# **History of Horizons**

December 4<sup>th</sup>, 2003. The seminar room in the Göttingen Center for Molecular Biosciences was bustling with activity. Organizers darted in and out of the room, making sure everything was in order and as it should be. Speakers attempted to look through their talking points, whilst entertaining the many curiosities of the next generation gathered around them. The graduate students themselves, whispered to each other and waited apprehensively, with thinly veiled excitement, for the program to begin. There were just under a hundred eager minds crowded into that one room. Students and researchers; all brought together by a shared passion: a passion for science. This was the inaugural Horizons in Molecular Biology Conference: An International PhD Student Symposium!

The conference has come a long way since then. Over the years, the number of participants grew steadily and increased in variety. Horizons now regularly attracts around three hundred participants from over thirty countries. The symposium has featured numerous renowned researchers, representing a wide range of fields in the life sciences. This exhaustive list also included several Nobel Laureates, namely: Professors Martin Chalfie, Sir John Walker, Ada Yonath, Thomas Südhof, Kurt Wüthrich, Carol Greider, Venki Ramakrishnan, Sir John Gurdon, Tim Hunt, and this year Michael Rosbash.

Horizons has also evolved continuously as each new batch of student organizers brings a fresh perspective and new ideas, proving consistently that you *can* make a good thing better! In 2006, the organizers introduced a **Poster Session** accompanied by **Student Talks**. PhD students presented *over a hundred posters* and a select few were given the chance to present their work to an audience of peers and professors. Building on this, in 2007, Horizons launched its first Career Fair in conjunction with the conference. The fair offered budding scientists with an opportunity to connect with industry and network with life science professionals with a different backgrounds and perspectives. Representatives from over *twenty companies* were present at the inaugural Career Fair, conducting live interviews and CV checks. Today, the Career Fair has adopted a major role in the conference, offering workshops held by professionals, and interactive discussions with key figures in the modern life science industry. All catered to the needs of a young scientist.

At the heart of Horizons, is an idea: An International Scientific Conference from PhD students for PhD students. Organized by students from Göttingen's International Max Plank Research School for Molecular Biology, Horizons in Molecular Biology provides an interactive experience in a relaxed environment. It aims to bridge the gap between young scientists and experienced researchers and bring together experts and novices from various fields of the life sciences to engage in a productive dialog and exchange information. Modern discovery is persistently progressing from exploring rainforests in faraway lands to observing the nature of life under a microscope. We are the modern explorers, and are committed to keep progressing forward, in the pursuit of science, towards the Horizon.

# **IMPRS for Molecular Biology**

For the 16<sup>th</sup> time, the Horizons symposium is organized by students of the International Max Planck Research School (IMPRS) for Molecular Biology at the University of Göttingen. The Molecular Biology Program is jointly conducted by various departments of the University of Göttingen, the University Medical Center Göttingen, the Max Planck Institutes for Biophysical Chemistry and Experimental Medicine, and the German Primate Center. The common aim is to offer an intensive, research-oriented education in order to prepare the students for a professional career in the life sciences. This broad spectrum of topics is mirrored in the fields covered by Horizons. In addition to the small classes and specialized hands-on laboratory courses, the intercultural experience is extraordinary. Excursions, culture nights and workshops with students from all over the world naturally become a "seminar" on intercultural communication. Students can join the program after completing their Bachelor studies. During the first year, students receive a broad education in molecular biology through lectures, lab rotations and methods courses delivered by the participating institutions. From the second year, the students conduct their own research during their MSc or PhD thesis projects and receive further training in specialized methods and skills courses within the Göttingen Graduate Center for Neurosciences, Biophysics and Molecular Biosciences (GGNB), which is funded by the German Excellence Initiative.

