



## PhD project

# Metabolism of phototrophic bacteria



**Phototrophic bacteria** are prokaryotic organisms capable of utilizing light energy to supplement respiration. The PhD project focusses on the metabolism of these interesting organisms. The interplay of respiration and photosynthesis will be investigated in laboratory cultures of various phototrophic organisms using biochemical and biophysical techniques. The fellowship is funded by the EU and Czech Grant Agency projects.

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## **PhD position available**

The Laboratory of Anoxygenic Phototrophs at the Institute of Microbiology in Trebon is looking for motivated candidate for a PhD position. We are an international, competitive group working on physiology, genomics and ecology of anoxygenic phototrophic bacteria. The communication language is English. The team collaborates with laboratories in Europe, USA and Japan. The Institute of Microbiology of the Czech Academy of Sciences is one of the top research institutes in the Czech Republic. Trebon is located in the center of lake-land nature reserve area. See: <http://www.alga.cz/en/c-371-laboratory-of-anoxygenic-phototrophs.html>

**Project:** Light energy from the sun drives basically all the life on Earth. Photosynthesis, the process where light energy is captured and converted in the chemical energy available for organisms, represent one of the most important biological processes. In the presented project we will focus on photoheterotrophic organisms which utilize light energy only partially to supplement their predominantly heterotrophic metabolism. The project will focus on how these bacteria capture light energy and how they use it in their metabolism. The student will learn basic microbiological, biophysical and molecular techniques.

### **Recruitment procedure:**

A motivation letter and CV should be sent to [aap@alga.cz](mailto:aap@alga.cz) by **May 10th, 2019**. The selected candidates will be contacted for additional information. The interviews will be held in May-June. The expected start is **summer 2019**.

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