Postdoc Position studying the mitotic spindle in the Zebrafish Embryo - Syracuse University

A postdoctoral position is available in our lab to study the role of cell division in tissue morphogenesis using the zebrafish embryo. Women and URM are encouraged to apply. Contact Heidi for further information at hhehnly@syr.edu.

The Hehnly lab focuses on a broad question: How do ciliated cells develop into a functional polarized organ? We propose that this occurs through a sequential process that starts with cell division and placement of the cytokinetic midbody, which marks a site for where the apical membrane should be placed. Once cytokinesis completes, cilia assembly occurs. If a ciliated organ is to expand its central lumen, cells need to re-enter the cell cycle and correctly position their mitotic spindle along the longest axis parallel to the lumen. We test a model in which the centrosome is essential during this process, modulating signaling events to 1) regulate spindle assembly and positioning, 2) direct events to assist in the final stage of cell division, cleavage of the cytokinetic bridge (abscission), and 3) direct apical polarity and formation of a primary cilium. To identify the mechanisms involved in these processes we use mammalian cell culture and the model vertebrate Danio rerio (Zebrafish) coupled with advance light-microscopy, biochemical, and molecular approaches. We currently seek a researcher with a background in cell biology and microscopy. The position is for a Postdoctoral Research who will be funded by an NIH R01. Specific research goals will be discussed and agreed upon with the principal investigator (Heidi). Please apply by sending a cover letter, CV, and job references to Heidi.

Come hang out with us in Syracuse!

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