

Post-doctoral research position in “Circadian Clock Regulation in Marine Diatoms” with Dr. Angela Falciatore

Institut de Biologie Physico-Chimique- Paris France

IBPC

Mission: We are looking for a highly-motivated Post-doctoral Research Scientist to join the laboratory of “Chloroplast Biology and Light-sensing in Microalgae” directed by Dr. Angela Falciatore at the Institut de Biologie Physico-Chimique in Paris – France. This laboratory is dedicated to the study of light-driven processes (photosynthesis, photoperception and light-dependent rhythms) and chloroplast biology. The laboratory addresses key questions on the biology, evolution and ecology of microalgae by focusing on different molecular model systems (e.g., the diatom *Phaeodactylum tricorutum*, the green alga *Chlamydomonas reinhardtii*) and on ecological relevant phytoplanktonic species, investigated with approaches of eco-physiology, biophysics, biochemistry, genomics and genetics (<http://www.ibpc.fr/UMR7141>).

The post-doctoral fellow will be involved in a project aiming to characterize the molecular regulators orchestrating circadian rhythms in marine diatoms. The project is built on the recent discovery of the bHLH-PAS protein RITMO1 as the first regulator of circadian rhythms in *P. tricorutum* and of different photoreceptors (the Phytochrome DPH and Cryptochromes), possibly involved in circadian regulation (Annunziata, Ritter, PNAS 2019). These proteins will be used as entry point to characterize the still unknown circadian clock system of diatoms, by integrating genome-wide molecular approaches with *in-vivo* analyses of light-dependent rhythmic processes. The project will also address the physiological and ecological relevance of circadian clock in diatoms by characterizing cell division and photosynthesis rhythms in wild-type and mutant cells, and by analyzing circadian clock components in environmental genomic data sets.

Qualifications: Ph.D. in biology or a closely related field and demonstrable experience in functional genomics and molecular biology techniques. Previous training in microalgae physiology and/or photobiology (photoperception or circadian clock regulation) is a plus.

Application: email your CV and a cover letter summarizing current and future research interests, as well as the contact details of 2 referees to angela.falciatore@ibpc.fr.

Earliest start date: October 2020. Open until filled.

