I am delighted to have an opportunity to contribute to the mission and development of the School of Medicine.

The mission of the School of Medicine at Trinity is to facilitate and provide healthcare education to the highest international standards; to train clinicians and allied health practitioners who are equipped to fulfil their professional roles in a caring, competent and patient centred manner; to produce individuals who through critical thinking and outstanding professional and ethical standards will become leaders in their field of practice.

The School consists of its almost 500 Trinity funded staff, a similar number of healthcare staff from 18 Trinity associated hospitals and healthcare partners with honorary Trinity appointments, our 1,800 strong undergraduate student body from six courses; 500 postgraduate students in taught and research programmes. The School is honoured to be associated with four major Trinity research institutions, Trinity Biomedical Sciences Institute, Trinity College Institute of Neuroscience, Trinity Translational Medicine Institute (TTMI) and the newly-established Trinity St James’s Cancer Institute, reflecting its research led ethos.

The four main development themes of my headship will be:

1. To develop faculty and infrastructure to provide a high quality undergraduate and postgraduate experience for our students. In addition to improving the experience for existing students, any increase in student numbers will be matched by increase in resources.

2. To attract and develop young academics showing excellence in research and education to support the future of the School. We will support excellent young colleagues to apply for academic training programmes such as the Wellcome – Health Research Board (HRB) Irish Academic Training (ICAT) programme and the HRB SPHeRE (Structured Population and Health-services Research Education) programme.

3. To develop structures and policies to support translational clinical research and clinical trials. This builds on work by TTMI; the Wellcome – HRB Clinical Research Facility and Mercer’s Institute for Successful Ageing. It is a high quality and carefully regulated space that improves patient outcomes in participating hospitals.

4. To improve interactions with our hospital and healthcare partners. Significant teaching and research activity is conducted by our honorary clinical colleagues and we need to support and grow this work. We have very strong relationships with our healthcare partners but these need to be reviewed and adapted to fit with a changing academic healthcare environment. The School needs to advise on and adapt to changes in healthcare policy and health services structures such as the Hospital Groups. We need to place research and education as a key driver of healthcare excellence.

The School of Medicine resides within a vibrant Faculty of Health Sciences that includes the Schools of Pharmacy, Nursing and Dentistry. I look forward working closely with Faculty colleagues, and colleagues from related schools and fostering new relationships with other Trinity schools.
About Michael Gill

Professor Michael Gill started his duties as Head of School of Medicine in August 2017. Michael Gill (MD, MRCPsych, FTCD) is Professor of Psychiatry at Trinity College Dublin and Consultant Psychiatrist at St James’s Hospital. He leads the Neuropsychiatric Genetics Research Group which conducts Phenotypic and Genomic research to identify and investigate the function of genetic variation contributing to risk as a means of improving understanding, developing better methods of diagnosis, and new therapeutic approaches. The group has been part of several significant discoveries in recent years published in journals such as Nature, Nature Genetics, Archives of General Psychiatry and the British and American Journals of Psychiatry. Professor Gill is a member of the steering group of the Psychiatric Genomics Consortium and a lead investigator on the international PGC3 award, focusing on whole genome sequencing of large pedigrees segregating psychiatric disorders.

In 2011 he was appointed as Director of the Wellcome/HRB Clinical Research Facility at St James’s Hospital which opened in 2013 and has been highly successful with over 120 studies on its books. Professor Gill is Director and PI of the Wellcome/HRB Irish Clinical Academic Training (ICAT) programme involving six universities, the postgraduate training bodies in the North and the South and the HSE and HSC.

Trinity Medical Graduate Elected Taoiseach

Leo Varadkar studied Medicine at Trinity and completed his six year degree in April 2003. As a student, he was serious about his academic work and was also a very engaged student with interests beyond his medical studies. On graduating from the School of Medicine he spent several years working as a junior doctor in St James’s Hospital, a Trinity teaching hospital, and Connolly Hospital before entering the Trinity/HSE GP training scheme. He qualified as a GP in 2010 and became a member of the Irish College of General Practitioners.

Leo and his two older sisters followed in the footsteps of their father Ashok, a doctor, and mother Miriam, a nurse, to choose careers in the medical field. Sophia, also a graduate of Trinity College School of Medicine, is a Consultant Paediatric Neurologist at Great Ormond Street Hospital for Children NHS Foundation Trust, London, UK, and Sonia is a midwife and works in Dublin.

At Trinity Leo was active in Young Fine Gael and served as vice-president of the Youth of the European People’s Party. He was also selected for the prestigious Washington Ireland Program for Service and Leadership (WIP), a six-month programme of personal and professional development for Irish university students in Washington DC involving summer internships and leadership training.

