

TRINITY SCHOOL OF

Pharmacy & Pharmaceutical Sciences

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Dear Colleagues and Friends,

Welcome to this edition of the Elixir Newsletter. As you will see there are a lot of interesting and exciting items to share with you. We are now featuring an alumni profile and we are delighted that Marita Kinsella has agreed to provide this inaugural profile.

Prof Anne Marie Healy,

Head of School

We thank Marita for taking the time to write this interesting and insightful piece and hope that many of you will follow in her footsteps and submit your profile to the Elixir. In this newsletter, we are pleased to present some of our highlights from this academic year, from the Annual Pharmacy Prize Giving Ceremony, where we celebrate the outstanding achievements of our students, to the introduction of our flexible education initiative. We have many new and ongoing research initiatives being led by the members of academic staff from the school, which are featured in our research section. We have had the pleasure of hosting large numbers of international visitors, such as delegates from the FIP



World Conference and over 60 students from the University of Copenhagen. We hope you enjoy reading each news story.

We wish to facilitate and encourage your continued professional and educational development where possible and also encourage a vibrant social network among our alumni that will both enhance and progress our profession. Please share any ideas you might have about how you feel your school can engage with you.



TRINITY COLLEGE DUBLIN
COLÁISTE NA TRÍONÓIDE, BAILE ÁTHA CLIATH

THE
UNIVERSITY
OF DUBLIN

Class reunions in the Mansion House



Jennifer Hughes, Pat Campion, Mairead Galvin and Aisling Reast. photographed by Naoise Cuihane

The prestigious Helix Health Pharmacist Awards 2013 was the setting for class reunions last November. Two classes celebrated significant anniversaries at Mansion House event.

Many thanks to:

- Cicely Roche for bringing together a group from the Class of 1983 to celebrate their 30 year reunion.
- Tamasine Grimes, who brought members of the Class of 1998 together to celebrate 15 years since their graduation.

A number of our alumni were recognised for their excellence in Pharmacy, including:

- Mairead Galvin - winner of the *Practice-Based Research Award (undergrad and M.Sc. Hospital Pharmacy 2010 in TCD)*.

The following alumni were finalists in several different award categories:

- Evelyn Deasy - *Practice-based Research Award*
- Eileen Relihan - *Practice-based Research Award*
- Rachel Maxwell – *Young Pharmacist of the Year Award*
- Oonagh O'Hagan – *Excellence in Community Practice Award*
- Sean Egan - *Excellence in Hospital Pharmacy Award*

Flexible Education Initiative Launched to Help Pharmacists Tackle Cardiovascular Disease

In November, the School launched a new flexible educational initiative for community and hospital pharmacists. The educational module entitled 'Cardiology in Clinical Pharmacy Practice' offers the latest training in managing cardiovascular patients in both the hospital and community settings through a distance learning approach.

The aim of the module is to equip pharmacists with the requisite knowledge and skills to optimise management of cardiovascular patients in both the hospital

and community settings and in doing so, to improve patient safety and the pharmaceutical care of this patient group. The educational module is open to registered pharmacists working in community or hospital practice. The course runs twice annually over approximately 12 weeks, predominantly online, and carries 5 credits under the European Credit Transfer and Accumulation System (ECTS).

For more information please go to: www.pharmacy.tcd.ie/postgraduate/cardiology_clin_pharm_mod.php

School of Pharmacy and Pharmaceutical Sciences hosts 2nd Galenus Workshop on Pulmonary Drug Delivery

The School recently hosted the 2nd Galenus Workshop on Pulmonary Drug Delivery at the Panoz Institute from September 18 - 20, 2013.

The workshop was attended by an international group of Ph.D. students undertaking research in Pharmaceutical Sciences and junior faculty members from 18 different Universities as well as representatives of the pharmaceutical industry from a variety of companies.

Both practical and theoretical in scope, the workshop covered many aspects of Pulmonary Formulation and Drug Disposition with lectures and practical sessions delivered

by highly experienced faculty members and international speakers.

Speaking about the success of this event, Assoc Prof Carsten Ehrhardt commented, "The feedback from the participants and speakers was fantastic and the mix of lectures and practical training was seen as being of real benefit."

