

Innovation in **operation**



RCSI

THE FUTURE
OF HEALTHCARE
EDUCATION IS
HERE



RCSI campus expansion at No 26 York Street



"WITH THE
EXPANSION OF OUR
CAMPUS AT
NO 26 YORK
STREET, OUR AIM
TO TRANSFORM
HEALTHCARE
EDUCATION BECOMES
A REALITY."

Professor John Hyland,
President of RCSI



WELCOME



This is a very special moment in our long history. As we mark the opening of our extended campus at No 26 York Street, we are spurred on to drive forward the College's mission: to educate, nurture and discover for the benefit of human health.

With our new state-of-the-art,

world-class simulated environment, RCSI has a unique strength not currently offered by other healthcare or medical schools. It is the largest, most modern facility of its kind in Europe and is already attracting international interest. Our new facilities have sparked new ideas about how and what we teach. At No 26 York Street we will prepare graduates to enter the professional world equipped not just with excellent clinical skills but with the human skills required to be excellent practitioners. We will encourage a patient-centred approach and a love of lifelong learning. All of this begins with an emotionally rich educational experience. And while the 2017 undergraduate student intake will be the first to benefit, we look forward to a future of benefits for students, trainees and clinicians and, most importantly, of improvements in human health and patient outcomes.

RCSI has been present at our city centre location on St Stephen's Green for more than 200 years. Our status as an independent not-for-profit institution, solely focused on healthcare, has cultivated an independent spirit and a need for courage – evident many times in our history. When we embarked on our ambitious plans to expand the campus, six years of design, planning, construction, testing and benchmarking with global sites was to follow. Led by Director of Corporate Strategy, Michael McGrail, the project team determined that the new building was to be wholly student-focused with multiple learning and study environments and sports facilities, and cutting-edge in terms of simulation and clinical skills training. The result is the most significant development in healthcare education in the centre of Dublin for many decades. Funded in part by a loan from the European Investment Bank, RCSI's campus expansion is evidence of our intent to transform healthcare education for the benefit of all.

PROFESSOR CATHAL KELLY, CHIEF EXECUTIVE OF RCSI



ON THE COVER ...

NO 26 YORK STREET: High-tech building for high-tech thinking. The building was designed by Henry J Lyons Architects. Published by Gloss Publications Ltd, in association with RCSI. Photography by Julien Behal, Patrick Bolger, Donal Murphy, Ros Kavanagh.



CONTENTS

LEVELS OF LEARNING

Space to develop



STUDENT SPIRIT

The new 2017 intake at No 26 York Street



IN THIS ISSUE

04

WINDOW TO THE FUTURE

The RCSI campus expands: No 26 York Street

10

DEEP LEARNING CURVE

The new state-of-the-art Library: a study in learning styles

07

YOUR NEXT BIG STEP

How to apply to RCSI; CAO, HPAT, scholarships and more

12

THE RCSI FACTOR

What gives RCSI graduates the edge?

09

SCALPEL, PLEASE

Female surgeons: RCSI addresses the gender balance

16

A PLACE OF GIFTS

The teaching of Anatomy owes much to altruism

17

OPERATION SIMULATION

RCSI opens the largest clinical simulation facility in Europe



OUR HERITAGE

RCSI was founded by Royal Charter in 1784 as the national training and professional body for surgery. The College flourished and in 1810 moved to its present location on St Stephen's Green. In 1978, RCSI became a recognised College of the National University of Ireland.



RCSI

TRANSFORMING HEALTHCARE EDUCATION

WINDOW TO THE FUTURE

RCSI's city centre campus expands with the opening of the new state-of-the-art academic building and it's a game-changer



NO 26 YORK STREET The ten-storey sustainable education building was designed by Henry J Lyons Architects, in consultation with the RCSI team led by Director of Corporate Strategy, Michael McGrail.

Last month, RCSI welcomed 460 new students and more than 3,000 returning students back to campus. For the very first time, they entered the College via the new academic education campus building at No 26 York Street, off Dublin's St Stephen's Green. Standing ten storeys tall, it faces the existing campus building across the street. It is as though it represents a window to the future. High-tech, student-centric, home to Europe's largest multi-disciplinary clinical simulation facility – the 120,000 square foot complex is a game-changer in terms of healthcare education. And transforming healthcare education in Ireland is what RCSI is all about.

This latest phase in RCSI's evolution aims to make the route to the real world more explicit for future generations of aspiring healthcare professionals in medicine, pharmacy and physiotherapy – undergraduate and postgraduate. "In this new education facility, we are able to capitalise on the educational potential of innovative technologies," says the Dean of Medicine & Health Sciences, Professor Hannah McGee, "and reinforce our reputation as a leading centre for professional education, research and innovation in healthcare."

Michael McGrail, Director of Corporate Strategy, who led the team to develop No 26 York Street, is justifiably proud. "We sought to get a feel for what world-class healthcare education in the future should be," says McGrail of the six years of consultation, planning, and benchmarking with international sites.

Evidence of the importance of this educational mission is found in the state-of-the-art surgical and training suite with clinical skills labs, mock operating theatre, clinical training wards and standardised patient rooms which occupy the top three floors. Two levels of clinical floors below provide a flexible working space that is used for skill-based training. Below ground are auditoria and a sports and fitness suite and, at the heart of the building, a specialist health sciences library spanning three floors, with more than 500 study spaces. "It's a seismic shift," says Philip Curtis, Associate Director of Admissions. "When we took students and parents on tours of the building, we could tell them that the state-of-the-art facilities and learning opportunities available to undergraduate students cannot be found anywhere else in Europe. Our students are learning with the latest technologies in a purpose-built environment – this is unique." With healthcare education a hugely competitive global sector, the establishment of this facility is a marker of RCSI's commitment and confidence in the future. "It's a very special moment in our long history," says the Chief Executive of RCSI, Professor Cathal Kelly. "Reflecting the ethos of the wider College, the establishment of No 26 York Street has profound implications for the



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Professor Hannah McGee,
Dean of Medicine & Health Sciences

The new expansion of the RCSI campus at No 26 York Street includes a state-of-the-art surgical and training suite, mock operating theatre and clinical training wards.

public, and for patients. We are celebrating the most significant development in healthcare education in Dublin in 40 years."

