

Meeting Report

Biomedical Science Conference on Thursday 14th April 2016 at Anglia Ruskin University (ARU) Cambridge Campus, UK

Richard P O Jones*

**To whom correspondence should be addressed: Department of Biomedical and Forensic Sciences, Faculty of Science and Technology, Anglia Ruskin University, OPT 028, East Road, Cambridge CB1 1PT, UK. E-mail: richard.jones@anglia.ac.uk*

Attendance

This meeting brought together staff, postgraduate students taking ARU's MSc in Biotechnology (led by Havovi Chichger), and finalists taking ARU's BSc (Hons.) in Biomedical Science (led by Claire Pike). Approximately 140 students and 20 staff attended. The conference was timetabled for the undergraduate module Current Advances in Biomedical Science (led by Richard Jones) and the MSc module Professional and Ethical Practice in Industry (led by Grisha Pirianov).

Aims and ambitions

The aims of this conference were as follows: to provide good value for grant money; to improve course communities; to strengthen relationships between staff and students; to help integration between UK and international students; to strengthen links between ARU, the Biochemical Society and the Institute of Biomedical Science (IBMS); to encourage interest in exciting research; and to add to the learning on the courses. Knowledge accumulated during the conference will be assessed at the end of the modules during written examinations.

Plenary lectures

Speakers explained cutting-edge research techniques, their results and what they mean for biomedical science. Mike Harrison (School of Biomedical Sciences, University of Leeds) outlined how the rotary ATPases function as nano-scale motors that drive biology. His lecture illustrated the physiological roles of the rotary ATPases, their structure and organisation, how they work, their regulation and control, and inhibitor binding and therapeutic potential. Grisha Pirianov (Department of Biomedical and Forensic Sciences, ARU) discussed current technology for drug discovery and validation for treatment of inflammatory based vascular diseases such as aneurysms. Dominika Gruszka (Francis Crick Institute) lectured on studies of protein folding, misfolding and aggregation performed with Jane Clarke (Department of Chemistry, University of Cambridge) and Jennifer Potts (Department of Biology, University of York). Dominika outlined the following: the basis of the protein folding problem; factors that can lead to protein denaturation; examples of experimental techniques used to study protein folding; the process of protein misfolding and aggregation including causes and examples of amyloidosis; and the formation of biofilms on implanted medical devices. Manal Mohammed (Department of Biomedical and Forensic Sciences, ARU) discussed how modern molecular, DNA sequencing and computational tools are enabling us to prepare for, and react to, outbreaks of infectious diseases that are difficult to treat.

Students' contributions

Students presented coursework posters that reflected their own developing and wide-ranging biomedical and industrial science interests. The posters were assessed by staff on the day. For the undergraduates, first prize was awarded to the poster entitled, "Cephalosomatic anastomosis: the proposition for the human head transplant" created by Gabriele Saba, Anton Zolotukhin, Lewis Mudway and Johnathan Willgress. Joint second prize was awarded to the posters, "Is 3D cell culture a better predictor of LD50 than 2D cell culture and how does it compare to in-vivo results?" by David Glasspool, and, "Does saturated fat intake increase the risk of coronary disease?" by Ololade Adenaike, Ernest Asamoah, Rita Cappiello and Khadijat Mansaray. The postgraduates presented case studies of biotechnology companies. First prize was awarded to the poster, "Horizon Discovery Group plc" by Sabastina Amoako. Joint second prize was awarded to the posters, "Oxitec Limited," by Ada Luisa Soto Chavarria and, "Novabiotics," by Thilini Kanchana Wickremasinghe.

Anonymous comments regarding the conference provided by students in module evaluations included the following: "The lecturers were very enthusiastic with very interesting current research topics"; "I liked that the lecturers are current researchers in the subjects they are talking about"; and "Presenting a poster was enjoyable and a good way of being assessed."

Head of Department's Comments

Jocelyn Pryce (Acting Head of the Department of Biomedical and Forensic Sciences at ARU) said that, "The students were able to apply the knowledge they have gained throughout their degree to their specialist interests, allowing them to showcase their work and success. This resulted in presentations of high quality posters and evidence of excellent critical defence of each subject area. This conference is growing in strength with each year and we would like to thank the Biochemical Society and the ARU Extra Curricular Fund and for their continued support in identifying new ways to increase the student experience."

