



Newsletter April 2022

Welcome to the 25th edition of the PopGen ALUMNI newsletter!

Follow us on Social Media

<https://twitter.com/PopGenViennaPhD>

<https://www.youtube.com/channel/UCAdGx2zyQNYvti9Cr1muhUg>

Join our Tuesday webinars:

<https://www.popgen-vienna.at/news/seminars/>

Do you know of suitable candidates for PopGen Vienna?

Our call for PhD students 2022 is open – please help us spread the word!

Application deadline: April 21, 2022

Flyer for download on the website:

https://www.popgen-vienna.at/media/popgenviennaflyertopics_6.pdf

<https://www.popgen-vienna.at/application/procedure/>

Recent events and news

May 2022: upcoming SAB meeting

We're happy to host our SAB members in person finally again this Spring! We're also planning for a hybrid Mini-Symposium on May 11, so keep an eye on our website for updates.

March 2022: Alumni News

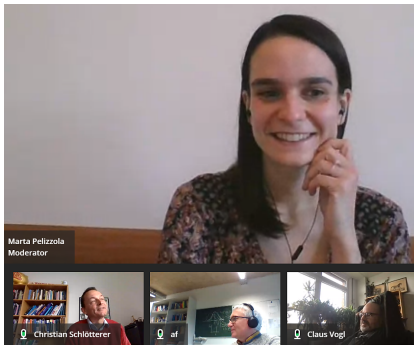
Fantastic news have reached us from alumna **Polina Novikova**, currently group leader at MPI for Plant Breeding Research in Cologne: Congratulations on securing a prestigious **ERC Starting Grant**!



Novikova lab: <https://www.novikovalab.org/>

February 2022: PhD defense

Our congratulations go to **Marta Pelizzola** (Futschik group) on successfully defending her thesis with the title "*Developing and testing statistical methods for experimental evolution*".



January 2022: PhD defense

Congratulations to **Florian Schwarz** (Kofler group) on successfully defending his thesis "*Towards unraveling the dynamics of Transposable Elements*".



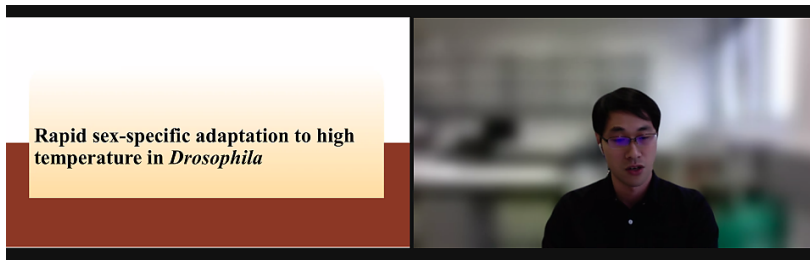
November 2021: Outreach/VetIdeas Challenge

PhD students **Elif Bozlak** and **Lara Radovic** and faculty member **Barbara Wallner** won the 1st prize at this year's VetIdeas Challenge at Vetmeduni Vienna for translating their research to a possible applicable business idea. The team developed the project "*Horse paternal ancestry*" to bridge the gap between the scientific and public horse community. The project aims to enable the interested public to explore the paternal ancestry of horses which may be particularly interesting for horse owners. For the poster and pitch presentation of the idea, special attention was given to the implementation of economical aspects that were earlier developed at different workshops. Congratulations!



November 2021: PhD defense

Congratulations to Sheng-Kai Hsu (Schlötterer group) on successfully defending his thesis about "The role of sex evolution: Sexual conflict and Sexual selection".



Alumni portraits

We feature a brief report about one of PopGen's graduate and faculty alumni in the Newsletter. This time, PopGen Vienna graduate alumna **Kerstin Spitzer** gives us some insight into her work environment at *Statistik Austria* (AT):

"I started my PhD on improving statistical methods in population genetics with Andreas Futschik in 2013. It took me a bit longer than expected to finish – I graduated in October 2020 – on the one hand due to a year of maternity leave with my son Frederik, on the other hand because I started a full-time job at Statistik Austria in 2018.

Statistik Austria is the National Statistical Institute of Austria. There, I worked at first on the design and implementation of the newly set-up statistical data warehouse. Unfortunately, the project was terminated after half a year for political reasons. After a short transition period where I learned the programming language SAS and got to know the business register of Statistik Austria, I am now the deputy manager of the "maintenance unit" of the business register.

While most of the information for the business register is obtained automatically via administrative data, there are still entries that need to be researched and edited manually; this is done by the people working in our unit. My job is to ensure the quality of the statistical business register, to look for possible improvements and to implement them. These improvements refer to the quality of the statistical business register like making use of new sources of administrative data, to the workflow of the manual work, and also to the user-friendliness of the register. Apart from that, I am contact person for the users of the statistical business register within Statistik Austria.