The Workshop on Pulmonary Drug Delivery was sponsored by the Galenus Foundation. Sponsorship for the event was also received from the International Society for Aerosols in Medicine (ISAM). For more information please go to: www.pharmacy.tcd.ie/news/Galenus_workshop.php



2nd Galenus Workshop Dublin

Alumni Profile



At school I had always enjoyed chemistry, so when I gained a place on the pharmacy degree programme at Trinity College, I was thrilled at the opportunity to combine the practical problem-solving of chemistry with developing the skills of a health professional. Having completed my pharmacy degree, my internship year was in the Pharmacy Department, University College Hospital Galway prior to registration as a pharmacist in 1998. After registration, I worked for three years with the global pharmaceutical company GlaxoSmithKline (then SmithKline Beecham) in a medical information role. It was during this time that I got my first taste of working with colleagues internationally.

In 2001 I left GSK to take up a post at the Pharmaceutical Society of Ireland (PSI), which is the statutory body responsible for regulating pharmacists and pharmacies. I gained experience working across a variety of areas within the PSI such as pharmacy practice, pharmacy education and registration. Around that time I finished a postgraduate Diploma in Legal Studies and went on to obtain the degree of Barrister of Law in 2004 at the Honorable Society of King's Inns, Dublin.

Enactment of a new Pharmacy Act in 2007 saw major changes in the PSI's role in regulating pharmacy in the interest of public health and safety. As a consequence, I moved to a new role as Head of Legal Affairs to develop the statutory rules necessary to implement the Pharmacy Act.

In January 2009 I was appointed to the post of Chief Pharmacist at the Department of Health. With a team, I was responsible for policy and legislation relating to the regulation of medicines, medical devices, cosmetics, psychoactive substances, as well as policy and legislation regulating pharmacists and pharmacies. The role, both fascinating and exceptionally busy, provided first-hand experience of how the State's parliamentary and legislative processes work, inspiring me to commence the professional doctoral studies in governance which I am currently undertaking.

My time in the Department gave me a wider knowledge of the health sector in Ireland as well as at EU and international level, all of which is vital in understanding the role that pharmacy plays and the contribution that pharmacy can make to the care of patients in our health system.

In late 2013 I returned to the PSI as Registrar/CEO, which is an exciting opportunity to contribute to pharmacy

regulation in a different way. My role, and that of the PSI, is concerned with maintaining public confidence in the profession of pharmacy through effective regulation, as well as ongoing education and development of pharmacists. Since returning, it has been inspiring to see how the new pharmacy regulatory system has evolved and how advances in pharmacy practice and education are improving care for patients and enhancing the role of pharmacists.

On my graduation from Trinity, I could never have imagined that my career as a pharmacist would take me in the direction that it has. Pharmacists, through their training, are a unique combination of scientist and health professional, and looking back, I realise that studying pharmacy at Trinity helped me to develop the skills that I've used throughout my career in the complex and challenging policy environments of pharmaceuticals and healthcare i.e. the ability to apply scientific rigour, to think critically, and to problem-solve, while being concerned for the welfare of patients. During my time at Trinity, one of the most important and rewarding lessons that I learned was the value of engaging in life-long learning, which has helped me to develop, adapt and take on new challenges throughout my career to date.

Marita Kinsella,
Registrar/CEO, Pharmaceutical Society
of Ireland
Class of 1997

Tell us your story!

Contact Gillian Doyle, Senior Executive Officer email: doylegi@tcd.ie



Rebecca Kate Cooper Clarke and Maura Kinahan



Asst Prof John Walsh, Louise Gavaghan and Ingrid Walsh



Ruth O'Toole, Prof Mary Meegan and Brian Collins



Prof Mary McCarron, Caroline Walsh and Catriona Bradley



Brian McNamara and Karen O'Connor



Paula Byrne and Geraldine Freeman



Asst Prof Astrid Sasse, Louise Gavaghan and Barry Doyle

2013 Pharmacy Prize Giving Ceremony

The TCD School of Pharmacy and Pharmaceutical Sciences was delighted to host its annual prize giving ceremony on Wednesday, 4 December. The event was held in the Knowledge Exchange, Trinity Biomedical Sciences Institute. Head of School, Prof Anne Marie Healy, and Prof Mary McCarron, Dean of the Faculty of Health Sciences, welcomed academics, sponsors, students, family and friends to the ceremony.

