

# MGSE Newsletter 03/2015

Activities & accomplishments at the Münster Graduate School of Evolution

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GRADUATE  
SCHOOL OF  
EVOLUTION

## Workshop on "Multiple DNA Codes" with ETT-Fellow Alexander Bolshoy



Together with ETT-Fellow Alexander Bolshoy from Haifa University the MGSE organized a workshop on "Multiple DNA Codes" on 28 - 29 September 2015 in Münster. The workshop was opened by Alexander Bolshoy with an introduction to sequence biology, before Edward Trifonov (Institute of Evolution, Haifa University) reported on nucleosome positioning patterns in his talk on "Chromatin code today". The second day of the workshop started with a talk by Olga Ozoline (Institute of Cell Biophysics, Russian Academy of Sciences) on "Code of transcription initiation in *E. coli*" in which she focussed on the biological role and evolution of promoter islands. Finally, Philipp Bucher (Swiss Institute for Experimental

Cancer Research, EPFL) ended the lecture part of the workshop with his talk on "The role of DNA sequence motifs and positioned nucleosomes in Eukaryotic transcription start site selection". The talks formed the basis for a round table discussion in the afternoon in which PhD students and senior researchers met to discuss latest concepts and hypothesis on transcription initiation in eukaryotes and prokaryotes.

<http://www.uni-muenster.de/Evolution/mgse/workshop/multipliednacodes.html>

## Three new PhD students joined the MGSE

In October, François Pellet (left) and Sergio Ávila (right) joined the MGSE as graduate students. François started his PhD at the Department of Philosophy under the supervision of Ulrich Krohs, where he works on the concept of disease in individualized medicine. Sergio works on his thesis under joint supervision of Claudia Fricke (Evolution and Sexual Conflict Group), Sophie Armitage, and Joachim Kurtz (both Animal Evolutionary Ecology Group) at the Institute of Evolution and Biodiversity. He will try to shed light on the evolution of the link between reproduction and immunity in *Drosophila melanogaster*. François and Sergio are DAAD scholarship holders in course of the DAAD Graduate School Scholarship Programme. The MGSE was selected by the DAAD in Spring 2014 to nominate and host 4 international graduate students within this programme. The selection process for the last two stipends is currently running.



<http://www.uni-muenster.de/Evolution/mgse/people/francoispellet.html>

<http://www.uni-muenster.de/Evolution/mgse/people/sergioavila.html>



In November, Nora Stolte joined the MGSE, who is a PhD student in the Animal Evolutionary Ecology Group under the supervision of Joachim Kurtz. In her doctoral project Nora applies RNAi and CRISPR technology to investigate the role of DNA methyltransferases and their possible involvement in epigenetic phenomena in the red flour beetle *Tribolium castaneum*.

<http://www.uni-muenster.de/Evolution/mgse/people/norastolte.html>

*A warm welcome to our new members!*



## MGSE celebrates second graduate

In October, Angela Noll successfully defended her PhD thesis entitled "Computational tools and their application in Retrogenomics", supervised by Jürgen Schmitz at the Institute of Experimental Pathology. Angela is the second PhD student to graduate from the MGSE doctoral program and has already continued with a postdoctoral position at the German Primate Center in Göttingen. *We offer Angela our warmest congratulations and wish her well in her future career!*

