iGRADbio - Graduate Program for Biology Science at HHU Düsseldorf, Germany

Network, exchange, and training program to understand fundamental principles in biology

The iGRADbio Graduate Program offers a comprehensive, interdisciplinary PhD training program in the fields of molecular sciences, biochemistry, genetics, synthetic and quantitative biology, and computer sciences. Future PhD students will join courses in transferable and scientific skills, regular seminars and retreats and practical courses in state-of-the-art laboratory methods. Selected candidates can start their PhD projects in January 2021.

The iGRADbio program offers
- Supervision of your research project by a thesis advisory committee
- Interdisciplinary scientific training: lecture series, seminar courses and practical workshops
- Active participation in institute seminars and international conferences
- Training in “Transferable Skills”: scientific writing and presentation, grant writing, project management, career planning, etc ...

Fellowships and Support PhD students receive a position as doctoral researcher (50% EG13 TV-L, German civil service pay scale) for three years. The program will assist in all formal and legal affairs, such as visas, housing, health insurance and enrollment.
Research Projects
#1: Regulation of intracellular Na+ concentrations - Christine Rose, Christoph Fahlke
#2: The association of lichenous fungi and cyanobacteria through lectins - Markus Pauly, Björn Usadel
#3: Controlling and monitoring signalling processes in plants - Rüdiger Simon, Wolf B. Frommer
#4: Plant-plant interactions and allelochemical responses in Arabidopsis - Petra Bauer, Jürgen Zeier
#5: Structure and conformational dynamics of plant receptor-histidine kinases responding to their molecular stimuli - Henrike Heise, Georg Groth
#6: Towards a structural mechanism of Drosophila ESCRT-III membrane remodeling: a multiscale imaging approach - Thomas Klein, Carsten Sachse
#7: Establishing the cyanobacterium Synechocystis as model for synthetic symbiosis and endosymbiosis - Andreas Weber, Michael Feldbrügge
#8: Exploring mechanisms establishing nuclear control over gene expression in a nascent photosynthetic organelle in the amoeba Paulinella chromatophore - Eva Nowack, Julia Frunzke
#9: Chlamydia and Alzheimer: Protofibrillar oligomers of Chlamydia adhesins and human amyloid-β - Wolfgang Hoyer, Johannes H. Hegemann
#10: Phenology and genetics of adaptation in wild grass species - Maria von Korff, Peter Westhoff
#11: Analysis of microscopy-research data using artificial intelligence - Markus Kollmann, Mathias Beller
#12: Exchange of iron chelators as a public good-based inter-kingdom communication principle in microbial consortia - Karl-Erich Jaeger, Nick Wierckx
#13: Molecular economics of signalling systems - Ebenhöh, Oliver, Zurbriggen, Matias
#14: CRISPR-induced sidestep mutations in honey bees: Consequences of neuromuscular miswiring on locomotion and social behavior - Hermann Aberle, Martin Beye
#15: The evolutionary landscape of microRNA targeting in plants - William Martin, Laura Rose
#16: Genetics of genotype*environment interaction for photosynthesis parameters in barley - Benjamin Stich, Ulrich Schurr
#17: Structural analysis of a novel type of signal transduction protein - Dieter Willbold, Michael Bott
#18: Interplay of inositol pyrophosphate pathway and iron-sulfur cluster biogenesis - Ingrid Span, Ursula Fleig
#19: The function of EPS in host-microbe interactions - Ilka Axmann, Sebastian Fraune

Application:
We are looking for talented, highly motivated applicants holding a M.Sc. degree in biology, biochemistry, bioinformatics or a related field and a strong background in molecular sciences, biochemistry, quantitative biology, synthetic biology or a related discipline. You need to submit three types of documents with your application in order to be considered for admission:

1. Statement of Purpose
2. Letters of Recommendation
3. Transcripts (Academic Records)

Please indicate your project number(s) of interest, #1 - #19, in your application!

Deadline: October 5, 2020
via Email: Mara.Schuff@hhu.de

For further information, please visit our website: https://www.biologie.hhu.de/