

SPEAKERS' BIOS

"The Future of (Bio)Pharmaceutical Manufacturing", high-level seminar, 28 February, Brussels



Barry Heavey – Head Life Sciences, IDA Ireland

Dr Barry Heavey has been a member of IDA Ireland's executive leadership team since 2012.

Dr Heavey is also Head of Life Sciences, Engineering and Industrial Technology for IDA Ireland, responsible for attracting foreign direct investment to Ireland in the biopharma, pharma, medical devices, food, healthcare services, engineering and industrial technology sectors.

Barry sits on the Board of Directors of Ireland's National Institute for Bioprocess Research and Training (NIBRT), a centre dedicated to the support of the growing biopharmaceutical manufacturing sector in Ireland. His various roles in IDA Ireland have included Head of R&D Policy as well as three years based in the US as SVP Life Sciences (R&D). Barry joined IDA in 2006 from the UK company Stem Cell Sciences Ltd, where he was Business Development Officer.

Barry was the recipient of a BBSRC (Biotechnology & Biological Sciences Research Council) fellowship for postdoctoral research at Edinburgh University and also completed an MBA at the University of Edinburgh Management School. Barry's PhD is in Genetics and was awarded by the Institute for Molecular Pathology in Vienna. He is married with three children.

Tom Kelly, Divisional Manager - Cleantech, Electronics and Life Sciences, Enterprise Ireland



Tom Kelly is Divisional Manager for Cleantech, Electronics and Lifesciences with responsibility for developing and implementing Enterprise Ireland's strategy for these sectors. He also has responsibility for leading Enterprise Ireland's Lean Business and Environment and Green Technologies programmes. Based at Enterprise Ireland's headquarters in East Point, Dublin, Tom is a member of Enterprise Ireland's Business Committee, Finance Committee and Growth Fund Committee.

Prior to taking up his current assignment Tom was senior manager within the Scaling Division at Enterprise Ireland, where he lead a team of specialists in business development and innovation management, working directly with a select group of fast-growth client firms.

Tom is originally from Ballinasloe, Co. Galway and was awarded a PhD in Chemistry from University College Galway, for work on the catalytic properties of zeolites. He holds Masters degrees in Materials Technology from the University of Sheffield and Industrial Engineering from University College Dublin. He is the author of several articles that have been published in the scientific literature, spanning traditional and advanced ceramics as well as surface engineering technology.



Mark Ferguson, Director General, Science Foundation Ireland and Chief Scientific Adviser to the Government of Ireland

Professor Mark W.J. Ferguson commenced as Director General of Science Foundation Ireland in January 2012 and as Chief Scientific Adviser to the Government of Ireland in October 2012. Previously he was Professor in Life Sciences at the University of Manchester (since 1984) and co-founder, CEO and Chairman of Renovo Group plc (1998-2011).

He is the recipient of numerous international research awards including the 2002 European Science Prize (jointly), and is the author of 327 research papers and book chapters, 60 patent families and author / editor of 8 books.

Mark graduated from the Queens University of Belfast with degrees in Dentistry (BDS 1st class honours), Anatomy and Embryology (BSc 1st class honours, PhD) and Medical Sciences (DMedSc), holds Fellowships from the Royal Colleges of Surgeons in Ireland (FFD), and Edinburgh (FDS) and is a Founding Fellow of the UK Academy of Medical Sciences (FMedSci). He is a member or Fellow of a number of learned Societies, and was made a “Commander of the British Empire” (CBE) by the Queen in 1999 for services to Health and Life Sciences.



Mary Shire, Vice President Research, University of Limerick

Dr Mary Shire holds the position of Vice President for Research at the University of Limerick (UL) since 2011 and is responsible for the leadership, development and delivery of the University’s research policy, strategy, support services, industry engagement and commercialisation activities. Prior to this she held the role of Director of Research Support Services at UL responsible for research funding and research metrics. Prior to joining UL Dr Shire spent 11 years in the Pharmaceutical Industry where she held senior management roles in a number of multinational pharmaceutical companies. While working with leading US-based pharmaceutical company, Celgene Corporation, Dr Shire developed inventions covered by 20 US patents for drug discovery. A number of these compounds are on the market in the US and Europe. Dr Shire holds a PhD in Chemistry and an MBA. Dr Shire is a Fellow of the National Academy of Inventors and holds Director positions of a number of companies and not for profit organisations.