The ever-changing needs of healthcare in the 21st century are a constant reminder of the demand for highly-trained and prepared graduates, and healthcare professionals whose professional development is continual and lifelong. As consultant surgeon and the Director of RCSI's National Surgical Training Centre, Professor Oscar Traynor attests, the enhanced facilities – six times the capacity of its former home – will address a very pertinent issue. "There are challenges for the profession faced by reductions in total hours of training and in working time restrictions so there are fewer years and fewer hours for training." Add to this, "The increase in the use of technology in surgery – robotics, advanced endoscopies, catheter-based interventions – and the ability for trainees to participate in a real way is limited. Plus, there are regular cancellations of electives due to pressure of emergency cases and, naturally, patients' expectations are that their surgeries will be performed by qualified surgeons." This means that enabling skills to be learned, practised and mastered before operating on patients is vitally important.

Since 2003, RCSI has enthusiastically embraced this new model, utilising simulation technology to teach technical and non-technical skills, but the new state-of-the-art National Surgical & Clinical Skills Centre will allow RCSI take progress to a new level.

TRANSFORMING HEALTHCARE EDUCATION



National Surgical & Clinical Skills Centre



Professor Oscar Traynor

“The centrepiece will be the clinical skills lab where we can train surgeons in very realistic ways using biological materials. We have simulation and virtual reality tools and a fully fitted mock hospital where we can teach crisis management and communications skills and demonstrate surgical handovers of care.”

Professor James Paul O'Neill began his career as a surgeon in the US, returning to Ireland in 2012. Having worked at Harvard, Cornell, Memorial Sloan Kettering Cancer Care and MD Anderson Cancer Centre, he believes RCSI is the best medical school in Ireland and has the motivation to be ranked among the best in the world. “The standards at RCSI are world class. This development means the campus matches and exceeds the best in the US. It's a real commitment to students.”

Professor O'Neill says the new complex has so impressed and intrigued colleagues in the US that they are coming to Ireland to see the standard at RCSI and will return home to up their game.

In November, a global gathering of top surgeons will visit, one of the first of many. “RCSI is a very attractive location for international meetings and conferences.”

With RCSI's international footprint (there are alumni from 97 countries working all over the world) the opportunities for Irish-trained doctors to work abroad are well documented. But now, specialist training that might have taken place elsewhere will happen here. “Our core objective is to keep revisiting our curriculum and the tools we deploy to teach it. We question all the components, from what we teach, to the quality of teaching, to how well our graduates communicate. We strive to improve all aspects of cultural understanding, professionalism and patient care,” says Professor McGee. “Doctors are only as good as their training.” ■

SURGICAL BOOTCAMP

The new intake of surgical trainees at RCSI began the first Surgical Bootcamp programme to take place in the National Surgical & Clinical Skills Centre's new home at No 26 York Street in July. This intensive week-long course, now mandatory for all new surgical trainees, was created to immerse surgical trainees in the technical and non-technical skills needed as a surgeon. Professor Oscar Traynor, Director, National Surgical Training Centre, RCSI says, “The Surgical Bootcamp programme is designed to accelerate the acquisition of key technical and non-technical skills at the start of a career in surgery so that valuable hours in hospitals are not lost learning basic training skills.”



The Surgical Bootcamp programme was developed by RCSI based on feedback from consultant surgeons and surgical trainees and is designed to better prepare trainees for their early clinical rotations in surgical

training. Key features of the programme include simulation-rich training methods, skilled faculty, human factors training, surgical techniques, suturing, risk management and critical care. At present, it can take surgical trainees a long time to learn the basic skills required to become a surgeon such as scrubbing up, tying knots and theatre etiquette as well as non-technical skills such as the management of surgical emergencies, critical care, risk management and clinical decision making.



LEARNING FROM THE BEST Surgical bootcamp.



YOUR NEXT | BIG STEP

By choosing to study at RCSI, you'll benefit from our ambition. At No 26 York Street, we are transforming healthcare education for the benefit of all. Join us on the journey

ALL FOR STUDENTS

The ten-storey building at No 26 York Street is organised around a central atrium which facilitates connectivity and transparency between student spaces, specialised reading areas and simulation spaces.

MEDICINE

RCSI offers a five- and six-year Medicine programme to school leavers (39 places), mature applicants (15 places) and a four-year medical programme to graduates (30 places). School leavers and mature candidates apply via CAO using the course code RC001. Graduates apply through the CAO using course code RC101. For entry requirements, see rcsi.ie/admissions. RCSI is part of the EU Free Fees Initiative funded by the Higher Education Authority (HEA) since 2002.

■ CAO APPLICATIONS

Applications are available via CAO from November 1 until February 1. Medicine is a restricted access programme; late applications are not permitted. Applicants must also register for the HPAT-Ireland admission test by January 20 2018.

■ MATURE APPLICANTS

Mature Entry Pathway students are selected in a holistic manner with a focus on life experiences such as volunteer work or relevant work experience in addition to the candidate's academic background. Mature applicants must be 23 years old on or before January 1 prior to admission and meet matriculation requirements (Irish Leaving Certificate or equivalent access to science programme). Mature applicants must present HPAT and are invited to submit their CV, a personal statement and references supporting their application.

■ GRADUATE ENTRY MEDICINE (GEM)

Graduate applicants must hold or expect to hold on year of admission, a minimum second class honours grade one (2H1) result in their first honours bachelor degree (NFQ Level 8) and a competitive GAMSAT score. The minimum GAMSAT score for entry to RC101 in 2017 was 58.



"It is evident to me that RCSI aims to make a real difference in healthcare. I admire how staff encourage us to keep the patient-centred approach in mind, emphasising the importance of taking time to understand patients and their individual experiences. Having finished my first year, I feel fortunate to study at RCSI. Each day motivates and inspires me. RCSI is my home from home, a place where I can truly be myself, surrounded by like-minded people."

