Dear All

Welcome to our new edition of the Elixir.

It’s hard to believe we’re already well into 2018, with the second semester of the academic year in full swing!

2017 saw many changes in our School. We had some staff retirements (Alison Finlay, Senior Executive Officer and Pauline McGlue, Senior Laboratory Attendant) and a number of new recruits joined our team. We wish both our retirees and the ‘newbies’ the very best for the new path that lies ahead of them.

Already this academic year, like last, has been a busy and fruitful one. We have established new partnerships and consolidated existing ones, we continue to lead out on a number of exciting and internationally acclaimed research endeavours, and progress with the roll-out of our new, integrated pharmacy programme.

We are very fortunate in our School to have tremendous support and input on a number of fronts from many of our alumni. We are always keen to hear from our alumni and welcome your ideas and contributions. If you would like to become more involved with the School please do get in touch!

I would encourage you to browse the School website during the year to keep updated on our latest news and activities.

With very best wishes for the rest of 2018.

Professor Anne Marie Healy
Head of School
SCHOOL NEWS

Trinity College Dublin and Boots Sign MOU

In September Trinity and Boots Retail (Ireland) Limited signed a Memorandum of Understanding (MOU), formalising an academic and research link between Boots and Trinity that has spanned nearly twenty years.

The MOU underpins the strong collaboration that has existed between the School of Pharmacy & Pharmaceutical Sciences and Boots for quite a number of years, and outlines the commitment to the partnership and to working together. In the eyes of the public, the name “Boots” is synonymous with pharmacy in Ireland, but to those who have engaged with Boots over the years, the name has also become synonymous with high quality, practice-based education and competency development. In June 2010, the then Minister of Health, Mary Harney, opened the Boots Practice of Pharmacy Teaching and Development Unit. Now, this state-of-the-art facility, which was sponsored by Boots, continues to be an invaluable resource for Practice of Pharmacy Teaching and Learning in our School.

The School’s relationship with Boots has also been about research and development and the School’s leadership looks forward to using it as the basis for deepening this productive partnership.

Ongoing Support from Clanwilliam Health

Clanwilliam Health is to support the School of Pharmacy & Pharmaceutical Sciences for an eighth consecutive year, bringing the total value of software donated to over €1.3 million. Clanwilliam Health has been supplying pharmacy software and equipment to help the School develop its digital learning environment, providing students with access to state-of-the-art technology and cutting-edge software applications. The partnership, first agreed in 2009, has been renewed for five more years, bringing it up to 2022.

By providing software, Clanwilliam Health’s contribution allows the School of Pharmacy students to gain practical experience by working in a real-life pharmacy setting, and the opportunity to acquire a practical knowledge of the reality of dispensing, drug interactions and pharmacy management practices.

Eileen Byrne, Managing Director, Clanwilliam Health, said: “We are delighted to be continuing our support for the School of Pharmacy and are proud to have such a longstanding relationship with them. Our partnership accounts for provision of software, drug information databases and accompanying training materials, as well as full access to our support and engineering departments. At Clanwilliam Health, we recognise that pharmacists play a vital role in the healthcare system. Ensuring that they are equipped with the right digital capabilities to work in the sector is now a must in today’s connected society and this is an area we are proud to support. Investing in education to support Ireland’s pharmacists of the future is and will continue to be a priority for us.”
New Staff Members

**Eduardo Ruiz-Hernandez** joined the School of Pharmacy & Pharmaceutical Sciences in January 2017 taking up the position of Ussher Assistant Professor in Pharmaceutical Chemistry. Eduardo’s research area is on stimuli-responsive nanosystems with applications in advanced drug delivery and biosensing (rapid detection of viral diseases).

Assistant Professor **Eimear Ni Sheachnasaigh** is a registered, practising pharmacist who divides her time between the School of Pharmacy & Pharmaceutical Sciences and practising in community pharmacy. She gained her MPharm at Aston University and subsequently completed her MSc (Community Pharmacy) at Trinity.

Assistant Professor **Niamh O’Boyle** received her BSc(Pharm) and PhD degree from Trinity, and was awarded a postdoctoral scholarship at University of Gothenburg in Sweden investigating the allergenic activity of epoxides and epoxy resins. She was awarded a postdoctoral research fellowship at the School of Biochemistry & Immunology, Trinity, working on ‘Cancer, Tubulin and Free Radicals: New Therapy’.

Professor in Practice of Pharmacy, **Cristín Ryan**, received her BSc(Pharm) from Robert Gordon University and her PhD from University College Cork. She undertook post-doctoral training at the University of Aberdeen. She worked as a lecturer at Queen’s University Belfast and as a senior Lecturer in Pharmacy Practice at the Royal College of Surgeons, before joining TCD.