Charlotte Videbaek, IC PerMed / Innovation Funds Denmark

Dr. Videbaek is supporting the Innovation Fund Denmark as a consultant. She has previously worked with personalized medicine and drug development in different roles. Dr. Videbaek has a background as MD from the University of Copenhagen with a board certification as Neurologist. Beside her clinical job she was active in academic research with main focus on neuroreceptor studies before joining the Pharma industry in 2001.

In Pharma industry Dr. Videbaek has worked as Integrated Health Care Leader, at F. Hoffmann-La Roche Ltd. She has also experience from H. Lundbeck A/S as Head of Department of International Clinical Research Neurology and VP in Corporate Project Management R&D.

Alfonso CALLES SANCHEZ, European Commission, DG GROW

Alfonso CALLES SANCHEZ has been a policy officer at the European Commission since 2004. Before he was a national civil servant in the Ministry of Industry and the national patent office of Spain. In 2008, he held a visiting scholarship at Duke University, in the US, where he researched on patent law and access to medicines. He has published research papers on these topics in major journals. Currently he is working in the Commission/DG GROW on the SPC and patent exemption initiatives that the Commission announced in its Single Market Strategy."



Sergio Napolitano, Medicines for Europe

Sergio Napolitano is Legal Affairs and Trade Director at Medicines for Europe. Before joining Medicines for Europe, Sergio Napolitano worked in the Directorate General for External Policies of the European Parliament where he was part of the Secretariat of the Committee on International Trade (INTA). In 2012, he authored a Report of the European Parliament on "The Role of the Congress in Shaping the US Trade Policy". He previously worked in the Trade Policy Department of the Permanent Representation of Italy to the EU on multilateral, plurilateral and bilateral trade negotiations, EU investment policy and IPR. Sergio Napolitano is qualified for mediator certification in most American states. He holds a degree in Law from the University of Naples Suor Orsola Benincasa, an Erasmus Diploma at the Université Paris-Sorbonne, and a LL.M. on EU and European Public Law from the University College of London (UCL).



Prof. Jarkko Ketolainen, University of Eastern Finland

Jarkko Ketolainen is a Professor in Pharmaceutical Technology and the Head of School of Pharmacy, University of Eastern Finland (www.uef.fi/en/web/farmasia). Professor Ketolainen is also the director of PROMIS Centre (www.promiscentre.fi) that develops pharmaceutical manufacturing processes and novel PAT tools for process monitoring and control. PROMIS Centre is a R&D centre that comprises of University of Eastern Finland (Pharmacy and Physics), VTT (The Technical Research Centre of Finland), Savonia University of Applied Sciences and over 30 partnering companies (e.g. GSK, Orion, Bayer and MSD), international and national. Furthermore, Professor Ketolainen is a member and 2nd vice chair of the Academy of Finland's Research Council for Health and EUFEPS' (European Federation for Pharmaceutical Sciences) QbD and PAT Sciences Network Steering Group.



Fergal Donnelly, European Commission, DG RTD

Fergal DONNELLY MD MSc FFPM is a medical doctor by training and specialised in the domain of pharmaceutical medicine. He is Principal is Principal Scientific Officer in the Advanced Materials and Nanotechnologies Unit of the Industrial Technologies Directorate of the Research Directorate– General of the European Commission. Previously he has spent almost 8 years in the pharmaceutical industry, in regulatory affairs, medical marketing, medical communication and drug safety monitoring. He is the author of numerous publications in the scientific and regulatory fields and his present areas of interest include the rational and accelerated development of new, safe, innovative technologies for healthcare, as well as the development of regulatory science.



Seamus Malone, Eli Lilly

Seamus Malone graduated in 1985 from University College Dublin (UCD) with a Bachelor's Degree in Chemistry and received his PhD in Chemistry from UCD in 1990.

Seamus joined Eli Lilly, Kinsale in 1989 as a Process Chemist for a number of years – supporting production operations and transferring in new products from R&D. He subsequently held a number of team leader positions at Lilly, Kinsale in HR, Training and Production Operations.

In 2001 Seamus was appointed HR Manager for Eli Lilly, Tippecanoe Labs, USA. In 2002, he was promoted to role of Plant Manager for the Eli Lilly, Tippecanoe Labs, USA.

In 2004 he was promoted to Executive Director of Manufacturing, working on a project to introduce Six Sigma across Eli Lilly globally. In 2005 he assumed the role of President and General Manager of Eli Lilly's Puerto Rico manufacturing operations.

In 2008, Seamus returned to Ireland and was appointed to his current role as global Senior Director of Technical Services for API covering a number of sites in US, PR and Ireland for small molecule and biotech products.

Seamus is on the board of SSPC – an Irish based hub of pharma related industry-academic research.



