SPACE LIFE SCIENCES SYMPOSIUM (A1)
Public Outreach and Education in Space Life Sciences (8)

Author: Dr. Christine Hellweg
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

Prof. Rupert Gerzer
Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany

THE HELMHOLTZ SPACE LIFE SCIENCES RESEARCH SCHOOL (SPACELIFE) ONE YEAR AFTER ITS START

Abstract

In the field of space life sciences, the demand of an interdisciplinary and specific training of young researchers is high due to the complex interaction of medical, biological, physical, technical and other questions. The DLR Institute of Aerospace Medicine in Cologne, in collaboration with the universities of Aachen, Bonn, Erlangen-Nürnberg, Frankfurt, Hohenheim, Kiel, Köln, Magdeburg, Regensburg, the Free University Berlin, the Beihang University in Beijing and the German Sports University Cologne, established the first Helmholtz Research School at DLR: an intensive training program for early-stage researchers from Germany as well as from abroad. SpaceLife will enable young researchers to do interdisciplinary research work in the fields of radiation biology, gravitational biology, and astrobiology, or space physiology. Project language is English. The doctoral candidates are coached by two specialist supervisors from DLR and the partner university, and a mentor. 21 doctoral candidates from different fields (biology, biomedicine, biomedical engineering, physics, sports and space sciences) were admitted to SpaceLife in 2009. They started the three-year program with the Summer School "Living with a star: Basics in Space Life Sciences" held in August 2009 in Bad Honnef, Germany. During this Summer School, lectures in different subfields of space life sciences allowed the students to attain an overview of the field: radiation and gravitational biology, astrobiology and space physiology, including psychological aspects of short and long term space missions. During the first Doctoral Students' Seminar, every candidate presented his/her research topic including hypothesis and methods to be applied. Furthermore, the doctoral candidates participated in a Research Skills Development Course offered by the Imperial College London, UK, addressing personal effectiveness, team working, and networking and communication skills. In Journal Clubs of the participating working groups, doctoral students learn critical reading of scientific literature, first steps in peer review, scientific writing during preparation of their own publication, and writing of the thesis. The program is complemented by advanced lectures, laboratory courses and stays at labs at the partner institutions or abroad as well as active participation national and international conferences. The whole program encompasses 303 hours and is organized in semester terms. **Acknowledgements:** The Helmholtz Space Life Sciences Research School (SpaceLife) is funded by the Helmholtz Association (Helmholtz-Gemeinschaft) over a period of six years and receives additional funds from the DLR.