Funding

This conference was funded by a Biochemical Society Sponsored Events Grant (£500) and an ARU Extra Curricular Event Award (£1500). These awards supported student poster prizes, packed lunches, light refreshments during session breaks, and travel costs for the external visiting speakers.

Sponsored by the Biochemical Society

www.biochemistry.org



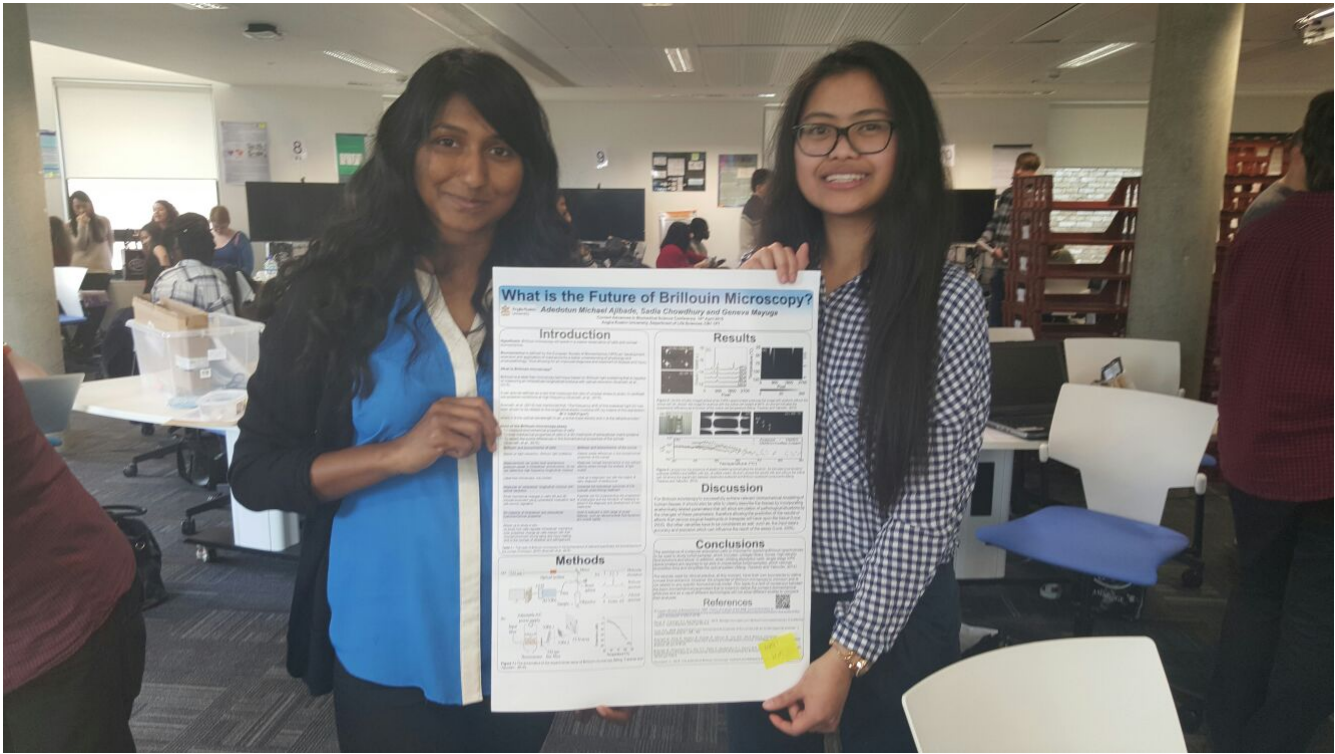
Advancing molecular bioscience

Photographs



Caption

Left to right: Anton Zolotukhin, Gabriele Saba and Lewis Mudway with their prize-winning poster.



Caption

Left to right: Sadia Chowdhury and Geneva Mayuga with their poster.



Caption

Left to right: Sadia Chowdhury, Avni Alonzo-Young, Kristina Tarsis, and Geneva Mayuga at the Biomedical Science Conference Poster Session. Photograph taken by Avni Alonzo-Young.