



Institiúid Ailse Choláiste
na Tríonóide/San Séamas

Trinity St James's
Cancer Institute

Compassionate care, revolutionary research

Trinity St James's Cancer Institute Annual Report 2022



OEI

RPMN 0473647634

Certificate of Accreditation and Designation

OEI

Hereby certifies that the Trinity St James's Cancer Institute, Dublin, Ireland Meets the quality standards for Cancer care and research and it is, therefore, designated as an **OEI Cancer Centre**.

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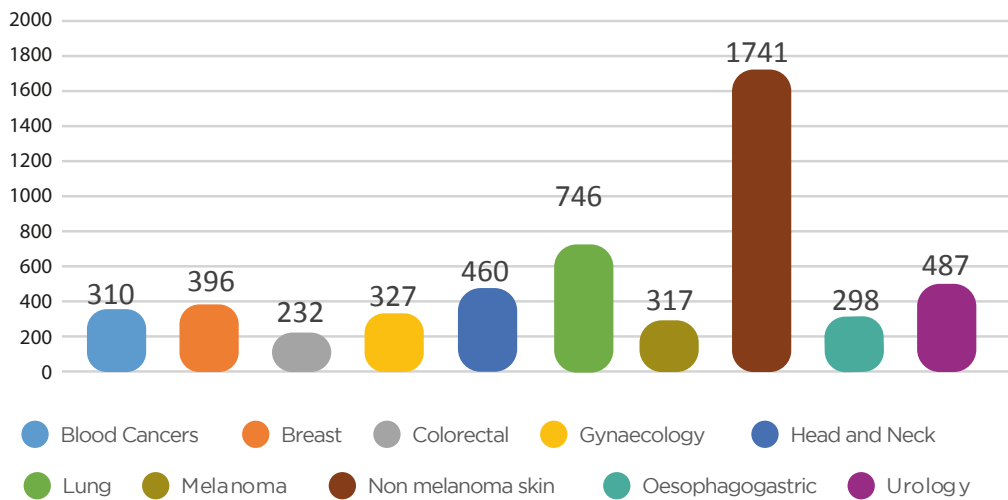
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Patients

5,314 Newly diagnosed and/or treated cases 2022



Clinical Care

Number of Systemic Anti-Cancer Treatments (SACT)
13,212

Stem Cell Transplant (SCT) Activity Autologous
105

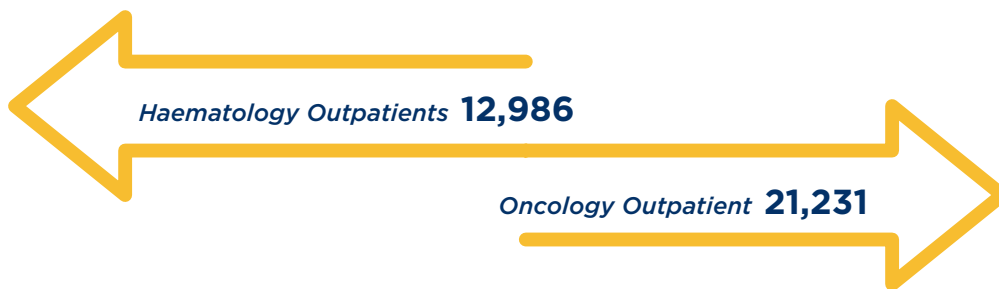
Stem Cell Transplant (SCT) Activity Allogeneic
87

Stem Cell Activity DLI Infusions
43

CAR-T Infusions (2 in King's College Hospital)
24

Number of Radiotherapy Fractions
20,867

Number of Visits



Inpatient Discharges Haematology
 Daycases treatment **5,875**
 Inpatient **1,123**
 AVLOS **13.4**

Inpatient Discharges Oncology
 Daycases treatment **11,624**
 Inpatient **1,477**
 AVLOS **10.3**

Histopathology

Histology
 260 specimens per day
 490 blocks per day

Cytology
 18 specimens per day
 40 procedures per day

Cancer Molecular Diagnostics
 12,500 per year

Radiology

Overall Activity (Cancer and Non Cancer)
198,921

Cancer
 Mammogram **10,024** PET/CT **3,439**

Cancer and Non Cancer
 CT **32,728** Ultrasound **26,056** MRI **11,932**

Research

€19.1 million
 Research Funding

43
 Drug Clinical Trials

325
 Peer Reviewed Publications

Education



Introduction From Directors



It is both a pleasure and a privilege to introduce the 2022 Annual Report of the Trinity St James's Cancer Institute (TSJCI). This document summarises an enormous body of work by talented and dedicated clinicians, scientists and staff in both the hospital and university who are committed to comprehensively improving outcomes for our patients.

It should be first pointed out that the volume of cancer care provided continues to rise relentlessly. The demands placed on all directorates, ranging from radiology and pathology through multiple other essential services, is impacting heavily on core infrastructure, both physical and personnel. This is a reflection not only of the demographic reality of an increasing and aging population but also of the demand for the highly specialised care we provide in areas such as lung, head and neck, upper gastrointestinal, melanoma, gynecologic and hematologic malignancies. These are diseases which require highly integrated multidisciplinary therapy from a host of specialists and hospital resources. As a result of the comprehensive and expanding services we provide referrals continue to increase and we are now the largest provider of care for these complex cancers in Ireland.

As survival improves, particularly for patients with complex needs undergoing toxic and extensive multidisciplinary therapy, the need for expert survivorship care has been increasingly recognised. It is gratifying to be able to report here the huge progress made in this area at TSJCI, led predominantly by health and social care professionals in the hospitals' SCOPe directorate. The establishment of the TSJCI Cancer Survivorship Theme in Research and the Cancer Survivorship Group and the expansion of services to encompass pre-habilitation, rehabilitation, cancer fatigue interventions, home enteral nutrition services, and peer support networks has had a major beneficial impact on the lives of our patients. In parallel, the group continues to successfully compete for research grants and to advocate for the integration of academic disciplines into the clinical care of their patients. The progress we have made in survivorship care and research is a highlight of this years' annual report.

We are also delighted to report the significant expansion of services for adolescents and young adults with cancer (AYA Cancer) in 2022. St James's was identified as one of the three national adult cancer center sites with an AYA designated unit and this has resulted in the establishment of AYA MDT clinics, the opening of specific AYA treatment areas on site and the launch of a new multidisciplinary outpatient facility for these patients in conjunction with the local Guinness Enterprise Center and supported by the National Cancer Control Programme. We look forward to further service expansion in 2023 with the ultimate goal of integrating care, research and education with the new Children's Health Ireland AYA services when they arrive on the campus later on in this decade.



Ultimately, close integration of research and educational activities with clinical care will be a core indicator of success for TSJCI.



Ultimately, close integration of research and educational activities with clinical care will be a core indicator of success for TSJCI. The 12th Annual TSJCI International Cancer Conference took place in TCD in 2022 and is a flagship event in progressing this goal. In this context the additional expansion of educational courses in areas such as CAR-T therapy, new bursaries for masters and PhD students funded by philanthropic donations, and the success of TSJCI investigators in securing major external research grant funding are also of critical importance. This report details some of these exciting developments for 2022. In addition, we are proud to outline the successful launching of the Cancer Research Stimulus Awards (CREST) award programme, specifically designed to fund research collaborations between scientists and clinicians, administered by TSJCI and supported by a philanthropic donation from the Dr Margaret Sau Sheung Ip and Dr Jonathan Chiu Fund.

In 2023 we will be preparing for OEI accreditation in 2024. We hope that 2023 will be as productive and rewarding as 2022 and produce further benefits for our patients, colleagues and collaborators.

Acknowledgments

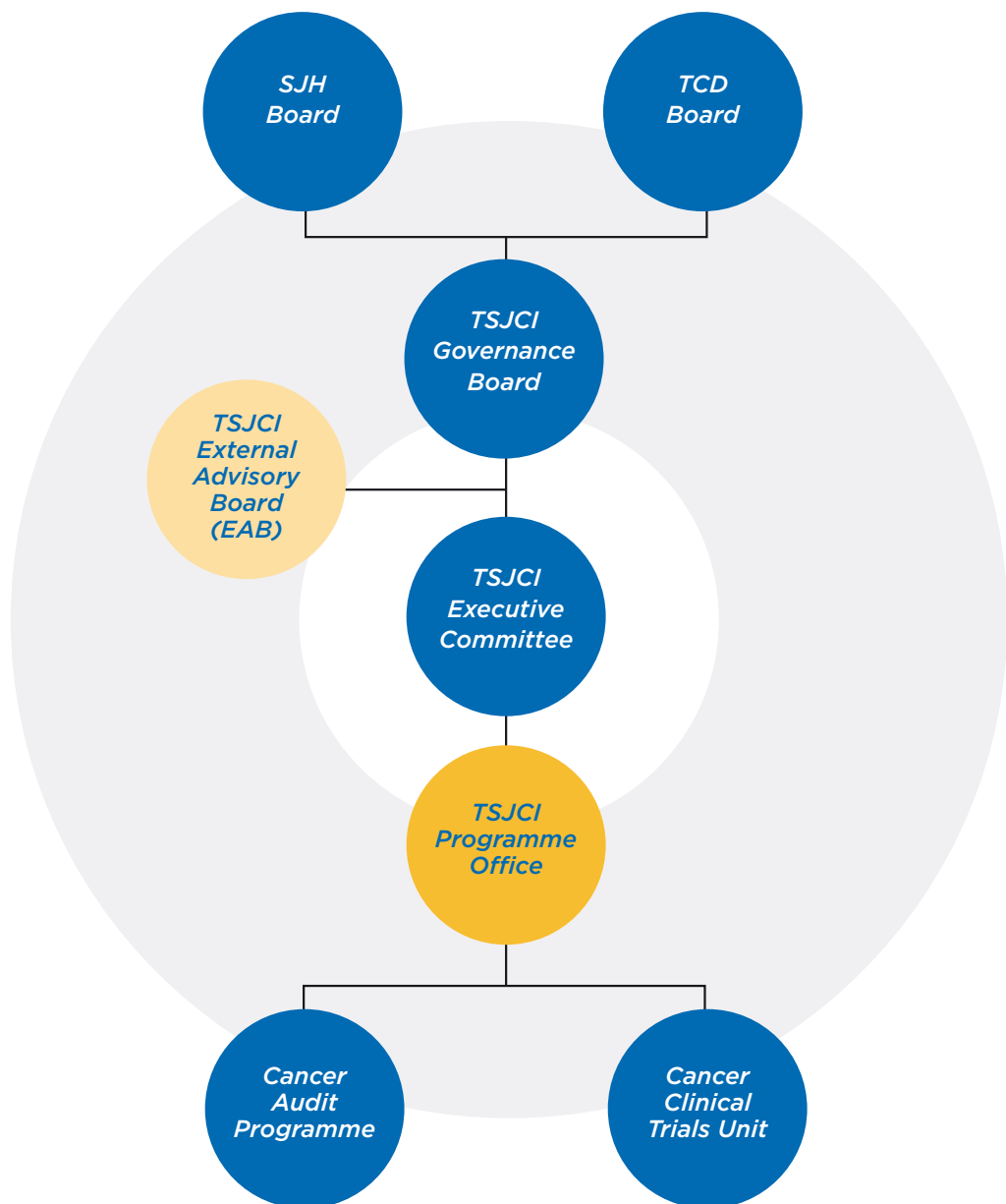
The Clinical Directorate Management teams named in this report are the current Directorate Management Teams. A number of personnel who were present in 2022 have moved on and we would like to acknowledge and thank them for all their excellent work managing and providing cancer services to patients and their families.