*Deborah Cardiff,
Marilyn Butt Scholar 2016*

PHARMACY

RCSI offers a five-year Pharmacy programme to school leavers (30 places), graduates (16 places) and pharmacy technicians (2 places). School leavers apply via CAO using the course code RC005. Graduates and pharmacy technicians apply directly to RCSI online from November 1 until February 1 each year. CAO applications are available from November 1 until February 1. Late applications for school leavers are accepted via CAO until May 1. Graduate candidates must hold or expect to hold on year of admission, a minimum second class honours result in their first honours bachelor degree (NFQ Level 8).

PHARMACY TECHNICIANS

■ Must be 23 years old on or before January 1 prior to admission ■ Must be at least three years post qualification as a pharmacy technician ■ Must meet NUI Matriculation criteria (to include Irish, English, Maths, a science subject* and a third language) ■ Must present Grade HB3 (or higher) in both Higher Level Leaving Certificate Biology and Higher Level Leaving Certificate Chemistry. Candidates may satisfy these criteria by presenting two science results obtained in more

than one sitting of the Leaving Certificate, if necessary ■ The Pharmacy Technician qualification which an applicant possesses must be of at least Level 6 on the National Framework of Qualifications (HETAC Level 6). Both graduate and pharmacy technician applicants are selected for admission on the basis of open competition using the following criteria: • Academic eligibility (see above) • Confidential references and life experience (work/life balance, extracurricular activities, relevant work / voluntary experience) • Structured interview.

PHYSIOTHERAPY

RCSI offers a four-year BSc Physiotherapy programme to school leavers (13 places) and a three-year programme to graduates (13 places). The BSc Physiotherapy degree at RCSI is a qualification for people who want to practice physiotherapy in the Irish healthcare system or in private practice. RCSI graduates are eligible for membership of the Irish Society of Chartered Physiotherapists. School leavers apply via CAO using the course code RC004. Graduates apply directly to RCSI using the online application form which is available on the Admissions section of the RCSI website from November 1 until February 1 each year.

■ CAO APPLICATIONS

Applications are available via CAO from November 1 until February 1. Late applications for school leavers are accepted until May 1. The RCSI course code for Physiotherapy is RC004.

■ GRADUATE ENTRY

The Physiotherapy programme for graduates is three years in duration. Applications are made online to RCSI; candidates must hold or expect to hold on year of admission, a minimum second class honours result in their first honours bachelor degree (NFQ level 8). Applicants will be selected for admission on the basis of open competition using: ■ Basic eligibility (competitive degree) ■ Confidential references and life experience (extracurricular activities, relevant work/ voluntary experience work/life balance, etc) ■ Structured interview. A science background is not a prerequisite and academic excellence in the humanities and social sciences is recognised. If a candidate presents a non-scientific degree they must present the NUI matriculation requirements in their Leaving Certificate.

OPEN DAYS

RCSI hosts a number of dedicated Open Days and Open Evenings throughout the year, in which candidates get a taste for what life is like as an RCSI Medicine, Pharmacy or Physiotherapy student. The school leavers open day is on January 4 2018. rcsi.ie/ugschoolleaveropenday

TY PROGRAMME

RCSI MyHealth Transition Year Programme offers a five-day experience for TY students interested in a career in medicine. Successful applicants from schools result in one place only, with student selection at the school's discretion. For information on how schools can apply, visit rcsi.ie/dublinty

STUDENT LIFE AT RCSI

A busy social life is encouraged at RCSI and with 33 student societies and 35 sports clubs, it's not hard to achieve a good work life balance. Expanded facilities at No 26 York Street place health and fitness firmly on the agenda with the new Sports Centre, but there's also a great Dispensary café and restaurant and lots of room for societies to meet and plot entertainment and events. One of the great annual events is the International Night, the culmination of a month-long celebration of cultural diversity: it showcases the culture, traditions, food, music and dance from our students' home countries, of which there are more than 60 represented in the RCSI student body. No matter what your favourite sport or activity, musical or drama obsession, political or current affairs interest – there are lots of opportunities to meet friends with shared interests and chances to make new ones.

HEALTH AGENDA

The way the new campus building at No 26 York Street works is a clear signal of RCSI's commitment to enhancing the student experience. And it's not just about the academic – the plan was to increase



"The strong sense of camaraderie is at the core of everyday life at RCSI."

*Ryan Leon,
Aim High Scholar 2016*



participation in health-related activities. Take for instance the new Sports Centre: it includes a spacious gym with heavy weights area, ladies' gym and fitness studio and an intervarsity-regulation Sports Hall so that, for the first time, RCSI will be able to host intervarsity basketball, volleyball, fencing, table tennis and archery as well as GAA, soccer,

cricket, hockey and netball training. There will be a comprehensive range of activities seven days a week from 7am-10pm and the gym will be manned by fully qualified staff. Cool locker and shower facilities and breakout spaces make the Sports Centre a very convenient city centre one-stop fitness option with coffee and Library a mere step away. ■

ACADEMIC EXCELLENCE SCHOLARSHIPS

RCSI has always attracted students who are high achievers academically. The College acknowledges, rewards and fosters the brightest students through the Consilio Manuque Medicine Scholarship. Consilio Manuque – meaning Scholarship and Dexterity – is RCSI's motto. The scholarships are awarded to the students with the highest combined Leaving Certificate and HPAT score, entering the five-year medical degree programme (RC001). The Consilio Manuque Medicine Scholarship is generously funded by philanthropic donations from our global network of RCSI alumni. A scholarship of €5,000 is awarded annually to recipients for each year of the five-year medical degree programme.

School leavers interested in applying for the Aim High Medicine, Kiran Pathak Pharmacy, Traveller Community Access Programme or Consilio Manuque scholarships must apply via CAO by February 1 and submit the relevant application forms to RCSI. Additional information and supplementary application forms are available from the RCSI Admissions Office; admissions@rcsi.ie.

RCSI ACCESS SCHOLARSHIPS

In addition to the 6% HEAR and 6% DARE reduced points (places), RCSI also provides three access scholarships:

- The Aim High Medicine Scholarship (RC001)
- The Kiran Pathak Pharmacy Scholarship (RC005)
- The Traveller Community Access Programme (TCAP)

MEDICINE, PHARMACY OR PHYSIOTHERAPY SCHOLARSHIPS

These three access scholarships provide reduced points entry,

financial support and opportunities for students who might otherwise be unable to attend third level due to social disadvantage or financial constraints.

