



## BIG4-based PhD position in Diptera Systematics and Evolution



We are pleased to announce **one PhD position** targeting an exciting project in **Diptera systematics**. The project is available at Ximo Mengual's research group and the student will be based at the the Zoologisches Forschungsmuseum Alexander Koenig (ZFMK) and enrolled at the University of Bonn, Bonn (Germany).

### **General information**

The project is entitled “**Origin and diversification of hoverflies: a revision of the genera *Asarkina* and *Allobaccha***”. The objective is to perform a taxonomic revision of the genera *Asarkina* and *Allobaccha* (Diptera: Syrphidae), both occurring in the Afrotropical, Oriental and Australasian Regions. The project also aims to resolve phylogenetic placement of these taxa with the development of a workflow for Ultra-Conserved Elements or Anchored Hybrid Enrichment technique.

The main academic advisor is X. Mengual, but the project is co-advised by F. Ronquist (Swedish Museum of Natural History) and N. Wahlberg (Lund University). At the same time all students will be part of the BIG4 international cross-disciplinary training consortium (BIG4: ‘Biosystematics, Informatics and Genomics of the 4 big insect groups’) funded by the European Union Marie Skłodowska-Curie Innovative Training Network Program (for details about BIG4 see Page 3).

The project combines classical methods of systematics with innovative techniques and approaches and it involves travels and field work. The position is for 3 years (36 months) at the ZFMK with very competitive salary, additional family allowance for married students, and sufficient research funds.

**For this project we seek highly motivated applicants from any country of the world.** The successful candidate is expected to be able to demonstrate some previous experience with evolutionary or taxonomic studies. Experience with next generation sequencing methodology and/or Diptera taxonomy are a plus, but excellent organization and communication skills are a must. Due to the requirements of the Marie Skłodowska-Curie Program applicants should not hold PhD degree and, at the time of enrollment in the PhD program in Germany, should have less than 4 years of research experience (counted as time of employment in research since receiving a degree allowing enrollment in the PhD program). Additionally, at the time of recruitment applicants must not have resided or carried out his/her main activity (work, studies, etc.) in the country of the host (Germany in this case) for more than 12 months in the 3 years before his/her recruitment for the PhD project.



***Guidelines for applications***

**Application should include:** 1) your letter of motivation, 2) CV including your e-mail address and other contact data as well as contact details of 1-3 referees who already know you as a student or employee, 3) list of publications including submitted or in press papers, if any, 4) transcript of BSc or MSc diploma or equivalent. It is desirable that in your letter of motivation you mention your experience with Diptera.

- Applicants should send their application directly to Ximo Mengual ([x.mengual@zfmk.de](mailto:x.mengual@zfmk.de)).

**The deadline for applications is April 1st, 2015.**

We will try to assess all applicants within 2-3 weeks after the deadline and conduct telephone or Skype interviews with shortlisted candidates immediately after the assessment. Successful candidates will be offered PhD positions and instructed about further enrollment formalities. We expect all students to be enrolled in the respective PhD programs and moved to Germany by early-late summer 2015 at the latest.

English is commonly spoken language at the ZFMK and the working language at Mengual lab however, German skills will be helpful for everyday life in Bonn. You are welcome to address any questions about application process, projects, BIG4, or work and life conditions directly to me any time.

Sincerely,

Ximo Mengual

e-mail: [x.mengual@zfmk.de](mailto:x.mengual@zfmk.de)

[Mengual's lab/personal web page](#)



## BIG4 at a glance

BIG4 stands for ‘Biosystematics, Informatics and Genomics of the 4 big insect groups’. It is an international training consortium funded by the European Union-based [Marie Skłodowska-Curie Innovative Training Network Program](#) (EU ITN) that mainly targets PhD education. BIG4 unites established researchers from 7 academic institutions with 3 business companies in Europe and 11 other support institutions around the globe. The main idea of BIG4 is to bring together experts with complementary taxonomic and methodological strengths for training a lucky cohort of young systematic entomologists in broad sense. BIG4 targets the biggest insect groups such as Coleoptera, Hymenoptera, Diptera and Lepidoptera. It tackles a long standing problem of amalgamation classical systematics with innovative methods in phylogenetics, bioinformatics, genomics, advanced semantic biodiversity publishing, and Citizen Science into competitive cross- disciplinary profiles. For every BIG4-based PhD student attached to either of the core BIG4 organizations, the consortium opens learning opportunities additional to their respective academic advisor or home lab. Secondments are planned from a few weeks to a few months to other BIG4 partner labs, and a series of thematic workshops held for all BIG4-based PhDs. Non-academic members of BIG4 bring opportunities in science-related business or industry and give students additional skills to succeed there, since not every PhD graduate lands in academia.

<b>BIG4 core consortium members</b>	<b>Their role and specialization in BIG4 training</b>
Alexey Solodovnikov University of Copenhagen, Denmark	BIG4 Coordinator and main advisor for 3 Coleoptera projects
Martin Fikáček Charles University in Prague, Czech Republic	Main advisor for 2 Coleoptera projects (here advertised)
Niklas Wahlberg Lund University, Sweden	Main advisor for 2 projects (1 Lepidoptera, and 1 cross-taxonomic in genomics)
Fredrik Ronquist Swedish Museum of Natural History, Stockholm	Main advisor for 2 projects (1 Hymenoptera, 1 cross-taxonomic in metagenomics)
Rolf Beutel Institute of Systematic Zoology and Evolutionary Biology, Jena, Germany	Main advisor for 1 project (cross-taxonomic, comparative functional morphology)
Ximo Mengual Zoologisches Forschungsmuseum Alexander Koenig, Germany	Main advisor for 1 Diptera project (here advertised)
Nesrine Akkari Naturhistorisches Museum Wien, Austria	Main advisor for 1 project (cross-taxonomic on new techniques for study of morphology)
Lubomir Penev Pensoft Publishers company, Bulgaria	Main advisor for 1 project on innovative biodiversity publishing methods
Eduardo Pareja ERA7- Bioinformatics company, Spain	Main advisor for 1 project on innovative methods in cloud computing for genomics
Tamas Jantvik Decuria IT company, Sweden	Main advisor for 1 project on mobile apps for Citizen Science in entomology