As former Minister for Health he supported many Trinity initiatives involving research and its relevance to improving patient care. He has also been particularly supportive of student led ventures such as Med Day, the charity fundraising initiative by our medical students among others.

New Academic Track for Internship for Junior Doctors

Trinity is part of the training programme for new junior doctors across Ireland which will see them embarking on critical research projects alongside their standard clinical training in hospitals around the country. The junior doctors are taking part in a new training scheme called the Academic Track for Internship which supports them in undertaking a research or quality improvement project through funding, protected time, mentorship and training in research skills.

“Every year, Ireland loses some of its top-performing medical school graduates to academic programmes in the UK and further afield. One of the aims of creating this opportunity for interns was to retain this talent in Ireland. The academic track provides a pathway for the clinician scientists of the future right from the start of their careers. Not only that, but the healthcare system will stand to benefit from the innovations and discoveries their research will bring,” said Professor Martina Hennessy, Associate Dean of Research, Trinity College Dublin.

Some of the areas these new doctors will be investigating include: premature babies and brain haemorrhaging, traumatic brain injury in young people, cutting-edge methods for diagnosing ovarian cancer, and depression in men living in rural Ireland.

The recruitment process for the academic track was highly competitive. Successful candidates were chosen for their outstanding academic performance and commitment to clinical excellence, with many having already made valuable contributions to clinical research.
Irish Clinical Academic Training Programme (ICAT)

The Wellcome-HRB Irish Clinical Academic Training Programme (ICAT) has welcomed its first intake of eight fellows from a range of clinical specialties, including psychiatry, infectious diseases, endocrinology, dermatology, nephrology and public health medicine, were appointed after a rigorous selection process and have now commenced their integrated academic and specialist clinical training.

The Wellcome-Health Research Board ICAT Programme is a unique all-Ireland cross-institutional programme for clinician scientists based at six major Irish academic institutions and their affiliated hospital groups. Eight ICAT fellows will be appointed every year and will embark upon integrated clinical and academic training, up to completion of PhD and Certificate of Completion of Specialist Training (CCST). ICAT is dedicated to training Ireland’s brightest clinicians and will mentor them as they develop careers in academic medicine.

Professor of Psychiatry Michael Gill, principal director of the ICAT Programme and Head of School of Medicine, commented, “We are delighted to welcome our first eight ICAT fellows and we look forward to working with them in their combined academic and specialist clinical training with ICAT. For medical doctors with an interest in research, ICAT is a fantastic opportunity to develop their careers as leading clinician academics.”

First Specialised Cancer Facility for Ireland

St James’s Hospital and Trinity College Dublin have joined together to consolidate cancer activities into a comprehensive cancer centre – a Trinity St James’s Cancer Institute. The first of its kind in Ireland, the Trinity St James’s Cancer Institute will set a new level for cancer care nationally, integrating medicine and science in cancer prevention, treatment and survivorship.

Trinity and St James’s Hospital have been scaling up for the new Cancer Institute with the recruitment of key new clinical academic and research appointments in oncology. Based on similar international models, it will be located in one designated facility at St James’s Hospital, which is a centre of excellence for the delivery of cancer care. As a public hospital it provides equal access to all.

Trinity has 170 scientists actively working in cancer. They have a track record of high quality cancer research with over €100 million grant income over the last four years. Cancer research is greatly strengthened by Trinity as an acknowledged international leader in research in biochemistry, immunology, genetics and neurosciences.

Accreditation for the new institute is being sought from the Organisation of European Cancer Institutes (OECI), a non-governmental organisation that promotes standards in cancer centres – it will provide a roadmap for taking cancer services and research to the next level. The Institute will cost an estimated €150 m and is expected to be financed with private support and state funds. The site and the development plan demonstrate the potential to have a facility of 24,000m² comparable to other major cancer centres.

Led by Professor Paul Browne, former Head of School of Medicine, this initiative is expected to deliver improved cure rates and outcomes for cancer patients - our ultimate goal.
Vitamin D Research in Trinity

In Ireland, most vitamin D is synthesised in our skin between March and September. During the winter months, our body predominantly uses our stores of vitamin D in our bodies, built up in the summer and autumn months. To maintain a good level of Vitamin D in our system during this period we need to top up our stores of Vitamin D with vitamin D rich foods (oily fish, liver, mushrooms, fortified foods) and vitamin D supplements. Lots of research has shown that supplementation is very effective in reducing deficiency, especially during winter months at high latitudes.

