PhD Position (ichthyology): Ontogeny and evolution of fin diversity in fishes



50 % EG13, **starting at 01.03.2021**. The position is limited to 2 years with the possibility of prolongation for 1 year.

The foundation Deutsches Meeresmuseum is a national and international important institution with excellent exhibitions and aquaria. With more than 850,000 visitors per year, it is the most-visited natural science museum in Germany. The foundation Deutsches Meeresmuseum comprises the OZEANEUM and MEERESMUSEUM, as well as the NATUREUM and NAUTINEUM. The growing research section of the Deutsches Meeresmuseum concentrates on aquatic vertebrates, European seas and collection based research.

PhD project:

One of the major innovations in vertebrate evolution was the acquisition of fins. They allow efficient locomotion for finding food and mates, or for escaping predators. Originally, a simple median finfold developed in basal chordates. During vertebrate evolution, this simple finfold diversified greatly in unpaired – or median – fins leading to various numbers, positions, skeletal support structures and/or ontogenetic patterns.

The PhD project aims to clarify homologies among fins and certain fin structures and to trace back the evolutionary history leading to the fin diversity present in the 35,000 extant fish species. The study will be mainly based on the extensive ichthyological collection of the Deutsches Meeresmuseum, including more than 1,000 collection units of cleared and stained fish, supplemented with μ CT 3D reconstructions, ontogenetic studies and ancestral character state reconstruction.

Your profile:

- Master degree (or comparable) in life sciences
- · strong interest in ichthyology, morphology and evolution
- basic knowledge in the field of vertebrate morphology
- basic knowledge in R
- (optional) experience in 3D-reconstruction
- (optional) experience in fish keeping
- (optional) experience with different staining techniques, e.g. clearing and double staining, antibody-staining

We offer:

- a two-year contract with the possibility of prolongation for 1 year
- salary of 50 % EG13
- possibility to conduct your PhD-thesis
- experienced supervision
- becoming part of the committed research team of the Deutsches Meeresmuseum

Your application should include:

- 1. a cover letter with a short statement of motivation
- 2. a statement of your research experience (max. 1 page)
- 3. a CV, including publications
- 4. contact details of one or two academic referees.

Applications should be submitted electronically before 31.01.2021 as single PDF file to bewerbung@meeresmuseum.de

For any questions please contact Dr. Timo Moritz, Tel. +49 3831 2650-370, timo.moritz@meeresmuseum.de.

Die Stiftung Deutsches Meeresmuseum wird gefördert von:







