

International PhD Student Symposium

Presented by Students of the
International Max Planck Research School
for Molecular Biology
Georg-August University Göttingen



11th HORIZONS in Molecular Biology

15-18th SEPTEMBER 2014
Max Planck Institute for Biophysical Chemistry
Göttingen, Germany

under the auspices of
Prof. Dr. Johanna Wanka
Federal Ministry of Education and Research









11TH HORIZONS IN MOLECULAR BIOLOGY

International PhD Student Symposium and Career Fair for Life Sciences

15-18th September 2014
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Welcome to Horizons!

We are excited to welcome participants from four continents and more than 40 different countries this year – to our most international Horizons yet! We are looking forward to an exciting and stimulating meeting with all of you. A meeting centered on you and inviting you to interact and network with other young scientists, company representatives and the invited world-famous scientists! So what do we have in store for you in the next days?



On Monday, and preceding Horizons itself, our Career Fair offers the opportunity to get a glimpse at alternative career paths outside of academia, get a new perspective on research and to directly get in touch with company representatives. A highlight of the Career Fair will be the opening talk by Uri Alon, known for his research on systems biology, guide-articles for young scientists – and his mad skills at the ukulele. He will instill us with “Love and Fear in the Lab”, but hopefully focusing rather the former. But if the latter shows its grim face all too often in your research, in the form of negative results, do not worry – we’ve got you covered: Dirk Mielenz from the Journal of Negative Results will speak to us on the importance of “failing” research. Other career talks will inform you about data visualisation and molecular simulation, your options in management consulting or science journalism, founding your own start-up, and many more!

The Horizons meeting itself will start on Monday evening with an opening talk by Ingo Potrykus, the inventor of Golden Rice, the first genetically modified crop that is specifically engineered to increase the health of its consumers in a population-wide scale. In total, there will be 20 lectures, covering such diverse topics as optogenetics, synthetic biology, ageing, membrane biophysics, antigen presentation, DNA vaccines, and many more.

The various social events during Horizons will provide a relaxed atmosphere and will allow you to get in contact with the speakers and other participants. For this you should “Join us for a Beer!” on Monday and the Bowling Event on Tuesday. Certainly the most anticipated social events this year will be the delicious Conference Dinner and the following party in Göttingen’s city center on Wednesday. We hope to see you all there!

We would like to thank you for your participation and wish you an awesome time at Horizons 2014! If you have any question, please approach us at any time – we are easy to spot in our red “Organizer” T-shirts.

Acknowledgements

We would like to thank the many people without whom this symposium would not have been possible. First, we have been working closely together with the coordination office of our graduate program and would thus like to thank Dr. Steffen Burkhardt and Kerstin Grüninger for their help. Furthermore, we would like to acknowledge the support provided by the Georg-August University and the two Max Planck Institutes, especially the Max Planck Institute for Biophysical Chemistry, which serves as the venue. We are also grateful for the help of volunteers from our program. Further, we would like to acknowledge the continuous support provided by the Federal Minister of Education and Research, Prof. Dr. Johanna Wanka, through her patronage, and of course our media partners, the donors, and the sponsors.



Greetings from the Patron



Due to the personal dedication and commitment of PhD students from Göttingen, a successful scientific meeting on the topic of molecular biology has become established over the past years. This PhD student symposium provides an international forum for young researchers to present their own work and discuss new research topics with leading scientists. It is particularly important to me that the participants will have the opportunity to make new contacts and establish their own networks in an early stage of their career. Furthermore, the Career Fair that is aligned with the symposium will open professional perspectives for the participants and completes the programme of the meeting excellently.

Education and research are a central origin of innovation and enjoy the highest priority in the actions of the federal government. Progress and development critically depend on the commitment of young people and require open scientific dialogue. The recruitment and support of young researchers is thus of central importance to the Federal Government. They are the basis of future innovative and successful research in Germany.

I feel certain that the 11th instalment of the symposium will again succeed in broadening the horizons and experience of all participants in a lasting manner. Not least, the list of outstanding speakers that accepted the invitation for this meeting – among them the two Nobel Laureates Ada Yonath and Sir John Walker – will vouch for this.



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Prof. Dr. Johanna Wanka
Federal Minister of Education and Research



Organizing Committee

The 11th PhD Student Symposium Horizons in Molecular Biology is organized by a group of PhD students of the International Max Planck Research School for Molecular Biology in Göttingen.



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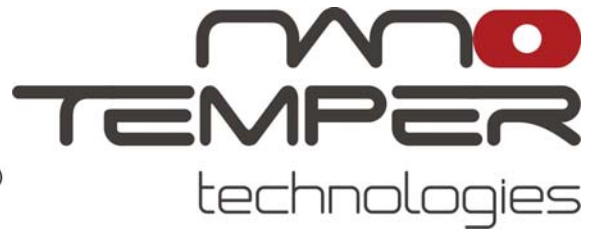


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Program Overview

Monday, September 15th

09:00	<i>Registration</i>
09:00 - 17:00	Career Fair for Life Sciences
17:15 - 17:30	Horizons Opening Ceremony
17:30 - 18:15	Keynote Lecture: Ingo Potrykus “The Golden Rice Project”
18:15 - 19:00	Jeff Lichtman “Imaging the Connectome”
21:00	Pub Crawl - Join us for a Beer

Tuesday, September 16th

09:00	<i>Registration</i>
09:30 - 10:15	Patrick Cramer “Recent insights into the mechanisms of genome transcription”
10:15 - 11:00	Awarded Student Talks Monica Risley - “Controlling electroconvulsive seizure recovery time in <i>D. melanogaster</i> and <i>C. elegans</i> ” Markus Kröss - “The molecular cause for high holding efficiency in specialized smooth muscles” Lando Schwenen - “Pore spanning membranes as a model system for SNARE mediated membrane fusion”
11:00 - 11:30	<i>Coffee Break</i>
11:30 - 12:15	Linda Van Aelst “Rho regulators in neuronal development and associated disorders”
12:15 - 13:00	Gero Miesenböck “Light Sleep”
13:00 - 14:30	<i>Lunch</i>
14:30 - 15:15	Vinzenz Unger “How Membranes Get Bent”
15:15 - 16:00	Steffen Lemke “Turning stochastic into coordinated cell behavior”
16:00 - 16:25	<i>Elevator Pitch Session</i>
16:25 - 16:45	<i>Coffee Break</i>
16:45 - 17:30	Nobel Lecture: Sir John Walker “The ATP synthase: new life and death in old enzyme”
17:30 - 19:00	<i>Wine and Cheese</i> Poster Session I - odd numbers
20:00	<i>Bowling</i>