

EES^{LMU} Program Zwischenbericht - March 2008

Results

General /Organizational

EES^{LMU} stands for the Munich Graduate School for Evolution, Ecology and Systematics. The EES^{LMU} project is a collaboration between the Biology Department of the LMU, the Max Planck Institute for Ornithology in Seewiesen and the Bavarian State Collections. The decision on funding of the EES^{LMU} project was taken in spring 2006. In September 2006 a secretary (K. Kümpfbeck, 10 hrs per week) and a coordinator (P. Pennings, 20 hrs per week) were hired. The main priority in the first year was to prepare the new master program in Evolution, Ecology and Systematics, which was scheduled to start in the winter semester 2007-2008. Other priorities were the setting up of a working organizational structure (with the board of directors and the curriculum committee as main bodies) and a website (www.EESLMU.de). After about one year, the speaker of the project, Joachim Hermisson, left Munich and he was replaced by Susanne Foitzik, who had been involved in the project from the very beginning. Next to Susanne Foitzik, the board now consists of Susanne Renner, Wolfgang Stephan, Sebastian Diehl, John Parsch and Bart Kempnaers. Susanne Foitzik and Sebastian Diehl are professors of ecology at the LMU, Bart Kempnaers is honorary professor of ecology at the LMU and director at the MPI for Ornithology in Seewiesen, Wolfgang Stephan and John Parsch are professors of evolutionary biology at the LMU and Susanne Renner is professor of systematic botany at the LMU and director of the botanical gardens in Munich. The board thus represents the three main EES sections: Evolution, Ecology and Systematics. The board meets 4-6 times per year and decides on financial and strategic issues of the EES^{LMU} program.



Illustration 1: The 2007 cohort of the EES^{LMU} master program.

Master program

The main activity of the EES^{LMU} project during the first year of its existence was the establishment of a new international master program. In the second half of 2006 and the first half of 2007, the curriculum committee (Foitzik, Diehl, Agerer, Hermisson, Pennings) planned new courses, wrote a “Studien- und Prüfungsordnung” and designed an application procedure (“Satzung über die Eignungsfeststellung”). In August 2007, the Bavarian ministry of education approved the program and consequently, the program could start in the winter semester 2007.

Students. To attract students an informative flyer was printed, a website created and e-mails sent to relevant mailinglists (i.e., Evoldir, Ecolog etc). The selection committee (headed by Sebastian Diehl) received 18 formal applications from students from Africa, Asia, North and South America and Europe. To our surprise, there was

only a single German applicant. This was likely due to the fact that only few universities in Germany are only now switching to the Bachelor/Master format (the LMU introduced its Biology Bachelor program in WS 2007/2008). Based on application criteria, we invited 12 candidates for (telephone) interviews and accepted 10 students to the program. Three of those were unable to come due to financial difficulties and one decided to enroll in a different master program. Six students (two from the US, one each from Canada, Bolivia, Peru and Colombia) came to Munich to join the master program in October 2007. In addition, we invited the best Diploma students with main subject Evolution&Ecology or Systematics to join the courses of the master program. Four excellent students accepted this offer and followed all classes of the first semester. An exchange student from Chile joined the program as well. The courses therefore started with eleven highly motivated students.

The first semester of the program has just finished and, according to evaluations by students and teachers, has been very successful. All new courses have taken place as planned (about 20 teachers and tutors were involved). Especially the innovative parts (writing course, presentations course, individual research training and mentoring program) have worked well. In addition, the “real” master students, the four German students and the exchange student formed a highly motivated group with an international atmosphere. During the last weeks, the first applications for the next winter semester have started coming in. Again, students from all around the world appear to be interested in the program. Due to the official approval of the EESLMU Master program by the LMU, we now can advertise also on the official web page. In addition, we will follow the same recruitment strategies as last year and we expect to receive about twice the applications. Hence, we expect to start with 10-12 Master students and potentially an additional 5-6 excellent Diploma students. The planned maximum capacity of the EES program of 40 students will be probably reached when the first Bachelor cohort finish at the LMU in 2010.

Activities for PhD students.

At the time the EES^{LMU} project proposal was written, the LMU planned a graduate school of sciences, and the EES^{LMU} program was planned to be part of this larger school. However, this graduate school of sciences was not funded and, for now, the PhD students in the EES^{LMU} fields are not formally enrolled in any graduate program. We did, however, make an effort to i) help PhD students build a network of peers, ii) offer courses for PhD students iii) offer PhD students the possibility to apply for an EES^{LMU} grants to visit conferences, do fieldwork or pursue other activities that further their independence and career perspectives.