RCSI ACCESS

At RCSI, we believe access to a world-class healthcare education should not be limited by disability or financial considerations and we believe in the benefits of a diverse healthcare workforce. To widen access, RCSI participates in the Higher Education Admissions Route (HEAR) which supports socio-economically disadvantaged students and the Disability Access Route to Education (DARE) which supports students applying with a disability. RCSI offers 6% of CAO places on reduced points to both the HEAR and DARE Schemes. School leavers applying via CAO who provide necessary evidence relating to their socio-economic circumstances and/or disability are eligible to compete for places allocated on reduced points through the HEAR and DARE Schemes. Please note that the normal College matriculation and entry requirements apply to HEAR and DARE applicants. Further information on HEAR and DARE is available at accesscollege.ie

CONTACT US

For further details, see rcsi.ie/admissions or contact admissions@rcsi.ie

Royal College of Surgeons in Ireland,
123 St Stephen's Green, Dublin 2 Tel: +353 1 402 2228/2248

DEEP LEARNING CURVE

The new library at No 26 York Street blends digital resources and expert services with traditional health sciences collections to support RCSI's mission of transforming healthcare education



LEARNING SPACES

LEFT AND BELOW The new Library at No 26 York Street caters for the different types of learner, from the visual to the verbal, the social to solitary, with a variety of styles of learning space.
BELOW LEFT Chief Librarian, Kate Kelly.



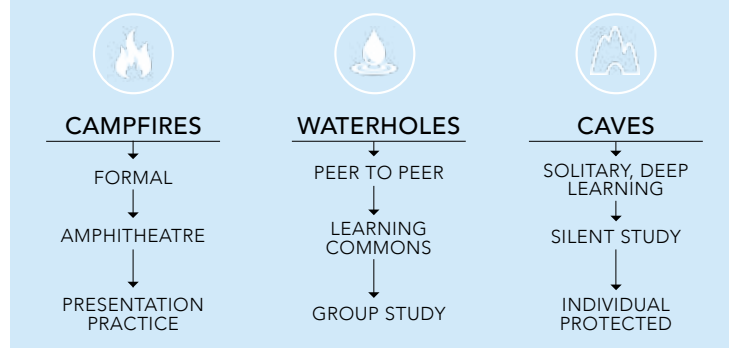
Visitors to No 26 York Street will note at first glance that something is missing from the new Library. Books. In this large, beautiful light-filled space, designed over three floors in the heart of the building, RCSI has created a digital learning library, an electronic information “commons” in line with new thinking around what a modern specialist health sciences library must provide. “It has the same universal goals as the ancient idea of a library,” says Chief Librarian and Director of Library Services, Kate Kelly. “It is a place for the advancement of knowledge, a focal point for research and a forum for the open exchange of ideas.”

But it is also innovative. There are multiple styles of learning environments to reflect the diversity of user: silent noise-proofed spaces for individual study, areas for group work and collaboration, an amphitheatre with Bluetooth seating to practise presentations, a dedicated postgraduate suite. There is a reading room with, yes, books. (Although RCSI maintains its extraordinary bank of specialist knowledge and information sources online, book borrowing is still steady, with RCSI stocking about 300 linear metres of books). Throughout the Library floors, there are “waterholes”, break-out spaces for students to take time, to connect with each other, have mental time-out from study. The walls are transparent, the spaces designed to facilitate intellectual collisions at all levels. This is a library for undergraduates, postgraduates, researchers and clinicians. There is no distinction among the information-seeking user. “Everyone is here to learn,” says Kelly.

All over the world, technological developments in library services have influenced how libraries function. After many years working in the US, and having witnessed this major transition firsthand, Kelly is proud that the new RCSI library is an initiative that has taken RCSI’s commitment to lifelong learning to a new level. It is the culmination of intensive planning, consultation and benchmarking with universities in the UK, Europe, the US and Canada. “We had an opportunity to create a custom-built student space that was among the best in the world. It’s no accident that seat capacity in the building is increased by almost half, that the spaces are free-flowing and adaptive (group study spaces can be converted to silent study



STYLES OF LEARNING SPACES



areas at exam time), and was placed right in the centre of this new building. We set out to create a library that is relevant to all RCSI students and to the future.”

Academic and clinical articles published in thousands of journals worldwide, the main resources for healthcare research, are now online. As well as an e-journal portal, RCSI’s repository of research material includes evidence-based summaries on healthcare topics and treatments. “As more texts become accessible online, we have been able to store lesser-used materials,” says Kelly, “and make the user experience more engaging.” The Library team work to an enhanced service model, combining direct engagement and support for students with the best in information delivery systems.

While the Library at No 26 York Street is the latest health sciences education hub at RCSI, the College has a large library at Beaumont Hospital and hosts its extensive Heritage Collections in the old Mercer Hospital building. Here you will find antiquarian books that relate to the practice of surgery and medicine, manuscripts and archives and a large collection of medical instruments, many used in battles and wars. ■



**PROFESSOR
FERGAL
MALONE**

Professor Fergal Malone is Master of the Rotunda Hospital and Professor and Chairman of the Department of Obstetrics and Gynaecology at RCSI.



**MS DARA
O'KEEFFE**

Ms Dara O'Keeffe, Special Lecturer in Surgical Education at RCSI, trained in surgery before becoming a full-time medical educator, both here and in the US at Brigham and Women's and Harvard.



**PROFESSOR
JAMES PAUL
O'NEILL**

Professor James Paul O'Neill is an ENT consultant and Professor of Otolaryngology, Head and Neck Surgery at Beaumont Hospital and RCSI.



**PROFESSOR
JAMES MURRAY**

Professor James Murray, Director of Simulation and Clinical Skills at RCSI, was a consultant anaesthetist before becoming involved in healthcare education.



**PROFESSOR
SUSAN SMITH**

Professor Susan Smith is a GP and Professor of Primary Care Medicine at RCSI. Her main research interests include chronic disease management.



**DR CEDRIC
GUNARATNAM**

Dr Cedric Gunaratnam is a respiratory consultant at Beaumont Hospital with a special interest in Cystic Fibrosis.



**PROFESSOR
JIM LUCEY**

Professor Jim Lucey is Medical Director of St Patrick's Mental Health Services, and Clinical Professor of Psychiatry at Trinity College Dublin.