Padraig Somers, B Eng , MBA, Local General Manager Pharma Business, Helsinn Birex Pharmaceuticals Ltd

Padraig Somers oversees operations at Helsinn Birex Pharmaceuticals Ltd, which is the Irish subsidiary of the Swiss based privately owned Helsinn Group engaged in Licensing, Development and Commercialisation of novel therapeutics with a focus on Cancer Care.

Padraig has worked with Helsinn in Ireland since 1992 initially to manage its chemical manufacturing facility and subsequently to establish Helsinn's finished dosage manufacturing and development operations, which supplies products worldwide including EU, US and Japanese markets, and also performs CMC development of Helsinn pipeline products in support of their registration and launch worldwide.

He is a graduate in Chemical Engineering from University College Dublin and holds an MBA from Dublin City University. He is currently a member of the Pharmaceutical Manufacturing Technology Centre Scientific Advisory Board, and previously has held leadership positions in professional bodies including the International Society for Pharmaceutical Engineering (ISPE), the Institution of Chemical Engineers (IChemE), Biopharmaceutical Ireland and the Swiss Irish Business Association (SIBA).



Dr. ir. Wouter De Soete, Ghent University, Belgium

Wouter De Soete (12/10/1989) is business and research developer within the pharmaceutical and raw material industry (added value manufacturing) at Ghent University, in the Department of Sustainable Organic Chemistry and Technology. He studied Bioscience Engineering at Ghent University and graduated in 2012 cum laude with an MSc. thesis entitled “Exergy-based Sustainability Assessment of Batch versus Continuous Tableting in Pharmaceutical Formulation”, a project in collaboration with Janssen Pharmaceutica NV and GEA Pharma Systems. For his work and the outstanding industrial relevance to continuous manufacturing platforms, he was awarded with the Solvay Price 2012 for Sustainable Chemistry for the best thesis in the Master of Chemistry, Bioprocess Technology and Environmental Technology. He holds a PhD in Bioscience Engineering on “Advancing Environmental Sustainability Assessment in the Pharmaceutical Industry – creating value for business”. He developed an implementation guide on how to systematically integrate these methodologies in business making in data scarce environments and how to allow for sustainment through SOPs and KPIs. His PhD contributed to a high extent to the field of LCA/LCM in bringing that closer to businesses through the coupling of the operational management toolbox such as operational excellence and lean manufacturing and LCA. Next, he holds a Black Belt in Lean Manufacturing & Six Sigma, performed in the pharmaceutical industry. He has working experiences within an academic setting as teaching assistant, PhD researcher and postdoctoral researcher (working of several FP7 and H2020 projects), within the public sector at the Joint Research Centre of the European Commission (Italy), within the private sector at Johnson and Johnson and as an entrepreneur within SECIS Consulting (Sustainability and Eco-Innovation Support), a company he founded in 2016. Currently, he advises the UK’s NHS SDU CSPM (Coalition on Sustainable Pharmaceuticals and Medical Devices) and is Chair of the Education Committee of the FSLCI (Forum of Sustainability through Life Cycle Innovation). Active as project developer within the EIT Raw Materials, he is coordinating the Sustainability Support and Information Centre (SSIC). Today, he has a very strong focus on internationalization and applied research within global pharmaceutical value chains, focusing on resource management. In this context, he is General Manager of the recently raised Centre of Excellence on Sustainable Pharmaceutical Engineering (CESPE).



Killian O’Driscoll, Projects Director, National Institute for Bioprocessing Research and Training (NIBRT)

Killian is a Genetics Graduate from Trinity College Dublin with an MSc in the Management of Innovation from the University of London. He also is an Associate Lecturer in Project Management at Dublin Business School. Prior to joining NIBRT, Killian worked with Microsoft European Operations Centre as Senior Global Project Manager and with Ericsson Competence Development Centre in the area of technology education and development. Killian working closely with all stakeholders in the biopharmaceutical industry has been involved in the successful establishment of NIBRT which has numerous international accolades including ISPE Facility of The Year, Bioprocess International Manufacturing Collaboration of the Decade and NIBRT is now recognized as a global leader in biopharma research and training.