The Irish Longitudinal Study on Ageing at Trinity found that 1 in 8 older Irish Adults are deficient in vitamin D with rates higher in those who were obese, smoked, live in the North West and with a lower asset wealth.

Our scientists also discovered that, contrary to what we might think, sun exposure is an important source of vitamin D in older individuals in Ireland, despite high latitude. In fact, participants in the study aged 60-74 years who reported enjoying sunshine managed to avoid vitamin D deficiency altogether, even if they were not taking supplements. Finally, Trinity researchers conducted a review of many studies examining almost 45,000 cancer cases and demonstrated a beneficial role of vitamin D in cancer survival.

The researchers at Trinity are also working on a number of other important vitamin D studies which should be published in the coming months. They are conducting research looking at vitamin D in pregnancy and vitamin D in ethnic groups. Another study is examining vitamin D and blood pressure and bone health in older adults, while yet another Trinity led study will look at the role of sunshine and vitamin D on the risk and survival of oesophageal and gastric cancer.

Trinity Translational Medicine Institute (TTMI)

Launched in April 2017, the Trinity Translational Medicine Institute (TTMI) brings scientists and clinicians together to develop new ways to diagnose, prevent and treat a range of pressing health concerns. Headed by Professor Orla Sheils, the Institute is located in Trinity Centre on the St James’s Hospital campus and aims to consolidate patient-orientated research across Trinity and the affiliated hospitals, creating a viable process, based on international best practice, for translating transformative biomedical research to a clinical setting. The close proximity, on St James’s campus, of the Wellcome Trust - HRB Clinical Research Facility enables the expedient translation of clinical research breakthroughs into opportunities for regulated clinical trials.

TTMI also incorporates researchers at the Meath Foundation Research Laboratory at the Trinity Centre, Tallaght Hospital, the Coombe Women and Infants University Hospital and Our Lady’s Children’s Hospital, Crumlin.

Trinity College Dublin Schools of Medicine, Chemistry, Pharmacy and Pharmaceutical Science are the founding partners of TTMI and are represented by research scientists and clinicians committed to prioritising patient driven clinical research. The substantive co-operative institute currently houses over 57 principal investigators and 150 scientists.

TTMI has a significant national role to play towards educating the next generation of healthcare professionals. Furthermore, the location of TTMI within the acute hospital setting and the adoption of a collaborative multidisciplinary approach towards patient centered research guarantees the dissemination of impactful clinical research. This will in turn lead to the development of improved diagnostics, therapeutics and devices, while also informing policy and clinical practice.

Professor Jacintha O’Sullivan, TTMI Principal Investigator, and Amy Buckley, a Ph.D. student
Preventative Treatment for Oesophageal Cancer

New research by lead authors Dr Anne-Marie Byrne, Senior Research Fellow in the Trinity Translational Medicine Institute, and Dr David Prichard, Assistant Professor of Medicine at the Mayo Clinic College of Medicine and Science, published in The Journal of Cellular and Molecular Medicine, has unlocked a clue into how chronic heartburn (gastroesophageal reflux disease, GORD) damages the oesophagus, potentially paving the way for new treatments. This may help to prevent both the pre-cancerous condition, Barrett’s Oesophagus and oesophageal cancer.

Chronic heartburn occurs when the stomach contents repeatedly reflux into the oesophagus. This reflux damages the oesophagus and can lead to oesophageal inflammation (Oesophagitis). It was originally thought that, heartburn, oesophagitis and Barrett’s Oesophagus were caused by the acidic component of the reflux. As a consequence anti-acid medication is routinely prescribed for people with these conditions. More recent research has shown that another component of the reflux (bile acids) also damage the cells lining the oesophagus.

In their research, the scientists found a new mechanism for how bile acids contribute to the development of oesophagitis and Barrett’s Oesophagus via its effects on a protein called Integrin-αV. This protein is on the surface of the oesophageal cells and is responsible for making oesophageal cells attach to each other and to the oesophageal wall. The oesophagus itself is made up of a number of layers of cells. The cells on the outside are robust and can stop the underlying cells from becoming damaged in response to hot/cold food etc.

The research team found that the robust outer layer of cells detach and are sloughed away when a bile acid causes the integrin-αV to internalise so that it is not expressed on the cell surface anymore. As a result, the underlying cells become damaged and undergo changes to become more resistant to the reflux, a process called metaplasia. The presence of these metaplastic cells in the oesophagus is called Barrett’s Oesophagus. A small population of Barrett’s Oesophagus patients (~3%) will develop cancer when these metaplastic cells change into cancer cells. The research suggests that targeting bile acid-induced injury in the oesophagus could be employed for better treatment of patients with heartburn, in order to prevent the development of Barrett’s Oesophagus and potentially, oesophageal cancer.