Obviously, in terms of content, my job is not really related to my PhD studies. However, the skills I gained during my PhD like adapting quickly to new situations, solving problems, being resilient, discussing my work with people from different backgrounds, have helped me quite a lot in my current job. At the moment, however, I'm not working there, as I have a 24 hours job at home: I'm on maternity leave with my daughter Annika who was born in November 2021. 😊"



Since I don't have a suitable picture from Statistik Austria, I show you a picture with my current employer, who apparently is not too satisfied with my work. 😊

Out of sight, out of mind?

Experiences of our students abroad

Many of our students choose to spend three to six months in foreign labs during their study time. **Krzysztof Stankiewicz** (advisor Joachim Hermisson) was hosted by Martin Lascoux at Uppsala Univ. (SE) as a guest researcher for 4 months.

“My name is Krzysztof Stankiewicz and I am a PhD student with Joachim Hermisson and Magnus Nordborg. My PhD project is primarily focused on investigating mechanisms that maintain trans-specific polymorphism in *A. thaliana* and its outcrossing relatives.

From August until November 2021, I had the opportunity to attend an exchange in the lab of Prof. Martin Lascoux at Uppsala University in Sweden. There, I worked on a side project that arose during my PhD, characterizing the chromosomal rearrangements that have occurred since the speciation of *A. thaliana*. The opportunity for such an exchange was an exceptionally attractive part of the PhD program offered by the PopGen School.

Scientifically, the opportunity to identify a project and devote a few months to it gives a chance to expand research interests in an adjacent space, and can help enrich the primary doctoral project. Personally, a change of environment offers a chance to interact with a different set of experts than those in Vienna, which offered a fresh perspective and also helped expand my scientific network. Additionally, I had the chance to help teach students in a journal club, which was also a great experience to learn more about curricula and teaching styles.

Late summer and autumn in Sweden were also a fabulous time, and I was able to travel a bit around the country and see the beautiful wildlife. Swedish cuisine, although challenging at times, was also definitely memorable! I'm extremely happy that I was able to attend the exchange through the program, and strongly recommend all students who have the opportunity to do so as well. Thanks!”

Upcoming seminars

Our Tuesday seminars have gone virtual, so you can join us from all over the world!

Sign up here to receive reminders and links for Summer term webinars by **Alberto Civetta, Sara Mathieson, Joshua L. Payne, Jesse Lasky, Carina Farah Mugal, Arvid Ågren, Hannes Svardal, Tamar Friedlander, Rahul Pisupati, Carol Eunmi Lee.**

<https://forms.gle/89roNpvVJdKH8som9>

Enjoy Spring!

Publications of our students so far in 2022

Fulgione A, Neto C, Elfarargi AF, Tergemina E, Ansari S, Göktay M, Dinis H, Döring N, Flood PJ, Rodriguez-Pacheco S, Walden N, Koch MA, Roux F, Hermisson J and Hancock AM. Parallel reduction in flowering time from de novo mutations enable evolutionary rescue in colonizing lineages. *Nat. Commun.* (2022) 13(1), 1461. doi: 10.1038/s41467-022-28800-z

<https://www.nature.com/articles/s41467-022-28800-z>

Szukala A, Lovegrove-Walsh J, Luqman H, Fior S, **Wolfe TM**, Frajman B, Schoenswetter P and Paun O. Polygenic routes lead to parallel altitudinal adaptation in *Heliosperma pusillum* (Caryophyllaceae). *Mol Ecol* (2022) doi: 10.1111/mec.16393

<https://onlinelibrary.wiley.com/doi/10.1111/mec.16393>

Lirakis M, Nolte V and Schlötterer C. Pool-GWAS on reproductive dormancy in *Drosophila simulans* suggests a polygenic architecture. *G3 jkac027*. (2022) doi: 10.1093/g3journal/jkac027

<https://academic.oup.com/g3journal/advance-article-abstract/doi/10.1093/g3journal/jkac027/6523974>

Remer V, **Bozlak E**, **Felkel S**, **Radovic L**, Rigler D, Grilz-Seger G, Stefaniuk-Szmukier M, Bugno-Poniewierska M, Brooks S, Miller DC, Antczak DF, Sadeghi R, Cothran G, Juras R, Khanshour AM, Rieder S, Penedo MC, ... Wallner B. Y-Chromosomal Insights into Breeding History and Sire Line Genealogies of Arabian Horses. *Genes*. 13(2), 229. (2022) doi: 10.3390/genes13020229

<https://www.mdpi.com/2073-4425/13/2/229/html>

See all publications [here](#)