**DR
MICHELLE
MC EVOY**

Dr Michelle McEvoy, formerly a consultant paediatrician at Great Ormond Street, London, has a particular interest in education and training.

THE RCSI FACTOR

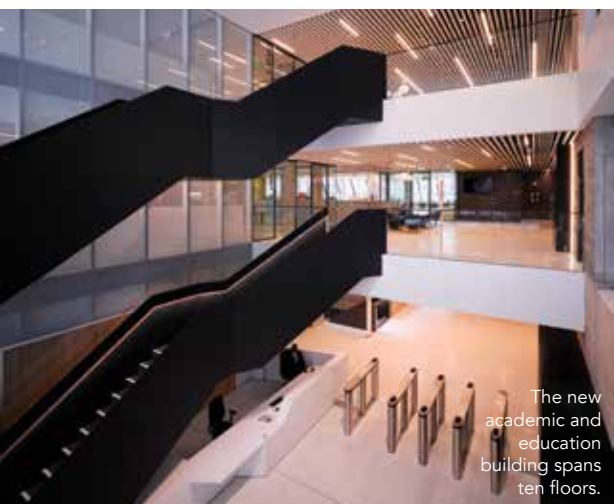
The bar is set high for RCSI graduates. As well as the RCSI 50 – the College's list of 50 clinical competencies – exceptional levels of patient care and professionalism must be met and exceeded. We talk to some distinguished clinicians in senior roles about what gives RCSI graduates the edge

A few months ago in June, approximately 275 doctors emerged from RCSI to become part of teams under the supervision of more senior doctors. For many of these graduates, they have begun a legendarily tough year in their professional lives. Fortunately, their training has ensured they are well prepared for the road ahead. From the start, the RCSI student is provided with the

most advanced, supportive and effective learning environment where early clinical exposure is prioritised and the emphasis is on learning by doing. Students learn directly from healthcare professionals with a wealth of knowledge and experience. But, as well as providing students with the best student:staff ratio and continuous exposure to working doctors, there are other factors that give RCSI graduates an edge.

1 EARLY CLINICAL EXPOSURE

Early patient contact and emphasis on clinical skills is a priority in the way RCSI students are taught. Training graduates who “are fit for purpose” is the priority, according to consultant obstetrician and Master of the Rotunda, **PROFESSOR FERGAL MALONE**. Proven academic ability and knowledge is one thing but the clinical component is rigorously assessed. “Other institutions around the world have dropped what is called the long case clinical exam, allowing graduates to qualify without ever having been tested in exam conditions or objectively tested on a real patient.” According to general practitioner **PROFESSOR SUSAN SMITH**, introduction to clinical practice begins in First Year. “It’s not just about exposure to patients, students learn how to examine a patient, how to reach a diagnosis, how to apply evidence to management of a chronic condition. Clinical exposure is both early and broad at RCSI.”



The new academic and education building spans ten floors.



Mentorship is an important part of learning at RCSI.



A state-of-the-art environment has been created for students.

2 A SOLE FOCUS ON HEALTHCARE

The advantages of being a specialist educational institution entirely dedicated to healthcare are clear, says **PROFESSOR JAMES PAUL O’NEILL**, Professor of Otolaryngology, Head and Neck Surgery at Beaumont Hospital. “First and foremost, RCSI is a healthcare-focused academic institution, and the patient is at the heart of healthcare.” The purpose-built building at No 26 York Street underpins RCSI’s aims by creating the state-of-the-art environment for students to be taught without compromise, with no limiting factors of space or time, in order to train healthcare professionals in the most effective way to deliver healthcare services to the patient.

3 CHARACTER AND ETHOS

For **PROFESSOR JIM LUCEY**, the manner in which RCSI graduates and trainee doctors conduct themselves has most to do with the College’s unique history, its tight-knit spirit and its dedication to informing and shaping future professionals for the benefit of patients. It’s a culture that has built up over time, says Professor Lucey. “RCSI is person-centred and patient-centred. The teachers knew us personally, their generosity was real. No matter how junior you were, they were aware of you. I still remember the handheld nature of the input.” Mentorship remains a pillar of RCSI training, says **PROFESSOR JAMES MURRAY**, Director of Simulation and Clinical Skills Based Learning. “While some say the mentorship model in medicine is disappearing, it is still strong at RCSI. Now, with doctors more likely to work as part of a team structure, offering a service that is more diffuse as more sub-specialties and treatments are ever more complex, mentorship is an important constant.” Building expertise through simulations provides another opportunity for students and young doctors to learn from the best physicians and consultants. “Simulations are set up as exact clinical scenarios in a controlled environment. Evaluations after simulated scenarios mean that direct feedback is immediate and conveyed calmly. This is very valuable, especially when practicing uncommon scenarios. It is mentoring – and there is zero risk.”

4 COMMITMENT TO LIFELONG LEARNING

“The concept of being a fully trained professional healthcare practitioner when you leave college is defunct,” says **PROFESSOR JAMES PAUL O’NEILL**. “You have to commit to lifelong learning, be up to date, read everything. At RCSI, the commitment to research means that students learn that the impact of one paper can change the course of a disease and its treatment. The advancement of science is non-stop – so it’s a priority to be on top of the latest thinking.” RCSI’s standing as a research-intensive undergraduate and postgraduate institution and its reputation for pioneering breakthroughs since its founding in 1784, means lifelong learning is hardwired into the spirit of the College. This applies to students, clinicians and teachers alike. “The concept of “training the trainer” is vital, says **PROFESSOR FERGAL MALONE**. “At RCSI, we keep ahead on every aspect of healthcare education.”



