# GRADUATE ENTRY MEDICAL SCHOOL NEWSLETTER

December 2019 | www.ul.ie/gems/



Minister Jim Daly TD, Minister for State for Mental Health Services and Older People launched the Health Science Academy and officially opened the Clinical Education and Research Centre (CERC) building on Monday 9<sup>th</sup> of December 2019. The University of Limerick (UL) and the Health Service Executive jointly fund the CERC which provides a base for students on clinical placement as well as academics

## Official Opening of the CERC Building

and clinical-based researchers at the University Hospital Limerick. Leadingedge teaching facilities include eight wellequipped modern tutorial rooms, which can be used flexibly to suit different sizes of tutorial groups with videoconferencing facilities to connect to UL and affiliated teaching hospitals. A large clinical area for simulation and research mimics a typical hospital ward or intensive care unit. The 150-seat lecture theatre is equipped with advanced audio-visual equipment, including 3D projection of Robotic Surgical procedure from the operating theatres. The CERC provides a base for Clinical Academic Faculty and the clinical academic liaison administrative and technical team. Other CERC occupants include the Mid-West Intern Network, the Health Research Institute (HRI), the Health Science Academy and the Regional Medical Library. The CERC

building illustrates the importance of the relationship that has been built between the University and the UL Hospitals Group. Minister Daly commended the spirit of collaboration in the Mid-West with the opening of the CERC.



Pictured at the official opening left to right: Prof Deirdre McGrath (Head of School), Sharon Nolan (School Manager), Mary O'Kelly (CERC Building Manager), Prof Austin Stack (Professor of Medicine), Dr Helena McKeague (BMBS Course Director).

## University of Limerick 2019 Award for Excellence in Service to the Community

Dr Patrick O'Donnell was awarded the University of Limerick 2019 Award for Excellence in Service to the Community. Dr O'Donnell was nominated for his voluntary work, which focuses primarily on addressing health inequalities and improving healthcare for those on the margins of society. He engages with many community stakeholders on issues of homelessness, addiction and social exclusion. He is committed to promoting a deeper understanding of these issues and their health consequences at local, regional and national levels.

This is an outstanding achievement, which recognises the impact of his work on the most vulnerable people in our communities.



Dr Patrick O'Donnell (GP & Clinical Fellow in Social Inclusion) receiving his award from Dr Des Fitzgerald (UL President)

Liam Glynn @LiamGGly... -23m > Thanks for all the support and good wishes from back home... Great news from Albuquerque!! We will be hosting the WONCA World Rural Health conference in Limerick @UL\_GEMS in 2022 with @CGPnews @SimonHarrisTD @IMO\_IRL @Ciarakellydoc @Idodwd @AnneRabbitte @RichmondmcHarty @dwcork

### World Rural Health Conference for UL in 2022

With this tweet from Albuquerque New Mexico, Professor Liam Glynn (Professor of General Practice) recently announced that GEMS would host the 2022 WONCA World Rural Health Conference. This was after a successful bid for the Conference undertaken with the Rural, Island and Dispensing Doctors of Ireland and the Irish College of General Practitioners.

The proposed theme of the conference is,

"Improving Health, Empowering Communities" and this will explore how communities can be and are empowered to improve their own health and the health of those around them. With an expected attendance of over 1000 delegates from around the world, this is a wonderful opportunity to raise the international profile of the Medical School and the University and indeed the entire Mid-West region.



#### **Paediatric Society**



Christmas caroling fundraising by the Paediatric Society in Limerick was very successful this month, raising €800 to go towards a donation to the UHL Children's Ark

The Paediatric Society is a group of medical students from across all years of the BMBS Programme. Since the fall of 2017, the UL Paediatric Society has been involved in various initiatives, including local children's health outreach activities and fundraising for the Children's Ark Unit at University Hospital Limerick (UHL). Additionally, the group has grown in the last year to encourage both education and research involvement in the area of Paediatrics amongst its members and students at GEMS.

In collaboration with the UHL Paediatric Department, the Paediatric Society is running an educational initiative on Instagram to assess the uptake and retention of paediatric knowledge by creating quizzes posted through the group's social media account (@ ulpaediatric).

The UL Paediatric Society fundraises for the Children's Ark Unit at UHL. To date, the group has raised €1000, which will be combined with other donations to the Children's Ark in order to purchase items that are required by staff and families to improve the level of care and comfort on the ward.

