

The Laboratory of Molecular and Cellular Signaling is seeking a talented and enthusiastic individual to join its young and dynamically growing research team as a PhD student. The successful candidate will study novel mechanisms of signal transduction. Although the project is mostly focused on basic scientific discovery, it has significant implications for the treatment of human diseases, including cancer.

Background:

Hedgehog signaling is one of the major signaling pathways active during development. Aberrant activation of this pathway is involved in various types of cancer. Gli proteins, the transcriptional effectors of this pathway, are converted by extracellular signals into activators of gene expression. However, the mechanism of this transition is only partially understood. Two aspects of this process in particular are still unclear. First, Gli proteins are concentrated in primary cilia – microtubule based protrusions on the surface of cells. The functional significance of Gli accumulation at ciliary tips is one of the unsolved questions in the field. Second, Gli proteins undergo many posttranslational modifications upon activation, but the importance of these changes is unknown. The purpose of the project that the student will engage in will be to solve these long-standing puzzles using state-of-the-art techniques ranging from genetic manipulations of cells to quantitative proteomics and fluorescence microscopy.

Qualifications:

- Master's degree in any field related to biomedical sciences
- Creativity and analytical thinking
- Excellent interpersonal and communication skills
- Strong motivation to work
- Ability to communicate fluently in English (written and spoken)
- General laboratory experience
- Specific experience in either of the following areas will be considered a plus:
 - molecular cloning
 - cell culture
 - protein biochemistry
 - immunocytochemistry and fluorescence microscopy

We offer:

- An environment that fosters creativity, autonomy, and personal development of the student
- Strong mentoring in both laboratory techniques and “soft skills” required for career progression
- Work in a brand new building with state-of-the-art equipment and ample opportunities for interdisciplinary collaborations

Application:

The application should contain the following documents/information:

- A cover letter describing personal motivation to apply for this position
- Candidate's CV with contact information for at least 2 references (previous supervisor or thesis advisor are preferred)
- Candidate may include additional information or copies of documents/certificates in support of the application

The remuneration for the position will be a stipend as detailed by National Science Center regulations. Selection of the best candidate will be solely based on qualifications for the advertised position. All applicants will be provided equal opportunity.

For more information please visit our laboratory website: <http://lmcs.cent.uw.edu.pl>

Please send your applications to the following e-mail address: lmcs.recruitment@gmail.com (please put “PhD student” in the subject).