6 PROFESSIONALISM

Training the professionals of the future is a huge responsibility and a measure of an institution’s own character, believes **PROFESSOR JIM LUCEY**. “At RCSI, everyone has to be a leader, step up, and do the right thing on a difficult day. As professionals, we are independently registered and culpable, we hold lives in our hands. RCSI forms doctors who are resilient and strong.” **PROFESSOR JAMES MURRAY** agrees. “RCSI never compromises on the level of assessment of each individual to ensure they have excellent clinical skills. RCSI maximises exposure to clinical experience in a way other institutions worldwide do not. When a newly qualified doctor arrives on the wards for the first time, his or her knees may be knocking. But, if he’s an RCSI graduate, he’ll know that he has had many hours of clinical practice, backed up by assessment and support, so he has the confidence to do a good job.” Says **DR CEDRIC GUNARATNAM**, “RCSI taught me how to strike a balance between honing clinical skills and holistic personal development. It also taught me how to manage my time. As a senior doctor supervising graduates, my expectation was that RCSI graduates would have a solid foundation, inherent leadership skills and maturity. It was clear that the investment placed in them by RCSI had stood to them – they were well-rounded practical people with good people skills.”



5 DIVERSITY IN THE STUDENT BODY

According to consultant general paediatrician, **DR MICHELLE MC EVOY**, recently returned from a stint at London’s Great Ormond Street Hospital, RCSI students benefit hugely from its long tradition educating students from around the globe. With 84 countries currently represented among the student body, the rigorously evaluated programmes are designed to enable graduates to practice in all regions of the world. “From the outset, RCSI students are familiar with different cultures. Learning about healthcare systems all over the world from your classmates from the US, Europe, the UAE, means you understand there’s more than one way of doing things. If you intend to work abroad, being comfortable with this from the beginning is hugely advantageous.” **PROFESSOR JIM LUCEY** agrees. “With healthcare now a global industry, learning about other healthcare systems is invaluable. RCSI has a headstart of many years in relation to this. Even when I was an undergraduate in the 1980s, I learned so much about healthcare systems from my fellow students from the US, Canada, Norway and the UK.” A consultant in respiratory medicine at Beaumont Hospital, an RCSI teaching hospital, **DR CEDRIC GUNARATNAM** also credits the cultural richness of the RCSI experience with developing graduates with a world view. “You get a sense of where classmates are from, their cultural approach to healthcare and their personal background.” This in turn leads to lifelong connections. “Keeping in touch with a far-flung network is important, personally and professionally. And it underpins the pride and bond with the mothership.”

7 A BALANCED LIFE

PROFESSOR JIM LUCEY says the balance between the “personable and the professional” is emphasised at RCSI. “Friendship, scholarship, music, sport and support – these are the things that sustain you. If you lose them, you are a technician.” Every student at RCSI is taking an intensive course so the motto “work hard, play hard” applies. From Freshers’ Fortnight to events hosted by more than 30 societies, to sport and drama and dance, socialising is encouraged. The fact that the College is in the heart of the capital city is no barrier to a busy social calendar and with students from more than 80 countries, variety is a given. Now, with the opening of No 26 York Street, students will have access on campus to fully staffed gyms, a fitness studio and the intervarsity-regulation Sports Hall, seven days a week, from 7am-10pm.

8 AN EYE TO THE FUTURE

With a legacy of pioneering firsts in medicine and healthcare innovation, and its standing as a specialist educational institution, solely focused on healthcare, RCSI has always understood the need to meet the future skills needs in the sector. Having had in its own history huge moments of reawakening and opportunities to reform itself, **PROFESSOR JIM LUCEY** believes RCSI's legacy and culture feeds into how students are taught and graduates are formed. "My theory is that RCSI has a strong culture of self-reliance, recognising its independence and using it to lead and thrive. This is relevant today. We need 21st-century people to be practitioners in what is one of the biggest industries in the world." And the business of 21st-century healthcare relies not only on lab research and groundbreaking scientific discovery, but also on the research into effective healthcare systems which can be applied to primary healthcare, according to **PROFESSOR SUSAN SMITH**. "The approach to research at RCSI is dynamic. It spans the continuum from the scientific – RCSI has many awards in relation to this – but also in research into everyday healthcare issues that are applied at patient level to reduce risk factors for patients and improve outcomes. Trials and interventions will benefit from the recent investment in



cutting-edge technology, and this will be transformative in inspiring innovative research programmes."

MS DARA O'KEEFFE's experience

of healthcare education in the US allows her comment with authority on the RCSI campus expansion at No 26 York Street: "The sky is the limit to what the future opportunities will be for healthcare education," she says. "These are facilities that are among the best in the world and unique in Europe. We will be training specialists from all over the world using advanced medical simulation, hybrid simulation, virtual reality, augmented reality. This is where surgery training at its most technical will be delivered." **PROFESSOR JAMES MURRAY** believes that the development of No 26 York Street has fostered the reimagining of the future of clinical education. "RCSI has an ethos of thinking ahead. It becomes natural to think of improving a process, honing a skill, perfecting a training technique. With the new facilities, we can envisage transforming healthcare education at every level, from undergraduate to postgraduate, then professional. Professor Murray also believes the focus on the future has an effect on graduates. "With an ethos of forward thinking, it becomes natural to also think of bettering yourself, whether at undergraduate or postgraduate level."



9 SIMULATION

RCSI has always been in the vanguard helping students to adopt and adapt to the latest tools, keeping pace with and often outstripping international institutions in its application of technology, like simulation. The new National Surgical & Clinical Skills Centre is an exciting, groundbreaking development for RCSI. "Simulation is extremely important

now," says **DR CEDRIC GUNARATNAM**. "With fewer human patient encounters available, it allows students gain skills and make mistakes in a safe environment and devote more time to practice." Simulation also allows students experience a variety of more unusual encounters, thus ensuring that however rare a condition they might be faced with, they will have seen it before and been trained to deal with it, which leads to better outcomes for patients. While simulation is established now as part of medical training, it's the degree to which you use it that matters. RCSI's investment in clinical simulation means that even the most complex scenarios can be prepared for students to deal with. For **PROFESSOR FERGAL MALONE**, access to cutting-edge simulation is extremely significant in the training of obstetrics and gynaecology. "This is a specialty you cannot learn out of a book. There is clinical interaction and human interaction. We work in teams, so using simulated scenarios helps focus on how the choreography works, who is responsible for getting intravenous access, for getting the lab results and so on. We can show how to work together to achieve a calm, controlled environment with a better outcome for the patient. You can see how the student's confidence increases."

10 HUMAN FACTORS

However clinically competent the doctor, critical information may be missed if there is no rapport with the patient.

