

Course presentation

for Summer Semester 2020

biol-235

Field course / Excursion

„Developmental biology of marine invertebrates“

Dr. Alexander Klimovich

biol-235 Field course / Excursion

„Developmental biology of marine invertebrates“

tentative date

22.06. - 29.06.2020

Biological Station of AWI „Helgoland“

Helgoland Island

Dr. Alexander Klimovich



„ *Developmental biology of marine invertebrates* “:

Summary

The course is offered for **20 students** of the Master in Biology and MAMBE programs. The course is given in **English** and is composed of **lectures, seminars prepared by the participants, experiments in the lab and field excursions**. The **goals** of the course are to extend the basic knowledge of developmental biology, demonstrate the influence of the environment onto development of diverse marine animals, and to raise interest in the contemporary evolutionary developmental biology. The participants will investigate the comparative anatomy, life cycles, larval stages, and reproductive patterns and self-nonself recognition in selected representatives of some invertebrate taxa (sponges, cnidarians, flatworms, tunicates). **Active participation** of the students in the experimental work and discussions is expected. The course will provide an opportunity to improve the student's communication skills. Informal interactions with the instructors will give insights into the current trends personal challenges in research in the EcoEvoDevo field.



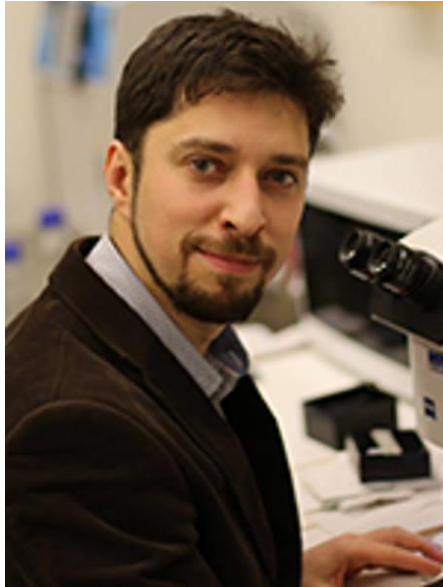
„ Developmental biology of marine invertebrates “: **Excursions**



- Intertidal zone
- Research vessel „Uthörn“
(plankton collection, dredging etc.)

„ *Developmental biology of marine invertebrates* “:

Guest professor



Assist. Prof. Igor Adameyko

Furlan A, Dyachuk V, Kastriti M et al. (2017) Multipotent peripheral glial cells generate neuroendocrine cells of the adrenal medulla. **Science**, 357 (6346): eaal3753

Kaucka M, Zikmund T, Tesarova M et al. (2017) Oriented clonal cell dynamics enables accurate growth and shaping of vertebrate cartilage. **eLife**, 6

Adameyko I (2016) Neural circuitry gets rewired. **Science**, 354 (6314): 833-834

Kaukua N, Shahidi M, Konstantinidou C et al. (2014) Glial origin of mesenchymal stem cells in a tooth model system. **Nature**, 513 (7519): 551-554

Dyachuk V, Furlan A, Shahidi M et al. (2014) Parasympathetic neurons originate from nerve-associated peripheral glial progenitors. **Science**, 345 (6192): 82-87



„ Developmental biology of marine invertebrates “:
Organisation aspects

- Registration: on 1-2 April, on-line only (LSF), binding
- Participants will be notified, whether the course takes place, in the first week of May 2020
- Participation fee – 45,00 EUR: students will be requested to pay by bank transfer in advance
- Overall costs – ca. 100,00 EUR
 - Accomodation (30%), transport (50%), provisions (100%)

„ Developmental biology of marine invertebrates “:
Briefing

- Detailed program and schedule of the course
- Seminar topics
- Organizational issues

14th May 2020, 15:00

Allgemeine Zoologie

Room 417, 4. OG

„ Developmental biology of marine invertebrates “:
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