Prof. John Kennedy
Medical Director

Prof. Maeve Lowery
Academic Director

Trinity St James's Cancer Institute Governance

TSJCI Structure



Governance Board

The TSJCI Governance Board was established in 2021, and is led by an external Chairperson, jointly appointed by St James's Hospital and Trinity College. The principal function of the Governance Board is to ensure the maintenance of high standards and best practice in the conduct and delivery of the function of TSJCI.

Executive Committee

The TSJCI Executive Committee under the leadership of two joint TSJCI Directors held its first meeting in July 2021. The committee has a broad membership with representation from TSJCI stakeholders from Trinity College Dublin, St James's Hospital and St Luke's Radiation Oncology Network. The Executive Committee is responsible for delivering on the objectives and indicators in the TSJCI Strategy 2023-2028.

TSJCI Joint Directors

The TSJCI is jointly led by a Medical Director and an Academic Director appointed by the Boards of TCD and SJH. The Directors have joint responsibility for the strategic objectives of the TSJCI and report to the TSJCI Governance Board. The medical and academic directors lead the ongoing development of the TSJCI and coordinate the integration between cancer clinical service, research, cancer clinical trials and education.

TSJCI Pillar Leads

The TSJCI Pillar leads drive the strategic direction, initiatives and development of their respective pillars clinical, cancer clinical trials, research and education. The pillar leads and directors work together through the Executive Committee to deliver on the strategic objectives and development of the TSJCI.



Clinical Pillar

Prof. John
Reynolds

Clinical Lead



Clinical Trials

Prof. Elisabeth
Vandenberghe

Clinical Trials Lead



Research Pillar

Prof. Lorraine
O'Driscoll

Research Lead



Education Pillar

Prof. Jacintha
O'Sullivan

Education Lead

Programme Office

The TSJCI Programme Office team is responsible for the implementation of the TSJCI strategy and delivery of re-accreditation by OECl in 2024 in collaboration with the directors, pillar leads, multidisciplinary teams at SJH, SLRON and TCD and patients. The programme office oversees and supports the delivery of a variety of workstreams including accreditation, strategic partnerships, patient partnership and involvement, infrastructure, communications, clinical trials, quality and audit.

Clinical Care Services

HOPe Directorate

- Dr John Cooney, Clinical Director
- Ms Paula O'Reilly, Operations Manager
- Ms Jane Murphy, Assistant Director of Nursing

The HOPe directorate comprises Haematology, Oncology, Palliative Medicine and Psychological medicine. It also includes the National Centre for Bone Marrow Transplantation, and the National Centre for Hereditary Coagulation Disorders and the anticoagulation clinic. It also provides a cancer genetic service and is linked with the following units, St Luke's Radiation Centre, and the Cancer Clinical Trials. It is one of the four national Adolescent and Young Adult Cancer Centres and the first CAR-T centre in Ireland. It provides non-surgical treatment for patients referred to the services and this includes Chemotherapy, radiotherapy and blood and blood products. Patient treatment is carried out on Denis Burkitt ward which is the bone marrow transplant unit, Donal Hollywood ward, which is the in patients ward and the Haematology Oncology Day Unit (HODC) which is the outpatient unit. Much work is currently ongoing to improve the efficiencies in HODC and to reduce waits and delays for patients and staff. The HOPe Directorate services are managed by consultants, and clinical nurse managers (CNMs) and led by a Clinical Director, an Operations Manager and a Nurse Manager.

Adolescent and Young Adult Cancers

Highlights in 2022

St James's was designated as one of the three Adult Cancer Centres with an AYA unit, as part of the National AYA Cancer Service Network. Further developments for the AYA service included the establishment of MDT clinics, and the opening of four AYA beds on the Denis Burkitt ward. The AYA rooms were co-designed by AYA patients and were opened in Q2, 2022.

A collaboration between the team in Trinity St James's Cancer Institute, the Academic Health Science Director, the HOPe directorate and AYA Consultant Dr Scheryll Alken led to a partnership with the local Guinness Enterprise Centre to launch a new clinic called the 'Hangout' for AYA patients. This young person focused, inter-professional clinic commenced in June 2022. Outcomes from this will be presented at the 5th Global AYA Cancer Congress in LA in June 2023. Senior AYA Cancer team members have participated in intraprofessional learning opportunities across the campus.

Key Priorities for 2023

To further develop the AYA service there is a planned appointment of an AYA Clinical Nurse Specialist, and Grade V Administrator. These appointments will provide support to the team to hold dedicated Multidisciplinary AYA clinics in HODC 2. It is planned that these AYA MDT clinics will commence March 2023. The National AYA Multidisciplinary meetings will convene in 2023, facilitating easier identification and resource allocation for these patients. The AYA cancer team, with locoregional stakeholders, will develop transition pathways from Children's Health Ireland at Crumlin to TSJCI and beyond.

Onco-Genetics Service

Highlights in 2022

- The Progeny database was successfully integrated into the hospital PAS system with historic pedigrees migrated onto the new system
- The remote pathway was facilitated through the introduction of TPro, Electronic Patient Record (EPR) functionality and remote genetic testing provider with the online portal
- Permanent administrative staff and the first genomic associate role supported the clinical workflow of the genetic counselling team
- Moved to new location at 40 St James's Street with hybrid outpatient model facilitating in-person, virtual and remote genetic testing

Haematology Service

Highlights in 2022

Chimeric Antigen Receptor T Cell Therapy (CAR-T) is a class of immunotherapy for refractory haematological malignancies. It involves the manipulation of patient's own T cells to express engineered CAR-T to target specific cancer cells. The first patient in Ireland to receive CAR-T therapy was treated in St James's Hospital in December 2021. In 2022, 24 patients received CAR-T infusions, 22 of these were in St James's Hospital and 2 in King's College Hospital in London.

- Opening of the Cartitude 5 CAR-T clinical trial for patient with multiple myeloma. Enrolment will begin in 2023
- Further development of the CAR-T and late effects clinics.

Key Developments in 2023

- On-going preparations for Joint Accreditation Committee of the International Society for Cellular Therapy and the European Group for Blood and Marrow Transplantation (JACIE).
- To open seven new beds on Denis Burkitt ward, improving access for all patients and also providing a unique environment for AYA patients in specially designed four-bed AYA unit.
- The appointment of the first Advance Nurse Practitioner (ANP) in the transplant service.

Medical Oncology

Highlights in 2022

There has been an increase in the number of patients attending HODC for treatment in 2022 compared to 2021. There were 17, 243 treatments given in HODC in 2022.

Key Developments in 2023

To develop a 2-day review and treat model working with the Lean Transformation Programme to increase capacity and reduce waiting and delays for patients attending HODC.

To develop Oncology review clinics in HODC 2 to reduce throughput in HODC and improve the patients experience attending the service

To develop and expand an integrated nurse led model of care.

- To expand the Swiftqueue phlebotomy service to provide access for all Haematology Oncology Day Centre (HODC) patients.
- Develop a Swiftqueue scheduling system in HODC to improve the patient and nurse's pathway.
 - Expand the role of the Community Intervention Teams (CITs).
 - On-going quality assurance to maintain the Organisation of European Cancer Institutes (OECI) accreditation
 - Challenges around recruitment and retention of staff remain an issue.

Palliative Medicine

Highlights in 2022

In 2022 Dr Aoibheann Conneely commenced as a new Consultant in Palliative Medicine working between St James's Hospital and Our Lady's Hospice. It is hoped that a new Consultant will be approved in 2023 to help with this evolving service.

Rory Wilkinson was appointed the first Advance Nurse Practitioner in Palliative Medicine and he continues to hold OPD and review clinics.

Psychological Medicine

Psycho-Oncology

The Psycho-Oncology Service, which is part of the Psychological Medicine Service at St James's Hospital, aims to provide expert, compassionate care to patients with cancer who are attending the hospital. The service also provides training for healthcare professionals. Our emphasis is on the early recognition of psychological distress, the delivery of best practice in terms of interventions both during and after cancer treatment and the promotion of psychological well-being. Through teaching and teamwork, we seek to promote a culture of collaboration, compassion and respect, not only for patients but also for all those involved in providing healthcare.

Highlights in 2022

With support from the National Cancer Control Programme (NCCP) we appointed the first psycho-oncology social worker to the team. This is a very important addition to the service and will complement the existing work of our psycho-oncology psychiatrists, clinical psychologists and clinical nurse specialists.

We launched our pioneering 'Fear of Cancer Recurrence' workshops for patients who have completed treatment and are currently cancer free. This innovative intervention is a collaboration between Psycho-Oncology Psychologists and Oncology Survivorship Advance Nurse Practitioners. Findings from the pilot study were presented at 12th International Cancer Conference hosted by Trinity St James's Cancer Institute.

In collaboration with colleagues from the Trinity St James's Cancer Institute we established the TSJCI Survivorship Group. This is a multidisciplinary team collaboration working with patients to improve and develop survivorship care and services for cancer patients.

Following the NCCP launch of the Framework for the Care and Support of Adolescents and Young Adults with Cancer in Ireland (2021-2026), St James's was identified as one of the 3 Adult Cancer Centres with an AYA designated unit. A new inter-professional clinic for AYA cancer patients, the "Hangout", was launched in the Guinness Enterprise Centre. St James's Hospital Psycho-Oncology service have played a key role in the development of the clinic in conjunction with medical, nursing, HSCP colleagues and the young people attending. "Bite-sized" psycho-education psychology sessions are provided at each meeting targeting mild to moderate levels of distress. In the absence of dedicated AYA psycho-oncology staff at SJH, referral pathways have been created from the "Hang-out" back to the general SJH Psycho-oncology outpatient clinic.

Members of the Psycho-Oncology team continue to serve on the Psycho-oncology Advisory Committee to the NCCP. In 2022 both Dr Rosie Plunkett, Consultant Psychiatrist and Dr Sonya Collier, Clinical Psychologist, sat on several NCCP Psycho-oncology working groups including: AYA Model of Care; Psycho-Oncology Multi-Disciplinary Meeting procedures; Measurement in Psycho-oncology.

Research is an important element in the work of Psycho-Oncology ensuring appropriate service development and best practice innovative care. We have collaborated with academic colleagues in the TSJCI and the Royal College Surgeons, providing psycho-oncology expertise and interventions for several projects and trials (e.g. Personal Exercise Rehabilitation in Cancer Survivorship (PERCS); Rehabilitative Strategies Following Oesophageal Cancer (ReStOre); Physiotherapy led Cancer Rehabilitation and Prehabilitation exercise programmes; Effective management of depression among patients with cancer (ENHANCE)). We have also served as co-applicant and collaborator on several grant applications.

Key Priorities for 2023

- In order to ensure adequate service and equity of care for patients attending St James's Hospital and consistent with NCCP Models of Care we will work with the NCCP to secure funding for:
 - A dedicated Senior Psychologist for patients attending St Luke's at St James's Radiotherapy Centre.
 - A Consultant Psychiatrist, Principal Clinical Psychologist, Clinical Specialist Occupational Therapist and Senior Social Worker for the St James's Hospital AYA Cancer Network Service.
- We plan to expand our suite of Psycho-Oncology Survivorship Workshops to include:
 - Understanding and managing Persistent Cancer Related Fatigue.
 - Living well after cancer using Acceptance & Commitment Therapy.
 - Managing Sleep Difficulties.
 - Living with Fear of Cancer Progression.
- We will complete and publish a psycho-oncology research project exploring levels of distress and attitudes towards psycho-oncology professions among patients attending the St James's Hospital Haematology and Oncology Day Ward.
- In order to facilitate the increase in staff and the increase in number of psycho-oncology group interventions we hope to secure additional office space and a group room.

Volunteer Service

Highlights in 2022

2022 saw the further integration of the Volunteer service in HODC, a meet and greet service for patients to help them navigate the HODC.