The winners were:

- Rebecca Kate Cooper Clarke: *Pfizer Healthcare Ltd Junior Freshman Pharmacy Prize*
- Louise Gavaghan: *Sanofi Ireland Prize, Pfizer Healthcare Ltd Prize in Pharmacology and the Actavis Academy Senior Sophister Pharmacy Prize*
- Ruth O'Toole: *Paul Higgins Memorial Prize, Prize in Pharmaceutical Chemistry*
- Brian McNamara: *LEO Pharma Prize in Pharmaceutics*
- Paula Byrne: *McNeil Prize*

The Pharmacy Alumni Prize was won by Caroline Walsh. This prize is awarded for the best combined overall mark in the Junior Sophister year. The award was presented by Prof Mary McCarron, Dean of Faculty of Health Sciences and TCD School of Pharmacy graduate, Dr Catriona Bradley, Executive Director of the Irish Institute of Pharmacy. This prize was funded by the Trinity Alumni Appeal.



Louise Gavaghan, Prof Marek Radomski and Maura Kinahan

This annual Prize Giving Ceremony is a celebration of the outstanding academic achievements of the TCD BSc. (Pharmacy) students.

Prizes are awarded for high academic performance in particular areas of Pharmacy study. The School views each award as a statement of support and recognition of their students. The School acknowledges the generosity of all our sponsors and congratulates all recipients on their awards.

Thank you to all School of Pharmacy and Pharmaceutical Sciences alumni who have donated to the appeal.

If you would like to donate to the 2014 Alumni Appeal please go to:
www.tcd.ie/alumniappeal
 OR phone +353 1 8962088.

European Society of Clinical Pharmacy Fellowship

Assoc Prof Martin Henman was recently awarded fellowship of the European Society of Clinical Pharmacy. ESCP Fellowship is awarded in recognition of continued excellence in clinical pharmacy practice and/or research. Prof Henman received the fellowship for his contributions to the development of clinical pharmacy in Ireland, the activities of the European Society and his contributions to clinical pharmacy in general. Prof Henman is the first pharmacist from Ireland to receive this award.



Assoc Prof Martin Henman

Stop for Good Programme - Operation Transformation

The Stop for Good Programme developed by Boots Ireland in conjunction with the School of Pharmacy, was featured on the very popular RTE programme Operation Transformation. Assoc Prof Martin Henman speaks about the research on the programme, which aired on 14 January and will be available to view on RTE player for a limited time.

International

FIP Conference

On Tuesday, 3 September a group of delegates from the FIP World Congress visited the School of Pharmacy and Pharmaceutical Sciences and were welcomed by the Head of School, Prof Anne Marie Healy.

They were then provided with an overview of Practice of Pharmacy teaching and learning in TCD by Asst Prof Sheila Ryder, research within the School by Assoc Prof Carsten Ehrhardt and postgraduate opportunities by Asst Prof Lidia Tajber, followed by an extensive tour of the facilities within the Panoz Institute. This tour was organised by DUPSA President Lisa Coffey (B.Sc. (Pharm.) Senior Sophister) and Chief Technical Officer, Ray Keaveny. A Fun Run also took place in the grounds of Trinity College early that morning, especially for the delegates of FIP World Congress.



FIP Fun Run - Start Line TCD

Copenhagen visit

On Tuesday 12 November, TCD School of Pharmacy and Pharmaceutical Sciences had the pleasure of welcoming 67 pharmacy students from the University of Copenhagen.

The students visited TBSI and were given talks by Asst Prof Astrid Sasse on studying Pharmacy at Trinity and Assoc Prof Martin Henman on Pharmacy in Ireland. They met some of our current Senior Sophister students and were given a tour of the Boots lab, aseptic suite and Unit Operations area coordinated by Asst Prof Sheila Ryder.

