

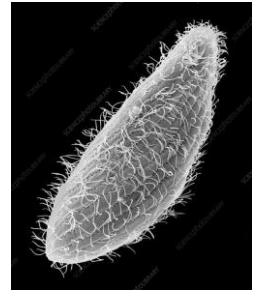
A PhD studentship in

Hormonal metabolism in the model protist *Tetrahymena thermophila*

We are seeking a candidate with a **background in molecular biology or genetics** for a Ph.D. studentship to study the biogenesis and reception of animal-like hormones in a single-celled model *Tetrahymena thermophila*. You will aim to identify enzymes and membrane receptors involved in insulin, serotonin, melatonin and dopamine metabolism and test their endogenous and exogenous effects on *Tetrahymena* physiology and behaviour. You will become proficient in methods of cell culture and visualization, gene editing and knockout, protein purification and interactions, omics data analysis, biochemistry and immunocytochemistry. Your results will have broad implications on hormone function in microbes and the origin of the animal endocrine system. The degree will be conferred by the University of South Bohemia.

We seek candidates with:

- a Master's degree in molecular biology or related field
- independent thinking, motivation and strong communication skills.
- a record of independent contribution to research ideally publications in peer-reviewed journals.
- experience with cloning, cell transformation, nucleic acid analysis, protein analysis, biochemistry and/or *Tetrahymena* genetics is an advantage.



We offer:

- individual mentorship
- 3-month stay abroad and collaboration with European and UK universities.
- opportunities to present data at regional and/or international meetings.
- a 4-year Ph.D. stipend including health and dental insurance coverage by the employer.

Algal Evolution and Ecology group at Centre Algatech, Institute of Microbiology Trebon (Czech Republic) is led by Jan Janouskovec and Eva Horakova. We study evolution, ecology, and molecular biology of protists (*PNAS* 114:E171–E180; *Curr Biol* 27(23), *eLife* 8:e49662; *Nat Commun* 13:7075).

Centre Algatech hosts several internationally recognized groups in microbiology research with a high proportion of foreign researchers, friendly atmosphere and English as a working language. We have had strong national and international funding and have outstanding facilities for molecular biology and biochemistry research. We have strong ties with the University of South Bohemia and the Czech Academy of Sciences.

Department of Molecular Biology and Genetics was established in 2016 at the University of South Bohemia in Ceske Budejovice. Research activities are focused on functional analysis of genes using various model organisms. Ph.D. students are trained in modern molecular genetics, including mutagenesis, transgenesis, and cell culture techniques. The department is closely associated with the Czech Academy of Sciences and offers a Ph.D. programme in Integrative Biology.

To apply:

Please send a **single PDF document in English** containing the following information to Eva Horakova (horakova@alga.cz) **by 2nd January 2024**. The interviews will take place on the 11th and 12th of January and the preferred start date is July 2024.

- Motivation letter detailing your fit for the position (max.1 page)
- Curriculum vitae with a complete list of peer-reviewed publications (max.2 pages)
- Contact information for 2 academic referees (please do not include letters with the application)