Prof. Dr. Johannes G. Khinast RCPE/Technical University of Graz

Prof. Johannes G. Khinast is the head of the Institute for Process and Particle Engineering at the Graz University of Technology, Scientific Director of the Research Center Pharmaceutical Engineering and Director of University Life-Long-Learning Curriculum Clean Room Technology. He received his Ph.D. in the area of particle technology in 1995 from the Graz University of Technology. He was then a post-doctoral fellow at the University of Houston with Prof. Dan Luss. In 1998 Prof. Khinast joined Rutgers University (New Jersey, USA) as an assistant professor, where he received several important awards and where in 2003 he was granted early tenure. In 2005 Prof. Khinast was selected as a Marie Curie Chair of the EU, and in 2006 he was offered a professorship at the Graz University of Technology. He has supervised more than 40 Ph.D. students and PostDocs and his publication record encompasses over 120 peer-reviewed publications and many other publications and book chapters. He also holds several patents in the area of pharmaceutical manufacturing.



Dr. Armin Schweiger, Managing Director, INVITE

Dr. Armin Schweiger is Managing Director of INVITE since August 2015. Before that, he was heading Bayer's Product Supply Pharma Solid Dosage Plant in Leverkusen, Germany, being responsible for the manufacturing and formulation of drugs for the world-wide market.

After studying pharmacy at the university of Heidelberg he received his Ph.D. from the university of Wurzburg in the field pharmaceutical technology. Dr. Schweiger started his industrial career in the galenical department for marketed products at Bayer AG in 1998 and held several scientific and managerial positions at Bayer AG.



Gavin Walker, Bernal Chair of Powder Processing UL

Professor Gavin Walker (FIChemE) was appointed as the Bernal Chair of Pharmaceutical Engineering at the University of Limerick in 2012. He is also a Visiting Research Professor of Chemical Engineering at Queen's University Belfast (UK). Professor Walker has been awarded >€25m in research funding from SFI, EI, EPSRC (UK), TSB (UK), EU FP7 and industry sources. He is currently a principal investigator in the SFI Investigators Programme, the Synthesis and Solid State Pharmaceutical Centre (SSPC), the EI Pharmaceutical Manufacturing Technology Centre (PMTTC) and the EI Dairy Processing Technology Centre (DPTC).

His research interests include particle/powder technology, process modelling and pharmaceutical engineering and currently has 40 researchers within his group. He has published over 144 international journal papers (>4000 citations, h-index 31) on various aspects of chemical and process engineering and is associate editor of Chemical Engineering Journal and Chemical Engineering Research and Design (focussing on material processing). Professor Walker has been awarded two Royal Academy of Engineering (UK) fellowships: the ExxonMobil Fellowship in 2002 and the Leverhulme Trust Senior Research Fellowship in 2009.



Dr Richard Alldread – Head of Innovation, National Biologics Manufacturing Centre, CPI Biologics, UK

I joined the National Biologics Manufacturing Centre in April 2014 as Head of Innovation. In this role I focus on the identification, development and commercialisation of emerging technologies that have the potential to revolutionise the development and manufacture of biopharmaceuticals. This is achieved through the development of strong collaborative partnerships with the academic and industrial biopharmaceutical research community.

Prior to joining the NBMC I spent over 7 years at Lonza Biologics as head of technology development for the biopharmaceutical contract development and manufacturing business units. Whilst in this role I led the introduction of new technologies and services for the selection, development and manufacture of biotherapeutic candidates. Before joining Lonza I held a number of roles with diagnostic, drug discovery and contract research companies, largely concerned with the development of recombinant microbial strains, cell lines and proteins for research, diagnostic and therapeutic use.

I gained my PhD in Molecular Biology and Protein Engineering from the University of Manchester Institute of Science and Technology.



Matthew Moran, Director, BioPharmaChem Ireland

Matthew Moran is Director of BioPharmaChem Ireland. He graduated in Chemistry at Trinity College Dublin in 1980 and in Chemical Engineering at University College Dublin in 1981; he holds an MBA also from University College Dublin (Smurfit School of Business). He worked for over ten years in the pharmaceutical industry where he held a number of management positions both in active ingredient and dosage form manufacture. He is a member the European Chemical Industry Council (CEFIC). Matthew Moran is a Board member of the Active Pharmaceuticals Ingredients (API) Committee of CEFIC (CEFIC/APIIC) and The European Association for Bioindustries (Europabio).

BioPharmaChem Ireland represents the interests of the biopharmachem sector in Ireland. CEFIC/APIIC represents the European API Industry. Europabio represents the European Biotech Sector.



Jon O'Halloran, General Manager, Synthesis and Solid State Pharmaceutical Centre

An Industrial chemistry and MBA graduate from the University of Limerick; Jon has 20 years' experience in the Pharmaceutical Industry and has worked from a number of multinational companies. His areas of industrial expertise are in new product introduction and validation, Active Pharmaceutical Ingredient (API) manufacturing and business development management. He has held a number of senior management positions in industry and has significant experience in managing projects as diverse as New Chemical Entity (NCE) introduction to manufacturing facilities in Ireland, transfer of marketing activities from Switzerland to Ireland and establishment of a Pharmaceutical Manufacturing base for a US corporation in Ireland. A keen student of industrial: academic alliances Jon's interest lies in the areas of capability based strategy development and knowledge management and has spent the last 8 years as GM for the SSPC centre.



