Quantitative proteomics: it's all about training, of course!

"I really enjoyed the training course, it was one of the most useful I have been to. It was really good

to keep reinforcing the ideas and I came away

feeling like I had learned no end of information",

2016 course delegate.

Robert Beynon (University of Liverpool), Victoria Harman (University of Liverpool) and Hannah Russell (Head of Education and Training. Biochemical Society)

The fourth iteration of the Biochemical Society training course on "Quantitative Proteomics" took place from 4-5 April 2016. The first time we delivered the course was to precede a conference in Chester in 2010, supported by the Biochemical Society as an Independent Meeting. Subsequently, the course was delivered as one of the first Biochemical Society training events, held at

Charles Darwin House in 2012, attached to a workshop on the same topic. In both instances, these were oversubscribed and hugely successful. We continued to deliver this

Biochemical Society course in 2014, and most recently, earlier this year.

As in all previous iterations, demand for the 80 places in 2016 considerably exceeded availability. It is easy to see why - real practicing experts as tutors, small group teaching and a friendly environment, all at low cost, particularly for Society student members. Delegates are surrounded by peers who are equally new to the field, creating an environment where questions are tolerated

(and positively encouraged). They also receive informal advice and guidance during breaks and the reception, and often in follow up exchanges after the course is over. The first session comprises an intensive afternoon

of talks, providing a grounding in the principles, best practice and pitfalls in quantitative proteomics. The speakers are all experts in the field and establish the

> overall context of the work that will be further developed in day two.

> The second session takes on a very different flavour. Delegates divide into groups of about

10 and over the course of three hours, attend three different round table sessions, each focused on one area of quantitative proteomics data analysis. The attendees express preferences for tables that resonate best with their particular interests. Topics covered included statistics, SILAC (stable isotope labeling by/with amino acids in cell culture), selected reaction monitoring and data analysis and visualisation. These 'round table' tutorials, delivered on specific topics by experienced tutors, are particularly popular.

Speakers and trainers all volunteer their time for the course, and so many of them come back year after year because it is such a rewarding experience. We hope to organize many more courses and maintain our commitment to keep the content cutting edge in this rapid developing field.

Could you support the Society and provide a training course?

If you are thinking of offering a training course through the Society, here are some of the reasons why you should. Mostly, it gives you, as a member of the Society, the opportunity to give back to the membership in the spirit of collegiality and to help support the next generation of biochemists - the best reason. Additionally, it can be great fun and hugely rewarding, working with a group of delegates who are keen to learn about your specialist area. Lastly, designing and delivering a training course can support your own learning and development, providing valuable experience, for example, to support applications for HEA Fellowship.



Day 1: The lectures

A checklist for a training proposal

- Who is the training event for?
- Is there a demonstrable need?
- Do you have the support of engaged instructors?
- Will the event make use of a variety of interactive teaching methods?
- Can the course be financially sustainable?
- Could you run it again if successful?
- Is there any opportunity for sponsorship?
- Is the course associated with a Society scientific meeting?

The application process is very straightforward, and is now settling into a new model. There are four open calls for proposals each year, and in addition, the newly formed Training Theme Panel can commission courses on particular topics. Training events can also be proposed by other Theme Panels, particularly where the event will be tied to specific scientific meetings that involve the Society. The application paperwork is straightforward (please see the Biochemical Society Training Events webpage for more details), and mostly asks you to think about demand, delivery, cost, content and tutors (see checklist above). If it is associated with a Biochemical Society meeting this will be known in advance. You may have some suggestions about venue and you will need a clear grasp of the teaching material you might generate. It is helpful to have some understanding of the need for sustainability and in this regard, suggestions for sponsorship are always welcome.

Offering these training events provides a valuable way for the Society to support its members, especially the postgraduate and postdoctoral communities. It also supports the Society's aim to build closer links with the biosciences industry.

Lastly, the benefits of the course extend well beyond the purely academic. The atmosphere of our proteomics courses has always been friendly and engaging and at the end of the first day the attendees have enjoyed a sponsored reception in the heart of Chester that has always been good fun. This breaks the ice and encourages animated discussion on the subsequent round table day. The value of this type of peer-networking should not be underestimated.

We are delighted to record the selfless engagement of the following tutors in 2016: Philip Brownridge, Claire Eyers, Dean Hammond, Stephen Holman, Andy Jones (University of Liverpool), Simon Hubbard, (University of Manchester), Laurent Gatto, Kathryn Lilley (Cambridge University), Stefan Tenzer (University of Mainz), Sara ten Have (University of Dundee) John Cottrell (Matrix Science), Agnes Corbin (Nonlinear Dynamics), Sybille



Sponsored Reception - end of Day One



Simon Hubbard using a Wordle to define the scope of the course

Heidelberger (Sciex). Participation of many of the UK tutors was made possible with support from the BBSRC. We wish to record our appreciation of the substantial sponsorship provided by Waters plc who have supported this course, and its forbears, for many years.

The next two deadlines for training event proposals are 15th August 2016 and 31st October 2016. For more information and to submit an application, please visit www.biochemistry.org/training