PhD position on the ecology and evolution of giant viruses

We are seeking a PhD candidate for the ERC funded project "CHIMERA"

CHIMERA will investigate the role of mobile genetic elements in the ecology and evolution of giant viruses. These viruses are abundant in soil and aquatic environments, infecting a wide range of protist hosts. Besides unusually large particle sizes, giant viruses possess complex "chimeric" genomes, including genes that were likely acquired from their hosts as well as bacteria that infect the same hosts. Unique is the presence of mobile genetic elements, that may play an important role in host-parasite co-evolution, whereby the same molecular systems are employed by hosts and parasites for defence and subsequent counter-defence. The holder of this PhD position will support the project by studying the competition and interactions between viruses, bacteria and their hosts, from the micro (in a controlled laboratory environment) to the macro scale (in the wild).

The research will be conducted as part of a Starting Grant from the European Research Council under the supervision of Dr. Anouk Willemsen, hosted at the Division of Microbial Ecology (DOME) at the Centre for Microbiology and Environmental Systems Science (CMESS) of the University of Vienna.

Tasks:
Specific research tasks will be tailored to the candidate. These can include:

- Conduct laboratory experiments with giant viruses, bacteria and protists using cell-culture, microscopy and sequencing techniques.
- Field work, targeted metagenomics and subsequent bioinformatic analyses to investigate the abundance of viruses, bacteria and protists in natural samples.
- The development of protocols to study giant viruses in the laboratory (*e.g.* microscopy, flow cytometry, mass spectrometry, genome modification)

General tasks include:

- Active participation in research, publication, administration and communication activities.
- Analyses of data generated by the experiments.
- Collaborate with members of the research team.
- Present work output in group and departmental seminars.
- Disseminate results at national and international conferences.
- Supervision of trainees and students.

Profile of the Candidate:

- Master's degree (or equivalent) in Biology/Microbiology/Virology/Molecular Biology/ Bioinformatics or a related subject.
- High ability to express yourself both orally and in writing.
- Very good organizational skills.
- Ability and willingness to work independently as well as in a larger team.
- Willingness to acquire new methodological skills required for the project and PhD thesis.
- Excellent command of English (written and spoken).

The starting date of the position is possible from January 1st 2023 and preferably not later than July 1st 2023.

For further information, please contact:
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