In September 2000 the first brave students from as far away as Ghana, China, Mexico and Malaysia came to Göttingen to join the new International MSc/PhD Molecular Biology Program. Today, with the twentieth batch of twenty students joining the IMPRS, the program has become very successful as demonstrated by excellent evaluations, awarded prizes, and applications from all over the world. By now, more than 175 students have successfully defended their PhD theses within the program and kissed the Gänseliesel. Kissing this statue that stands on a fountain on the market place in the middle of the city and giving her flowers is an old tradition for Göttingen PhD students. For more detailed information about the International MSc/PhD Molecular Biology Program in Göttingen, please take a look at our website:

www.gpmolbio.uni-goettingen.de

# **About Göttingen**

The renowned university town of Göttingen lies in the center of Germany in southern Niedersachsen (Lower Saxony) between the Harz mountains and the Weser river. Its establishment dates back to 953, it was chartered in 1210 and flourished as a member of the Hanseatic League.

A glimpse of this hanseatic opulence is still present today in the medieval Town Hall, the splendid churches and quaint half-timbered houses in Gothic, Renaissance and Baroque styles. Göttingen's landmark is the "Gänseliesel", an art nouveau statue of a girl herding geese on top of the fountain on the market square, outside the Old Town Hall. Traditionally, all new doctoral graduates of the University kiss the cheeks of the statue after passing their examinations, making her "the most kissed girl in the world".

The Georg-August University was founded in 1734 and today has 13 faculties with 32,000 students. The university sends forth many famous scientists – amongst its alumni are 45 Nobel laureates. Especially many famous mathematicians come from Göttingen: Carl Friedrich Gauss, Bernhard Riemann and David Hilbert, to name only a few.

Apart from the university, the city is also home to many research institutes, such as Max Planck Institutes, and international companies.

Nearly untouched by bombings in World War II, the city center is now an attractive place to live in with many shops, small cafes and chic bars. Consequently many students live here, giving Göttingen a young face: in 2003, almost half of the population of the inner city was between 18 and 30 years of age. Today Göttingen has approximately 130,000 inhabitants including 24,000 students, giving it the charm of a small and lively university city.

## **Practical Information**

Certificates of attendance will be handed out during registration upon request.

#### Insurance

The Organizing Committee accepts no responsibility for accidents or damage to participants' private property. Please make your own arrangements for all the necessary insurance.

#### Internet

Free Wi-Fi internet (eduroam) is available throughout the symposium in the lecture facilities. If you do not have access to eduroam, please contact the registration desk.

## **Parking**

Participants can use the parking lots available near the MPI for Biophysical Chemistry.

#### **Buses**

The buses number 21, 22 and 23 to the city center leaves just outside the symposium venue at the bus stop "Faßberg". Bus schedules are available at the registration desk.

#### Taxi

Taxis to the city center can be arranged by calling one of the many Göttingen taxi companies:

Göttinger-Funk-Taxi-Zentrale: 0049-551-69300
 puk minicar: 0049-551-484848

Please note that taxis are considerably more expensive than public transport. Also, keep in mind that taxis only accept cash.

## **Organizers**

In case you have difficulties ordering a cab, getting around town or else, you are always welcome to ask for help one of the organizers. Just look out for students wearing a **Horizons t-shirt** and get in touch with us regarding your issue.

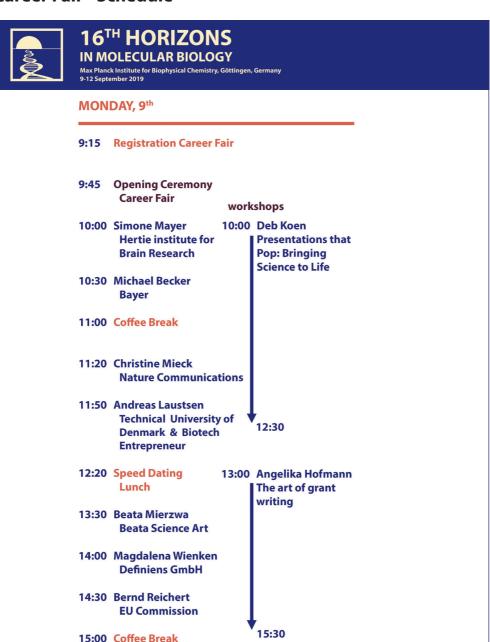
### Services

Registered participants are entitled to the following: Admission to plenary lectures, conference material (certificate of participation, name badge, conference bag) and refreshment during coffee breaks.

