Filling the European Skills Gap – Preparing the Next Generation of European Bio-Entrepreneurs

Dr Allison Carrington & Prof Andy Porter School of Medicine, Medical Sciences & Nutrition

Biotechnology is one of the most innovative industries of the 21st century driving global wealth & wellbeing. It is revolutionising areas as diverse as the prevention of environmental pollution to the diagnosis & treatment of disease. Our biotechnological scientific understanding is expanding at an unprecedented rate & preparing our graduates to embrace this opportunity through a combination of their scientific & entrepreneurial skills will ensure they maximise their employability & that this industry continues to develop & provide solutions to many of our modern-day challenges.

In August 2015 34 PhD & MSc students from across Europe gathered in Aberdeen to take part in a week-long summer school aimed at developing the skills required to make the transition from student to life-science entrepreneur.



Students worked in international teams, each with representatives from Italy, Spain, France, Hungary & the UK.

The intensive event delivered the opportunity to learn directly from individuals who have "been there & done it" &, in many cases, have the commercial scars to prove it. By the end of the week the teams took on Board Level roles in their own "virtual" biotechnology companies & pitched for cash or contracts guided by a panel of industry Dragons.

"The Summer School enriched & expanded my understanding of the intricacies of bio-business & provided an insight into the rewarding career opportunities the sector provides.

I thoroughly enjoyed the course & it has been something I've used as motivation while working through my PhD, given me a path to aim for, if you like."

"Amazing & wonderful experience!

If i could do this again, I will do it!:)"

"I really enjoyed the summer school & felt that it gave me an insight into career options outside of academia that are not otherwise easy to find out about...."

"....The team-based challenge of setting-up a hypothetical start-up company seeking investment allowed the simulation of a real-life work situation - gaining transferable skills & practical experience that can be applied to a potential future career."

This innovative summer school relied on the collaboration of 5 European higher education institutions as well as a number of successful biotechnology companies. It provided students with a knowledge & understanding of how the field of biotechnology in industry is evolving & an opportunity to experience high-level education in specific fields that cannot routinely been taught in the classic school programmes. Students were able to expand their professional networks across Europe & develop multidisciplinary skills which will give them a major advantage in today's highly competitive job market.

Lecturers, mentors & bio-entrepreneurs that delivered the programme were also a broad & international mix. Students were exposed to aspects of the industry from small start-up companies to large, billion-dollar multinationals. They interacted with bio-entrepreneurs running award winning, high-risk, therapeutic companies & corporate giants providing services & research capabilities to the ever-expanding portfolio of companies that sit within the life-sciences umbrella.



Students were encouraged to abandon their academic values for the week & discuss how ideas could be protected by patents before being shared with the wider science community, to facilitate income generation or even new spinout formation.

In the evenings students were encouraged to work together in their teams & social events were organised to allow them to relax & mingle.

This was the third in a series of such summer schools, with the next one scheduled for 2016 in Bologna.

"This experience was wonderful for me, in professional, cultural, & personal sense. I think that it will be better if the summer school it lasted two week, in this case the student will have a free afternoon to visit the city & to do something else."