Volvox. A small group of PhD students has started to build a network called Volvox (see <http://www.EESLMU.de/wiki>). In 2007, they organized courses on R, Arlequin and OpenOffice. With financial help of EES^{LMU}, they invited the young and successful scientist Patricia Beldade from Leiden University to Munich to give a presentation and join discussion sessions with the PhD students. Volvox has also organized several social meetings at the Biozentrum and in the Botanical Institute. In all these activities there were students involved from the Biozentrum, the Botanical Institute, and the MPI in Seewiesen. Communication between the PhD students from different locations has greatly improved in the last two years. About 10 PhD students have been involved in organization of activities and an estimated 40 PhD students have joined one or more of the activities.

For 2008, EES^{LMU} has planned a two-day writing course and a course on teamwork for PhD students. Other courses, organized by Volvox or EES^{LMU}



Illustration 2: Discussions at one of the Volvox meetings.

will certainly follow. We also plan a two-day retreat for PhD students and staff to take place in fall 2008.

EES^{LMU} awards

In 2007, for the first time, EES^{LMU} gave prizes for the best Diploma and best PhD thesis in the fields of evolution, ecology and systematics at the LMU. Students could apply if they had successfully defended their thesis between the 1st of August 2006 and the 1st of September 2007. The prize committee was headed by Susanne Renner. Three prize winners (Steffen Beisswanger for his PhD and Andrea Riebler and Stephan Behl for their Diploma theses) gave a presentation of their work at the EES^{LMU} conference on the 5th of October. The fourth prizewinner (Alexander Varzari from Moldova) was unable to come to the EES^{LMU} conference but visited the Biozentrum in November and December to continue his collaboration with Professors Weiss and Stephan and to give a presentation on his PhD work. The prizes were 1000 € for the Diploma theses and 1500 € for the PhD theses, which the winners used to visit the Biozentrum, buy scientific books or buy a laptop.



Illustration 3: EES^{LMU} prizewinners 2007: Steffen Beisswanger, Andrea Riebler and Stephan Behl.

EES^{LMU} conference

On October 4th and 5th 2007, the first EES^{LMU} conference took place. The first day of the conference was meant for the new students and the staff of the EES^{LMU} master program. In the morning, the module responsible presented the first semester courses. The students met each other and their mentors for the first time. In the afternoon, the students engaged in discussions with the invited speakers and the staff met separately to discuss organizational issues in the EES^{LMU} program. The evening was spent in a nice Bavarian restaurant in the inner city. The second day was open to everybody. More than 100 Diploma, Master and PhD students, post docs, assistants and professors came to the conference to hear talks by two international speakers (Barbara Hellriegel from Zürich and Jonathan Bolback from Copenhagen) and three students who had won the EES^{LMU} prizes for best PhD thesis and best Diplomarbeit. They also saw the award winning movie “Exhuming Adams” by Thassilo Franke, documentary maker and systematic biologist at the LMU. The second EES^{LMU} conference will take place on the 1st and 2nd of October 2008.



Illustration 4: EES^{LMU} conference, invited speaker Barbara Hellriegel talking to EES^{LMU} student Pablo Duchon.

EES^{LMU} grants

In 2007, ten PhD students and four Diploma students were granted an EES^{LMU} grant. The Diploma students were required to write a proposal for their Diplomarbeit within the first two months of their Diplomarbeit. Two students were granted funds to visit conferences (see box). One student went to visit a lab in another university to

learn a new technique and one student was granted funds to buy satellite photographs which he needed for his Diplomarbeit.

Of the PhD students, eight went to conferences. One student was granted money to do fieldwork and one to visit a lab in England to plan a collaboration and write a proposal for a post-doc grant.

*Diplom student Iris Fischer about the PopGroup meeting in England:
“(...) Since all scientist spent breakfast, lunch, dinner and coffee breaks together, it was possible to meet many interesting people. The most positive thing about the conference was the very nice and almost familial atmosphere. It was very easy to strike up a conversation. The most negative thing was the accommodation, which wasn't very comfortable. The most important thing I have learnt: “Important” people do not necessarily give good talks. I enjoyed the conference very much and I really would like to visit the next PopGroup Meeting, too!”*

EES^{LMU} seminar series

In the winter semester 2007-2008 EES^{LMU} started a seminar series. The goals of the EES^{LMU} seminar series are to expose the master students and PhD students to outstanding scientists from Munich and abroad and to tighten the network of scientists and students in the EES^{LMU} fields in Munich. During the semester, there is a seminar every other week. The seminar speakers are encouraged to spend the day at the Biozentrum where they talk to the master students, PhD students and staff of the EES^{LMU} program. Seminar speakers in the academic year 2007-2008 were / will be Prof. Karsten Suhre (GSF Munich), Dr. Björn Siemers (MPI Ornithology), Dr. Tina Heger (TUM Munich), Prof. Gerhard Haszprunar (Zoological State Collections Munich), Dr. Meike Teschke (MPI Evolutionary Biology, Plön), Prof. Santiago Elena (Valencia), Prof. Laurent Excoffier (Bern), Prof. Brian Charlesworth (Edinburgh), Prof. Manfred Milinsky (MPI Evolutionary Biology, Plön), Dr. Tatiana Giraud (Paris-Sud), Prof. Dieter Ebert (Basel) and Prof. John Wakeley (Harvard).