In addition, we would like to welcome **Olga Knutova**, **Katherine Walsh** and **Elizabeth O’Shaughnessy** to the Technical and Administrative Teams.

Trinity and St. Vincent’s University Hospital Sign Memorandum of Understanding

In November 2017, the Pharmacy Department at St. Vincent’s University Hospital (SVUH) signed a Memorandum of Understanding (MOU) agreement with the School of Pharmacy & Pharmaceutical Sciences, Trinity. This MOU provides a solid basis for:

- Co-operation in establishing teaching, research and clinical links and providing a suitable environment for training and education in Pharmacy
- Co-operation in facilitating professional development in Pharmacy
- Encouraging research opportunities
- Mutual collaboration for the provision of excellence in patient care.


Staying Afloat in the Female Boat – A “Chew and Chat” Event

To celebrate International Women’s Week, the School hosted a “Chew and Chat” evening on 7th March. The evening showcased presentations from a very accomplished and interesting group of women. Presentations included “Let your Dreams Set Sail” by Fionnuala Walsh, Senior VP, Eli Lilly and Company, and “How I Float my Boat” by Marina Lynch, Professor of Neuroscience at Trinity.

Discovery of Rogue Messengers Hindering Immune Response to Cancer

Researchers led by Professor Lorraine O’Driscoll made a discovery around treatment-resistant breast cancer that may turn the phrase, “don’t shoot the messenger”, on its head. The scientists have found that cell to cell messengers released by cancer cells which are not responding to treatment, can negatively affect the body’s immune system response against the cancer. They have also discovered a possible way for doctors to identify those patients most at risk of treatment resistance which allows them to choose the best possible treatment for each patient.

Essentially, the messengers were found to be bearers not of bad news, but of immunosuppressive agents which inhibit the body’s immune system from fighting against the cancer. Making a bad situation worse, when the messengers were received by other cancer cells, they made those cells also release immunosuppressive agents, thereby multiplying the effect.

This study sets the proof-of-principle basis for the development of a predictive tool for doctors, which would be able to tell from a blood sample whether the patient would respond to targeted treatment before it is given. This would help ensure that only those patients that would benefit from this type of treatment would be given it, while non-responders would not receive unnecessary treatment, and associated side-effects and would instead be given a different, likely more effective treatment to begin with.

The study also suggests that patients that do not respond to this treatment would very likely benefit from therapies that enhance the immune response against the tumour, as lack of response to treatment appears to be related to immune system suppression.

For more information visit www.tandfonline.com/doi/full/10.1080/2162402X.2017.1362530

SFI Funding to Lidia Tajber

Associate Professor Lidia Tajber was awarded a Science Foundation Ireland (SFI) Career Development Award to transform problematic therapeutic agents into novel functional materials called ionic liquids (project acronym ActiPIILs). This project has received €637,000 in funding and is supported by SSPC (the Synthesis and Solid State Pharmaceutical Centre, led by the University of Limerick). ActiPIILs involves international and national collaboration with Purdue University, University of Silesia, University College Cork and an industry partner Physiolution.

For more information visit www.pharmacy.tcd.ie/news/lidiatajber-sciencefoundation-funding.php

Research Papers Published Biomaterials and Nanomedicine

Biomaterials research work led by Dr. Eduardo Ruiz-Hernandez and his colleagues in CIBER Bioengineering, Biomaterials and Nanomedicine (Spain) was published in Acta Biomaterialia, one of the top journals in the field. The researchers propose a novel technology based on the combination of thermoresponse liposomes and degradable hydrogels (referred to as “lipogels”) to locally control the release of chemotherapy. Near-infrared (NIR) photabsorbers were incorporated into the hydrogel to transduce NIR photon energy into heat. The remote activation of the chemotherapeutic-loaded liposomes by NIR irradiation provides a fine regulation of the dose and bioavailability of the delivered payloads, as shown in cultures of epithelial carcinoma cells. This controlled drug delivery system may be beneficial for those therapies that require precise control over dosing in a defined spatiotemporal framework.

For more information visit www.sciencedirect.com/science/article/pii/S1742706117305087?via%3Dihub#f0040
School Researcher awarded €4 million

Professor Lorraine O’Driscoll was awarded almost €4 million Horizon 2020 funding for a programme entitled “Training in Extracellular Vesicles for Benefit in Health and Disease”. The programme is in collaboration with European partners at Institut Curie Paris, Utrecht University, Ghent University, Semmelweis University Budapest, Freiburg University, University of Porto, and industry including Lonza, HansaBioMed, Bioinf2Bio, GVS SpA, AJ Innuscreen GmbH, Exosomes Siena SpA, BD Biosciences and Thermo Fisher.