It has been a successful year of research for the Paediatric Society as many members submitted abstracts to the Irish Paediatric Conference in Athlone this December that have been accepted for poster and oral presentations. UL had an excellent turnout of students at the Royal Academy of Medicines (RAMI) student research awards event in Dublin in October. Victoria Griffiths (BMBS Year 4) presented her research on a novel biomarker for necrotizing enter colitis at the 3<sup>rd</sup> Congress of Joint European Neonatal Societies Conference in Maastricht and was recently awarded 'Best Poster Presentation' at the Neonatal Research Symposium in Dublin in November. Niall Dalton (BMBS Year 4) and Julie Evers (BMBS Year 3) were accepted for oral presentations at the Irish Endocrine Conference in Galway in October. Additionally, Niall presented their work at the International Ninth Euro Paediatric Conference in Dublin during the summer.

## **GEMS Student Runs** UITraks <<EXTREME>> Race

The UITraks <<Extreme>> race is a hybrid of running and mountaineering, requires participants to use specialised shoe spikes and climbing ropes to ascend 2800M over 24Km. This is a new race designed expressively for the best sky runners in the world and blends the pure values of sky running with one of the most spectacular mountain sceneries you can find.

Designed by the Anthamatten brothers, the course features high altitude (25% of the course is above 3000m), technical sections and mountaineering segments. Philip ran this race, reserved only for elite runners, as part of the 2019 Migu Run SkyRunner World Series.



Philip Green (BMBS Year 3), running the Matterhorn UlTraks <<EXTREME>> race in Zermatt, Switzerland.

#### Athena SWAN Bronze Award

The Graduate Entry Medical School was conferred with an Athena SWAN Bronze Award at an awards ceremony at the RCSI in Dublin on 24<sup>th</sup> October. The award is in recognition of the School's commitment to promoting gender equality and to identifying and addressing genderrelated challenges in the School. The submission team, led by Prof Ailish Hannigan, included representatives from all roles in the School.



Left to right: Una McInerney (Project Manager, Primary Healthcare Research), Sarah Harney (Senior Lecturer in Medical Education), Mariam Sheehan (Senior Anatomical Pathologist), Mary Mitchell O'Connor (Minister of State, Department of Education), Ailish Hannigan (Associate Prof of Biostatistics) and Sharon Nolan (School Manager).

## **Royal Academy of Medicine** Student Research Award

Aubree Worobetz faced stiff competition from 150 other medical student research projects nationally. Seven of these were chosen for an oral presentation. Aubree was awarded the overall runner-up medal, which is an outstanding achievement for a second year medical student. Aubree's research, which was supervised by Professor Liam Glynn (Professor of General Practice), examined the MEDWELL Programme, which is a feasibility study of exercise intervention to educate and promote health and well-being among medical students. The MEDWELL Programme was introduced into the BMBS Programme this academic year for Year 2 students. It is delivered by a multidisciplinary team from EHS, including GEMS General Practice, PESS and Dietetics. This is an eight-week programme made up of one-hour sessions, each involving a different type of physical activity. These sessions are prefaced by an interactive lecture on how to incorporate the theory of exercise into daily medical practice. Aubree's study demonstrated that it was feasible to introduce MEDWELL into the BMBS Programme and was of benefit to students with regards to improvements in physical activity, well-being, sleep and loneliness.



Aubree Worobetz (BMBS Year 2) with her Royal Academy of Medicine in Ireland Student Research Award.

#### CWELL



Left to right: Dr Maura Adshead (Associate Professor in Politics and Public Administration, UL Department of Politics and Public Administration & CWELL Course Director), Dr Patrick O'Donnell (GEMS Clinical Fellow in Social Inclusion) and Patrice Toomey (CWELL Student)

A team of GEMS staff delivers a module on 'managing health in the home and in the community' for the UL Community Wellness, Empowerment, Leadership and Life skills (CWELL) Diploma. This course is aimed at adult learners from deprived areas in Limerick city. The GEMS module is led by Prof Deirdre McGrath and is delivered as a workshop and practical sessions. The topics covered include chronic illness, diet and exercise, first aid and basic life support. At the end of the course, the students presented academic posters on ideas they have for improving health and wellbeing in their own communities. These posters were put on display for the public as part of the Limerick Lifelong Learning Festival 2019.

#### Reuben Harvey Prize 2019



Congratulations to 2019 BMBS graduate Dr Christi Brady seen here receiving the Reuben Harvey Prize from Dr Terry McWade (CEO, The Royal College of Physicians) at the Royal College of Physicians, Dublin on Friday 18th October.

