



Newsletter April 2016

Welcome to the 9th edition of the PopGen ALUMNI newsletter!

Recent events

Follow us on Twitter! @PopGenViennaPhD

Call for PhD students is open – please spread the word!
([Flyer for download](#) on the website)

March 2016: New associated faculty

We're happy that Kirsten Senti and Robert Kofler joined the Vienna Graduate School of Population Genetics as associated faculty.

Kirsten Senti and his group will add a wealth of expertise in functional genetics including CRISPR/Cas9 mutagenesis to the PhD program. Kirsten's research interest focuses on the battle between transposable elements and their control by the piRNA pathway.

Bioinformatician Robert Kofler, well-known to most of our Alumni, recently received an FWF grant. His future group will investigate the evolution of transposable elements in different species and dissect the genetic basis of quantitative traits.

February 2016: Alumni career news

Congratulations to our former graduate student Raymond Tobler:

After his recent relocation to the University of Adelaide, Ray is currently the lead postdoctoral researcher on the Aboriginal Heritage Project, a collaboration between the Australian Centre of Ancient DNA (ACAD) and the South Australian Museum (SAM), which aims to reconstruct the genetic history of Aboriginal Australia. Ray was recently awarded an Indigenous Discovery Fellowship that will enable his group to extend the phylogenetic analyses and study paleo-demography and adaptation.

More about this exciting project in the next ALUMNI News.

January 2016: Visiting Grant for one of our students

Congratulations to our PhD student Dominik Schrempf for receiving a Visiting Grant for three months, funded by Aarhus University for a research stay at the Bioinformatics Research Center (BiRC) in the group of Asger Hobolth.

January 2016: New master's program

Our faculty co-organised a new joint master's program at University of Vienna and Vetmeduni Vienna: Evolutionary Systems Biology

The ESB Master's program features:

- Courses covering population genetics, comparative genomics, molecular evolution, EvoDevo and systems biology.
- Practical courses introducing modelling, programming, and statistical data analysis to biologists.
- An extensive research component, including rotations in multiple research groups, one-on-one training, and individual research projects.
- Special skill courses on giving scientific talks and writing successful grant proposals.

Please help us to spread the word at your institutions! The [flyer](http://www.evolsysbio.univie.ac.at) can be downloaded from www.evolsysbio.univie.ac.at

December 2015 and January 2016: PopGen dances!

Walz, Cha Cha and Fox sounds recently billowed through the Institute of Population Genetics. PhD student Anna Langmüller (Schlötterer group) had a very special Christmas present for of us: She organised two dance workshops with drinks and snacks, and her dance-trained sister with her tournament partner gave us easy-to-follow instructions. We're now perfectly ready for one of Vienna's ball events ☺ Thank you!!

November 2015: DOC scholarship awarded to PopGen student

Congratulations to our PhD student Thomas Taus who received a prestigious DOC scholarship awarded by the Austrian Academy of Sciences (ÖAW) for his project investigating the genomic basis of adaptation to a new environment using replicated evolve and resequence studies in the fruit fly.



Thomas with Dr. Mahrer (left, Secretary of State) and Prof. Zeilinger (right, president of the Austrian Academy of Sciences). © Reinhard Öhner

Alumni lab portraits

We feature a brief report about one of PopGen's graduate and faculty alumni in every Newsletter. This time, alumnus **Ludwig Geroldinger** gives us some insight into his position as financial analyst:

“Since April 2015 I am employed by Accenture, a global consulting and outsourcing company. My first project got me to Frankfurt, where Accenture supports a major German bank in the validation and modification of credit-risk models. Credit risk refers to the risk that an obligor will default on a debt by failing to make required payments. Our task is to develop a statistical model which predicts the probability of default of an obligor.

As in my PhD I am still very much concerned with migration matrices: instead of considering migration events between geographic niches, I am concerned with migration events of obligors between „default classes“. Migration patterns are mostly stepping-stone like ;-)

Usually I am in Frankfurt from Monday to Thursday and in Vienna otherwise. The relation to the client (the bank is Accenture's client) is nice and the team is a mix of mathematicians and economists. On the first picture my team was on a wine-tour nearby Frankfurt. The second picture shows the view on the city from our building.”



... Ludwig's new abode!

Out of sight, out of mind?

Experiences of our students abroad

Many of our students choose to spend 3 months in foreign labs during their study time.

Agnes Jonas (advisors Carolin Kosiol, Andreas Futschik, Christian Schlötterer) was recently hosted by the Department of Genetics, Univ. of Cambridge in the group of Chris Illingworth (November 2015 - March 2016). Agi will tell us about her experiences in the next Alumni News.

Upcoming events

The 2016 **SAB meeting** will take place from April 25 to 27.

On **April 27**, Brian Charlesworth, Andy Clark, Jean-Michel Gibert, and Nick Barton will present talks at the 3rd edition of the “**Frontiers in Population Genetics**” mini-symposium.

Venue: Seminar room Institut für Tierzucht & Genetik (building NA, 2nd floor), Vetmeduni Vienna

13:00 Opening remarks

13:05-13:50 Jean-Michel Gibert – CNRS Paris

“Environmental and genetic bases of pigmentation variation in *Drosophila*”

13:50-14:35 Brian Charlesworth - University of Edinburgh

“Associative overdominance- fact or fiction?”

14:35-15:00 coffee break

15:00-15:45 Andrew Clark – Cornell Univ.

“Genomic analysis of silver foxes selected for tame/aggressive behaviors”

15:45-16:30 Nick Barton – IST Austria

“Is it possible to find the alleles that cause variation in complex traits?”

Save the date: November 2016

Stay tuned for the announcement of the 2016 **Mind The Gap** meeting. Our PhD students will organise the 5th edition of the meeting to help bridging the gap between theoretical and empirical population genetics.

Upcoming seminars

Exciting seminar speakers are lined up during the Summer term:

19.04. - **Markus Pfenninger** (Goethe Univ. Frankfurt, GER)

29.04. – **Ary Hoffmann** (Univ. of Melbourne, AUS)

03.05. - **Corbin Jones** (UNC Chapel Hill, USA)

10.05. – **Charalambos Kyriacou** (Univ. of Leicester, UK)

17.05. - **Ellen Baake** (Bielefeld Univ., GER)

24.05. – **Kirsten Senti** (Vetmeduni Vienna, A)

31.05. – **Elio Sucena** (IGC, PT)

07.06. – **Agnes Jonas** (Vetmeduni Vienna, A)

14.06. – **Hanna Kokko** (Univ. of Zurich, CH)

21.06. – **Mariana Wolfner** (Cornell Univ., USA)

28.06. – **John Brookfield** (Univ. of Nottingham, UK)

Publications of our students

R. Kofler, **D. Gomez-Sanchez** and C. Schlötterer: PoPoolationTE2: comparative population genomics of transposable elements using Pool-Seq. bioarxiv. doi:10.1101/038745 (2016)

C. Vogl and **J. Bergman**: Computation of the likelihood of joint site frequency spectra using orthogonal polynomials. Computation. 4(1), 6; doi:10.3390/computation4010006 (2016)

C. Schlötterer, R. Kofler, E. Versace, **R. Tobler** and S.U. Franssen: Combining experimental evolution with next-generation sequencing: a powerful tool to study adaptation from standing genetic variation. Heredity. 116(2):248 (2015)

See all publications [here](#)

Have a nice Spring!