'We all had a great experience at Trinity. The lecture about how the education for pharmacists in Ireland was truly a worth-while experience.'

Maria Grundahl, University of Copenhagen



Lene Olsen-Nanna Boegelund-Marloes van Hout

Education and Trade Mission to Brazil

Asst Prof Fabio Boylan, lecturer in the School of Pharmacy and Pharmaceutical sciences, went to Brazil in October as part of a team from Trinity College Dublin, to take part in the most recent official education and trade mission. The mission was lead by the Minister of Education and Skills Ruairi Quinn.

Science Without Borders, an educational initiative that is currently being rolled out by the Brazillian government, funds a large number of Brazillian students to study in many different countries across the globe, including Ireland.

Asst Prof Fabio Boylan commented that, "visiting the schools was a remarkable experience...the level of engagement from the students was superb and we classified this part of the trip as being very successful".

The School of Pharmacy and Pharmaceutical Sciences and the School of Nursing and Midwifery TCD are now opening modules to Brazilian students as part of the Science without Borders initiative. To read more about the Trade Mission to Brazil please visit our website.

http://pharmacy.tcd.ie/news/Fabio_Boylan_trip_to_Brazil.html



Dr Rocco Lupoi - Mechanical Engineering TCD, Dr Jose d'Albuquerque e Castro - Head of the Physics Institute UFRJ, Dr Aline Guerra Manssour Fraga - Director of the undergraduate studies - Faculty of Pharmacy UFRJ, Dr Mauro Ferreira - Physics TCD, Dr Franceline Reynaud - Director of the undergraduate studies - Faculty of Pharmacy UFRJ, Dr. Antonio Ledo - Vice Rector UFRJ, Prof. Jane Ohlmeyer - Vice President of Global Relations - TCD and Dr. Fabio Boylan - Pharmacy TCD.

Research

Strengthening Cancer Research Capacity

The School of Pharmacy and Pharmaceutical Sciences is now part of the new Centre for Cancer Drug Discovery in Trinity Biomedical Sciences Institute on Pearse Street.

It is a state-of-the-art facility where we work in an interdisciplinary setting as a team of medical doctors, pharmacists, pharmacologists, and medicinal and pharmaceutical chemists. The Centre is designed to enhance cancer drug research capacity and education of the next generation of cancer researchers. To this end, we are developing a Cancer Research Ph.D. Programme with the goal of progressing research on newly developed molecules and existing anti-cancer drugs. The four-year programme will involve focus on progressing our research on newly developed molecules and existing anti-cancer drugs through the developmental pipeline.

We are seeking corporate and private support for the programme. If you are interested in finding out more about this initiative please contact Director of Research, Assoc Prof Lorraine O'Driscoll lodrisc@tcd.ie



Trinity Biomedical Sciences Institute,
Pearse Street

Health Research Board (HRB) Award Success

Assoc Prof Lorraine O'Driscoll has recently secured a Health Research Board (HRB) Award of €320,000 to advance her team's breast cancer research.

A new range of anti-cancer drugs that are used in the treatment of some breast cancer patients has become available. These drugs were designed to interact with HER2, a molecule found at greater amounts on cancer cells compared to normal cells for ~25% of breast cancer patients. These drugs are more cancer-specific than older chemotherapy and can offer advantages of greatly helping many patients without causing serious side-effects.

Unfortunately, some patients who seem suitable candidates don't benefit from these

treatments. Some others respond at first, but then become unresponsive (resistant) to the treatment. These drugs are also an extraordinarily expensive cost to healthcare.

Studying cells from breast tumours, Lorraine and her team have recently found two molecules, NmU and miR-X, at substantially different amounts both inside and outside cells that are resistant to these drugs compared to those that are sensitive. By "tweaking" their amounts in the cells, they can make cells more resistant or more sensitive to these drugs, suggesting that this approach might help overcome the serious resistance problem in tumours.

The Health Research Board Award will enable progression of this research through translational clinical trials.

