



**Postdoctoral Research Associate in the Development of Genetic Systems
in Water Fern/Filamentous Cyanobacteria/Bacteria Symbiosis**

Rensselaer Polytechnic Institute, Troy, NY USA seeks candidates to fill a postdoctoral position focusing on the development of genetic tools for the manipulation of the *Azolla* symbiosis that consists of a water fern, filamentous nitrogen-fixing cyanobacteria and bacteria. The postdoc will have the unique opportunity to work in the laboratories of Dr. Henriette Schlupepmann (Utrecht University, Netherlands) Dr. Peter Lindblad (Uppsala University, Sweden) and Dr. Sandra Nierzwicki-Bauer (Rensselaer Polytechnic Institute, US) for this collaborative international project. The successful candidate will be employed by Rensselaer Polytechnic Institute. We are looking for a highly motivated postdoc to join our team and carry out independent research to develop and use genetic tools for the partners of this symbiotic system.

The successful candidate will lead the research on transformation and editing of the symbiotic cyanobacteria. This will include being responsible for planning and running genetic experiments with the goal to develop stable transformation and editing protocols for the symbiotic cyanobacteria in the *Azolla* symbiosis. Additionally, the postdoc will be expected to contribute to ongoing efforts to transform the fern and associated bacteria in this symbiosis. The collective overall project goals are to i) establish robust transformation of the organisms in this symbiosis ii) develop selection strategies and synthetic biology tools, and iii) establish genome editing.

Qualifications: Candidates are required to hold a Ph.D. in Biological or Chemical Sciences or related field and have experience in the development and/or use of molecular techniques for genetic manipulation of cyanobacteria and/or plants. Preference will be given to candidates with experience in the transformation and genetic manipulation of filamentous cyanobacteria. Candidates must be able to communicate effectively using oral and written English. Candidates must have the ability to conduct independent research, take initiative, and have a desire to participate in an awesome international collaboration.

The position is funded through the Symbiosis in Aquatic Systems Initiative by the Gordon and Betty Moore Foundation. The initial appointment is for one year, with funding available for up to 2.5 years, contingent upon satisfactory progress in year one. The successful candidate will be hired as a Postdoctoral Research Associate at Rensselaer Polytechnic Institute, Troy NY, however, the incumbent will be expected to spend significant time at each of the collaborating Universities (Utrecht University, Uppsala University and Rensselaer Polytechnic Institute). Salary will be \$55,000-\$60,000 per year based on experience.

Review of applications will start on September 9, 2020 and will continue until the position is filled. While the position may start as early as October-November 2020, there is flexibility on the start date.

Interested individuals should send (in pdf style) a brief cover letter including relevant experience and professional goals, a CV, and the names and contact information for 3 professional references to Sandra Nierzwicki-Bauer by e-mail (nierzs@rpi.edu).

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More information regarding the Principal Investigators and their labs is available on their websites or by contacting them:

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