- There are now seven volunteers who provide support for patients.
- The role of the volunteer includes providing a friendly welcoming meet and greet service, assisting with communications between the staff and patients, providing general hospital information and providing support to the patients.

Key Priorities for 2023

- Expansion of the Volunteer Service: The patient representative group have written to hospital board to request this be rolled out across the hospital as it has been such a success in HODC.

Medical Directorate

- Prof. Declan Byrne, Clinical Director
- Ms Michelle Maher, Operations Manager
- Ms Clodagh Quinn, Assistant Director of Nursing

Overview

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.

Cancer Care Pathways are established and are being developed in the following services:

Dermatology/Plastic Surgery/Dermatopathology – Skin Cancer

Highlights in 2022

Dermview Collaboration

The highly successful collaboration between St James's Hospital, Dermview and The National Treatment Purchase Fund (NTPF) using tele-dermatology to accurately and efficiently triage 3,500 patients waiting over one year, in under one year, with no one waiting over 12 months currently.

Just under one fifth of all the patients triaged via Dermview, were diagnosed with skin cancer with the average reduction in waiting time reduced by 14 months. The impact of this on malignant melanoma was most marked with patients diagnosed with significantly thinner melanomas.

Improvements in achieving early diagnosis is the ultimate aim of many national and international efforts in melanoma management. We are proud that St James's Hospital has lead this innovate and important development in cancer care in Ireland, and will continue to advocate for this on a national level, particularly given the mounting evidence and data on the benefit for patients.

Mohs Micrographic Surgery

2022 was a challenging year for Mohs surgery in the St James's Hospital as the hospital experienced ongoing issues with recruitment, training and retention of specialist medical scientists. This led to a reduced service compared to previous years.

The efforts of all departments involved with the strong support to the Institute and the Hospital's management teams have come up with short, medium and long-term solutions, and we look forward to restarting Mohs micrographic Surgery in early 2023.

Dermatopathology

Electronic Melanoma Diagnostic and Surveillance Tracing

This was completed in 2022 and is in the process for being refined and used on based changes being collated. This will allow greater safety in melanoma surveillance, and greater detail in service planning.

Key Priorities for 2023

- Development of capacity based prospective teledermatology to prevent recurrence of unsafe and undesirable waiting lists, and to rapidly and accurately triage pigmented lesions.
- Micrographic Surgery Fellowship – an excellent candidate commences the first two-year Fellowship in Micrographic and Dermatology Surgery in Ireland. In addition, an International Surgical Fellow completed his two-year training in dermatology Surgery.
- The continued increase in melanoma diagnoses has placed immense strain on the service – Dermatology, Plastic and Oncology. Add to this, the increased complexity of diagnoses, treatments (surgical, and oncological – adjuvant and neo-adjuvant therapies), and increased surveillance requires the immediate appointment of ANPs with responsibility for Melanoma in each of the sub-specialist areas – Plastic Surgery, Dermatology and Oncology.
- The continued need for better physical facilities to see, treat and provide care for our skin cancer patients is paramount.

Endocrinology – Thyroid Cancer

Highlights in 2022

In 2022, 123 new patients joined the existing cohort of 1,200, all of whom require life-long follow up due to the well documented risk of late recurrence.

The Endocrinology service also provides clinical support to the late effects service in the HODC for post-transplant patients who require life-long follow up in the survivorship clinic.

Radio-Iodine Treatment

- The Endocrinology Service manages radio-iodine treatment, reserved for high risk and selected intermediate risk thyroid cancer patients. Forty patients were admitted to the iodine suite for this treatment following MDT review in 2022.
- The service has seen a 20% (N = 48) increase in patients attending for the three-day surveillance programme post-radio-iodine treatment.

Key Priorities for 2023

- The Endocrinology service will continue to strive to provide an excellent service by seeking the support of a dedicated data manager.
- The Endocrinology service will appoint a Thyroid Cancer Clinical Nurse Specialist to streamline care pathways and improve delivery of service with a focus on survivorship and nursing research.
- 2022 brought the referral of 14 new patients from Ukraine. It is predicted that this referral stream will continue to grow as Ukraine has a high prevalence of radiation induced thyroid cancer. These patients will require enhanced support with communication and coordinated follow-up.

Additional Highlights

- Prof. Marie Louise Healy is representing St James's Hospital as a member of the Programme Organising Committee for the World Thyroid Cancer Congress to be held in London in June 2023
- Research output for the unit has been presented both at National and International meetings.
- Complexity of referrals will continue to increase.

Hepatology

Highlights in 2022

There is a growing incidence of hepatocellular carcinoma (HCC) worldwide. In the United States, the rate of HCC deaths has increased by ~40% over the period 1990-2004, relating to the emergence of cirrhosis due to hepatitis C as a risk factor for HCC, but additionally also to an increase in Hepatitis B Virus (HBV)-related HCC. Obesity, diabetes and fatty liver disease are recognised aetiological factors for HCC development. In the US in 2020, Non Alcoholic Fatty Liver Disease (NAFLD) -related HCC was the primary liver cancer indication for liver transplantation. HCC arises in a cirrhotic background in up to 90% of cases, and cirrhosis itself is a progressive disease that affects patient survival. The presence and staging of cirrhosis therefore influences the opportunity for anti-HCC treatment, thus rendering early diagnosis of HCC even more crucial.

- The Hepatology Department provides diagnostic and loco-regional therapeutic interventions and supportive therapies to patients who develop liver cancers (HCC, cholangiocarcinoma), and supportive care to patients requiring liver transplantation.
- Up to 4% of patients with cirrhosis develop HCC annually, and the team provides HCC screening services every six months 1,183 patients with cirrhosis who attend the Hepatology Department.
- Prof. Norris undertook a community cirrhosis screening project in 2021/2022 and presented at the European Association for the Study of the Liver (EASL) 2022 and Irish Society of Gastroenterology (ISG) 2022 (best oral prize Dr Emma McCormick), which identified that 21% of patients attending community pharmacy services have unidentified advanced fibrosis or cirrhosis, representing a huge population of persons at risk of developing HCC development and a need for a focused screening strategy for high-risk populations.

Key Priorities for 2023

- Development of a dedicated cancer database to capture all liver cancer data in real-time.
- Linkage to Intellect data capture system.
- Staff training on new cancer data management systems.
- Development of non-clinical HCC care materials for patient and family support, linked to ARC cancer support services.
- Development of liver cancer Clinical Nurse Specialist (CNS) role to revise care pathways and improve delivery of service with a focus on survivorship and nursing research.



Surgical Directorate

- Mr Vincent Young, Clinical Director
- Mr Jeff Virgo, Operations Manager
- Ms Mary O'Brien, Assistant Directorate of Nursing

Surgical Oncology

Highlights in 2022

June 2022 saw the introduction of St James's Hospital's first Da Vinci robot. The rollout was introduced in three specialties assisting with cancer surgeries in urology, thoracic and gynaecology.

The dual console robot facilitates teaching.

On Thursday, 21 July 2022, the new Breast Care Clinic opened in St James's Hospital. The new clinic was specifically designed with patient confidentiality in mind.

New CNS roles were introduced in:

- Urology
- Head and Neck
- Breast-care – family risk

New ANP roles were introduced in:

- Urology – for men with prostate cancer
- Upper G.I. which was the first for the specialty in SJH
- Cardio-thoracic surgery
- Breast-care
- Gynaecology

New Consultant roles were introduced in:

- Maxillo Facial Head and Neck surgeon
- Ears, Nose and Throat (ENT), Head and Neck Surgeon

Key Priorities for 2023

- The Directorate will begin its work with external stakeholders in planning a new off-site surgical hub that will treat day-case surgical patients with both benign and malignant disease. The introduction of this unit will also free up some very welcomed capacity within the main theatre operating theatres.
- This is an exciting project that the Directorate are looking forward to developing through-out 2023.
- Improvement and enhancement of both the family history and symptomatic breast service.
- Development of all cancer services particularly in relation to survivorship programmes.

Additional Highlights

The Directorate also leads out on the on the 'Fundamentals in Cancer Surgery' programme which was the first of its kind in Ireland.

The four-day course for registered nurses provides education on caring for surgical patients in acute or community care settings encompassing all of the cancer surgery specialities.

Staff from within the SACC Directorate were well represented at the staff recognition awards as Deborah Cross, CNS III also received the CEO award for providing an outstanding contribution by leading and developing projects and services.

Upper G.I CNS/ANP completed the Certificate in Leadership and Quality in Healthcare, RCPI in 2022, with colleagues from SJH and the TSJCI. This led to the development of a project charter- 'Person Centered Cancer Survivorship Care'.



Cardiothoracic Surgery

Highlights in 2022

In 2022 the thoracic service began performing robotic assisted thoracic surgery (RATS) for thoracic patients promoting earlier discharges and a new post-operative pathway for RATS patients.

In 2022 the cardiothoracic service sought and were successful in securing funding from the National Cancer Control Programme for an additional ANP post. This expansion of the ANP team (from five to six ANPs) is to facilitate the expansion of the nurse led preadmission assessment clinic and day of surgery admissions for patients awaiting lung resection for lung cancer.

An enhanced recovery programme after thoracic surgery (ERATS) for thoracic surgical patients was introduced in July 2020. An audit conducted during 2022, has shown a reduced length of stay and reduced opiate requirement on discharge.

In 2022 we introduced music therapy as a complimentary therapy for cancer patients on the cardiothoracic unit

Key Priorities for 2023

- Continuation of the enhanced recovery programme (ERAS) for thoracic surgical patients and continued audit of the patient pathway and progress made to date.
- The nurse-led lung cancer surveillance and survivorship service continues to expand. We have collaborated with the medical oncology service in SJH to streamline the patients follow up and reduce duplication of reviews. This change is commencing in Spring 2023.
- Collaboration with the NCCP and ANPs nationally to develop a patient passport for lung cancer patients.
- Expansion of the nurse led preadmission assessment clinic for thoracic surgical oncology patients. This will facilitate increased day of surgery admission and thus reduce length of hospital stay.
- Support our new candidate ANPs in their career development, both their clinical practice and advanced practice university programmes.

Additional Highlights

Upon discharge all patients receive a Patient Satisfaction Survey to complete. This survey is an essential resource to identify gaps and aid in the development of effective action plans to improve the quality care provided on the unit.

LabMed Directorate

- Dr Niamh Leonard, Clinical Director
- Ms Fiona Kearney, Operations Manager
- Ms Christina Ryan, Quality Manager

Histopathology/Cytopathology/Cancer Molecular Diagnostics

The Centre for Laboratory Medicine and Molecular Pathology (LabMed) at St James's hospital encompasses a wide range of laboratory disciplines each supporting cancer diagnosis, management and treatment. Each cancer patient has their own unique pattern of biomarkers which require ongoing monitoring in our laboratories: our Biochemistry team measures many different tumour markers and biochemistry results provide important information on overall patient health and organ function; our Haematology team performs full blood cell counting and chemotherapy monitoring whilst supporting the national adult Bone Marrow Transplant program at SJH. The laboratory team checks patient Coagulation therapies, and provide blood product supports such as platelet transfusions with our Transfusion Medicine team. Our Clinical and Diagnostic Immunology team provides diagnostic tests contributing to the diagnostic criteria for Plasma Cell Disorders of multiple myeloma. Our Phlebotomy team support patients attending on-campus as outpatients or inpatients to have blood samples collected in comfortable surroundings and sent to the laboratory for testing. The Virology Laboratory plays a critical role in monitoring patients post-Bone Marrow Transplant as these patients are immunocompromised and highly susceptible to infections. Patients are monitored twice-weekly for viruses such as Cytomegalovirus, Epstein-Barr virus and Adenovirus. Early detection of these viruses allows prompt treatment, ensuring good clinical outcomes. Our Histopathology and Cytopathology laboratory, our Cancer Molecular Diagnostics laboratory and our Cryobiology Stem Cell laboratory are significant contributors to cancer and are described in further detail. Overall the laboratory provides cancer services to our hospital patients, to patients located in external hospitals throughout the country, and to our community patients via their general practitioners. In addition, the laboratory engages in cancer research and is actively involved in audit and improvement as an ISO 15189 accredited medical laboratory.



