



Photo courtesy of Maura Boyle.

Welcome to the latest edition of the information sharing newsletter from the Maynooth University Commercialisation Office. Our goal is to share relevant market news and activities on the commercialisation of Maynooth University research. We hope you enjoy this newsletter.

For more information visit: www.maynoothuniversity.ie/commercialisation



DR ANDREW HOGAN Dr Andrew Hogan (BSc (2004) and PhD (2010), Maynooth University) was recruited in June 2017 to the position of lecturer in Immunology within the Biology Department. He is also a Principal Investigator with the Obesity Immunology Research Group, and a member of the MU Human Health Research Institute.

Post-PhD, Andrew was awarded a Newman fellowship with Professor Donal O'Shea's Obesity Research group in St Vincent's University Hospital (SVUH), and subsequently awarded a Health Research Board, Health Research Award. His research focuses on the impact of obesity on the immune system and a role for the immune system in bodyweight regulation. To date the group have recruited over 1000 obese patients into their studies. The groups findings have been published in high impact journals such as Diabetologia, Immunity, Journal of Immunology and Cell Metabolism.

In 2012, with a fellowship from the National Children's Research Centre (NCRC), Andrew established the Childhood Obesity Immunology Research Group,

alongside Prof Declan Cody (Consultant Paediatric Endocrinologist, OLCHC). In 2016, the group renewed their NCRC grant with the support of the CMRF to continue their research programme. The groups work focuses on the dysregulation of immunometabolism in obese children and the development of insulin resistance (IR), with the ultimate goal of targeting this dysregulation to prevent IR. To date they have recruited 300 children into their studies, and have published in journals including JCEM, JCI insight and Journal of Immunology.

Andrew has on-going collaborations with clinicians and scientists across national and international centres (SUVH, OLCHC, Harvard Medical School and Trinity College Dublin). Since arriving to Maynooth University, Andrew has engaged actively with industry partners, leading some wholly funded research programmes and coinvestigating an Enterprise Ireland Innovation Partnership. The overall aim is to develop novel therapeutic strategies for obesity and it's co-morbid conditions (Type II diabetes, cardiovascular disease and cancer).

BIO INTERNATIONAL CONVENTION

Dr. Karen Griffin attended the BIO International Convention, in Boston (June 4-7) hosted by the Biotechnology Innovation Organisation. Some of the thematic areas included: Digital Health, Emerging opportunities in Global Markets, Modern Ag Innovation, Genome Editing, Next Generation Biotherapeutics, etc. (full details: http://convention.bio.org/Sessions/).

The key benefits of attending BIO are access to global biotech and pharma leaders via BIO One-on-One Partnering, exposure to industry though-leaders with over 500 education sessions at your fingertips, and unparalleled networking opportunities with 16,000+ attendees from 74 countries.

While the conference covered many subjects the digital health stream is a typical example of emerging trends and included 12 sessions in total; the panels were varied, and included large pharma companies, biological companies/start-ups, tech companies/start-ups, digital platform companies / start-ups, universities, and patient groups. Discussions on emerging trends included precision medicine, drug discovery, analytics of big data. These new technologies, although still in the early stages of development promise better tools for diagnostics and predicting treatment outcomes. Much emphases was placed on the validation of these methods and data, the methods of collection, analysis of the data once collected and the best usage of the data for successful clinical outcomes.

Full Agenda

Initial Event Reports

Reports of interest Emerging Therapeutic Company Investment and Deal Trends

If you have any questions on any of the specific sessions or would like to discuss further please contact karen.griffin@mu.ie

MAYNOOTHWORKS

MaynoothWorks is turning a spotlight on startup innovation and how to stimulate it in a more effective manner. The challenge comes from the fact that not all startups are the same, they come in different shapes and sizes. Some are in the ideation stage, some at the go-to-market stage while others are already revenue generating and/or scaling. High potential startups tend to have the following attributes; large unfulfilled ambitions, identified a market gap and believe in their novel solution. Early on, the companies are founderlead and embark upon their business venture with limited resources. Novelty is their 'entry ticket' to participate in the marketplace and they have to make judicious use of resources, to reach the next funding milestone.

The classic approach to starting a company is challenging because innovation cycle times are getting ever shorter. The plan-resource-execute approach to business building is being replaced by the new approach of prototype-test-resource. This model concentrates on validating the solution concept and uncovering the most optimal business model, before putting substantial resources in place.

Initially, companies tend to be founder-led and over time develop into a team-led organisation. The initial founder team needs to learn quickly and focus on the key functions appropriate for their stage of maturity. In some cases, technical founders need to learn enough business skills to validate market and secure funding while business founders need to learn good technical management skills, before specialist staff can be recruited. By its nature, a startup tends to be incomplete capabilities-wise. Therefore, premature application of resources or lack of awareness of essential business risks put the startup at greater risk. To fill the knowledge gap, most startups currently rely on investment-driven 'accelerator' programmes to gain access to essential business management skills. However, these can come too late and/or may be structured in a 'one-size fits-all' manner, failing to address key skills gaps at company level.

At MaynoothWorks, we believe that startups should be able to access stage-appropriate supports throughout their development journey. MaynoothWorks is building startup-specific business materials and plans to launch its own programmes for client companies. As the company matures, our business innovation model will support company development, in a new way. This new model supports the successful transfer of research outputs to spinouts and facilitates an arms-length approach to selecting spin-in companies, all of which will underpin our objective to maximise economic impact and employment potential.

Contact joe.moore@mu.ie for additional information.







