



LSM Newsletter, 02/2015, No. 2

OSCAR'S ORCHIDS AND THE NEW LSM LOGO



The current LSM logo is inspired by the work of Oscar Alejandro Pérez Escobar, a LSM student who is working in the lab of PD Dr. Marc Gottschling. We asked him to give us some background information about the subject and his research.

Orchids have always captured the imagination of biologists, naturalists, amateurs and lay people from around the world, due to their remarkable display of floral morphologies and reproductive strategies. With about 800 genera and 26,000 species distributed worldwide, Orchidaceae is one of the largest families of flowering plants. Orchids are also of key economic importance in many corners of the world because of their top priced horticultural varieties and their

ABOUT THE LSM

The Graduate School Life Science Munich (LSM) is an international PhD program at the LMU which includes the Faculties of Biology, Chemistry, Biochemistry and Pharmacy and more than 35 research groups. For detailed information visit www.lsm.bio.lmu.de.

NUMBERS ABOUT THE LSM

Currently, there are 52 students in the LSM, 40 % with an international background. The LSM includes students from 16 different countries. So far 28 students have graduated from the LSM since 2011 until now.

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From Molecules to Systems:
GRADUATE SCHOOL OF LIFE SCIENCES MUNICH
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NEWSLETTER



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industrial applications, as is the case of the vanilla orchid. Charles Darwin, a professed orchid lover, stands as one of the major researchers in orchid pollination biology. In 1862, he studied sexual systems and the impact of self-pollination in orchids and he termed members of the subtribe Catasetinae "the most remarkable of all Orchids". Darwin was bewildered with members of this charismatic Neotropical lineage because of their amazing array morphological diversity, pollination syndromes, such sexual deceit, oil and fragrance reward, and reproductive strategies. The charismatic *Cycnoches warszewiczii*, a species restricted to few diversity spots in Central America, is the chosen plant for the 2015 logo of the LSM. Unlike the vast majority of orchids, *C. warszewiczii* produces sexually dimorphic flowers, either pistillate or staminate, depending on the surrounding environment and ecological conditions, especially sunlight intensity. This condition, named "Environmental Sex Determination" is a sexual system unique among orchids and only evolved in three genera of Catasetinae: Catasetum, Cycnoches and Mormodes. Now, 150 years after Darwin's studies on

orchids there are many unresolved questions regarding the evolution of sexual systems in Catasetinae. My present research aims at unraveling the ecological and evolutionary implications of environmental sex determination and its correlation with mode and tempo of diversification of this charismatic, yet poorly known, clade of orchids.

Oscar Alejandro Pérez Escobar



LMU TEAMS

Since November of last year, LSM students have a new way to connect and exchange useful information online. The LSM student council has formed a so-called LMU team called *LSM connected*. Now, we have an internal, password-protected website where you can find a download section with useful documents, a wiki that covers important issues concerning your PhD program, a calendar with all dates concerning the LSM and discussion groups. We hope that many students will use this platform to interact. If you want to join the team, please send an e-mail with your campus ID to laura.kleinknecht@campus.lmu.de for further instructions.

Laura Kleinknecht



INTERVIEW WEEK

In January the deadline of this year's application for new LSM students ended. The LSM received 137 submissions of mostly international candidates. Selected applicants will be invited to the LSM interview week (9th-12th of March).

During this week, the students will be introduced to the campus. They get the chance to visit the groups they are interested in and will have selected interviews with group leaders. These events are accompanied by several social events including a dinner and sight seeing tours where they will have the opportunity to interact with current LSM students. The interview week ends with a poster session and the professor meeting. Successful applicants will be offered a PhD position within the LSM program starting as soon as possible.



WANTED!

The LSM student council is always looking for new members! Feel free to email any of us to get more information about our monthly meetings!

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Also in 2014, the LSM held its yearly Christmas Party on the 4th of December. With pizza, beer, Glühwein, home-made desserts and music we got into the mood for Christmas. The last two years the White Elephant Gift exchange was a lot of fun, so we decided to stick to this "tradition". The most famous presents like a salad dressing maker, a 3D baking form or a nice bottle of wine were much sought-after and people even invented tricky trading strategies to get their favorite present. We hope you join us next year!