RCSI places great emphasis on the human factors, interpersonal skills, the interaction with and empathy for patients and their families throughout the educational process. "It is clinically risky if something important in a patient's background is overlooked – it takes good communication skills to ensure a patient is comfortable revealing information," says **PROFESSOR FERGAL MALONE**. In the frontline clinical specialities like paediatrics, obstetrics, medicine and psychiatry, this is particularly relevant. Professor Malone observes trainees gain confidence in this area by first working with simulated patients and being required to perform in multiple scenarios, some very challenging. In real life, there will be anxious patients and families, aggressive family members, perhaps under the influence of alcohol. Students can be videoed and recorded in a simulated environment, then along with their peers can review the encounters and handle them better next time. "We can give good feedback ..." ■



At RCSI, students have the best of both worlds in terms of learning about the structure of the human body, its systems and understanding how organs grow and function, and how they fail. State-of-the-art technology and computer-aided learning are used alongside classical teaching methods – lectures and tutorials and practicals using professionally prepared dissections, called prosections. In anatomy, students learn to work in teams as doctors do. While the use of virtual anatomy and computer-generated models has its place, Professor Clive Lee, Professor of Anatomy at RCSI, believes nothing can really replace what is gained from actively participating in a dissection. “It’s the best three-dimensional model there is,” he says.

As the home of surgical training in Ireland, RCSI has a long history at the forefront of anatomy teaching. The first Professor of Anatomy at RCSI, John Halahan, was appointed in 1785, the year after the college was founded. Today, the Anatomy Room is in the same College building on St Stephen’s Green where it opened in 1812. Anatomy is central to the training of physicians and surgeons and the principle of donating one’s remains for anatomy teaching dates from 1832 and The Anatomy Act that regulated the practice. Following an initiative by Irish anatomists, voluntary donation for medical teaching and research has been the practice at RCSI since the early 1960s.

The Anatomy Room is bright, high-ceilinged and spotlessly clean. Teams of students work in groups at metal tables, guided by demonstrators (recently qualified doctors) and prosectors (professional dissectors unique to RCSI), often retired surgeons whose benign influence and years of experience have a steadying effect on what may for some students be an initially traumatic aspect of early training. Students are expected to understand the regional structure of the human body, the body systems and surface markings and superficial structures and to know the clinical anatomy of commonly performed procedures. They work with colleagues and staff in the discovery and collection of information. They observe and learn to recognise

“WE ARE VERY GRATEFUL FOR THE GENEROSITY OF THOSE WHO DONATE THEIR BODIES TO BENEFIT MANKIND.”

Professor Clive Lee



The Anatomy Lesson of the Irish College of Surgeons, by Robert Jackson, 2009.

A PLACE OF GIFTS

Dissecting a human body remains central to a modern medical curriculum

and appreciate, interpret and test. Anatomy sessions are also a chance to practice oral communication skills, to be continuously assessed and to address clinical case studies. The Anatomy Course Book tells students the most useful dissection instruments are their fingers. “Use them a lot. Use scissors a little and use the scalpel hardly at all.” Professor Lee reminds students that the cadavers for dissection are their “first patients and their first teachers”, to be treated with the utmost respect. (Inter-faith memorial services held at the end of anatomy courses and attended by students emphasise the point.) “As a profession,” he says, “we are very grateful for the generosity of individuals who donate their bodies to benefit mankind. This selfless act has the power to inspire our students and graduates as they treat patients throughout their careers all over the world.” A recent Act requires that potential donors sign a witnessed consent form and regulation is onerous. For students, their first experience of the Anatomy Room may be their first encounter with mortality. It also brings home that every living person is an individual, that bodies are not stereotypical and that variation abounds.

High above the Anatomy Room tables, hangs a unique collection of art, somewhat surprising to find in this most practical of spaces. But, as Professor Lee, curator of this body of work explains: “Art and anatomy have a common heritage in the Renaissance and anatomy was studied in all the art academies.” RCSI’s collection began with a request by artist Robert Jackson to paint the Anatomy Room. Unveiled by Mick O’Dea RHA in 2010, *The Anatomy Lesson* created considerable interest when it was chosen to hang in the RHA Annual Exhibition. Professor Lee was spurred on to contact other artists which led to donations by Richard Gorman, Mick O’Dea, Robert McColgan, Camille Souter, Imogen Stuart, Eithne Jordan and others. Many other artists, students and staff also donated works. When the artist Patrick Scott HRHA died in 2014, *The Irish Times* noted he had donated his body to RCSI. “This was his first gift to us,” says Professor Lee. His second, *Untitled from Meditations*, was made in 2017 by Eric Pearce who chose its place in the Anatomy Room. These, and other pieces from history are an inspiration, according to Professor Lee. “They inspire us to look up from our labours and realise that while medicine makes life possible, art makes it worthwhile.” ■



Students experience 3D anatomy.



National
Surgical & Clinical
Skills Centre

OPERATION SIMULATION

Simulation is embedded
in the curriculum at
RCSI, helping students
prepare for high-pressure
hospital situations

INNOVATION IN OPERATION

Sim.LED 450 SC

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SIMEON MEDICAL

SIMEON

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The National Surgical & Clinical Skills Centre in RCSI's new building at No 26 York Street features a simulated hospital setting, complete with labs, operating theatre and hospital rooms. It also comes with programmable "patients" – life-sized mannequins (or "manikins" in medical parlance) with simulated pulses and traceable vital signs. They lie in hospital beds and "breathe" and "blink" and are programmed to emit a variety of responses and reactions, depending on the medical scenario being played out. The environment is clinically realistic, designed to feel like a hospital. Director of Simulation and Clinical Skills Based Learning, Professor James Murray says that most students forget they are not in a real hospital, working on a real patient. "Students become so immersed, 99 per cent forget it's a dummy. They suspend disbelief. We simulate everyday occurrences, but also practice rare and unexpected events. While simulation is not a replacement for the real thing, it is a safe and effective way for students to learn with no risk to patients. Students can make mistakes, learn from them, then repeat until they are confident – and we are confident – that they are fully competent with dealing with that scenario."

