IUBMB–FEBS Conference on New Horizons in Biochemistry and Molecular Biology Education

6–8 September 2017; Rehovot, Israel

This significant initiative, agreed between IUBMB, FEBS and the Weizmann Institute of Science in 2015, brought together 130 participants (including lecturers) from around the world at the fascinating David Lopatie Conference Center of the Weizmann Institute of Science. Eight scientists were supported by bursaries from FEBS, IUBMB, the Tang Foundation, and the Weizmann Institute of Science.

The Conference was opened by Joan Guinovart, President of IUBMB, and Israel Pecht, Former Secretary General of FEBS, followed by introductions and welcomes from Anat Yarden (Host and Co-Chair) and Co-Chairs Janet Macaulay (Chair, IUBMB Education Committee) and Gül Güner Akdoğan (Chair, FEBS Education Committee).

The rich programme (www.weizmann.ac.il/conferences/NHBMB2017) included 16 invited lectures (international and Israeli) and three plenary lectures from eminent scientists/educators. The backbone of the programme was five mini-symposia ranging from the high-school stage of biology education, to the BSc level, to PhD training and up to the postdoctoral stage: ‘Pre-University Biology Education’ (Chair, Anat Yarden, Rehovot), ‘Key Knowledge and Skills for Molecular Life Scientists’ (Chair, Keith Elliott, Manchester), ‘Research in Undergraduate Education’ (Chair, Janet Macaulay, Monash), ‘PhD Training: New Prospects’ (Chair, Gül Güner Akdoğan, Izmir), and ‘Rethinking Doctoral Training’ (Chair, Michael Walsh, Calgary). The conference also included eight workshops on current educational topics, involving innovative perspectives and methods. A poster session with 18 posters of high educational value received great interest as well.

The opening plenary talk by Bruce Alberts (UCSF, USA) on ‘Why science education is more important for the world than most scientists realize’ was inspiring. He stated how ‘every society needs the values of science: honesty, generosity, and an insistence on evidence while respecting all ideas and opinions regardless of their source of origin’. To spread these scientific values, he advocated less emphasis in science education on memorizing facts and more active problem-solving. In the second plenary talk, ‘The future of the Doctorate’, Robert Harris (Karolinska Institute, Sweden) reflected on the radical changes in expectations of both PhD students and supervisors, touching on pressures for publication, global competition, cases of scientific fraud and worsening career prospects, and argued how quality assurance and feedback systems are imperative within doctoral training. Another highlight of the conference was a closing plenary lecture from Ada Yonath, Nobel Laureate (Weizmann Institute of Science) on ‘Next Generation Environmental Friendly Antibiotics’, which ably demonstrated how scientific research can be explained in an understandable and friendly way.

Altogether, we hope the outcomes of this conference will have impact on how biochemistry and molecular biology education is pursued at all levels, throughout the world.

Gül Güner Akdoğan, Anat Yarden and Janet Macaulay

Co-Chairs of the Conference

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