This H2020 Marie Skłodowska-Curie Innovation Training Network will train 15 PhD students over its 4-year lifetime and will work on establishing standards and best practice for exosomes and other extracellular vesicles (EVs) research. It will focus on cancer and determining how EVs contribute to cancer metastasis, immune suppression and resistance to anti-cancer drugs, but also how EVs may be used as naturally-occurring drug delivery systems. The hope would be to subsequently make use of this knowledge for societal and economic purposes.

Carsten Ehrhardt joins EJPB Editorial Board

Dr. Carsten Ehrhardt has recently joined the editorial board of the European Journal of Pharmaceutics and Biopharmaceutics, the official journal of the International Association for Pharmaceutical Technology. With a 5-year Impact Factor of 4.389, the journal is one of the leading journals in the field of Pharmaceutical Technology, Biotechnology and Biopharmaceutics. It provides a medium for publication of novel and innovative research. Topics covered include Biopharmaceutics, Quality Control and Pharmaceutical Analysis.

Staff Awards: Dr. Oliviero Gobbo

Congratulations to the winner of the Dean’s Research Initiatives Fund 2017, Research Fellow Dr. Oliviero Gobbo. His winning application was titled ‘Assessment of a Nanocarrier to Deliver Trastuzumab through the Blood Brain Barrier in a Murine Model of HER2+ Breast Cancer Brain Metastasis’.

For more information visit www.pharmacy.tcd.ie/news/deans-research-initiatives-fund-2017.php

H2020-funded Cooperation in Science and Technology Ranked Number One

The H2020-funded Cooperation in Science and Technology (COST) led by Professor Lorraine O’Driscoll, was ranked number one when evaluated by the European Commission. Interest in exosomes and microvesicles, collectively termed extracellular vesicles (EV), is escalating because of their involvement in many physiological and pathological processes including cancer, immune modulation, Alzheimer’s disease, Parkinson’s disease and their potential to be exploited as naturally-occurring delivery vehicles.

The Clanwilliam Pharmacist Awards 2017

Congratulations to Anne-Marie Healy on being nominated for a Professional Excellence Award at the Clanwilliam Pharmacist Awards ceremony in November.
STUDENT & ALUMNI NEWS

Julie O’Neill Receives Alumni Award

Julie O’Neill BSc(Pharm) started her career in 1990. She gained experience in the areas of operations, plant management and quality assurance while working for Helsinn Birex Pharmaceutical Limited and Burnil Pharmacies Limited before joining Gilead Sciences in 1997. During her 17-year tenure at Gilead, Julie held many senior management positions including Vice President, Operations & General Manager, Ireland. Since 2014, she has worked with Alexion Pharmaceuticals and is currently Executive Vice President, Global Operations, where she leads a diverse multi-disciplinary global operations team. Julie holds various national leadership positions. Since 2013, she has held the position of Chairwoman and Member of the Board of the National Standards Authority of Ireland (NSAI) and is the former President of the Irish Business and Employers’ Confederation (IBEC), being the first woman to hold this position. She is a Board Member of the National Institute for Bioprocessing Research and Training (NIBRT), the American Chamber of Commerce of Ireland, and CRANN, the Trinity College based Centre for Research on Adaptive Nanostructures and Nanodevices. She has also served on the governing body of University College Cork and the Research Institute Board of UCD’s Conway Institute.

In 2014, Julie was honoured by the Irish Independent as the 16th most powerful woman in business. In May 2017, Trinity honoured her with an alumni award. She is the first Pharmacy graduate to receive this award.

Postdoc Society Presentation Event
May 2017

The Postdoc Society in the School was established in early 2017. It is a vibrant group of early-stage researchers who organise regular presentations from internal and invited speakers.

For more information visit www.pharmacy.tcd.ie/news/postdoc-society-presentations-2017.php

Mohammed Ali Selo Honoured with American Thoracic Society Award

Mohammed Ali Selo, a PhD student in the School of Pharmacy & Pharmaceutical Sciences, has received the ATS Assembly on Respiratory Cell and Molecular Biology Jo Rae Wright Early Investigator Award at the ATS International Conference in Washington, DC.

Alumni Weekend 2017

Class of 1987 reunite at the Alumni Weekend

CPD – Cardiology in Clinical Practice Module

Cardiovascular disease is the leading cause of mortality and morbidity in Ireland. As a result, the Health Service Executive has put a high priority national strategy in place, with clinical care programmes specifically designed to address the key areas of concern. Application is on a bi-annual basis.