Histopathology/Cytopathology

Highlights in 2022

The Histopathology Department continued to support cancer services in 2022. The drive to reduce waiting lists and increase capacity within the cancer services yielded an increase in service usage from St James Hospital and from external institutions.

The Immunohistochemistry repertoire expanded, e.g. NTRK testing, as a companion to NTRK next generation sequencing, was introduced for tumor's with PanTRK fusions.

The FISH service increased its repertoire with the addition of MDM2/CEN12 and EWSR1 for diagnosis and differentiation of several sarcomas. The DUSP22 and TP63 probes were introduced as prognostic probes for patients with Anaplastic Large Cell lymphoma.

The department supported the increase in molecular testing of solid tumors through triage of histological material. This ensures suitable tumor yield and quicker Turnaround Times for our patients.

Unfortunately, the ongoing national Medical Scientist staffing shortage brought about the inability of the department to support the Mohs dermatological oncology service. The service was suspended in September 2022 resulting in delay of treatment to hundreds of patients.

Key Developments in 2023

- Validation of SS18, MAML2 & MYB for salivary gland neoplasms.
- Validation of HPVRNA ISH.
- Resumption of the Mohs dermatology service.
- Validation of the INI1 sarcoma marker.
- Validation of the PRAME antibody to assist in the identification of malignant melanoma and other malignancies.
- Investigation to the benefits of continuous processing to streamline workflows within the department.

Stem Cell Cryobiology Laboratory Service

Highlights in 2022

Cryobiology Department

The Cryobiology Laboratory Stem Cell facility as part of the St James Hospital Tissue Establishment collect, process and cryopreserve stem cells for transplantation. In 2022, a total of 290 stem cell units were processed and lab procedures were increased by 15%. For Allogeneic transplant, 21 bone marrow products and 93 peripheral blood products, (including 50 product imports) were analyzed and issued and 138 PBSC units were cryopreserved for the autologous PBSC programme, with 105 stem cell infusions.

In 2022, the Cryobiology Laboratory Stem Cell facility, as part of the National Adult CAR-T programme, received authorisation for the collection of stem cells for manufacture and the acceptance, storage and infusion of the genetically modified CAR-T product (Yescarta) from KITE, Gilhead in addition to authorisation for (Kymriah) Novartis previously obtained. The CAR-T patient programme started in full and 28 patients had mononuclear cells collected, processed by the laboratory and shipped for CAR-T manufacture. CAR-T products were received, stored on behalf of SJH Pharmacy and 24 patients received CAR-T cells thawed at the bedside and infused in 2022. The laboratory commenced the authorisation for participation in CARTITUDE 5 CAR-T clinical trial with Janssen in 2022.

The Cellular Therapy Research group established in 2021 comprising of SJH Medical scientists and clinicians, with IBTS staff and Trinity College (TTMI) scientists to develop a common interest group in establishing research projects has evolved into a routine meeting with input from internal and external contributors with an expansion of the research collaborations of the group. A PhD research project (Year 1 in 2022; Ms Hayley Foy Stones) seed funded by an IBTS research agreement, based on detailed laboratory monitoring of patients in the early post-stem cell transplant and post-CAR-T treatment has commenced and is running concurrent with an MD project (Dr Chris Armstrong) monitoring patient outcome (non interventional). The bio-banking of consented haematology patient samples from this study group is ongoing. A research agreement was signed with Avectas, who funded a preliminary study on CAR-T manufacturing and a final year medical scientist student project was nominated for the ACLSM President's award 2023 and speaker award at the Irish Haematology Association meeting 2022.

Key Developments in 2023

- Initiation of CAR-T clinical trial for Multiple Myeloma.
- Expansion of the offsite storage of stem cells to create more facility space on site.
- Initiation of CD34 count order on EPR.
- Establishment of electronic reports for stem cell products.

Cancer Molecular Diagnostics (CMD) Laboratory

Highlights in 2022

The CMD laboratory increased its laboratory testing output by 22% to approximately 77,000 tests reported in 2022. This increase was due to a combination of both increasing sample numbers from patient referrals but also an adoption of next generation sequencing which has enabled the service to increase the number of tests it can perform for each patient request. The laboratory's position as a major referral and reference service is also reinforced by the proportion of work processed on behalf of other external cancer centres. However, 2022 was particularly difficult for the laboratory with reduced staffing for most of the year due to recruitment challenges.

Key Developments in 2023

Technological developments underpin much of the CMD laboratory service. However, technology without appropriate scientific and clinical insight does not benefit the service, hospital or patient. In 2023 we aim to further improve our staff training and development to allow us to adapt to the rapidly changing demands of the cancer service.



Pharmacy

- Ms Gail Melanophy, Chief Pharmacist

Highlights in 2022

National Cancer Information System (NCIS)

- The pharmacy team continued to work alongside members of the MDT in progressing the further roll out of electronic prescribing, manufacture and administration of the Systemic Anti-Cancer Treatments (SACT) on NCIS.
- By the end of 2022, over 75% of patients receiving treatment on the Haematology Oncology Day ward have their SACT prescribed, dispensed/compounded and administered on NCIS.
- 1044 patients received SACT treatment on NCIS.
- Over 12,500 medications were administered to patients on NCIS

Chemotherapy Compounding Robot

- The Pharmacy Team has been involved in the development of a detailed specification of requirements for the tender process for procurement of a chemotherapy compounding robot.
- Procurement processes have been completed and a specific model has been selected for use in SJH. It is anticipated that it will be operational in quarter 1 of 2024.

CAR-T Therapy

- In March 2022 a second CAR-T product became available for patients in Ireland. The Pharmacy team was involved in the preparation and planning for the implementation of this product for use in SJH.

Key Priorities for 2023

Chemotherapy Compounding Robot

- 2023 will see the compounding robot arrive on site. The pharmacy team will have a huge role in installation, validation and operation of the robot.
- The use of the compounding robot for manufacture will enable some specialist staff to be involved in other duties within cancer care in SJH.

National Cancer Information System

- Complete the NCIS implementation with a focus on liaising with the NCCP and NCIS teams to get compassionate access medicines and clinical trials on NCIS.

Staff training

- Prioritise training new members of staff in specialist areas.

Radiology

- Prof. Peter Beddy, Clinical Director
- Ms Suzanne Dennan, Operations Manager

Highlights in 2022

- Expansion of Breast Imaging services:
 - In 2022, further expansion of the Breast Imaging department was undertaken to provide additional breast imaging capacity. A third breast ultrasound room opened in the Breast Imaging department. An existing mammography room relocated to the redeveloped Breast Care department to improve patient flow and reduce waiting times.
- Equipment Replacement:
 - A number of equipment replacement projects were undertaken. The Interventional Radiology room, a CT scanner, a general X-ray room and a number of ultrasound machines were replaced during 2022.
- Consultant Radiologist Appointments:
 - Dr Alison Corr and Dr Danielle Byrne with specialist interest in cross-sectional imaging joined the department in 2022.

Key Priorities for 2023

- Reconfiguration of Ultrasound and Procedure Waiting Area:
 - The reconfiguration of the ultrasound department to provide additional ultrasound procedure rooms and a dedicated recovery area for all procedures in the department will be completed. These works when supported by staffing resources will provide increased capacity for oncology imaging and direct day ward access for image guided oncology procedures.
- Weekend MR service:
 - It is planned to introduce weekend MR sessions for inpatients and outpatients. The commencement of the weekend MR service will provide additional MR capacity and is expected to reduce the waiting time for inpatients supporting earlier discharge.
- Equipment Replacement:
 - A fluoroscopy room and a general X-ray room will be replaced during 2023.
- Expansion of PET/CT services:
 - During 2023, opportunities exist to develop the service further by increasing PET/CT PSMA capacity and introducing new radiopharmaceuticals.

Additional Highlights

Consultant Radiologist Appointments:

In 2023, Dr Roisin Heaney with specialist interest in Breast Imaging will join the department.

SCOPE Directorate

Health and Social Care Professionals (HSCP)

- Alison Enright, Director, SCOPE

Highlights in 2022

Significant progress was made at SCOPE Directorate level as follows:

- Expansion of SCOPE services through NCCP funding, enabling some development of key components of survivorship care, including:
 1. Prehabilitation (Physiotherapy (PT), Speech and Language Therapy (SLT), Clinical Nutrition (CN));
 2. Exercise rehabilitation (PT);
 3. Cancer fatigue clinic (Occupational Therapy (OT));
 4. UGI home enteral feeding (CN);
 5. UGI SLT;
 6. Psycho-oncology Social Work (SW) pathway.
- Establishment of the Trinity St James's Cancer Survivorship Group, a multi-disciplinary network set up to support HCPs and influence decision-makers.
- The introduction of the first Survivorship Session at the Cancer Conference 2022
- Both national Irish Cancer Society Allied Health Professional grants were awarded to SJH SCOPE Directorate (OT and PT services). These grants provided an opportunity to test a joint clinical/academic appointment structure, focused on embedding translational research in practice.

Key Priorities for 2023

SCOPE service demand continues to rise. Compared to 2021, demand increased as follows: cancer rehabilitation (PT) up by 22%; in-patient OT up by 33%, out-patient SW up 29%. HNC SLT and CN demand increased by 120% as compared to 2018.

1. Physiotherapy: To pilot a prehab-rehabilitation service to post-bone marrow transplant patients.
2. Occupational Therapy: To pilot an OT fatigue clinic for those with cancer-related fatigue. To re-launch OPTIMAL, a six-week self-management programme for those living with and beyond cancer.
3. Clinical Nutrition: With NTPF funding ceasing for the home enteral feeding dietitian initiative in upper GI surgery, it is a priority to secure recurrent funding to continue this service and avoid impact on patients and the national oesophageal programme at SJH.
4. Social Work: To re-introduce the Medical Oncology MDT meetings and expand the roll out of the CLIMB programme for haematology/oncology patients. The AYA and Breast Care SW services will also commence in 2023.
5. SLT: To re-establish the Laryngectomy Peer-Support Survivorship Group in Head and Neck Cancer (post-pandemic) and in partnership with NCAD, to develop animated educational videos for patients undergoing laryngectomy surgery.

Additional Highlights

1. Physiotherapy: Participation in two successful Trinity St James's Cancer Institute Cancer Research Stimulus Awards
 - a. A targeted intervention to improve functional outcomes and treatment related side-effects in patients with head and neck cancer in the early survivorship phase.
 - b. Evaluation of a pilot early-detection lymphoedema service for high-risk gynaecological cancers.
2. Occupational Therapy: OTs working in collaboration with the Bone Marrow and Leukaemia Trust (BMLT) on a project to enhance patient accessibility of the BMLT apartments
3. Clinical Nutrition: Meeting the nutritional needs of head and neck cancer (HNC) patients attending SJH has become increasingly challenging with higher complexity, acuity and a 14% increase in new cancer inpatients and 38% in outpatients seen by the HNC dietetic service. With 64% of HNC patients nutritionally compromised, the team strive to deliver nutritional prehabilitation to all new HNC patients before major, life-challenging surgery.
4. Speech and Language Therapy: SLT is currently involved in two international multicenter Clinical Trials: PRESERVE and Compare, which are investigating swallow outcomes in patients undergoing treatment for Head and Neck cancer.
5. Social work: SWs are leading the development of a memory box design with the Irish Cancer Society (ICS) which will be rolled out by ICS nationally. Funding was secured in 2021.