Cell ‘Checkpoint’ that Stops Allergic Diseases

The team of scientists led by Science Foundation Ireland Stokes Professor of Translational Immunology, Padraic Fallon, of the School of Medicine made a significant breakthrough in understanding the regulation of immune cells that play a pivotal role in allergic diseases such as asthma and eczema. They have identified a ‘checkpoint’ manned by these immune cells that, if barred, can halt the development of the lung inflammation associated with allergies.

The discovery provides a potential new target for drug developers to home in on. In theory, a drug that successfully regulates this newly pinpointed ‘checkpoint’ would better control overly aggressive allergic responses.

Allergic conditions, such as asthma or eczema, arise when the immune system misfires and sparks an uncontrolled response to common allergens, such as house dust mites. In asthma this aberrant immune response leads to immune cells infiltrating the lungs, where they cause inflammation that affects lung function and leads to difficulties in breathing.

One key cell that is an early initiator of this allergic inflammation is known as a ‘type 2 innate lymphoid cell’ (ILC2). These cells instruct others, known as ‘Th2 cells’, to drive the cascade of inflammation in the lungs that leads to the development of asthma.

In this study, using a mouse transgenic approach, the scientists demonstrated that ILC2s express a checkpoint molecule, known as ‘PD-L1’, that functions to control the expansion of allergy-inducing Th2 cells and the development of allergic pulmonary and gut tissue inflammation.

The work was published in The Journal of Experimental Medicine (paper DOI: 10.1084/jem.20170051). First author of the paper, Dr Christian Schwartz, a European Molecular Biology Organization Long Term Fellow in Professor Fallon’s group, said: “It is fascinating that a small cell population such as the ILC2s can regulate the expansion of Th2 cells and thereby shape the whole outcome of an immune response – be it beneficial in case of parasitic infections, or detrimental as in the case of allergic responses. I believe the more we learn about these delicate cellular networks the more possibilities we will create for intervention.”

The National Children’s Research Centre, Science Foundation Ireland and The Wellcome Trust supported Professor Fallon’s research. Dr Schwartz is a recipient of a European Molecular Biology Organization Long Term Fellowship.
The Ellard and Beth Seminar Room

On 2 November the Institute of Population Health, located in the new purpose-fitted building at Tallaght Cross, held its first event - the dedication of one of its seminar rooms in memory of Dr Ellard Eppel and his wife, Beth (nee Abrahamson). Sons Michael and Alan, both School of Medicine graduates living in the US and Canada respectively, and daughters Melanie, also based in Canada, and Shireen, from Dublin, welcomed a gathering of family and friends, including members of the Dublin Jewish Community and representatives of the Irish College of General Practitioners. Tom O’Dowd, Emeritus Professor of General Practice, and Dr Richard Brennan, President of the Irish College of General Practitioners, spoke warmly about Ellard and Beth and son Michael added to the reflections. It was an evening of memories of an extraordinary couple who were genuinely beloved members of the community.

Ellard Eppel was born in May 1923 in Dublin where he obtained his primary and secondary education. He attended Trinity College Medical School graduating in 1949 and then trained in the Richmond and Rotunda Hospitals. He particularly enjoyed Midwifery (Midder) carrying out home deliveries in the surrounding district, which was the practice at the time. Later, it was not unusual for him to attend the birth of a baby whose mother he had also delivered.

He married Beth Abrahamson in 1947. She was his confidante, advisor and love of his life for their entire 55 year marriage. They had four children.

After initially setting up practice in Walkinstown, an area then developing near Dublin, he moved the surgery to Kimmage where he was to practice as a GP for the next 50 years. He served as Vice Chairman of the Irish Red Cross, and was President of the Dublin Jewish Board of Guardians, the Terenure Hebrew Congregation and the Dublin Jewish Students Union and was a member of the Irish Council of Christians and Jews and Medical Council. He was elected to the Council of the Irish Medical Association and was instrumental in helping to amalgamate that organisation with the Irish Medical Association to form the Irish Medical Organisation of which he later was a trustee. In 1991 he became President of the Irish College of General Practitioners, which he considered the highest accolade that a General Practitioner could receive. He was keenly aware of the relationship between societal ills and health and encouraged the College to undertake research projects amongst the population.