## John Bradley Clinical Research Programme -University of Toronto



Left to right: Dr Ruby Alvi (Assistant Professor, Pre-clerkship Director, Department of Family and Community Medicine, University of Toronto), Shivani Bhat (BMBS Year 3), Dr Heather Sampson (Assistant Professor, Department of Family and Community Medicine, University of Toronto, Chair of the Toronto Public Health Research Ethics Board, lead of the JBCRP)

In July two BMBS students, Shivani Bhat (Year 3) and Casey Goldstein (Year 2) participated in the John Bradley Clinical Research Program (JBCRP) hosted by the Department of Family and Community Medicine at the University of Toronto.

Shivani evaluated the feasibility of using teaching kitchens as an educational tool to increase nutrition knowledge and practice and physician well-being among primary care residents at the Sunnybrook Department of Family and Community Medicine. This project earned her the Polaris Award, awarded to participants who demonstrated commitment in scholarly work, as well as an oral presentation at the Sunnybrook Education Conference.

Casey worked with the University of Toronto's MD Program and the Department of Family and Community Medicine in their effort to enhance community health and institutional connectivity by developing a programme, which provides tailored information on post-secondary education for mothers completing their general equivalency diplomas.

Both Shivani and Casey hope to present their project findings at the Medical Student Summit and International Conference for Healthcare and Medical Students (ICHAMS) in Dublin.

#### **GEMS Postgraduate Graduations** August 2019



Left to right: Dr Sylvia Murphy PhD, Dr Anushree Dwivedi PhD and Dr Miranda Kiernan PhD



Left to right: Dr Edel Tierney PhD with her supervisor Prof Ailish Hannigan

Five GEMS postgraduate research students graduated in the August 2019 conferring ceremonies – 4 PhDs and 1 MD.

Dr Anushree Dwivedi was awarded her PhD where her thesis was entitled "Identification of Key Factors and Genes Involved in Breast Cancer Metastasis to the Bone and Development of Scaffolds Incorporating Germanium Nanowires for Biological Applications".

Dr Sylvia Murphy also graduated with a PhD and her thesis was "A Cell Based Bioassay to study Skeletal Muscle Cell Growth and Behaviour". Anushree and Sylvia were supervised by Dr Pat Kiely.



Dr Miranda Kiernan received her Phd for her thesis "The Role of The Mesentry in Crohn's Disease and Ulcerative Colitis". She was supervised by Prof Calvin Coffey & Prof Colum Dunne.

Dr Edel Tierney graduated also with a PhD and was supervised by Prof Anne MacFarlane and Prof Ailish Hannigan. Her thesis was "Community Participation in Action: Involving Communities in Primary Care Teams".

Dr Lisa Moran graduated with an MD and her thesis was on "The Lived Experience of Opioid Use Disorder in Ireland in the 21st Century". Dr Khalifa Elmusharaf supervised Lisa.

Congratulations to all five!



(BMBS Year 3)

#### **HEMS** Progamme

The Medical School collaborated with TEAAM (Technical Evacuation Advanced Aero Medical) from British Columbia, Canada to design a high fidelity Helicopter Emergency Medicine Simulation (HEMS) programme. The project is the first of its kind in Ireland and part of a small number of HEMS programmes around the world. The project is aiming to design a HEMS programme that can accurately train and evaluate crew performance.

The research team is made up of Philip Green (BMBS Year 3), Erin O'Gorman (TEAAM), Mary O'Neill (Clinical Tutor, Paramedic Studies), Dr Dervla Kelly (Lecturer in Medical Education), Dr Alan Watts (Emergency Medicine Consultant, UHL) and Mark Dixon (Senior Lecturer, Paramedic Studies). A student simulation-training day was held in September where UL students working in pairs practiced diagnostic skills and procedures such as Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS) as well as communication skills.

## Visiting Professors at MSc Public Health Programme

Curriculum Design Workshop



Dr Khalifa Elmusharaf (Senior Lecturer in Public Health), secured funding from the US Fulbright Programme and the Brazilian Sao Paulo Research Foundation, to invite two visiting Professors to the University of Limerick. The two Professors attending were Prof Carlos Eduardo Siqueira (Associate Professor of Environment and Public Health at the University of Massachusetts, Boston) and Prof Luiz Carlos de Abreu (Professor of Public Health and Head of the Study and Scientific Writing Laboratory, ABC Medical School, University of Sau Paulo, Brazil).