Nursing

- Ms Sharon Slattery, Director of Nursing

Introduction

As Director of Nursing, I would like to take this opportunity to thank everyone within the Nurse Executive team and all within the nursing for their continued dedication and professionalism that is demonstrated daily and for ensuring the delivery of patient centred care. 2022 saw many challenges and opportunities to which the nursing team excelled. I am delighted to share with you SJH Nursing activities and achievements across the multiple services and across all Clinical Directorates.

Highlights in 2022

Urology CNS/ANP

- A new CNS was appointed to the department in 2022, in addition to the department's first cANP. This ANP role is being developed to support and deliver care to men with prostate cancer.
- The first robotic-assisted laparoscopic prostatectomy (RALP) in St James's Hospital was performed in June 2022. This procedure is the gold standard for prostate cancer surgery, and represents a new milestone for prostate cancer care in the hospital.
- The introduction of this new surgery was accompanied by the successful rollout of a Robotic Assisted Laparoscopic Proctectomy Nursing Care Education Programme, and awareness campaign for ward staff regarding its introduction.

Hematopoietic Stem Cell Transplantation

- There were additional cancer nursing posts created including CNS's and ANPs, with the appointment of the first HSCT ANP and a new AYA CNS in St James's Hospital.
- Magnet4Europe Cancer Nurse Council meetings reconvened in September 2022. The main purpose of the Cancer Nurse Council, is to empower cancer nurse's in TSJCI to become exemplars in their field.
- The successful roll out of the CAR-T Cell Education pathway for the nursing team within the National Bone Marrow Transplant Unit.
- We continue to develop our cancer nursing team and support all grades of cancer nurses to attend both internal and external cancer care education including postgraduate and masters courses.

Upper GI CNS/ANP

- Ms Jenny Moore, Oesophageal Cancer Nurse Coordinator, completed Certificate in Leadership and Quality in Healthcare, RCPI in 2022 with Ms C. Donohoe and Ms C. Enright. This led to the development of our project charter - 'Person-Centered Cancer Survivorship Care'
- Ms Moore attends Cancer Survivorship Nursing Group meetings led by Catherine O'Brien ANP and regularly attends Oesophageal Cancer Fund (OCF) twice yearly patient meetings (next in April).

- Regularly presents 'Oesophageal Cancer - The New Normal' lecture to SJH Foundation courses and education sessions
- The first Upper GI cANP was appointed. This new role allows for a focus on the patient journey with an intense focus on perioperative care pathways, introducing an Enhanced Recovery After Surgery pathway with buy-in from key stakeholders: surgeons, anaesthetists, Intensive Care Unit (ICU) Intensivists, ward and ICU nurses, physiotherapists, dieticians and speech and language. This will allow the team to further standardise care in the already established surgical approach used for oesophageal and gastric cancer resections prior to the introduction of robotic resections. In addition, it will allow the team to quantify surgical outcomes.

Colorectal CNS

- Provide Nurse Led Follow Up Surveillance for patients who have had a curable resection supporting a patient focused, protocol driven process of care. It measures outcomes and provides support of evidence based care. It also provides psychological support for patients.
- In 2020 as a consequence of COVID the Nurse Led Surveillance were conducted via telephone Clinics. The team built on the existing phone clinic and transferred all patients to telephone Clinics as per the Public Health Advice at the time. This has proven to be very successful and is well received by patients. Patients now have a choice of attending face to face or remaining on the phone clinic but as per figures listed below there is now a much higher uptake for the telephone clinic.
- In 2019, 96% of our Nurse Led Clinics were conducted in face to face clinics leaving 3.1% via telephone clinics. By 2022 98% of Nurse Led Clinics were conducted via telephone clinics leaving 2% in face to face clinics. It is the intention to undertake a Patient Satisfaction Survey in 2023/2024 to attempt to quantify patient's satisfaction following the change of practice.
- The Colorectal Cancer Patient numbers have increased in the hospital and as a consequence our Nurse Led Clinics patient volume has also increased. In total in 2019 the team saw 443 patients in our nurse led service. This has now increased to 803 patients seen in 2022. This is an increase of 44.8%.

Stoma Care

The Stoma Care Service in 2022 has:

- A Nurse Prescriber
- Attended a patient support day
- Organised the Keynote speaker in a High Output Stoma education evening for Stoma Care Nurses nationally
- Facilitated a stoma support group in ARC House
- Developed a drain "cutting and bagging policy" and was involved in updating the existing drain policy
- Attended a national forum on convexity practice
- Attended a siting course
- Been a member of Primary Care Reimbursement Service (PCRS) Ireland
- Been a member of Coloplast Ostomy Forum (COF)
- Developed a Stoma Care Orientation Document which outlining the running of the Department

- Presented at The Fundamentals of Cancer Care, Further Education and Training Awards Council (FETAC), Endoscopy course, Medical/Surgical Nursing course, CNS Council
- Had a “Lunch and Learn” with the Gynaecology team
- Facilitated a site visit from German Stoma Care Nurses
- Run 2 Foundation in Stoma Care courses

Head and Neck CNS

- There was an appointment of an additional CNS and continued development of our cancer nursing team.
- Involvement in promoting the World Head and Neck Cancer day with other members of the MDT including patient involvement, a coordinated social media campaign and an article in a Sunday national paper.
- Appointment of two new Head and Neck consultants one in Maxillo Facial and one in ENT, presents challenges due to lack of resources to support their patient load.
- Participation in monthly morbidity and mortality meeting.
- Attendance at monthly journal club.

Breast Care

Hire of Breast CNS Family Risk O. McGill

- Formation of Breast pre-operative education clinics in conjunction with physiotherapy department April 2022. Feedback from patients has been positive.
- Completion of Postgrad Certificate in Cancer Care by Siobhán Ní Chinnéide
- Completion of Cancer Genetics Course in Guys and St Thomas' Hospital by Orla McGill
- ABS Conference Poster Liverpool presented by Niamh Byrne and Siobhán Ní Chinnéide
- Lecture on breast cancer pre-op care to UCD PGcert students given by Niamh Byrne
- Talk on breast reconstruction presented at Marie Keating BRA day by Niamh Byrne
- Postgraduate lecture of Genetics/Family Risk presented at UCD by Yvonne Hanhauser ANP
- Postgraduate lecture provided on Breast Cancer Overview for Midwives at Trinity College Dublin by Yvonne Hanhauser ANP
- Presentation of Breast Cancer a Surgical Overview at the Fundamentals of Cancer Nursing Course at St James Hospital by Yvonne Hanhauser ANP
- Marie Keating Podcast on breast cancer guest starred Carol Spillane and Niamh Byrne
- Poster presentation at the San Antonio Breast Cancer Conference, USA, of nursing research project “Development of a Risk Reduction Patient Decision Aid Toolkit for Women with a Breast Cancer Gene (BRCA)+ Gene Mutation” by Yvonne Hanhauser ANP, Carol Spillane ANP and Niamh Byrne CNS
- Poster and verbal presentation at the IANO annual meeting of nursing research “Development of a Risk Reduction Patient Decision Aid Toolkit for Women with a BRCA+ Gene Mutation” by Yvonne Hanhauser ANP, Carol Spillane ANP.

Gynaecological Oncology

- There has been the welcome addition of the first ANP. This will bring a vitally important addition to the service which will improve follow-up survivorship for patients post-treatment and will assist them in dealing with the issues they encounter as a result of their treatment for their gynaecological cancer.
- In addition to the appointment of an ANP, the team will soon be expanding the CNS team by another full-time CNS, bringing the total number of CNSs to two full-time and two part-time within the service. This will help to provide an already well established support system for our patients who are newly diagnosed with a gynaecological malignancy and those undergoing surgery for those malignancies.
- Throughout 2022 we have had a number of improvements within the service through charitable donations, in particular the Crosby family, who regularly fundraise for the Gynaecology service to directly benefit our patients. They have provided us with a quiet space in the form of a comfort room that has proved invaluable to our patients when they need quiet time and is also used by our team to host family meetings.

Key Priorities for 2023

Urology

- An extra full-time CNS and HCA will join the team in 2023 to support the successful delivery of care, including improved facilitation of hematuria clinics and cancer support.
- The Rapid Access Prostate Clinic will be restructured in 2023 to improve pathway efficiency and access for patients with suspected prostate cancer. This will be supported by additional nurse-delivered clinics.
- An ANP-led survivorship clinic for men following surgery for prostate cancer will be launched in 2023. This service will facilitate the assessment and treatment of side effects related to prostate cancer treatment, in addition to monitoring for disease recurrence and signposting to community supports.

Hematopoietic Stem Cell Transplantation

- In collaboration with the School of Nursing and Midwifery Trinity College Dublin (TCD), we are developing a Hematopoietic Stem Cell Transplantation (HSCT) Nursing Education Pathway. This course will be an excellent learning resource, for new nurses to the area of HSCT. Aiming to launch in Q2 2023, the programme will combine theoretical, simulation and practical components, in order for nurses new to the area of HSCT to become competent in the safe delivery of HSCT.
- Encourage more cancer care nurses to attend and present at national and international cancer conferences.

Upper GI CNS/ANP

- Oesophageal cancer nurse aims to capture and formalise patients follow up within a nurse/ NCHD led clinic. This will not only improve the quality of life for oesophageal cancer survivor patients but will reduce attendance at upper GI cancer clinics – reducing attendance burden for patients/families and reduce work load for upper GI staff.
- Regular meetings for Endoscopy planning to develop and implement dysphagia pathway to share with all disciplines involved with oesophageal cancer patients to reduce demand on endoscopy requirement.
- cANP key priority for 2023 is safe surgical care for our patient cohort. Further implementation of ERAS care will improve this. All patients should receive a high standard of care irrespective of their day of surgery and personnel involved. Our cANP has played a large part in the recent introduction of prophylactic venous thromboembolism care pre-surgery. This involved a change in culture for patients to prepare prior to surgery. The cANP is in the process of standardising medications on discharge to reduce the risk of non or over prescribing as a quality improvement project. This with the addition of reviewing all pre-op major cancer resections to assess fitness for surgery and provide in-depth education will complement an already established excellent service.
- Plan to complete the 'Nurse Authority to Refer for Radiological Procedures-Micro credential' Trinity College Dublin Nov 23

Colorectal CNS

- We intend to complete the Micro-Credentials Course in Authority to Refer for Radiology Procedures.
- There are two new Colorectal Consultant Surgeons joining the service which will bring the total number to seven Colorectal Consultants, four fully based in St James's Hospital and three mainly based in Tallaght University Hospital. All rectal cancer surgeries and management take place in St James's Hospital, as per the National Cancer Control Programme (NCCP) guidelines. The new appointments will bring additional challenges which the team are eager to embrace. It is expected that more extensive surgical procedures will take place which in turn will lead to less external referrals to the Pelvic Cancer Units in the United Kingdom.
- In 2023 the team will be exploring the potential of a role for an ANP within the service. If the team are successful in securing funding for an ANP this would greatly enhance the service and would lead to new initiatives that are not being fulfilled within the current service.

Stoma Care

- Planning underway to run Stoma Care education days for Public Health Nurses and carers in the community
- A Stoma Care CNS is going to complete a postgraduate qualification in Stoma Care
- A Stoma Care CNS is commencing the Nurse prescriber course
- There is a site visit planned to a European hospital
- The "suppository and enema administration via a stoma" guideline will be finalised

Head and Neck CNS

- Retention of 4th Head and Neck CNS and role being made permanent.
- Encourage more cancer care nurses to attend national and international cancer conferences.
- Build on our Cancer Nursing research capacity and capabilities.
- Development of a patient passport.