The spirit and ethos of care for individual patients and for the community at large, which Ellard and Beth demonstrated throughout their lives, will be an inspiration for the Institute of Population Health and the School of Medicine.

About the Institute of Population Health

Headed by Professor Joseph Barry, the Institute of Population Health has excellent teaching and training facilities and social spaces for both undergraduate and postgraduate students. The high-spec three-floor facility incorporates the Department of Public Health and Primary Care of the School of Medicine and public nursing of the School of Nursing and Midwifery with focus on community health or social care services.
Interview with Alumnus Ewe Khay Guan

1. What made you decide to study medicine at Trinity?
I went to London for ‘A’ level and my fourth brother who was a former Trinity engineering graduate in 1971 was instrumental in encouraging me to study medicine at this premier university. The campus with its traditional architecture, cobble stone pathway and beautiful greenery was very welcoming. I made my decision after speaking to some of his Trinity medical student friends.

2. Who was your role model during your student days?
My first role model was my flatmate who was a Trinity third year medical student. I stayed in the same house till the end of my first medical year when he graduated. I was impressed by the many good and dedicated professors, lecturers and clinicians who took pride in imparting knowledge, skills and sharing their clinical experiences. In many ways, I regard them as role models who facilitated the practice of good medicine, the art of human touch and communication, respecting patient and the importance of medical education.

3. How did you choose your area of specialisation?
In the early 80s, I was posted to a government hospital ENT department in state of Penang, Malaysia. That was where my interest began. There was a great shortage of ENT surgeons in the country back then and I was granted a government scholarship to pursue my specialisation.

4. What has been your proudest moment in your medical career to date?
If one is passionate and practices the ideals of the profession, there is no shortage of many proud moments that I found in my medical career. From making a difference in the healthcare of patients, alleviating the condition and suffering of patients or curing them, saving lives during emergencies to simply being remembered or appreciated are proud moments for me. Currently, I am also proud to be involved in the hospital management as one of the hospital board of directors, member of some hospital committees such as Medical Advisory Committee, Credentialing, Medical Ethics & Peer Review committee, Mortality Review Committee and heading the Hospital Safety Goals Committee. I was previously Medical Director for seven years.

5. What advice would you give your younger self?
I should have sought prior information about the medical studies, financial set back, and backup plan instead of spontaneous decision. My father supported my decision all the way. I was blessed to be in Trinity. I still remember the trauma of studying very hard to get the desired results within seven to eight months in a foreign land where it snowed in 1973. I was not a bookworm and never challenged myself academically. My school life was all about sports, games, swimming (certified life saver as well), scouting activities (troop leader) but never a doctor in thought … “a doctor by accident”.

6. What advice would you give to medical students?
Take every opportunity to succeed but remember to be healthy in mind and body. Stay connected with friends, enjoy time and a balance effort to pass all subjects. Don’t miss clinical teaching classes. Practice clinical skills as much as possible. History taking, clinical exams are must pass skills before proceeding further. Be mindful that every life is important and negligence is an absolute NO! NO! Never ever get comfortable with negligence.

7. What is your fondest memory from your Trinity days?
My fondest memory in Trinity days was the time when I was studying anatomy in the antique Anatomy Department under Prof Erskin & Dr Weekes and not forgetting the lab assistant, Mr. Edwards.

8. When did you visit Trinity last?
My Last visit to Trinity was on September 12th 2017 after 37 years whereby I celebrated by birthday in the Alumni office and the most unforgettable event – graduation re-enactment.
Paul Balf, Surgeon at St Luke’s Hospital, Kilkenny, read several of his poems. Paul was awarded the September 2016 Irish Times/Hennessey New Irish Writing award for poetry. His first collection Four Seasons, is scheduled for publication by Salmon in May 2018.

Four Seasons
Late Autumn.
An eerie stillness infuses the landscape.
You sit outside, back to the whitewashed wall,
Staring through the twilight gloom.
It’s the Winter of your life, the Summer of mine.

Father and son - separated by more than a season.
A sidelong glance, we observe the other observing.
You, what you were,
Me, what I will become.

Get Involved
Trinity has a long tradition of outreach and community engagement. To find out about the numerous ways you can get involved with Trinity both at home and abroad, please visit www.tcd.ie/alumni/volunteer

Class Notes
Do you have any news or updates that you’d like to share with your fellow alumni? Submit your news with an image, subject of study and year of graduation to alumni@tcd.ie. For more information please visit www.tcd.ie/alumni

Alumni Events
Alumni Weekend
24-26 August 2018
www.tcd.ie/alumni/news-events/events/