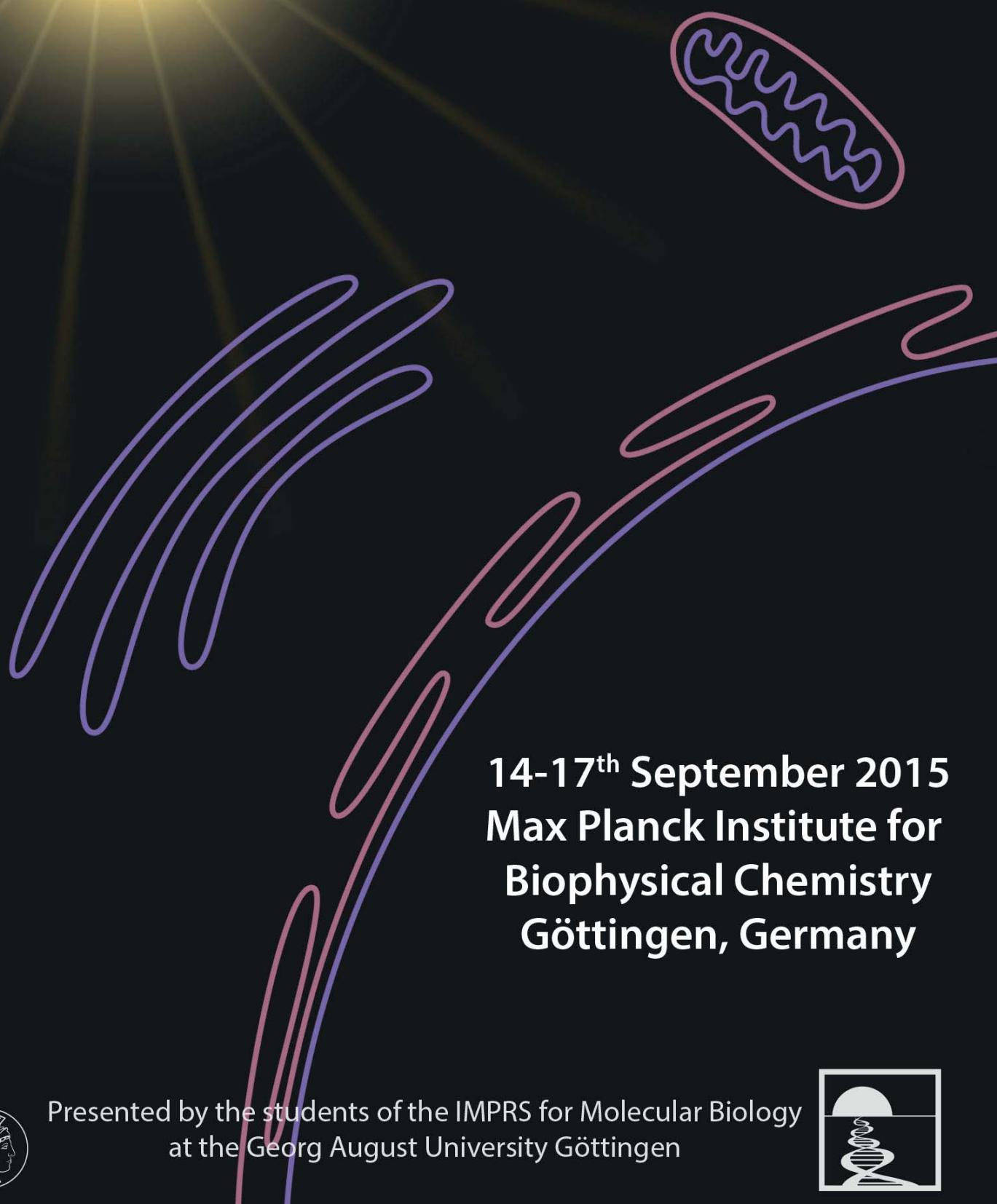


12th International PhD Student Symposium

HORIZONS in MOLECULAR BIOLOGY



**14-17th September 2015
Max Planck Institute for
Biophysical Chemistry
Göttingen, Germany**



Presented by the students of the IMPRS for Molecular Biology
at the Georg August University Göttingen





12th Horizons in Molecular Biology



Dieses Werk ist copyrightgeschützt und darf in keiner Form vervielfältigt werden noch an Dritte weitergegeben werden.
Es gilt nur für den persönlichen Gebrauch.



12TH HORIZONS IN MOLECULAR BIOLOGY

International PhD Student Symposium and Career Fair for Life Sciences

**14-17th September 2015
Göttingen, Germany**



Bibliographical information held by the German National Library

The German National Library has listed this book in the Deutsche Nationalbibliografie (German national bibliography); detailed bibliographic information is available online at <http://dnb.d-nb.de>.

1st edition - Göttingen: Cuvillier, 2015

© CUVILLIER VERLAG, Göttingen, Germany 2015

Nonnenstieg 8, 37075 Göttingen, Germany

Telephone: +49 (0)551-54724-0

Telefax: +49 (0)551-54724-21

www.cuvillier.de

ISBN 978-3-7369-9098-2

eISBN 978-3-7369-8098-3

This publication is printed on acid-free paper.