Gynae ANP

- Introduction of Gynaecology Survivorship cANP commencing a new survivorship clinic and use of a health needs assessments for patients post-Gynaecology treatment. This will aid in meeting the holistic needs of our patients post-treatment, signposting them to available health professionals and resources to empower them while living with and beyond cancer.
- Implementation of a Survivorship passport for Gynaecology patients which will be a personalised document to carry with them during their cancer journey, with information regarding their diagnosis, treatment and follow up care as well as resources and useful contacts.

Breast Care

- Both Yvonne Hanhauser, ANP and Carol Spillane, ANP are attending National Working Groups with the NCCP to address the area of High Risk Family History Clinics nationally. These groups are developing national guidelines to improve access and standardised care for high risk family history/gene carrier women. St James Breast Care Department is the only ANP led service for high risk women in the country. ANP led symptomatic clinics have been established to review non urgent new referrals to the symptomatic service. This new innovative access is aimed to improve efficiency of the overall symptomatic service and improve key performance indicators regarding waiting times.
- Continued audit and improvement of the Breast pre-operative education clinics.
- Support for more nurses to attend courses on cancer genetics and breast cancer.
- Support for more staff to attend conferences.
- Build on our educational support for ward staff.

Gynaecological Oncology

- The team have given presentations on gynaecological malignancies on the fundamentals of cancer care study days, held twice yearly in SJH for nursing staff, where they discuss the post-op care of patients undergoing major pelvic surgeries.
- The team attend the annual meeting of the society of gynae oncology to keep up to date and informed of any new patient related initiatives of benefit for our patients.
- The team continue to promote awareness of gynaecological malignancies on the various awareness days in association with the Irish Cancer Society.
- The team aim to develop information leaflets for our patients specific to their particular surgery that they are undergoing for the cancer they have been diagnosed with so that they feel more informed and prepared for their experience in hospital.

Additional Highlights

Urology

- The first SJH CNS in Urology, Marion O'Brien, moved on from the department in 2022. Marion was responsible for setting up the CNS service in SJH and the legacy of her innovation and dedication will continue to influence the Urology nursing team in the future.
- The Urology nursing team in SJH strives to deliver evidence-based care with efficiency and compassion. The nursing team is committed to continuous professional development, with team members engaged in nurse prescribing and masters programmes in 2023.

Upper GI CNS/ANP

- A welcomed new appointment of ANP, upper GI improving patient services and outcomes
- The Upper GI service is constantly evolving. As part of one of the team's PhD in this area they received a CREST award for funding the study of pneumonia after surgery from an immunological and microbiological stance. The TSJCI encouraged application for a future funding call later in the year, with their full support. This would allow St James's Hospital to pilot this research in other centres for collaborative purposes and further publication. All of this would feed back into our patients as a best practice guideline/protocol for care after surgery.

Colorectal CNS

- In 2020, in collaboration with the NCCP we developed a Patient Passport. This is a road map for patients to use from diagnosis to surveillance and on to survivorship. It empowers patients to have control over their illness and encourages participation in their care pathway. This was officially rolled out in October 2020 and has been fully operational since then.
- A patient survey was undertaken at 6 months and at 12 months following the roll out. When asked how useful the participants found the Colorectal Passport the majority surveyed (80%) found it to be excellent or good. The team will be doing a further review on this in the near future.

Stoma Care

In 2022 we saw:

- 520 inpatients
- 503 outpatients
- 187 new stomas were formed

Gynae cANP

Gynaecology cANP will continue to network nationally and internationally to provide the best service available for our patients with regards to survivorship needs.

Breast Care

- Marie Keating Foundation have donated furniture to create a quiet room within the Breast Care department for patients.
- ANP led family history/high risk clinics have commenced a new group information session monthly for new BRCA gene carriers referred to the service. This is an attempt to improve efficiency of the service for women newly diagnosed as gene mutation carriers and provide quicker access to information and clinical management.
- A nursing research project titled “Development of a Risk Reduction Patient Decision Aid Toolkit for Women with a BRCA+ Gene Mutation” is due for completion in June 2023. This nursing research will provide a further valuable information source for high risk women in the family history service in St James’s Hospital.

Gynaecological Oncology

- SJH Nursing continues to develop and work at the top of their Nursing and Midwifery Board of Ireland (NMBI) license to provide high-quality evidence-based nursing care.



Cancer Clinical Trials

- Prof. Elisabeth Vandenberghe, Director, Cancer Clinical Trials
- Ms Ingrid Kiernan, Manager, Cancer Clinical Trials

Highlights in 2022

1. The Cancer Clinical Trials Unit (CCTU) opened 22 drug trials in 2022 in haematology, breast, lung, gynaecology and head and neck cancers.
2. A very exciting development was the opening of the first CAR-T trial in Ireland, led by Prof. Larry Bacon. This trial is being conducted jointly with our colleagues in the SJH Clinical Research Facility (CRF) and further cemented the close synergy between the two units.
3. We opened our first transplant trial with the UK IMPACT group which will hopefully lead to more transplant trials in the future with this group.
4. We continued to develop our collaboration with our colleagues in St Luke's Hospital by exceeding our recruitment target on a head and neck cancer combined modality trial involving immunotherapy, surgery and radiotherapy. This trial is being led by Dr Cliona Grant, St James's Hospital and Dr Sinead Brennan, St Luke's Radiation Oncology Network.
5. Finally, the CCTU treatment clinics relocated in full to the CRF in 2022 improving the experience for our patients.

Key Developments in 2023

- The main initiative for 2023 is to expand the portfolio ensuring that we have trials open in the disease areas that we know we can perform well in. We need to listen to our patients to see what trials they want and we will be forming a clinical trials patient representative group in 2023 so that they can advise us.
- Another key priority is to increase patient participation and this can be enhanced by promoting our unit and our trials; we plan to create patient leaflets that will be available in the oncology and haematology dayward and to make greater use of social media.

Additional Highlights

The department, like most others, was badly affected by Covid absences in Q1 of 2022. Despite this our patients continued to receive the highest level of care, which is testament to the dedicated nursing and data management team within the unit.

We created a new structure within the research nursing team with the creation of two new CNM1 roles and within the data management team by creating a new research assistant role. We have been very lucky to hire some wonderful staff into these roles and aim to establish an education programme for new staff.

St Luke's Radiation Oncology Network

- Dr Charles Gilham, Medical Director, SLRON

Radiotherapy treatment for the Trinity St James's Cancer Institute is provided by St Luke's Radiation Oncology Network (SLRON). Dedicated to being a world class leader in cancer treatment, patient care, research education and prevention, SLRON rolled out their 5-year strategy 2022 to 2027 with 3 strategic priorities

- Our people
- Research and advanced technical innovation
- Strategic partnerships; and

Two strategic enablers, Governance and Business Intelligence and data.

Highlights in 2022

- Implementation of Surface Guided Radiation Therapy (SGRT) with Stereotactic Ablative Radiotherapy (SABR) treatments in Rathgar.
- Held Stereotactic Ablative Radiotherapy training programme.
- Increased Stereotactic Ablative Radiotherapy development to include prostate.

Key Priorities for 2023

- Planning for major radiotherapy equipment replacement programme.
- Expanding use of Surface Guided Radiation Therapy across other treatment sites.
- Remove the need for set up tattoos for breast treatments.
- Pilot artificial intelligence (AI) software for contouring in planning system.
- Build on established links with the Trinity St James's Cancer Institute to improve data sharing processes and enhance patient pathways.

Additional Highlights

SLRON Activity in 2022

- Delivered 1,449 radiotherapy treatment starts, new and return patients (7% increase in starts on 2021);
- 20,867 radiotherapy fractions (5% increase on 2021);
- Complexity of radiotherapy increased with 85% of treatment delivered using volumetric modulated arc therapy (VMAT);
- Delivered 88 total body irradiation (TBI) and 731 stereotactic ablative therapy (SABR) treatment fractions.

Education

- Prof. Jacintha O'Sullivan, Education Lead, Trinity St James's Cancer Institute

Highlights in 2022

Many successful education courses ran in 2022. These included:

Foundation course in Cancer Care and Haematology	Fundamentals in Haematology	Fundamentals in Oncology
National SACT Education Programme	Introduction to Specialist Palliative Medicine Programme	TCD Cancer Care and Haematology Postgraduate Diploma (22/23)
CAR-T Nursing Education Pathway	MSc in Translational Oncology	MSc in Cancer Survivorship

- CAR-T Nursing Education Pathway was developed by HOPE nurses in late 2021, in collaboration with The School of Nursing and Midwifery, Trinity College Dublin. The programme combines theoretical, simulation and practical components for the nurse to become competent practitioners in delivering CAR-T cell therapy. Step one is self-directed learning on CAR-T. Step two is simulated learning and this was first run in March 2022 and again in August 2022. The simulation is run with our School of Nursing and Midwifery colleagues, Trinity College Dublin. Step three is clinical practice sign off.
- Two successful Master of Science (MSc) programmes in cancer, MSc in Translational Oncology and the MSc in Cancer Survivorship have recruited many highly ranked applicants from diverse clinical and scientific backgrounds.
- Dr Emer Guinan and Dr Linda O'Neill delivered a 4-day course entitled 'From Pitch to Project' in collaboration with the Irish Cancer Society. This course was open to social, nursing and allied health professionals from across Ireland as a strategic initiative to build research capacity amongst these health professionals and was very successful. The course will run again in 2023.
- Dr Melissa Conroy as course coordinator launched the MSc in Entrepreneurship of Smart Medicines. This programme delivers content on the development of novel anti-cancer drugs and takes the students on the journey from cancer drug discovery, through clinical development and commercialisation.
- Many transition year programmes ran to encourage STEM in teenagers.
- Fourteen PhD students successfully completed their PhD in a cancer related discipline.
- Two Drechsler Bursaries were awarded to two 3rd year medical students in TCD to do a MSc in Translational Oncology as part of the intercalated education programme for medical trainees, these were Eoin McDermott and Saoirse Morrin.

Key Priorities for 2023

- Recruit an education co-ordinator to work with Prof. Jacintha O'Sullivan and the education advisory board.
- Build on our strengths in education through delivering the cancer modules in our successful MSc courses to a broader audience, including key strategic areas including Children, Adolescent and Young Adult Cancers, and are keen to build our student numbers.
- Attract further Philanthropy donations to support education at the PhD level.
- Work in collaboration with other accredited cancer centres in Ireland in developing joint cancer education offering for trainees. The goal is to offer flexible, personalised education opportunities for those involved in delivering cancer care and conducting cancer research.



Research

- Prof. Lorraine O'Driscoll, Research Lead, Trinity St James's Cancer Institute
- Dr Patricia Doherty, Senior Research Programme Officer/OECI coordinator

12th International Cancer Conference

The TSJCI 12th International Cancer Conference, led by Prof. Lorraine O'Driscoll (TSJCI Research Lead) and Dr Patricia Doherty (Senior Research Programme Officer/OECI coordinator), took place at the Trinity Biomedical Sciences Institute on October 13th and 14th 2022 with the theme of "*harnessing fundamental, translational and clinical research for the benefit of cancer patients,*" in recognition of the major advances made in cancer prevention, precision oncology, cancer immunology and cancer survivorship.

A cross-disciplinary range of participants including health professionals, oncology clinicians, fundamental, translational, and medical scientists, pharmaceutical industry representatives, policy makers and patient advocates gathered for two days to present novel "bench-to-beside" research findings and to discuss international best practice and the leading work of St James's Hospital and Trinity College Dublin in advancing cancer care.