EES students are encouraged to also visit other seminar series in the Munich area such as the seminar series at the MPI for Ornithology in Seewiesen and the seminar series at the Botanical Institute.

Website, mailing list and newsletter

The EES^{LMU} website (<http://www.EESLMU.de/eeswiki>) is updated regularly and informs current and potential students and staff. We also created an EES^{LMU} mailing list, which now has 87 people subscribed. The mailing list is mainly used to inform the EES^{LMU} community about the various seminar series that are organized throughout Munich. Once a week, we send out an overview of the seminars of the coming week. Once per semester we distribute a newsletter.

Summer school

The first EES^{LMU} summer school took place in September 2007 on the island Frauenchiemsee near the Alps. The summer school was organized by Diehl, Kempnaers, Agerer and Pennings and had as topic “Evolutionary and ecological consequences of global change”. External teachers were Christian Both (University of Groningen),



Illustration 5: Participants and teachers of the first EES summer school

Dag Hjermmann (University of Oslo) , and Håkan Wallander (University of Lund). There were 18 participants, about half of them from Germany and the other half from abroad. Most participants were PhD students. Participating students who worked on a related topic were encouraged to give short talks about their research. As an excursion, one afternoon was spent on a hike to the Alps.

The 2008 summer school will again be held at the Frauenchiemsee and is organized by Parsch, Renner, Kempnaers and Pennings. The topic will be “Sex chromosome evolution”. As external speakers, there will be Daven Presgraves (University of Rochester), Sander van Doorn (Santa Fe Institute), Judith Mank (University of Uppsala) and Deborah Charlesworth (University of Edinburgh).

Comparison with original plan

* At the time the EES^{LMU} project proposal was written, the LMU planned a graduate school of sciences, and the EES^{LMU} program was planned to be part of this larger school. However, this graduate school of sciences was not funded and, for now, the PhD students in the EES^{LMU} fields are not formally enrolled in any graduate program.

* When we wrote the original plan, we counted on having 40 EES master students from the start of the master program. We planned to spend 20,000 € on grants for these master students. When we realized that we would not spend this amount on grants for master students, we decided to allow Diploma students to apply for money and to reserve more money than originally planned for grants for PhD students.

* The Biozentrum used to have a weekly institute seminar where every professor was allowed to suggest guests. Before the start of the winter semester 2007, it was decided to stop this seminar series altogether. Upon this decision, we decided to start our own seminar series, even though it was not originally planned.

* In the original plan, a yearly retreat for staff and PhD students was planned. This retreat hasn't taken place yet, but will happen in fall 2008 for the first time.

* EES^{LMU} has volunteered to host the Graduiertentreffen Evolution of the DZG (German Zoological Society) in 2009. This activity is a good opportunity for EES^{LMU} to show itself to a large group of young researchers as a center of excellent evolutionary research and at the same time it allows EES^{LMU} master and PhD students to gather experience in organizing a medium-sized meeting.

Interdisciplinary or international collaboration,

* EES^{LMU} is a very interdisciplinary project. The staff and students involved come from ecology, evolution and systematics. The Biology Faculty at the LMU is split in two departments and multiple locations. The EES^{LMU} project brings together people from both departments. Other partners in the EES^{LMU} project are the MPI for Ornithology in Seewiesen, the Bavarian State Collections (such as the Bavarian State Collection of Zoology, the State Collection of Anthropology and Palaeoanatomy and the Botanical Gardens in Munich) and the Helmholtz Zentrum München – German Research Center for Environmental Health (formerly GSF).

* The EES^{LMU} project is a very international project. Many of our staff is international (for example, two of the board members and the coordinator are not German), all of the EES^{LMU} master students are international and many of our PhD students are international. Many of the invited speakers and all of the external teachers for the summer schools are international. EES^{LMU} grants are used mainly to visit international conferences.

* We have started a collaboration with master programs in Uppsala and Groningen. Joachim Hermisson and Pleuni Pennings already visited Groningen to talk to Franjo Weissing and Jan Komdeur of the TOP master program in “Evolutionary Biology”. John Parsch and Pleuni Pennings visited Uppsala and talked to Jacob Höglund of the Evolutionary Biology Centre (EBC) at Uppsala University. We plan to facilitate student exchange between the three universities. In December 2008, the first year master of all three master programs will follow a one week course together at one of the three universities. Eventually it is planned to formalize the collaboration in the “Erasmus Mundus” framework of the EU.