Participants who opted for the conference package, in addition to the above get a voucher for lunch, city tour, conference dinner and party and a hardcopy conference booklet.



## Career Fair - Schedule



## Welcome to the 13th Career Fair for Life Sciences

Your PhD is the starting point of your career in science. But have you ever found yourself asking: what is a career in science? A Post-Doc and tenure track to become a group leader? A position in a big biotech company? What are my options?

The answer is that with a PhD within the natural sciences, you have an ocean of options. Certainly more than two! The truth is, during a PhD you will acquire skills and a mind-set sought after everywhere.

In this year's Horizons Career Fair, we introduce you to seven people, all with a background in the natural sciences, who have chosen seven different career paths. These speakers represent the fields of science policy, academic research, industry, startups and entrepreneurship, publishing, consulting, and science art. Our goal is to present a broad range of possible future paths for our participants and to create an informal environment in which students can explore their possibilities after a PhD or a Post-doc in the natural sciences.

In addition, we give you the opportunity to learn the "dos" and "don'ts" of research proposal writing and a chance to learn clever tricks to become a more confident speaker in our two workshops.

The Horizons career fair 2019 will give you a taster of what opportunities are out there and broaden your Horizons!

Career Fair Organizers

# Notes





# **Insights: Academia**

Following one's own curiosity and pushing forward the frontiers of human knowledge is a dream for many PhD students. But how do you make this dream come true? And is the grass really so much greener on the other side? Simone Mayer will share her strategies and decision points that crucially contributed to her longterm goal of becoming a principal investigator. Having only recently started her own research group, she will share the unexpected joys as well as the unforeseen hurdles involved in this endeavor. For Simone, heading your own research lab is a bit like having your own company. As the CEO, one does a diverse array of jobs including being the head of Human Resources, the Head of Acquisitions, the Head of Public Relations as well as the Head of Finance and Research Strategy. For these reasons, heading her own group has been a very fun experience that has allowed Simone Mayer to grow as a person in many different areas already. Simone Mayer is looking forward to developing her research endeavor further in the coming years to push the frontiers of human knowledge on human brain development and evolution.

**Simone Mayer**Hertie Institute for
Clinical Brain Research



Dr. Simone Mayer is a molecular neurobiologist interested in understanding the development of the neocortex, the brain structure that has significantly contributed to the evolution of advanced cognitive functions in mammals. Simone conducted her doctoral work at the Max Planck Institute of Experimental Medicine focused on inhibitory synapses. Being interested in both academia and science policy, Simone decided to get practical experience beyond the lab during a traineeship at the European Research Council Executive Agency in Brussels, Belgium. After 5 months in an office, however, she was happy to be back at the bench starting her postdoctoral work at the University of California, San Francisco. Being based in the Bay Area, in collaboration with a biotech company, Simone established a novel method to determine physiological and transcriptomic features of single cells simultaneously. Since September 2018, Simone is heading an independent research group at the Hertie Institute for Clinical Brain Research in Tübingen, Germany. Her research questions focus on how environmental impacts affect brain development, for example by modulating the neurotransmitter system.





**Michael Becker** *Bayer* 

Michael Becker is heading a laboratory in the area of kidney disease research at Bayer AG. In addition, he is leading multiple preclinical research projects partly involving other companies or academic institutions. After studies in Biochemistry at Tübingen University and Harvard Medical School, he did his PhD at the German Cancer Research Center in Heidelberg. He joined Bayer in 2015 in the area of Lead Discovery, where he worked on uHTS assay development and switched to his current position in 2016. In addition to his passion for drug discovery he has a strong interest in innovation. He won the Merck Innovation Cup in 2014 and is supporting innovation at Bayer in his role as Innovation Coach.



# Preclinical Research in the Pharmaceutical Industry

Michael will talk about his personal career path and decisions who led him to his current position. Moreover, he will give an insight into his everyday work and the differences between research in pharma and academia. At the end of his talk, perspectives into other positions in pharma R&D and beyond will be given.