The Professors joined Dr Elmusharaf for four months over the summer to work on the development of the new Masters of Science in Public Health Programme starting in September 2020. They participated in the Public Health Curriculum design Workshop in June at the Castletroy Park Hotel, attended by more than fifty national and international experts.



Left to right: Dr Khalifa Elmusharaf (GEMS Senior Lecturer in Public Health), with Prof Carlos Eduardo Siqueira (Associate Professor of Environment and Public Health at University of Massachusetts, Boston)

#### Inter Professional Advanced Healthcare Research Project



Left to right: Niall Horan (Head of Castel Education Venture), Dr Helena McKeague (BMBS Course Director), Dr Chris O'Connor (Clinical Tutor, Paramedic Studies) Dr Khalifa Elmusharaf (Senior Lecturer in Public Health) Dr Mastour (Head of Medical Rehabilitation, King Khalid University), Prof Deirdre McGrath (Head of School), Mark Dixon (Senior Lecturer, Paramedic Studies), Muizz Siddig (PhD Student, School of Design) and Stephane Pinson (GEMS Elective Coordinator)

Dr Khalifa Elmusharaf received a research grant from King Khalid University to conduct an educational research project to enhance self-directed learning and promote life-long learning of international students coming from collectivist cultures. The project was conducted in collaboration with Dr Helena McKeague (BMBS Course Director), Dr Dervla Kelly (Lecturer in Medical Education), Dr Chris O'Connor (Clinical Tutor, Paramedic Studies) and Mark Dixon (Senior Lecturer, Paramedic Studies).

The project involved 33 Saudi students from public health, medical rehabilitation, radiology, clinical laboratory and dental technology who attended an eight-week programme over the summer.

The objective of this research project was to enable health professional students to engage in the concepts and principles of problem based learning and selfdirected learning. This would enable them to work in inter professional teams to improve patient outcomes and enhance cultural competencies in a way that could build skills for their future careers. The research team gained insight into the experience of international students from collectivist cultures working outside of their comfort zones in a way that will potentially build skills for their future careers. This in turn provided valuable information on the effectiveness of Inter professional education.

A curriculum design team from Public Health, Medical Education, Paramedic Studies and other relevant disciplines, worked together to design an advanced Inter professional training programme. The approach used included a mix of learning methods such as lectures, small group tutorials, interactive sessions, case studies, field visits, advanced patient simulation via virtual reality and experiential learning via real scenario enactments, problem based learning (participants prepared their own problem based case), intercultural learning and peer learning.

## **BMBS** Year 1 2019-20



Paramedic Studies Undergraduate Year 1 2019-20



Paramedic Studies Practitioner Entry Year 1 2019-20



## **Major Research Grants** come to the UL's Kidney Health Consortium at GEMS

Professor Austin Stack has been awarded a new HRB Investigator-Led Projects (ILP) 2019 entitled, "Transitions of Care in Advanced Chronic Kidney Disease" commencing January 2020. This four-year grant will allow the project team to improve their understanding of advanced kidney disease and its management in Ireland and in particular, the transition pathways to dialysis and transplantation using a nationally representative data supplemented with national surveys.

Building on earlier successes, Professor Stack's UL Kidney Health Consortium has also been awarded a second HRB Grant to explore differences between men and women in the detection, progression and outcomes of chronic kidney disease. This is the first of its kind in Ireland and will provide new insights into the gender differences in chronic disease management and help reduce gender disparities and foster more gender-inclusive health planning. Combined, these two HRB grants will provide a substantial €620,000 to GEMS Research programmes in health outcomes research.

## **A Double Win for Dr Leonard Browne,** Kidney Health Consortium and National Kidney Disease Surveillance Programme



Prof Austin Stack (Prof of Medicine) and Dr Leonard Browne (GEMS Research Fellow)

Dr Leonard Browne (GEMS Research Fellow) and the UL Kidney Health Consortium were awarded one of the best overall abstract awards and one of the top eight abstracts by a young investigator at the European Renal Association European Dialysis and Transplant Association Congress (EDTA) meeting in Budapest http://www.eraedta2019.org/ERA EDTA\_2019\_ Absolute\_Best\_Abstracts\_ web.pdf\_for\_his\_paper, "The Relationship between Serum and Uric Acid All-Cause Mortality: Systematic Review And Meta-Analysis Of 3,034,994 Participants".

