Drug Metabolism and Toxicology Cohort

Introduction

The Drug Metabolism and Toxicology cohort in the Department of Surgery and Cancer held two “not-so-far-away days” in early 2016. Funding from the Graduate School supported and event held within Imperial, with the collective decision to split activities over two days to allow time for planning, action and follow-up. The aim was to address aspects of development in the cohort:

Careers - Collaboration - Creativity

Away Day – Part I

Friday 15th January 2016

Cohort Lead Toby Athersuch welcomed everyone and explained the agenda for the day, along with a reminder of the cohort building aims and expectations.

First up, and icebreaker! Four teams were each given a variety of stationery items – paper, pencils, rulers, protractor, etc. – but each receiving these in different proportions (some missing individual items completely). The aim of the game was to produce paper shapes of specific sizes and trade them in return for credits. During the game, other variables and influential factors were introduced, and value of shapes fluctuated, adding complexity to the interactions and motivation for production and trade of particular items. Teams quickly realised they could not win the game without compromise, trade and collaboration with other teams who had complementary items. During the game, some clear personality traits became evident, with individuals and teams employing different strategies to achieve their goals. This activity proved very popular, and would be recommended for others looking to get people thinking and working together.

After the shapes and credits had been tallied and a winner announced, the next activity required each team to share information about their own scientific research, and to produce a team “coat of arms” that represented their joint skills, knowledge and interests. This proved surprisingly successful (it turns out there are some talented artists in the mix!). Team designs were judged by Prof Nigel Gooderham (Assistant Provost) who skilfully managed to give ALL the teams the win by devising different award categories – a master of tact at work!

The icebreaker activities were followed by a session focused on career opportunities, with presentations from several members of the cohort and from elsewhere. Liza Selley (PhD student) described her experiences of an mini-fellowship obtained from the In Vitro Toxicology Society, which helped support her PhD studies; Lea Maitre (PDRA) talked about her placement at the Organisation for Economic Co-operation and Development, and the insight it had provided about how scientific research is translated and used for policy making; Jia Li (Lecturer) gave an account of her career
path at Imperial from PhD student to Junior Research Fellow to Lecturer, and highlighted the key resources available at Imperial that support student/ staff training and development (Graduate School, Postdoc Development Centre, Educational Development Unit, etc.); Muireann Coen (Lecturer) concluded the session by describing her own career, and the positive influence that an MRC ITTP Fellowship had on her ability to develop her own research independence.

The first afternoon session turned to the creativity element of the day; how do we develop and describe our ideas? All students were challenged to present a three-slide, three-minute description of their work - i.e. an elevator pitch. Being able to provide concise information that sustains interest and conveys the key messages is a valuable skill in science, and it was interesting to see the variety of approaches taken in this session. The activity provided a good opportunity to provide constructive feedback to all participants, which will hopefully help improve clarity in future presentations. The cohort then heard from Liz Hayes (Science Manager, MRC-PHE Centre for Environment and Health) who previously managed grants schemes at the BBSRC. She provided a detailed picture of how grant (and in particular fellowship) applications are processed, reviewed, prioritised, and funded (or not). This gave the group an excellent idea of how to structure their own application development, paying attention to the three critical aspects – project, person, and place. To complete the session, Catherine Vickers (Programme Manager, NC3Rs) gave a perspective of a funder in the toxicological sciences, and how her own programme (CRACK IT) is coordinated. This provide insight into how academia, industry and funders can work together to connect key problems in the areas with the right research teams for their solution.

Following a break, a collaborative group work session was held with everyone tasked to identify an opportunity of some kind that they would seek to investigate further before the follow-up away day (award, fellowship, grant, etc.). Key resources for finding such opportunities (e.g. Research Professional) were shared, and by the roundup at the conclusion of the day, it was clear there was plenty to be done.

Away Day – Part II

Tuesday 1st March 2016

The main aim of the day was to draw together how individuals had worked towards opportunities identified in the first away day, alongside some more practical advice on preparation of applications. Cohort Lead Dr Toby Athersuch kicked off the day with a ‘walk-through’ of the grant preparation process, using a previous application to the MRC as an exemplar. This provided an opportunity to highlight to the group how the various parts of larger applications need coordination and coherence, and place a requirement on the applicant to anticipate administrative and financial deadlines in the Department and with funders.

A group session followed, where all participants described the opportunities they had investigated and actions taken. The first away day had clearly provided greater motivation for involvement in the
wider drug metabolism and toxicology community, with several applications for membership of relevant societies initiated (including British Toxicology Society, Royal Society of Chemistry, UK Register of Toxicologists). Examples of clear progress included Oliver Graham (PhD student) who had focused on obtaining travel grant funding to support attendance at the upcoming Society of Toxicology meeting in the USA. Using the tools shared in the workshop, Oliver applied to multiple funders, successfully securing a £400 grant from the Imperial College Trust. Liza Selley (PhD student) had identified opportunities for fellowship applications, and had started drafting the scientific case for support and seeking advice from senior academics with respect to timing of a potential application in the coming year.

The cohort then heard from Charlie O’Rourke (Department of Surgery and Cancer Finance Manager) who detailed the process of submitting grant proposals, and highlighting key ‘Golden Rules’ of the main funders. Charlie also provided some advice on how to help administrators efficiently process applications, and the timeline for ensuring appropriate scientific review, costing, approval, and submission. The group then took a break from the workshop environment to enjoy a lunch together, providing an opportunity to continue discussion in an informal setting.

A final session in the afternoon was held with Neil Chapman (CSM Safety Manager) to provide guidance on laboratory operational matters that are specific to the work conducted in drug metabolism and toxicology, to ensure good practice and compliance across the cohort on day-to-day activities.

Feedback from participants was invited. A selection of comments are shown below:

“I found it a good opportunity to gain an insight into the work of the group and to meet some of it members in a relaxed setting.”
Todd Smith (PhD student)

“Thank you for organising such a fun day! I think the day overall was very good.”
Rabiya Zia (PhD student)

“It was an information rich cohort away day for PhD students and early years postdocs.”
Pooja Jain (PDRA)

“The away day was very informative for all and in particular for students and will enable them to avail of the many opportunities that exist, for example to get more involved in societies / conferences / broaden research experience through exchange programmes and ultimately better plan their careers.”
Muireann Coen (PI / Lecturer)

Other comments received suggested that subsequent activities for development of the cohort (which are now being organized) include more group work and problem solving to facilitate team building.
There was also a request that a series of talks from academics within the Department be organized to provide case studies on career progression. It was clear that although many intend to pursue academic careers, there is also a strong interest in working directly with/as policy making and science funding bodies.

All involved wish to thank the Graduate School for supporting the activities as they have had a positive impact on the cohesion of the cohort, and enabled us to explore a number of aspects of development that will undoubtedly benefit collaboration and career progression.

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