

**VISUALIZATION OF THE HYALOID VASCULATURE IN THE POSTNATAL MOUSE AND RAT USING FITC/DEXTRAN. *M. Bethany, B. Buchner, and I. M. Evans\**, Department of Biology, [meb0479@rit.edu](mailto:meb0479@rit.edu), [blb6344@rit.edu](mailto:blb6344@rit.edu), [imesbi@rit.edu](mailto:imesbi@rit.edu)**

Much effort has gone into developing effective methods for visualizing vascular systems. A good model for observing the development and regression of blood vessels is the hyaloid vasculature surrounding the eyes of newborn mice and rats. The pupillary membrane covers the front of the lens; the hyaloid artery feeds into the back of the eye where the vasa hyaloidia propria and the tunica vasculosa lentis branch off. As the rodent matures, this early vasculature disappears, and adult vessels including those of the retina, slowly grow in. In the present study, a suspension of the dye fluorescein (FITC) bound to a high molecular-weight dextran, was injected intracardially into young mice and rats up to postnatal day 21 (P21). Adult mice were injected for comparison. After allowing the heart time to pump the dye throughout the body, the eyes were dissected out and visualized under a fluorescent microscope. As the rodents aged, there was a decrease in the number of vessels, indicating vascular regression. Interestingly, it appears that remnants of the mouse hyaloid vasculature persist until P21, longer than reported in the literature. We will continue studying regression of the hyaloid system and development of the retinal vasculature using the FITC/Dextran technology.