The National Surgical & Clinical Skills Centre is the first of its kind in Ireland, and the largest and most advanced in Europe. The investment in state-of-the-art technology will transform education, and transform student performance assessment. As Professor Murray explains, simulation allows the human side of healthcare to be addressed too, "It's not just about training in medical procedures and clinical skills, it's about teamwork, communication and decision-making."

"Most of the time, it is not poor performance that is the cause of mistakes, it is poor communication. In simulated scenarios with teams, students learn when to listen, when to speak up, how to assert. Everyone is a stakeholder." And the aim is to monitor, evaluate and remediate.



SURGEONS AND SIMULATION

To the untrained eye, it's difficult to differentiate the RCSI mock hospital from an actual one. Professor Oscar Traynor, Director of the National Surgical Training Centre, compares the simulation training methods at RCSI to the types of simulation found in aviation or in the military. "We are trying to advance the science, to work out how to teach better and perform better."

Curriculum-based surgical simulation training at RCSI is not just about teaching tech skills: human factors training is integrated into the programme. Hybrid simulation – using programmable mannequins and scenarios, but also using simulated patients or actors to recreate the environment in which students will have to perform – is also used. The aim is to mimic reality to the extent that pagers go off, there are urgent phone calls from the lab, equipment alarms sound – all the sights and sounds of an actual intensive care or emergency room. Research shows that this type of training results in a decreased incidence of error. And, according to Professor Traynor, it is about improving patient outcomes. It is estimated that 75% of important events during a surgical procedure relate to human factors such as decision making, communication, team work and leadership and only 25% are related to manual or technical skills. Other human factors which are important in surgical practice include self awareness, conflict resolution and error management.

"RCSI is the only surgical training college in the world to offer a comprehensive human factors training course integrated into the surgical curriculum." Director of Human Factors at RCSI, Eva Doherty says the programme aims to facilitate surgical trainees "to explore areas of professional development in an effort to develop their interpersonal skills in order to enhance the performance of the surgeon and contribute to the reduction of error and risk during surgical procedures."

PLAYING THE PART OF A PATIENT

Simulated patients are people, usually actors but sometimes laypeople, who are trained to play a specific patient role or act out a scripted scenario which allows a student doctor, physiotherapist or pharmacist to practice their communication and consultation skills and in some cases physical examination skills. The use of simulated patients means that students can practice and prepare their skills before they meet actual patients. Interactions are filmed, then critiqued and centrally documented so students can correct errors and observe their improvement over time. As the students progress through the training years, the scenarios become more complex and challenging.



“Medical students are great learners, they devour knowledge, but putting that knowledge into practice while maintaining patient safety is the challenge. And this is where simulation is valuable.” Students’ performances are observed and measured over a collection of tasks under controlled and standardised conditions to give an objective analysis of expertise.

“Typically, where they do exist, simulation centres are “retrofitted” into an existing academic building,” says Ms Dara O’Keeffe,

“WHILE SIMULATION IS NOT A REPLACEMENT FOR THE REAL THING, IT IS A SAFE AND EFFECTIVE WAY FOR STUDENTS TO LEARN WITH NO RISK TO PATIENTS.”

Professor James Murray, Director of Simulation and Clinical Skills

Simulation Lead in Postgraduate Surgical Education at RCSI, a surgeon who trained in simulation at Boston’s Brigham and Women’s Hospital, a leading centre for simulation, and Harvard, “Our Centre is purpose-built so students perform in an environment that’s very close to a real situation.”

Nowadays, students in the US would not apply to a course without advanced simulation options, says O’Keeffe. “As hands-on experience gets harder to come by in the real world, it’s a vital tool for blended learning – in tech skills and human factors.”

The Centre is used by postgraduates, surgical trainees and specialists taking specific courses as well as students. Members of the Dublin Fire Brigade had their first training session there earlier this year and medical devices companies and pharmaceutical firms will use it to run trials and carry out training. ■



SCALPEL, PLEASE

Less than seven per cent of consultant surgeons are female. RCSI is set to address this gender imbalance

RCSI is implementing a series of measures to encourage more women to become surgeons, following the launch of a report by Minister for Health, Simon Harris TD and RCSI President, Professor John Hyland, highlighting a series of barriers to female entry into and progression in surgical careers.

While more than 50% of medical graduates are female, just 34% of surgical trainees are women, while fewer than 7% of consultant surgeons are women. The report, by a working group established by RCSI President, Professor John Hyland, identifies the lack of access for women to high quality surgical fellowships, working conditions during pregnancy and supports available to those returning to work after absence as among the barriers to female progress in the profession.

The report was produced by RCSI’s Working Group on Gender Diversity.

According to the chair of the Working Group, Ms Deborah McNamara, consultant in general and colorectal surgery, Beaumont Hospital, “If surgery is less appealing to women than to men, we need to know why and remove the obstacles.

“There is a striking absence of female surgeons in senior academic positions. We also need career structures that enable surgeons to vary the tempo of their professional life during different periods. This is a fundamental matter of gender equality but it is also a question of ensuring we provide the best patient care. There is evidence suggesting male and female doctors practice differently, that the needs of patients are more likely to be met by a diverse profession,” concluded McNamara.

The Minister for Health, Simon Harris TD, welcomed the report. “The implementation of its recommendations should make a significant contribution to tackling the barriers to gender equality in surgery. I am delighted to see that RCSI is actively addressing the current gender imbalance.”

RCSI President, Professor John Hyland, said “RCSI has been at the forefront of developing selection processes for future surgeons, and we are proud of our tradition of supporting women in surgery that began with the conferring of our first female Fellow Dr Emily Winifred Dickson in 1893. The publication of this report and implementation of the findings demonstrates RCSI’s commitment to addressing this imbalance in the profession.” ■



Professor John Hyland,
President of RCSI.

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RCSI has a well-earned international reputation for delivering an exceptional educational experience that enables our students to become future healthcare leaders around the world. As Ireland's only focused health sciences institution, we inspire greatness, but with a personal touch. That's why we're delighted to announce the opening of the newest addition to our campus, at York Street just off St Stephen's Green.

With the very first clinical simulation training environment of its kind outside of the US, state-of-the-art teaching and simulation spaces and first class student facilities, we have created Europe's most advanced healthcare learning facility.

RCSI: transforming healthcare education, so our future leaders can transform lives.



RCSI

Innovation in **operation**