A range of experts highlighted the opportunities, as well as challenges, for innovation presented by the COVID-19 pandemic in the context of cancer care both in Ireland and abroad. A dedicated public symposium on the topic of living with and beyond cancer was held on Friday 14th October which was open to all members of the public.

Burkitt Medal 2022

Dr Eileen O'Reilly was the 2022 recipient of the Burkitt Medal. The Burkitt Medal is designed to recognise people with the integrity, compassion and dedication matching that of Denis Burkitt, a Trinity graduate, who is known for his discovery of Burkitt lymphoma. Winners demonstrate extraordinary achievement and advancement in the field of cancer internationally. Dr O'Reilly is the Winthrop Rockefeller Endowed Chair in Medical Oncology; Co-Director, Medical Initiatives, David M. Rubenstein Centre for Pancreatic Cancer Research and Section Head for Hepatopancreaticobiliary and Neuroendocrine Cancers at Memorial Sloan Kettering Cancer Centre (MSKCC). She is a 1990 graduate of Trinity College Dublin and trained in Dublin before pursuing a Fellowship in medical oncology at MSKCC. Her therapeutic and research interest has been in the area of pancreatic cancer, where she has integrated molecularly-based and genomically-based novel therapeutics for the treatment of this disease along with development of adjuvant and neoadjuvant therapy.

As part of her visit to Trinity, Dr O'Reilly delivered the Burkitt Lecture, entitled: '*Pancreas Cancer: Biomarker Directed Therapy an Emerging Reality*'.

CREST Awards

A key priority for 2022 was to launch an internal research funding scheme. In September 2022 we were delighted to support 10 collaborative projects across the Cancer Institute. The CREST awards is a research funding scheme providing seed funding to foster and develop new research collaborations across the Cancer Institute, supported by a philanthropic gift from The Dr Margaret Sau Sheung Ip and Dr Jonathan Chiu Fund. The CREST scheme was designed by TSJCI's Research Pillar, led by Prof. Lorraine O'Driscoll and managed by Dr Patricia Doherty, to enable short-term (up to 12 months) new, innovative research projects that will enhance the ability of TSJCI researchers to foster new avenues of cancer research and generate impactful data to leverage significant external funding. Following a peer-review process including external reviewers and TSJCI's Research Theme Leaders, 10 projects across all four research themes were selected and awarded €12,000 each.

External Research Funding Secured (selected)

Several large-scale competitive research grants/awards were secured in the 2021/2022 academic year.

These include:

1. All-Ireland Cancer Liquid Biopsies Research Consortium (CLuB) 2022-2027 is a €4 million Higher Education Authority award, led by TSJCI Research Lead Prof. Lorraine O'Driscoll. The CLuB's vision, as an emerging hub of excellence, is to ensure that smart science drives smart medicine by our research translating to future clinical utility. CLuB brings together researchers from TSJCI, QUB and University of Galway. The HEA North-South Shared Island Research Programme's support will enable us to synergistically weave together the fragmented, but essential, multi-disciplinary expertise on the island of Ireland to deliver novel research on liquid biopsies that will be of societal and economic benefit to the island, while teaching and training our future scientific and clinical leaders.
2. Endoscopic outpatient cancer treatment platform (ENACT) is a €4.78 million industry-led Disruptive Technologies Innovation Fund (DTIF) award from Enterprise Ireland. The ENACT consortium, led by the SME Mirai Medical, and comprising of the following partners Trinity College Dublin (Prof. Jacintha O'Sullivan, €1.07 million), University of Galway and Advanced Energy will examine the use of electroporation to disrupt the standard of care for gastrointestinal cancers by offering an outpatient solution without side effects which can deliver next generation therapeutic and gene therapies for the benefit of the patient, clinician and health provider. This ENACT consortium has a vision in which electroporation technology could be used to increase treatment responses in GI cancers.
3. Science Foundation Ireland Frontiers Award 2021-2025. Breaking the Obesity Cancer Link investigates a theranostic role for FKBPL in modulating immunometabolism across the disease progression in oesophageal adenocarcinoma. €939,290 (€471,208 to Prof. Jacintha O'Sullivan). This programme, led by Prof. Tracy Robson, Royal College of Surgeons in Ireland (RCSI), with co-applicant Prof. Jacintha O'Sullivan (TSJCI), will explore the importance of FKBPL in driving disease progression in the obesity associated cancer, oesophageal cancer using human and mouse models. This programme will evaluate the impact of reversing disease progression and obesity with FKBPL-based peptides, understand how FKBPL controls immunometabolic regulation and assess the mechanistic role of FKBPL in this disease setting.
4. HEALED consortium (The Personalised Active Cell Therapy Paradigm) is a €6 million industry-led DTIF award from Enterprise Ireland 2021-2025. The HEALED consortium, led by RemedyBio, is working together to enable patient personalised tumour-infiltrating lymphocyte therapy delivery. This DTIF integrates RemedyBio's Nanoreactor and a GMP modular hub from aCGT located within the St James's Clinical Research Facility. The TSJCI will be the central resource for tissue and blood material across different solid malignancies including GI, lung and ovarian and the hub for all the immunometabolic and T cell biology assessments. Trinity St James's Cancer Institute PIs Prof. Aideen Long (lead), and co-leads Profs. Maeve Lowery and Jacintha O'Sullivan and were awarded €2.35 million as part of this programme. The National Centre for Pharmacoeconomics (NCPE) will conduct health technology assessments and the bedrock for biostatistics for this programme will be directed by the SFI Centre for Research Training in Genomics Data Science.
5. Dr Dania Movia, Dr Martin Barr and Dr Anne-Marie Baird (TSJCI) received €1 million as partners on a 3-year, €12.8 million program funded by Horizon Europe to develop novel inhaled, bioengineered extracellular vesicle RNA-based advanced therapeutics for the treatment of lung cancer (INSPIRE). Led by OmniSpirant Limited, the consortium is comprised of TCD (Ireland), RemedyBio (Ireland), Aerogen Limited (Ireland), EVerZom (France), Biopharma Excellence (Pharmalex) (Germany), DKFZ (Germany) and Lung Cancer Europe (LUCE) (Switzerland).

6. All-Island Cancer Research Institute Start (AICRIStart) 2022-2027 is a €4 million Higher Education Authority award, led by UCD and on which TSJCI Research Lead Prof. Lorraine O'Driscoll is Co-PI (€340,545). Ten academic institutions (UCD, TCD, RCSI, TU Dublin, DCU, QUB, UU, NUIG, UL and UCC) are involved in AICRIStart, a doctoral and post-doctoral research training programme, which will create a network of excellence in precision cancer medicine.
7. The all-island eHealth-Hub for Cancer (ehealth4cancer) 2022-2027 is a €4 million all-island partnership on the island of Ireland that is building software and data platforms using best practice open science international health data standards to unlock and share health data, to grow clinical cancer research and improve cancer care. This consortium, funded by the HEA is led by Prof. Aedin Culhane at the University of Limerick. Dr Claire Donohoe (Department of Surgery), as a partner on this award (€130,000), will be involved in the characterisation of upper gastrointestinal (UGI) cancer outcomes strand, developing the data dictionaries to map and examine UGI cancer treated with curative in 3000 patients, and investigate molecular markers in aligned biobanked samples.
8. Prof. Karen Cadoo, TSJCI cancer geneticist, ovarian cancer specialist and Cancer Prevention theme co-lead, was awarded an Irish Cancer Society Clinician Research Leadership Award in 2022. This award will buy out time for two years to enable Prof. Kadoo to pursue critical research in the inherited genetic cancer space. Prof. Cadoo's research will investigate genetic drivers of adult cancers to maximise cancer prevention opportunities. She will identify and address barriers to cancer genetic testing and address post-testing needs in people with a cancer predisposition mutation.
9. Dr Naomi Algeo and Dr Grainne Sheill were both awarded Irish Cancer Society Allied Health Professional (AHP) Programme Awards, a scheme which promotes partnerships between health professionals and academics. This clinical-academic scheme encourages research that is of the highest quality and clinical relevance, whilst expediting the translation of research into practice, resulting in positive patient care outcomes, as strategically outlined in the current National Cancer Strategy.
 - 9a. Dr Naomi Algeo's funding will support her identifying support needs of adolescents and young adult cancer survivors for successful return to education and/or work. There is increasing national and international recognition that Adolescent and Young Adult (AYA) cancer survivors have difficulty returning to education and work due to ongoing difficulties with their physical, mental, and social health following completion of cancer treatment. The purpose of this study, therefore, is to examine health difficulties impacting on return to education and/or work for AYA cancer survivors and to identify services required to meet the unique support needs of AYA cancer survivors in Ireland. This research will identify the specific physical, psychological, and social health concerns that impact on reintegration into education and work post-diagnosis and explore age- and situation-appropriate supports required to facilitate successful return to education/work.
 - 9b. Dr Grainne Sheill's funding will support her research in Head and Neck Cancer Rehabilitation: Identifying and Addressing Patient Needs (The CaRe Study). People living with Head and Neck Cancer may experience many unique side effects of their treatment. Treatment, including chemotherapy, radiation therapy and surgery, can lead to side-effects such as fatigue, shortness of breath, muscle weakness and shoulder weakness and pain. These side-effects can also limit people's ability to engage in physical activity and exercise. Further, there is no clear post-discharge pathway for patients with Head and Neck Cancer experiencing physical impairments. The development of supportive rehabilitation for patients in the acute phase post-treatment is thus needed. This study will identify the physical rehabilitation needs of patients diagnosed with head and neck cancer in Ireland and this information will be used to highlight the late and long-term effects of cancer treatment in this group.

10. Dr Fergal Kelleher was granted the John Barraghy award from the Meath Foundation (€75,000), which will foster a new collaboration with Prof. Clair Gardiner, Cancer Immunology Theme Co-Lead (TCD, TSJCI) €75,000. The study will use immunology lab tests to predict successful immunotherapy outcomes for patients with melanoma. In this work, patient immune function will be measured in the laboratory before and after patients start Pembrolizumab treatment. Data will then be retrospectively investigated to see if patients who respond in lab tests are those that respond clinically. This would potentially allow clinicians and scientists to predict what patients are likely to respond to immunotherapy prior to treatment, a significant advance over the current process.
11. Prof. Clair Gardiner was awarded a HRB Investigator-led project (€370,000). Prof. Gardiner will study Altered histone protein acetylation and how this is associated with dysregulated NK cell metabolism in different cancer types. Initially this work will focus on metastatic breast cancer, in collaboration with Dr Ciara O'Hanlon Brown (SJH/TSJCI) and metastatic melanoma in collaboration with Prof. Fergal Kelleher (SJH/TSJCI).

Key Priorities for 2023

In addition to progressing the recently funded projects outlined above (1-11), and also aligned with the TSJCI Strategic Plan (<https://www.stjames.ie/cancer/>) we will seek opportunities to fund:

1. Key equipment to further expand the Liquid Biopsies Core
2. Key equipment to development a Functional Genomics Core
3. A second CREST Awards round
4. Increase human resources decided to TSJCI's research programme
5. Nurture successful relationships with industry partners, patients' advocacy groups, research funders, and charitable groups

Continue to build collaborative fundamental, translational, and clinical research programmes across our four Research Themes

- Integrate patient-focused research across the Island of Ireland that studies samples kindly donated by cancer patients.
- Establish for a for clinicians, allied health professional and academic research to meet.
- Establish more research collaborations between personnel on TCD campus and SJH campus.