For more information www.pharmacy.tcd.ie/postgraduate/cardiology_clin_pharm_mod.php
“Breaking Boundaries”
– Jack Kavanagh

“Breaking Boundaries” is a truly inspirational documentary which aired on 3e last August following Jack Kavanagh and his friends as they headed to the west coast of America in search of adventure. In 2012, everything changed for Jack Kavanagh. Having just completed his first year in pharmacy in Trinity, Jack was holidaying in Portugal when tragedy struck the young teen. While swimming in the sea Jack collided with a hidden sandbank as he dived into an oncoming wave and was left instantly paralysed. This documentary chronicles the adventures of Jack, who travels to the west coast of America with friends, despite becoming paralysed. Amidst the highs, there are many lows that put Jack’s own circumstances into perspective whilst also providing a stark reminder of the fragility of life itself. Speaking about his uplifting and touching journey, Jack says: “We learnt a lot about ourselves on the trip, but more importantly it was the end of one chapter and the beginning of something very new. When we came home from America, all of us were inspired because we had shown that we could achieve anything. Obstacles no longer seem like obstacles and I am embracing even more challenges because I began to relish that uncomfortable place in which you exist when you are challenged, developing, adapting and overcoming. This journey was important to me… It proved to me that I could achieve anything in my life.”

The Prize Giving Ceremony is a celebration of the outstanding performance of the Trinity pharmacy students in their academic achievements in the BSc(Pharm) and MPharm Degree course.

The School acknowledges the generosity of all our sponsors and congratulations to all recipients on their awards and their academic achievements.

**The Prizes and Prize Winners**


Congratulations to the Class of 2017!

L-R: Mr. Turlough Heffernan, Ms. Dzana Hadzic, Ms. Ciara MacKenna, Ms. Rebecca Clarke, Mr. Matthew Comer and Mr. Mark Lynch

Congratulations to our New Scholar!

Chee Cheng Koay – Scholar

Following the announcement by the Provost on Monday, April 10th, the School of Pharmacy would like to extend our sincerest congratulations to our new Scholar, Chee Cheng Koay.

Congratulations to Michelle Lowry, PhD student who was honoured with an International Society for Extracellular Vesicles (ISEV) Junior Scholarship Award in May at the Society’s Annual Conference in Toronto, Canada.
The School bids a fond farewell to Alison Finlay

Where did it all begin?
‘I started work in Trinity in 1970 in the Admissions Office. There were plenty of dramas in those days. We once had an incident where a disgruntled student set a fire in the Secretary’s office which resulted in a lot of smoke damage in the entire building. We also had a number of student riots but we just got on with it all and worked around things.’

After two years Alison’s work and meticulous attention to detail was recognised and she was offered a position in the Senior Lecturer’s Office/Exams Office. Complete responsibility for the Matriculation Examination was handed over to Alison. This involved timetabling of the papers, vivas, collation of results and sourcing venues. She was delegated some staff members for the purpose of checking marks and smiles as she describes one of the lighter moments. ‘I found that intentionally calling out a wrong mark when checking results would prevent any lapse in concentration.’

The position in Senior Lecturer’s/Exams Office was to last seven years during which time Alison’s first baby, Andrew was born. She smiles as she describes Andrew’s first days in Trinity. ‘He was 6 weeks old when he was pushed at great speed over the cobbles to the Crèche.’

Over the years the numbers steadily increased to 2,500 entrants for this examination which took place in term time. In 1979 it was decided to discontinue the Matriculation Examination as the numbers were unmanageable which coincided with Alison’s second son, David, being born.

When did you return to work outside the home?
‘In 1991 I returned to work in the School of Pharmacy in Shrewsbury Road. After twelve years away from College the explosion of technology had changed the office environment out of all recognition.’

Alison dealt with many of the difficulties that students presented over the years but it never left her defeated. Alison’s keen examination eye and practical knowledge left no room for a syrupy approach but always allowed for words of encouragement, practical advice and plain speaking. Her flair for unobtrusively alerting both the academics and students of potential hazards ahead will be sorely missed. There are many students as well as staff members who managed to avert a disaster in one way or another due to Alison’s attentive nature. From scooping students off the floor after fainting at an exam to always creating time and space for academic and administrative staff alike.

What did you find most satisfying whilst working in the School over the years?
‘I have always enjoyed examination results probably because I am also interested in the people that are doing the exam. I like to know how our students get on after they leave us. The interaction with students and colleagues was always collegial and made working in the School very pleasant but most of all I enjoyed the camaraderie I had with the staff.’

Did you have a favourite part or section of your work?
‘I enjoyed the on-line interaction and meeting up with the students on the QP course. Meeting up with past students at the QP Forum over the years was also most enjoyable.’

The QP Forum began originally in 1999 as a reunion however, due to growing interest, expanded into the conference it is today.

What are you looking forward to when you retire?
‘Free time to myself! I am looking forward to spending more quality time with my six grandchildren. I intend to catch up with friends and win the battle of the weeds in my garden. I also enjoy being in a choir and of course, Ken and I plan to do some travelling as well.’

Whilst speaking with Alison about this milestone in her life I could not help thinking that she will not retire from working tirelessly and enthusiastically but will simply redirect her working life.

By Catherine Muldowney