David Breslow’s lab, part of the Dept. of Molecular, Cellular and Developmental Biology at Yale University, is seeking a post-doctoral researcher interested in understanding the functions of the mammalian primary cilium, with a focus on defining the mechanisms that regulate cilium biogenesis and ciliary signaling and on understanding how defects in these processes contribute to disease.

Located in the newly constructed Yale Science Building, the Breslow lab aims to understand the mammalian primary cilium – a micron-scale structure protruding from the surface of most cells in the human body. Using a combination of CRISPR-based functional screening, microscopy and biochemistry, we are investigating the fundamental processes by which cilia are assembled, maintained, and disassembled and the physiologic impact of defects in these processes. Project areas of particular interest include: applying genome-wide imaging-based screening technology to cilia; understanding a newly identified role for ciliary dysfunction in neurodevelopmental disease; and functional analysis of cilia disassembly pathways. Collectively, our studies aim to provide fundamental biological insights, to shed light on the pathogenic mechanisms of ciliary diseases, and to reveal new strategies for targeting cancers in which ciliary function is altered.

The Breslow lab and MCDB department provide a supportive, diverse, and collaborative environment for training and mentorship. Interactions across campus with scientists that have shared interests and expertise in cilium and cell biology provide additional opportunities for intellectual enrichment.

Applicants should hold (or anticipate award of) a Ph.D. in a relevant area of biological research such as cell biology, biochemistry, or genetics. Please send a cover letter briefly summarizing your research experience and goals, a CV, and contact information for 3 references to david.breslow@yale.edu

For more information, visit: http://breslowlab.yale.edu