Theme 1: Cancer Prevention

- Continue developing new approaches and technologies for current cancer screening programmes, to support both prevention, early detection, and chemoprevention of cancers.
- Support the WHO and specifically Irelands roadmap to cervical cancer elimination, through research evaluating the impact of HPV vaccination on cervical screening in Ireland.
- Focus research on new cancer screening approaches, in particular anal cancer screening for high-risk groups.
- Examine the mechanisms of immune tolerance to human papilloma virus (HPV) infection and the development of HPV-associated pre-cancers, facilitating the identification of factors associated with different risks of disease progression.
- Expand of our understanding of genetic drivers of adult cancers to maximise cancer prevention opportunities.

Theme 2: Molecular and Precision Oncology

- Further strengthening our research as a centre of excellence for liquid biopsies research, we will establish niche collaborations to help us to additional novel assays and methodologies – based on Raman and FTIR spectroscopy as well as surface enhanced approaches such as SERS and surface enhanced infrared absorption (SEIRA)- for analysis of component of the liquid biopsy, including extracellular vesicles and circulating tumour cells.
- Expand our efforts to including studies of liquid biopsies/extracellular vesicles from other cancer types including gastrointestinal cancer and leukemias.
- Expand on biomarkers for cancer associated venous thrombosis to include other pro-thrombotic cancers, e.g. lung cancer.
- Further our understanding of anti-cancer drug resistance, immune suppression, and metastasis including the contribution of the tumour hypoxic microenvironment and cellular metabolism.
- Progress position of Assistant Professor in Cancer Genetics.
- Lead national effort in Functional Genomics in collaboration with AICRI (All Island Cancer Research Institute).

Theme 3: Cancer Immunology

- Continue to drive TSJCI's research in oesophageal cancer. We hope to achieve this via several avenues including initiating *in vivo* pre-clinical studies of a promising anti-cancer drug target. We also aim to expand research areas into glioblastoma, further develop a lung cancer immunology research programme through collaboration with Thoracic Oncology Research Group and an ovarian cancer immunology research programme with the Molecular Pathology Research Group.
- Expand our understanding of the role of T cells in muscle breakdown in sarcopenia and cancer-related cachexia.
- Examine new combination therapies with immunotherapies to improve outcomes for upper GI cancer patients.
- Further our understanding of the tumour promoting influence of immune checkpoint inhibitors and how these mechanisms can be bypassed to improve response rates
- Understand the role of the immune system in progression of pre-malignant conditions to cancer.

Theme 4: Cancer Survivorship

- Exercise Oncology group: Priority on high quality recruitment and retention of participants to our ongoing trials with the goal of achieving full accrual for preoperative high intensity interval training (PreHIIT) and personalised exercise rehabilitation in cancer survivorship (PERCS) within 2023 and for RESTORE in 2024. Aim to build capacity in survivorship research through the MSc in Cancer Survivorship and offering short courses to build research skills.
- Get the Breakthrough Cancer Research AllCaN North-South programme off the ground. AllCan LEAD: Prof. Jacintha O'Sullivan, co-leads: Prof. Helen Coleman (Queens University Belfast) and Prof. Juliette Hussey (TSJCI). The collaboration links six major academic institutions across the island of Ireland - Trinity College Dublin, Queen's University Belfast, University College Cork, Royal College of Surgeons in Ireland, University College Dublin, and University of Galway - along with their associated hospitals, the National Cancer Control Programme and the Belfast Health and Social Care Trust. focus on oesophageal cancer, funding innovative innovative research to improve early detection and outcomes for patients with, or at risk of, developing the disease.

Additional Highlights

- Dr Dania Movia was a recipient of an SFI-IRC Pathway award (€551,630). These awards enable postdoctoral researchers to conduct independent research for a four-year period and provide funding for a postgraduate student who will be primarily supervised by the awardee. Dr Movia will pursue research with the goal of improving the clinical outcomes of patients living with non-small-cell lung cancer, which is the most common type of lung cancer and a deadly disease. Most patients develop drug resistance during treatment. But, when resistance is identified early, patients' prognosis significantly improves.
- A next-generation sequencing facility has been established in TTMI, as part of a collaborative effort with Eurofins. This is a significant industrial collaboration between TCD and Eurofins, which will focus on developing novel NGS molecular diagnostics for 4 areas, including cancer (CTCs' single cell, metastasis, etc.); viral genomics, prenatal screening, and nutrigenomics.
- Dr Sharon O'Toole is the coordinator of the Irish Network for Gynaecological Oncology (INGO) that received a Global Inspiring Collaboration Award for the awareness campaigns in gynaecological cancer underscoring the immense value of partnership as they work together in unison to raise awareness in Ireland.



Quality

- Ms Catherine Buckley, Quality Coordinator, Trinity St James's Cancer Institute

TSJCI continues to provide high quality, safe, compassionate care with an emphasis on continually improving the experience and the outcomes for people with cancer and their support networks.

TSJCI is currently working towards gaining Comprehensive Cancer Centre Status in 2024 by completing the accreditation process of the OECI. This work includes constant engagement and collaboration with all of the key stakeholders in this process on a local, national and international level.

Preparation for Accreditation

- Close out of most items on the quality improvement plan from the findings of the previous OECI inspection.
- An OECI self-inspection was undertaken with gap analysis presented to all of the key stakeholders in the process.
- TSJCI Quality Coordinator undertook OECI inspector training.
- Two OECI Inspectors on the TSJCI team continued to support OECI by providing audit support to inspect other European cancer centres.

Highlights in 2022

- Work continued on the standardisation of patient pathways and multi-disciplinary team meetings
- Pathway-centric biannual review processes commenced in collaboration with all cancer specialities
- The External Advisory Board (EAB) to TSJCI had their first in-person meeting
- The TSJCI Patient Representative Group (TSJCI PRG) continued to gain skills and experience over the year and had formal training in Patient Public Involvement (PPI). They became involved in patient information events and became members of special interest groups across the clinical and academic sites
- Surveys of different aspect of service delivery and education courses were undertaken.

Key Priorities for 2023

- Development of a 3-year Quality strategy for TSJCI underpinned by the TSJCI Strategy 2023-2028
- Development of accreditation implementation group across TSJCI
- Formalising audit schedules across TSJCI
- Development of the Complications Registry
- Continue the preparation process for accreditation to comprehensive cancer centre status by the end of 2024

We would like to thank all staff members across TSJCI for their engagement in this process.

Patient Representative Group

- Ms Catherine Buckley, Quality Coordinator, Trinity St James's Cancer Institute

The PRG continued their tremendous contribution to TSJCI during 2022. There were 12 meetings 11 of which were held virtually and then they attended their first in-person meeting of the group in September 2022. They have developed a one year TSJCI PRG strategy and have also agreed mission and values statements.

Outside of the monthly meetings the group attended a course tailored to their needs and facilitated by Mr Michael Foley the Programme Manager of TCD Ignite. This was very well received and has optimised the skillset of the members in critiquing the clinical improvement projects, research and innovation proposals that have been presented to them. Their skills were put to use during the process of the CREST awardees pitch to the patient group members.

The group developed a 'Researcher Summary Form', for researchers who wish to have their proposals reviewed, the aim is to summarise their research proposals under specific headings as decided by the PRG members. This form is sent to the Group at least a week before their monthly meeting. The PRG members have also developed a formal feedback template to feedback their comments to the researchers after their presentation pitch.

The PRG members amended the HODC survey tool and sent the questionnaire to patients in December 2022. They have also reviewed many other survey tools across the Haem Onc services for staff over the year.

The members of the group attended the TSJCI 12th International Cancer Conference, Conference Digital Health in Cancer AICRI conference; PPI IGNITE Values launch.

The members contributed to the One Small Change article in the Irish Times and also wrote a piece for the SJH Times.

The members have also contributed to education of staff by presenting at the SJH Communications course and the Fundamentals in Haematology and Oncology courses.



<p>January</p> <ul style="list-style-type: none"> • Terms of reference • Mini Strategy • Sharefile • Volunteer effectiveness survey • Video for World Cancer Day • Review four Lung cancer PILs 	<p>February</p> <ul style="list-style-type: none"> • Genetics Pil review • Stem Cell transplant survey first draft review • Volunteer service letter drafted to CEO • PPI - 2022-01 - 2022-02 • Piece in SJH Times • TSJCI Organogram • Annual report for 2021 	<p>March</p> <ul style="list-style-type: none"> • Members survey Re; vision, values mission etc • PPI-2022-03 • Update from EG on PERCS • 2x Small Grants Foundation application • ICS PPI application • HODC Working Group convened • Volunteer to participate in the staff Communications programme
<p>April</p> <ul style="list-style-type: none"> • HODC survey designed • Cancer Surgery OPD • Feedback from reps • Staff Comms education sessions • HODC working group • Biobanking working group • Conference Digital Health in Cancer AICRI conference • PPI-2022 -04 	<p>May</p> <ul style="list-style-type: none"> • PPI 2022-06 • 2022-07 • PRG poster development for recruitment drive • One small change article in Irish Times • PPI course with MF TCD started 16th May 	<p>June</p> <ul style="list-style-type: none"> • Continuation of PPI course • Prep for in person day • Discussion about Cancer Conference • Amendment of ToR re communication of attendance
<p>July</p>	<p>August</p> <ul style="list-style-type: none"> • Discussion & decision on TACC working Group • PPI 2022-05 • PPI 2022-08 	<p>September</p> <ul style="list-style-type: none"> • PPI 2022-09 • 2022-10 • Stem cell transplant PIL <p>In person meeting day</p> <ul style="list-style-type: none"> • PPI Prof. Mc Carron • PPI Claire Kielty ICS • PPI review 2022-17 • 2022-18 • Discussion on need for template pathway for scientific research
<p>October</p> <ul style="list-style-type: none"> • PPI review • 2022-11 • 2022-12 • 2022-13 • Prep for Biobanking, consent, ethics and and the General Data Protection Regulation (GDPR) meeting • PPI IGNITE Values launch • TSJCI Cancer Conference 	<p>November</p> <ul style="list-style-type: none"> • Bronchoscopy PII review • SJH Data Governance group set up on the back of TSJCI work- TSJCI pat rep on group • Health research Board Commitment to PPI presentation by Anne Cody • TSJCI Survivorship Group pat rep • TSJCI Strategy Review 	<p>December</p> <ul style="list-style-type: none"> • Onc Pat rep at TSJCI Survivorship meeting • TSJCI Pat rep and Carer rep presenting to the Oncology Fundamentals course • HODC survey

Appendix 1: Glossary Of Terms

Term	Descriptions
AICRI	All-Island Cancer Research Institute
ANP	Advance Nurse Practitioner
AVLOS	Average Length of Stay
AYA	Adolescent and Young Adults
BRCA	Breast Cancer Gene
CMD	Cancer Molecular Diagnostic
CNM	Clinical Nurse Manager
CNS	Clinical Nurse Specialist
CREST	Cancer Research Stimulus Awards
ENT	Ear, Nose and Throat
EPR	Electronic Patient Record
FETAC	Further Education and Training Awards Council
GDPR	General Data Protection Regulation
ICU	Intensive Care Unit
JACIE	Joint Accreditation Committee of the International Society for Cellular Therapy and the European Group for Blood and Marrow Transplantation
MDM	Multi-Disciplinary Meeting
MDT	Multi-Disciplinary Team
NCCP	National Cancer Control Programme
NCIS	National Cancer Information System
NCPE	The National Centre for Pharmacoeconomics
NMBI	Nursing and Midwifery Board of Ireland
OECI	Organisation of European Cancer Institutes
PERCS	Personalised Exercise Rehabilitation in Cancer Survivorship
PPI	Public Patient Involvement
PRG	Patient Representative Group
RALP	Robotic-assisted laparoscopic prostatectomy
RCSI	Royal College of Surgeons in Ireland
SABR	Stereotactic Ablative Radiotherapy
SACT	Systemic Anti-Cancer Therapy
SCT	Stem Cell Transplant
TSJCI	Trinity St James's Cancer Institute