## 5th annual MGSE Symposium

The 5th annual MGSE Symposium was held on 20 – 21 October 2015 in Münster. More than 50 participants met in Münster's city palace and its northern cavalier house, which provided an historic ambience to exchange ideas, discuss current research, and broaden perspectives on "Evolutionary Medicine". As in past years, the MGSE Symposium provided the doctoral students with the opportunity to present and discuss their ongoing PhD projects and to learn about studies taking place in other faculties and departments of the graduate school. Their posters and presentations were embedded into exciting contributions from Principle Investigators Stephan Ludwig, Monika Stoll, and Norbert Sachser. The program was completed by three keynote lectures by distinguished invited speakers: Edward Hagen, Washington State University Vancouver, challenged the current reward models of psychoactive drug seeking and use with the hypothesis that humans may have evolved to exploit plant-neurotoxins. Ted Morrow, University of Sussex, outlined current ideas about the evolutionary origins of sex differences in disease and described the approach his laboratory takes to identify genes with sex-specific effects in *Drosophila melanogaster*. Frank Rühli, University of Zurich, presented the wider impact of evolutionary medicine for the understanding of modern human health issues and diseases and showed the very latest research results on morphological and genetic evolutionary changes in humans.



*The MGSE would like to thank everybody who took part in the symposium and helped to create a very stimulating and successful meeting in a friendly and relaxed atmosphere!*

<http://www.uni-muenster.de/Evolution/mgse/symposium/symposium2015.html>

## "The Growth of the Evolutionary Thought" lecture series started again



The MGSE lecture series "The Growth of the Evolutionary Thought" entered its fifth round and started in October with "A brief history of evolutionary theories" by Joachim Kurtz. The interdisciplinary lecture series deals with aspects of evolution within the disciplines Biology, Medicine, Geosciences, and Philosophy and provides an in-depth introduction to the history and philosophy of evolutionary science. It is organized by Dr. Francesco Catania and takes place on Wednesdays between 8.45 - 10.00 in the Kavaliershäuschen. In addition to Principle Investigators of the MGSE, the graduate school is happy to welcome also experts from the Universities of Kiel, Essen, and Bochum to present their research.

Together with a weekly series of Journal Clubs, the lecture series is part of an interdisciplinary Advanced Module (*Fortgeschrittenen-Modul*) for Master's and PhD students.

<http://www.uni-muenster.de/Evolution/mgse/seminars/tgotet.html>





## Münster's Science Pub was launched in October

The first two talks in the newly launched Science Pub series were a big success. On 12 October, around 150 people came to Münster's harbour to listen to Dr. Jan Ole Kriegs from the *LWL-Museum für Naturkunde* talking about the current status of the mammal fauna in North Rhine-Westphalia. During the informal lecture the audience learnt not only that wild cats are attracted by a certain Calvin Klein cologne and that lynxes are customers of hessian supermarkets, but also which mammals can be found in our area, where they come from, and which methods are used to detect and identify them.

On 16 November, also the wine bar "Ideal" in Münster's city centre was filled to capacity when Prof. Dr. Harald Strauß from the Institute for Geology and Palaeontology invited to an illustrative journey through the history of the oxygenation of the earth. Both events were moderated by Bernd Brommann and included ample time for discussion between the speakers and the mixed audience.

The next Science Pub will take place on 18 January 2016 with Prof. Dr. Thomas Bosch from the University of Kiel who will talk about "*Das Individuum als Metaorganismus: Neue Perspektiven für Biologie und Medizin*".

<http://www.uni-muenster.de/Evolution/mgse/sciencepub/index.html>



## MGSI PIs achieve success with draft proposal

After submitting a draft proposal in April 2015, a group of twelve MGSE PIs has now been invited to submit a full establishment proposal for a Research Training Group (RTG) on "Evolutionary Processes in Adaptation and Disease" by the DFG.

RTGs are aimed at promoting young researchers by providing them with a focused research program and a structured training strategy within the framework of an outstanding and particularly innovative research project. They are funded by the DFG for a period of up to nine years.



The Münster Graduate School of Evolution  
wishes you a very Happy Holiday Season  
and a peaceful and prosperous New Year!



## Upcoming events



Wednesdays,  
8.45 — 10.00

Lecture series "The Growth of the Evolutionary Thought"

18 Jan 2016

Science Pub with Thomas Bosch

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Up-to-date information can also be found on: [www.wvu.de/Evolution/mgse/](http://www.wvu.de/Evolution/mgse/)