INTRODUCING FRANCISCA

Francisca was born in South Africa within an international family: her father is Portuguese and her mother is English. After living in South Africa for 9 years, her family moved to Portugal where she graduated from high school. Before studying in London, Francisca worked for one year in Switzerland, where she learned German. After successfully finishing her Bachelor's degree in Biological sciences she continued to work for a publishing company as an assistant editor and later for a Public relation company. After these experiences, Francisca and her husband moved to New York, where Francisca gave birth to their first child. Finally, the family decided to move back to Europe and settled in Munich. So far, Francisca appreciates the quality of life in Munich and was able to feel home quite soon. Apart from working, she often goes hiking with her three, very energetic boys aged 5, 3 and almost 1 ½ years. Besides this, she likes Yoga and good food. Regarding the job, Francisca is happy to fulfill her new responsibilities including for example organizing soft skill courses, retreats and method courses. She sees her duty in supporting the students in every situation starting from taking students to the KVR and hopefully finishing with printing a lot of certificates when we successfully graduate. **Welcome to the LSM!**



Francisca Rosa Mende, our new LSM coordinator

On 30th of October Manali and me organized a LSM quiz night. The LSM was kind enough to provide pizza and a crate of beer! The rules of the quiz were quite simple: people form groups, give themselves a name and most importantly checking answers on smartphones is strictly forbidden! We had a lot of fun with questions about Halloween, football and ugly and not so ugly looking animals. The Halloween questions included how much does the heaviest pumpkin in the world weights (you would be surprised); in what colors do pumpkins come (blue?) and where did the Halloween tradition start (and no, it was not in USA). Questions about football included where did the first world cup take place, which

team always took part in the world cup but never won and which one is the smallest country to ever take part in a world cup. In the last part, groups got 3 times the points for identifying the name of weird looking animals like the monk fish, the naked mole rat, the star nosed mole and the alligator snapping turtle. Quite a few groups guessed a good number of them with Ina being able to identify each and every one. The winners were Ina, Ana and Vedran. The prize was a little jar of honey and a chocolate bar! The night closed with a game of naming the capital of countries (it was more fun than it sounds). For the fun night I would like to thank the LSM, Manali and everyone that participated!

Eleni Polatoglou

ALUMNI: QUESTIONNAIRE TO FORMER LSM STUDENTS

Iris Jarsch graduated in July 2014 in the Lab of Thomas Ott (Genetics Department).

When did you graduate? How long did it take?

I defended my thesis on 31.07.2014, about 2 months after I had handed in my thesis. I had started in September 2009.

What was the topic of your PhD thesis? Remorin proteins in Arabidopsis thaliana: Markers for diverse membrane micro-domains with roles in plant microbe interactions.

Where are you currently living? Cambridge UK

What are your current professional pursuits? What is your job? I am working as a Research Associate, so basically a PostDoc.

Where are you employed? Cancer Research UK Gurdon Institute (Cambridge University)

What are your daily tasks and responsibilities? I am working in the lab following a project assigned by my supervisor, but in the meantime I am writing grant proposals to pursue a project of my own. There is no teaching but occasional supervision of students in the lab.

How long did it take for you to find a job after your PhD? I found the job already during my PhD, but the interview was just two weeks before I intended to hand in my thesis.

What were the reasons why you stayed in academia & why did you move to a new field? I wanted to move to another

research field which would have been difficult with a background in plant genetics outside academia. My intention was to broaden my possibilities for future jobs inside and outside academia. Also I really wanted to live abroad for a while, and doing a PostDoc is the easiest way to cross borders.

What do you like about your job? What could be improved or changed? I like working in the lab and I like my project. Cambridge University has an astonishingly open scientific atmosphere and community. Communication and project management in the lab could be improved. I have a very young supervisor, who has little time and experience. The topics are not very developed and the group is growing fast, so everybody is working very closely on similar projects. This of course creates tension and some uncertainties.

Your professional advice to PhD students in general and/or PhD students wanting to pursue a similar career path. There are three things that really bought me this job. Sadly it is nothing new and really those things that everybody tells you. 1. I had just had a really good first author paper. 2. I was close to hand in my thesis, so I could give them certainty about when I could start. 3. I had really nice references from my boss and I am rather good in giving talks. Apart from that you should really not hesitate to try out labs or institutes with big names. They are all normal people and they all cook with water.

FIRST AUTHOR PUBLICATIONS, LSM STUDENTS, 2/2014

Carbannel, S., and Gutjahr, C. (2014). Control of arbuscular mycorrhiza development by nutrient signals. *Frontiers in Plant Science* 5.
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 Staab, P.R., Zhu, S., Metzler, D., and Lunter, G. (2015). scrm: efficiently simulating long sequences using the approximated coalescent with recombination. *Bioinformatics*.