., Marriott, P., Gardiner, C.M., Bannan, C., Bergin, C., Hoffmann, M., Turner, B., Nicosia, A., Folgori, A., Hanke, T., Barnes, E., Dorrell, L. A novel vaccine strategy employing serologically different chimpanzee adenoviral vectors for the prevention of HIV-1 and HCV coinfection (2019) *Frontiers in Immunology*, 10 (JAN), art. no. 3175, . Cited 14 times.







**ANNUAL REPORT  
2019**