



# PhD position in genetics- and chemistry-based natural products discovery in Tübingen

(f/m/d; E13 TV-L, 65%)

Would you like to participate in an exciting interdisciplinary European network of young scientists to transform natural product discovery? Do you enjoy collaboration and teamwork while being at the cutting edge of scientific progress? We are looking for a PhD candidate with expertise in the regulation and/or the isolation of bacterial natural products.

## About the project

Leading European universities, research centers and industrial partners are joining forces to speed up the search for new useful molecules for sustainable application. In **MAGic-MOLFUN**, a new Marie Skłodowska-Curie Doctoral Network funded by the European Union, we will recruit 12 outstanding PhD students from all over the world and train them to become world-class specialists in the natural products field. The PhDs will have a chance to join one of the five leading European universities/research centers and two companies and closely collaborate within the network. Associated companies within the pharma, biocolors and agri-biotech sectors will host you for secondments.

Our **Doctoral Network MAGic-MOLFUN** aims to integrate natural products genome mining, computational metabolomics, and state-of-the art metabolic engineering and pathway discovery to develop ground-breaking tools and approaches to improve natural products discovery and characterization in bacteria and fungi, two major sources of bioactive compounds for applications in medicine, agriculture, food and biotechnology.

In one of two Tübingen-based projects, the candidate will develop genetics- and chemistry-based methods to uncover new biologically-active natural products. The PhD project will involve a mixture of the two approaches and provide the candidate with an interdisciplinary skillset that makes him/her able to pursue one or both approaches in the future. The genetics-based approach will focus on genetic regulation to “turn on” biosynthetic gene clusters that would otherwise be silent under standard laboratory culture conditions. The chemistry-based approach will focus on innovative methods to rapidly detect, purify, and characterize the newly-produced chemical entities.

## Your profile

We are looking for an enthusiastic and complementary team player with all or a subset of the following skills:

- a solid academic record (MSc) in biology, chemistry, biochemistry or a related discipline
- a “team player” attitude

- an interest in natural products research and multidisciplinary science
- a high level of oral and written English proficiency

### **Our offer**

We are offering you an exciting research position at a highly renowned university with a rich history of natural products research. The working groups of Stegmann and Hughes (<https://www.hughesresearchgroup.de/>) work closely together, combining two distinct expertise (one in genetics and one in natural products chemistry), in order to discover new natural products from bacteria. Apl. Prof. Dr. Stegmann and Dr. Hughes are committed to ensuring you the possibility to conduct research with a high amount of autonomy, a collegial work atmosphere, and continuous career mentoring. In addition to an exciting research PhD project, you will receive comprehensive and transferable skill training, including a personal career development plan, that will equip you for today's demands for a successful career in industry and academia.

We provide remuneration in accordance with the TV-L (collective agreement for public employees of the German federal states) 65% as well as all corresponding benefits, e.g., extensive visa and onboarding assistance, 30 days/year of paid vacation, flexible working hours, discounted public transportation, etc. International students will be supported by the Welcome Center before and during their stay at the University of Tübingen. They can provide guidance and help with visa issues and can give advice about housing.

We value diversity in science and particularly look forward to receiving applications from women, non-binary people, and researchers from underrepresented groups across cultures, genders, ethnicities, and lifestyles. We actively promote the compatibility of science, work, studies, family life and care work. In case of equal qualification and experience, physically challenged applicants are given preference.

### **Eligibility**

The Doctoral Network program requires transnational mobility (i.e., movement from one country to another). At the time of recruitment, you must not have resided or carried out your main activity (work, studies, etc.) in Germany for more than 12 months in the 3 years immediately prior to the date of recruitment.

### **How to apply**

Please send your application (including motivation letter, curriculum vitae, certificates, and academic references as a single PDF to BOTH apl. Prof. Dr. Evi Stegmann ([evi.stegmann@uni-tuebingen.de](mailto:evi.stegmann@uni-tuebingen.de)) and Dr. Chambers Hughes ([chambers.hughes@uni-tuebingen.de](mailto:chambers.hughes@uni-tuebingen.de)).

**Application deadline: January 31th, 2023.**