

Highlights of my week at the FEBS Advanced Lecture Course for Matrix Pathobiology, Signaling and Molecular Targets, June 2017

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The FEBS-MPST 2017 was held on the beautiful Greek island of Spetses. The aim of the six-day meeting was to showcase the latest research in the fast growing field of matrix biology and to provide essential training and information to young researchers like myself so that we could transfer back in our own research environment.

The meeting was organised by an international organising committee and a young scientists' committee, which was made up of young researchers from around the world. There were over 100 participants at the meeting. Over 30 attendees were senior experts from around the world and the remaining majority were eager junior scientists like myself. The meeting opened with addresses from contributors to the meeting: Chairman of the FEBS Advanced Lecture Courses for matrix biology since 2007 – Nikos Karamanos (University of Patras), Chair of the FEBS Advanced Courses Committee – Beáta Vertessy, President of the Hellenic Society of Biochemistry and Molecular Biology – Dimitris Kletsas, and the president of the ISMB – Lilliana Schaefer. The first day closed with an International Union of Biochemistry and Molecular Biology plenary lecture on 'Matrikines' by François-Xavier Maquart (University of Reims).

The program comprised of general lectures or tutorials aimed to fill in any gaps in extracellular matrix knowledge of the junior audience, presentations of the latest research from leaders in the field, and plenty of opportunities for junior scientists to present – in the form of selected talks, flash presentations and poster presentations. There were also career development sessions designed for PhD students presented by representatives of the FEBS Education Committee and by Maria Papatriantafyllou, the Editor of FEBS Letters.

In line with my research interests in matrix homeostasis, highlight presentations for me were: Yoshifumi Itoh (University of Oxford) presented various studies his lab has been conducting on the potential therapeutic role of MT1-MMP; Irit Saga (Weizmann Institute of Science) presented an elegant study on how intrauterine matrix remodelling by MMP1 improved embryo implantation in mice; Cecile Gauthier-Rouvere (University of Montpellier) showed how flotillins mediate the loading of MT1-MMP into multivesicular endosomes and exosomes; Ralph Sanderson (University of Alabama) then continued the hot topic of exosomes, giving us a tutorial on the isolation techniques; Manuel Dauchez (University of Reims) and Sylvie Ricard-Blum (University of Lyon) both presented their collaborative efforts in generating computer models of matrix protein-protein interactions in 3D based on published matrix interaction networks and protein kinetics and biochemistry; Dimitrios Zeugolis (University of Galway) enlightened the cell culturists amongst us on molecular crowding with a sugar called carrageenan to concentrate matrix molecules closer to the cells to enable faster assembly into a network. I also enjoyed talks from long-standing leaders in the extracellular matrix field, Lilliana Schaefer (Goethe University), Peter Bruckner (Münster University), John Couchman (University of Copenhagen), who gave engaging and comprehensive lectures. I most enjoyed the panel discussion at the start of the meeting, where 6 of the invited speakers discussed what they think has been the most significant discoveries in their respective fields and what emerging aspects of matrix biology we should keep an eye out for.

Other highlights from the meeting include the excursion during which we were given a guided tour of Bouboulina's Museum, all the amazing food we were treated to at the local restaurants, and the night where Nikos Karamanos and the Young Scientists' Committee showed us how to do traditional Greek dancing! I really enjoyed the meeting and the location. I've also returned to the lab with refreshed enthusiasm and exciting new ideas to try, which is essential for junior researchers to continuing advancing. And thus, I thank the organisers for a successful meeting and both BSMB and ISMB for awarding me with travel bursaries that allowed me to attend and present at the meeting.

Photo attached of the 4 ISMB Travel Fellowship Awardees: (L-R) Raquel Melero (Finland), Bassil Dekky (France), Nikolaos Afratis (Israel), and myself.