Nicholas Gathergood, EuCheMS/Tallinn University of Technology

Nicholas studied chemistry (BSc) at the University of Bath which included a one year industry placement at BP in Sunbury. He completed his PhD with Professor Richard J. Whitby entitled “Chiral cyclopentadienyl lanthanide and transition metal complexes” at the University of Southampton. Postdoctoral research followed with a two year position at Aarhus University, working in Prof. Karl Anker Jorgensen’s group on asymmetric catalytic reactions. In 2001, he joined Prof. Peter J. Scammells and worked at Deakin University, Geelong and the Victorian College of Pharmacy, Melbourne for three years as a postdoctoral fellow. In Australia he worked as a synthetic medicinal chemist on an industry project for GlaxoSmithKline investigating applications of ionic liquid based technologies.

Nicholas became a lecturer in organic chemistry at Dublin City University in 2004 where he supervised 10 PhD students to completion. In 2015, he relocated to Tallinn University of Technology, Estonia as the ERA Chair of Green Chemistry. Currently, he is building a new team of talented young academics to promote a green chemistry philosophy in science. His research interests include green synthesis of antimicrobials and analgesics. Between 2007 and 2010 he was Chair of the Society of Chemical Industry, Republic of Ireland section.

In Dublin, his endeavours led to Irish participation in the creation of the European Association for Chemical and Molecular Sciences (EuCheMS) Division of Organic Chemistry and support for the EuCheMS Working Party of Green and Sustainable Chemistry. Since 2015 he is the Estonian representative on both the EuCheMS Division of Organic Chemistry and Division of Green and Sustainable Chemistry. In 2016 he was elected the Chair of the EuCheMS Division of Green and Sustainable Chemistry.



Dr. Kimmo Solehmainen, VTT Technical Research Centre of Finland

Dr. Kimmo Solehmainen has worked with VTT Technical Research Centre of Finland from 2001 onwards. His technology competence areas are microelectronics, printed electronics, and optical sensing. During his years with VTT, he has participated actively in public and private sector R&D and technology commercialization activities both a national and international level and headed two research teams. Currently he is Key Account Manager and responsible for VTT’s business line “Process and Analytical Measurement” with pharmaceutical industry being one of the primary customer sectors.



Joe Hannon, Chief Executive Officer, Scale-up Systems

Joe Hannon is CEO of Scale-up Systems (headquartered in Dublin, Ireland), where he leads the company together with Dr Steve Hearn, COO. Joe works with the Support and Training team for the company's DynoChem chemical process simulation software, delivering project support and user training programs for over 300 customer sites worldwide and contributing to the development of new process models.

Joe was a founder member of AIChE's new Pharmaceutical Discovery, Development and Manufacturing Forum (PD2M) in 2012. He continues to serve AIChE and PD2M as a member of the Executive Committee. Together with colleagues from Pfizer and Merck, Joe established in 2010 the first global awards for Excellence in Quality by Design (QbD), now run by AIChE and sponsored by Merck, Pfizer and Scale-up Systems. Joe was elected a Fellow of the American Institute of Chemical Engineers in 2015.

Prior to Scale-up systems, Joe worked in chemical engineering, research management and business development roles with BHR Group (Cranfield, UK). He graduated in 1987 from University College Dublin (Ireland) with a Bachelor's Degree in Chemical Engineering and completed his PhD at Cranfield University.



Chris Edlin, Director at Pharmaceutical Manufacturing Technology Centre. Pharmaceutical Manufacturing Technology (PMTc)

Chris is the Director of the PMTC where he is responsible for the overall direction, financial control and management of the research in the Centre. He takes a leadership role in fostering pharmaceutical manufacturing research at a national and international level, in conjunction with industrial and academic partners, and funding agencies. Chris has a background in big Pharma, not-for-profit organisations plus formation and management of SMEs. Chris has previously held positions as Chief Scientific Officer at iThemba Pharmaceuticals (Johannesburg, South Africa), Group Leader (Medicinal Chemistry) with the Medical Research Council Technology, Team Leader (Medicinal Chemistry) with GSK and Roche Pharmaceuticals and Senior Medicinal Chemist with Sanofi Aventis.