Copyright c 2015 by Horizons in Molecular Biology

PhD Student Organizing Committee

Göttingen, Germany

Editors: Horizons Organizing Committee

Graphic Design (Cover), InDesign Template and Layout: Katharina Seitz

Java scripts for student abstracts and participant list: Evgeniia Edeleva, Sviatoslav Edelev

Group Pictures: Irene Böttcher-Gajewski, Reprostelle, MPI-bpc

All rights reserved. No part of this brochure may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means without the permission of the "Horizons in Molecular Biology" PhD Student Organizing Committee. This brochure is designed for informational purposes only. The PhD Student Organizing Committee cannot guarantee for accuracy and completeness and cannot be held liable for any direct, indirect or consequential damage arising from reliance upon this information.

Welcome to Horizons!

Welcome to Horizons! Buckle up, sit back and let us take you on an unforgettable ride through the very forefronts of science.

This year, our symposium hosts a wonderful selection of speakers from all over the world and across a broad range of topics.

The career fair on the first day will give you the opportunity to explore different paths for your future in science, whether you want to stay in academia, or spread your wings to farther horizons.

Take the opportunity to network with industry representatives like Melina Fan, the founder of Addgene, Peter Odenwälder from McKinsey, Eva-Maria Neher from Göttingen's XLAB and many others. Maybe you'd like to bring along your old copy of "Lehninger's principles of Biochemistry" and get it signed by its author, Michael Cox, who will be there at the career fair this year!

We will kick off our conference with an exciting keynote by Tom Rapoport about how the organelles inside cells take up their elegant shapes.

If you're interested in structural biology, make sure you don't miss the talks by Axel Brunger on the structure of proteins at synapses, Pamela Björkman who tweaks antibodies to make them better, or Adam Frost who studies how ribosomes correct errors.

At the interface of physics and chemistry, Alice Ting makes chemical labels to study the proteome of live cells, and Charalampos Kalodimos models the dynamics of protein assemblies.

If you're a developmental biology buff, the talks by Kimberly Mowry on how RNA is distributed in frog egg cells, Karuna Sampath about RNAs that are both coding and non-coding at the same time, and Didier Steiner who looks at why knockdowns and deletion mutants don't always show the same phenotypes, are definitely for you.

Bringing basic science to the clinic, Manuel Mayr talks about how not only genomes, but proteomes, transcriptomes and metabolomes can be mined for heart disease markers. Curious about the inner workings of the brain? Join the neuroscience talks by Erika Holzbaur and King-Wai Yau.

And for more about the fascinating processes and molecules that make cells function, we have Scott Emr on the ESCRT pathway, Kathleen Green on adhesion molecules, Fumiyo Ikeda on ubiquitin pathways, Maya Schuldiner on organelle proteins, and Carola Vinuesa on immune cells.

Last but definitely not least, don't miss out on our Nobel lecture by Martin Chalfie talking about mechanosensation in *C. elegans*!



Join us for a drink, and explore the student nightlife in Göttingen, the city of science. Get to know other students who will present their posters with the backdrop of a sophisticated selection of wines and cheeses during our Wine and Cheese Poster session.

And of course, after a long day of exciting science, join us for dinner and a party, because we work hard and we party hard!

If you need help with anything, don't hesitate to approach any one of us – we are very friendly people donning crimson "organizer" T-shirts.

Welcome, and enjoy the ride!

- The Horizons Organizing Committee-

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 our media partners, the donors, and the sponsors.

Organizing Committee

The 12th 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.



Stefan-Sebastian David



Nataliia Naumenko



Martin Helm



Sara Osman



Damian Hernandez



Frank Richter



Shrutee Jakhanwahl



Katharina Seitz



Tahere Kalantary



Kashish Singh



Ina Klusmann



Minhui Su



Natalia Korniy



Daryna Tarasenko



Stefanie Krinner



Vedran Vasic



Sebastian Ludwig



Ahmed Warda



Manuel Maidorn



Olexandr Yagensky

Donors

The 11th International PhD Student Symposium "Horizons in Molecular Biology" is financially supported by the following institutions through the International Max Planck Research School for Molecular Biology.



Niedersächsisches Ministerium
für Wissenschaft und Kultur

DAAD



Bundesministerium
für Bildung
und Forschung

Sponsors

The PhD Student Organizing Committee would like to thank the following companies and organizations for their support:



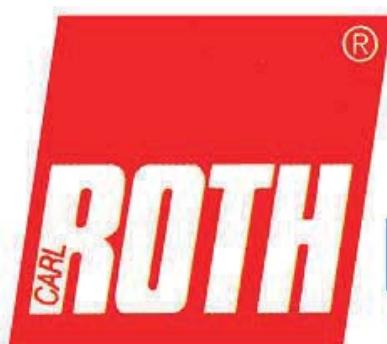
Fluorescent Labels and Dyes



SIE HABEN DIE VISION,
WIR HABEN DIE SUBSTANZ.



Nikon



sartorius





Media Partners

We are grateful for the cooperations with the following media partners:



Cuvillier Verlag





CONTENTS



Dieses Werk ist copyrightgeschützt und darf in keiner Form vervielfältigt werden noch an Dritte weitergegeben werden.
Es gilt nur für den persönlichen Gebrauch.