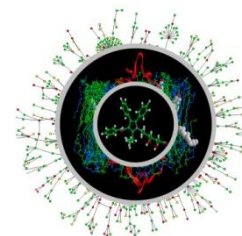


Report of the 3rd AIMMS annual meeting



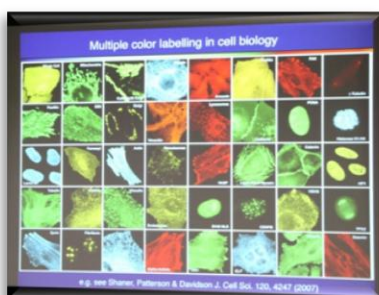
Amsterdam, 5 April 2013

After a welcome with coffee and greeting familiar faces, director Nico Vermeulen opened the 3rd AIMMS annual meeting in lecture hall KC-159 within the W&N building at the VU campus. 120 professors, staff members, post-docs, PhD and Master's students from research groups affiliated to AIMMS attended the event.

Vermeulen first reflected on the start of AIMMS in 2010. He then proudly presented the [2012 AIMMS annual report](#), which contains general and funding information, summaries of bridged PhD projects, scientific output and descriptions of the participating research groups. Vermeulen concluded by mentioning a number of interesting developments for AIMMS, including the construction of the O|2 building and the evolution of the Amsterdam Faculty of Sciences.



Key-note lectures



The first speaker of the annual meeting was Doris Gadella. He presented highlights of recent developments in fluorescent microscopy, including super-resolution microscopy. Gadella clarified one of his research lines: improving enhancement of fluorescent proteins. His group constructed a cyan fluorescent protein with the highest fluorescent luminescence worldwide, which he demonstrated with very detailed cell movement videos.

Then Wilbert Bitter took the stage and explained his work on finding new drug targets for the tuberculosis bacterium as annually still 1.4 million people die of this disease. Bitter's group identified novel virulence factors using the TraDIs method. He showed the audience that clusters of mycobacterium genes are required for macrophage infection and that the ESX-5 system is essential for the secretion of virulence factors.



The third speaker was Age Smilde. He elucidated several models for organizing and summarizing complex biological data within systems biology. His group works on data fusion of metabolic data from different omics measurements and nutrikinetics. Another research line of Smilde is constructing networks and dynamics for e.g. gene regulation and metabolism in adipose tissue. His work also focuses on integrating top-down and bottom-up systems biology.

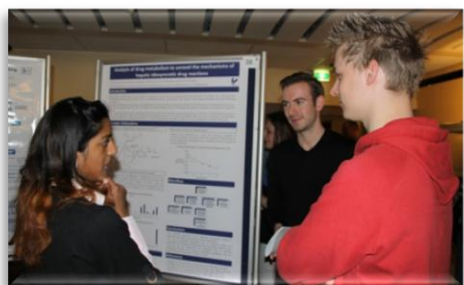
Concluding the morning session, Rob Leurs talked about phosphodiesterase enzymes (PDEs) and their role in African trypanosomiasis. One of his research lines focuses on finding inhibitors for PDEs, as these enzymes are parasite-selective molecular targets. Leurs' group applied the fragment-based drug

discovery approach as an alternative for high-throughput screening to find compounds that can inhibit parasitic PDEs. Novel molecules that fit into the PDE pocket were modeled and synthesized. With a related method structured-based drug design his group generated a PDE inhibitor specific for parasites.



Poster market

During lunch, a poster market session took place where 48 young AIMMS researchers presented their scientific discoveries. A jury consisting of Dirk Bald, Frank Bruggeman, Eelco Ruijter and Henry Vischer rated the posters and appointed three winners: Wouter Vogel (Bio-organic Chemistry), Reka Otvos (Biomolecular Analysis) and Sabrina de Munnik (Target and Systems Biochemistry). The latter won the AIMMS poster prize for the third time. These students were awarded with a sum of €200.



PhD competition

After the poster market, the programme continued with an oral presentation competition for 5 selected PhD students. The PhD students had exactly 15 minutes for their talk and 5 minutes were reserved for discussion.

Azra Delic explained her research on nanobodies against chemokine receptor CXCR7 as a anti-cancer therapeutic. Then Harini Venkataranam talked about the role of human enzymes in idiosyncratic adverse drug reactions. The topic of sustainable synthesis of heterocycles by palladium-catalysed isocyanides was addressed by Tjøstil Vlaar. Subsequently, Meike Wortel demonstrated principles of optimal metabolic network operation. And last but not least Saskia Nijmeijer elucidated her work on biased signalling by G-protein coupled receptors.

The audience voted electronically for the best oral presentation. Azra Muijc-Delic was awarded with a prize for the best lecture: a full-covered attendance of a European scientific congress of her choice. Furthermore, Shalene Sewradj (Molecular Toxicology) won two cinema tickets for the most important contribution to the plenary discussion.



Concluding lectures

After a short tea break, scientific advisory board member Nick Turner gave a lecture on innovation processes at the Manchester Institute of Biotechnology and how this could be an example for AIMMS. He showed that the new housing of this institute facilitates and stimulates extensive collaboration between research groups, which is very promising for the moving of AIMMS to the O|2 building.



Then Christien Dijkstra presented work of her research group at the VUmc on Multiple Sclerosis and neuroinflammation in tissue damage and repair. Her studies on malignant macrophages seem very promising to better treatment of MS patients.

The annual meeting concluded with socializing over drinks served by study association VCSVU and a nice buffet dinner in the Tuinzaal.

The management team of AIMMS would like to thank all attendees for their presence. For affiliations of all above mentioned speakers, please check the programme of the annual meeting.