# **Dr Caoimhe Leneghan** joins the National Academic Intern Programme

Dr Caoimhe Leneghan (BMBS 2019 Graduate) has been awarded an academic internship from a very competitive field of graduates across all medical schools in Ireland. She is one of three BMBS graduates to receive this award and with Professor Stack as supervisor, her Research is focused on a hugely important quality improvement initiative using the national renal information system, "Assessment of Modifiable Risk Factors and Practice Patterns among Haemodialysis Patients in the Irish Health System".



Dr Caoimhe Leneghan (2019 BMBS graduate and intern at the Mater Misericordiae Hospital, Dublin)

#### Paramedic Studies Multi-Disciplinary Training Day



Pictured far left, Prof Rachel Msetfi (Dean, EHS) with participants from the training day

GEMS hosted members of the General Practice training cohort to engage with community emergency services colleagues in a road traffic collision scenario. Participants included the GP Training Scheme, Limerick Fire and Rescue, The National Ambulance Service, Irish Coast Guard, Civil Defence and students from multiple courses within Health Sciences. Culmination of the day resulted in the evacuation of simulated patients in the Sikorksy S92 aircraft and the Dean, Prof Rachel Msetfi, marshalled the helicopter landing in UL.

## President of Iceland Welcomes Mark Dixon



Left to right: Mark Dixon (Senior Lecturer, Paramedic Studies) with Mr Guðni Th. Jóhannesson (President of Iceland)

The President of Iceland Mr Guðni Th. Jóhannesson, welcomed Mark Dixon (Senior Lecturer, Paramedic Studies) at the recent "On Watch for Iceland" Emergency Services Conference hosted in Reykjavik. Mark was the keynote speaker and presented on "Transitioning Paramedic Education from Vocational to Academic Models" as well as "Changing The Paradigm of Road Traffic Collision Management".

Over a busy weekend, activities outside the Conference included one to one dialogue with Icelandic students and observational deployment upon Icelandic rescue vehicles.

#### Med Week 2019

The UL Medical Society held its second annual Med Week in November. With a focus on mental health, the week was dedicated to supporting, informing, and engaging students to help understand mental health and wellbeing while fundraising for an important cause. All proceeds this year went towards the charity, "A Lust for Life" which is an outstanding Irish charity dedicated to supporting and empowering people to take care of their own minds, while changing societal norms around mental health.

Events were held throughout the week which focused on supporting and engaging GEMS students in their mental health, such as providing salad bars for lunch, organising trivia nights, paint nights and compliment-grams, where students were encouraged to write positive messages to other students which were hand delivered later in the week.

Med Week concluded with a 5K fun run sponsored by M2 Office. The fun run was a great success with over 100 participants from the UL community and beyond coming out to show their support for mental health and A Lust for Life. The community truly came together to make the event happen with support from many local individuals and businesses.

Thanks to everyone who took part in and supported the events of Med Week! For upcoming Medical Society events, follow on Facebook (UL Medsoc) and Instagram (@ULmedsoc).



## UL Sim Wars



Left to right: Philip Green (BMBS Year 3), Anna Demian (BMBS Year 3), Conor Clancy (BMBS Year 2), Michael McElligot (BMBS Year 2), Jenna McEwan-Doris (BMBS Year 3) and Dr Alan Watts (Emergency Medicine Consultant, UHL)

In November the 10th Annual Association for Simulated Practice in Healthcare (ASPiH) Conference in Belfast, featured teams of healthcare students from disciplines including paramedics, nursing, advanced nurse practitioners and medical students fighting it out for the top prize. Over two days student simulation teams from England, Ireland and Northern Ireland competed in a series of emergency simulation scenarios, performed in front of a live audience and judged by a panel of senior professionals.

Organised by Sim Wars Ireland, the Royal Belfast Hospital for Sick Children Sim Team and Northern Ireland Simulation and Human Factors Network, this was the first time a student simulation competition has featured at the Conference. The GEMS team trained by Dr Alan Watts (Emergency Medicine Consultant, UHL), was made up of second and third year students.

The students not only benefited from the experience of working on a medical team in a high-pressure scenario but had also received weeks of clinical training by Dr Watts. The training covered team dynamics in critical care; diagnostic skills using tests such as CT, ECG, X-ray and blood tests; procedures such as chest drain insertion, BLS and ACLS; as well as training in professional communication within the hospital setting. This offered a great opportunity for students to apply, practice and



expand the skills gained in classroom learning.

While the team did not progress beyond the semi-final on this occasion, Dr Watts and the students look forward to the internal UL GEMS SimWars where a team will be chosen to represent UL at the SimWars Ireland inter-varsity competition at University College Cork in March 2020.

