

Position #	Supervisor
-------------------	-------------------

RA-28	Kathryn (Kaia) Skaggs, PhD.; Assistant Professor of Biology
--------------	---

Description: (Part – Time position, 10 hours/wk)

This RA will assist in a research program focused on investigation of the mechanisms of neuronal repair in adult zebrafish following brain injury. Unlike mammals, zebrafish have with remarkable capability to regenerate the central nervous system following injury. The ultimate goal of these studies is to shed light on mechanisms that could augment repair and recovery following brain injury in mammals, including humans, by overcoming the barriers to regeneration in mammalian brain. The RA will engage in a range of research activities, including direct experimentation, data analysis and communication of results from these studies and will have responsibility for day - to - day animal care and lab organization. The RA will participate in the conduct of experiments to collect data on an assigned research aim. The RA will have the opportunity to present research results at local and regional conferences and will assist in writing and submission of scientific articles to peer reviewed journals. In addition, the RA will train and supervise undergraduate research students as the skills of the individual RA selected allow and will take a leadership role in day - to - day organization and management of the lab and animal care facilities. The specific tasks will vary due to the nature and flow of scientific research. For example, during intense periods of experimental work, tasks will involve mostly the execution of experimental techniques at the bench. During data collection and analysis, the tasks would instead involve imaging, cell counting, and statistical data analyses. After data collection, tasks will focus on analysis and summarization of results and presentation of the work in written or oral form. Similarly other tasks, such as the need for animal husbandry or attention to lab equipment and supplies, will also vary within the cycle of research activities. The tasks involved in this position include hands - on bench experimental work, data collection and analysis, interpretation and communication of the goals and results from individual experiments and the lab as a whole in written and oral form, independent responsibility for daily animal health checks and housing system quality (including maintaining accurate records), breeding and husbandry to maintain the fish population, coordination of scheduling of undergraduate assistance in animal care and system maintenance, training of undergraduates in animal care and system maintenance skills and requirements, and others. Animal health, husbandry, system maintenance and lab organization tasks involve independent identification of issues or problems, analysis of the severity or urgency of the situation, problem - solving and skills to make corrections or seek help from the faculty advisor or other resources, the ability to anticipate needs and consequences, and the ability to reliably and independently prioritize and execute multiple responsibilities.