EU funding for Knowledge Alliances Project



Academics in the School of Pharmacy led by Prof Anne Marie Healy, secured €315,000 in EU funding under the Erasmus Lifelong Learning Programme Knowledge Alliance for a two-year project entitled Linking Industry and Academia in Teaching Pharmaceutical Development and Manufacture (LIAT-Ph).

Project partners include: Trinity College Dublin, University of Belgrade, University of Ljubljana, University of Helsinki, Queen's University Belfast, Amebis Ltd., APC Ltd., Brinox inzeniring d.o.o., Innopharma Labs Ltd., NIBRT, Pfizer Ltd., Sigmoid Pharma Ltd. To read more please visit the news section of the webpage www.pharmacy.tcd.ie/news/news-summaries.php

Three-dimensional cell culture: the missing link in drug discovery

"A research manuscript by Susan Breslin (Ph.D. student) with Assoc. Prof Lorraine O'Driscoll entitled "Three-dimensional cell culture: the missing link in drug discovery", is proving to be very popular with academia and industry-based researchers alike. Published in *Drug Discovery Today* (impact factor = 6.551), this was the most accessed publication in Q2 of 2013. This, and two other publications, were selected by Editor Stephen Carney as the "best of 2013" (<http://www.drugdiscoverytoday.com/view/36209/the-view-from-here-december-2013-the-best-of-2013/>)"

[Breslin S, O'Driscoll L. (2013). *Three-dimensional cell culture: the missing link in drug discovery. Drug Discov Today. 18(5-6):240-249*].

International Research Collaboration

Assoc Prof Carsten Ehrhardt together with Dr Daniela Traini and Prof Paul Young from the Respiratory Technology Team at the Woolcock Institute of Medical Research (Sydney, Australia) have been successful in securing funding for the establishment of a project to study the implications of drug transporters in the lung on pulmonary drug disposition. The grant is worth \$12,000 AUS under the International Research Collaboration Award scheme at the University of Sydney.

Postgraduate Scholarship

A postgraduate scholarship was awarded to Gloria Ana by the Regional Agency for Labour Policies of Sardinia (Agenzia Regionale per il Lavoro), an Italian institution that funds overseas postgraduate studies. Gloria commenced her research with Prof Mary Meegan's group in September 2013 on the design and synthesis of apoptosis-mediating molecules.

Funding under the Ulysses Programme

Prof Anne Marie Healy has received funding under the Ulysses programme which supports Irish and French researchers in collaborative projects. The €2,500 which Prof Healy has been awarded from the Irish Research Council will enable her conduct research in the University of Poitiers in collaboration with Asst Prof Frederic Tewes who has received matching funding from Campus France. The research project which will be supported under this initiative is: "Development of inhalable fluoroquinolone/cation complex-loaded microparticles to treat chronic bacterial lung infection".

Upcoming Events

TCD Alumni Weekend
22-24 August 2014

Christmas Commons
3 December 2014

Christmas Homecoming
22 December 2014
www.tcd.ie/alumni/events

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, see

www.tcd.ie/alumni/volunteer

Stay in Touch

Get connected with Front Gate Online. Update your details, search and contact fellow alumni, register for events, join the career network and other groups, all in one place!

Register today!

www.tcd.ie/alumni/frontgateonline



Remember.

The power of a legacy to Trinity

There's an old saying that the true meaning of life is to plant trees under whose shade one does not expect to sit. When you leave a legacy to Trinity however big or small, you're planting a tree which will grow to provide shelter to many. You're empowering ground-breaking research which will benefit people in Ireland and all over the world. You're supporting students from all backgrounds to access a Trinity education. You're helping preserve our unique campus and heritage for new generations.



When you remember Trinity in your will, you join a tradition of giving that stretches back over 400 years – and reaches far into the future. For more information about leaving a Legacy to Trinity, please contact Eileen Punch.

T. +353 1 896 2088
E. eileen.punch@tcd.ie
www.tcd.ie/development

www.tcd.ie/pharmacy

The School of Pharmacy
& Pharmaceutical Sciences,
Panoz Institute,
Trinity College,
Dublin 2, Ireland.
Phone +353 (0)1 896 2809
Email edaly3@tcd.ie