

## AIMMS 2015 Annual Meeting: successful celebration of the first lustrum

On Thursday 16 April, the 2015 annual meeting of the Amsterdam Institute for Molecules, Medicines and Systems took place. This year, the annual meeting was extra special, as it was the fifth since the foundation of AIMMS in 2010. The first lustrum of AIMMS was thus celebrated during this meeting entitled 'Celebrating AIMMS, Celebrating Science'.

Over 160 staff members, post-docs, PhD, Master and Bachelor students attended the event. They were provided with interesting key-note lectures and presentations from AIMMS scientists who succeeded in obtaining grants in the last years. A poster competition and an oral communication competition between AIMMS PhD-students completed the divers programme.

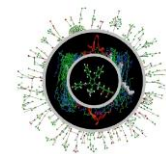
The 2015 annual meeting was opened by AIMMS director Prof. Nico Vermeulen, who briefly introduced AIMMS, its research themes and the successes of AIMMS in its first five years of existence. He also elaborated on the importance of synergy and collaboration of the science faculties of the VU and UvA and their movement to the O|2 building in the near future.



### Human Life Sciences lectures

The first guest speaker was Prof. Yvette van Kooyk, Professor at the department of Molecular Cell Biology and Immunology at the VUmc. She gave an update on the use of glycans and nanotechnology for the design of dendritic cell (DC) targeting cancer vaccines. Daan Geerke (Assistant Professor at AIMMS) continued, with a presentation on a major challenge within the field of computational molecular toxicology: the accurate, affordable and automated binding affinity prediction for flexible proteins. Afterwards, the floor was for Pernette Verschure, Associate Professor at the Swammerdam Institute for Life Sciences (SILS-UvA). She explained some of the key aspects of epigenetic regulation and the diversity of subjects to which this research could be of help.

The fourth speaker was Martine Smit (Professor at AIMMS), providing an interesting talk about G protein-coupled receptors (GPCRs), which appear to be involved in many diseases and which are therefore prime targets in modern drug discovery. She showed how nanobodies can be used to target CXCR4 and CXCR7. Concluding the morning sessions, Romano Orru (Professor at AIMMS) expanded on new 'green' chemistry methods for the production of complex molecules. With these methods, compounds could be made in more efficient ways, which is of great use for the large scale production of medicines for example.



In the afternoon, Prof. Thomas Wurdinger from the Cancer Center Amsterdam (CCA) presented his research on the treatment of brain cancers. As the life-expectancy of these patients is very poor, new combinatorial therapy treatments are definitely needed. In his presentation, he expanded on the latest visualization techniques, making it for example possible to get 3D vesicle structures in the brain.

### Poster competition

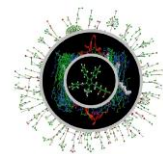
At noon, the attendees moved to the Tuinzaal for lunch, during which a poster session was held. During this session, 43 AIMMS post-docs, PhD and Master students presented their latest scientific discoveries and discussed these with the participants. Meanwhile, the jury consisting of Assistant Professors Eelco Ruijter, Henry Vischer, Edith Houben and Anton Feenstra visited all posters and graded them. They selected the best three posters and presenters, but the names of the winners were kept silent until the end of the meeting.



### Oral communication competition

After the poster session, it was time for the oral communication competition between AIMMS PhD-students. This year a PhD student from the SILS-UvA, Thierry Mondeel, also joined the competition, exemplifying the value AIMMS attributes to (this) collaboration. All five contestants had 10 minutes to explain their research to the audience, and 5 minutes were reserved for discussion. The audience was asked to rank the presentations via electronic voting at the end of the session.

First, Willem Jonker (Biomolecular Analysis) updated the audience about a new method for the identification of newly emerging pharmaceutical contaminants in the aquatic environment, which could replace current methods having high costs and low success rates. Then, Thierry Mondeel (Synthetic Systems Biology) spoke about the utility of metabolic maps for all kinds of purposes, such as biotechnological and medical purposes. Raymond de Wit (Target and Systems Biochemistry) continued, who's PhD research is focused on the search for more effective treatments for the WHIM syndrome, showing the potential of CXCR4-specific nanobodies. Next up was Michiel den Braver (Molecular Toxicology), who explained how the drug diclofenac (an NSAID) can induce liver toxicity in some individuals and how inter-individual differences in drug metabolizing enzymes can help in predicting the risk of this adverse drug reaction. Last but not least, Nilgun Yilmaz (Molecular Cell Physiology) elucidated her modelling work on the understanding of the biological responses to stress and the association between high levels of stress and increased risk of diabetes.



The contestants could then release their stress during the tea break and enjoy the special AIMMS 5 year anniversary cakes together with the other attendees.

### Award winners

After the tea break and the key-note lecture of Thomas Wurdinger, it was time to announce the prize winners of the annual meeting. The prizes were handed out by Prof. Karen Maex, dean of FEW and FALW of the VU University and FNWI of the UvA.

Firstly, the poster prizes were awarded to three PhD students who had very clear, high quality posters, accompanied by an excellent presentation. Annika Jacobsen (Integrative Bioinformatics) received a prize for her poster *Modeling WNT/B-Catenin Signalling*. Art Kruithof (Bio-organic Chemistry) won with his poster *The Synergy of Computational and Synthetic Chemistry in Reaction Development*. The poster *The Road to the Development of Small Molecule Stabilizers of the 14-3-3/ErA Interaction Using a Fragment Based Approach* of Stephanie Thee (Medicinal Chemistry) was awarded as well. All three will receive a €200 contribution to spend on a conference of their choice.



The oral presentation prize was awarded to Thierry Mondeel, for his presentation *Metabolic maps for the improved biotech productivity and individualised medicine*. He was not only awarded with €600 to be spent on a conference, but he will also represent AIMMS at the FIGON Dutch Medicines Days 5-7 October in Ede. Raymond de Wit was chosen runner-up and will represent AIMMS at the VUmc Wetenschapsdag on 25 September. Master student Lindsey Burggraaff was awarded the prize for the best contribution to the plenary discussion.

The last words were for director Prof. Nico Vermeulen, who thanked the audience for their contributions to a marvellous fifth annual meeting. The meeting concluded with a Spanish tapas buffet dinner and drinks served by study association VCSVU. Altogether, it was a very pleasant and scientifically interesting day, showing the diversity and added value of translational research, i.e. from molecule to patient, conducted within AIMMS and nearby groups. Moreover, presentations from all researchers gave an excellent flavour of what our future neighbours in O|2 are doing.

The management team of AIMMS would like to thank all attendees for their presence and looks forward to meet all of you again at next year's annual meeting in the new O|2 building.

