



M.S. in Biology (Cell and Developmental)

Regulated cell-cell adhesion during early embryogenesis. Dr. Mick Yoder, Department of Biology, University of Central Arkansas.

Do you have a passion for science and discovery and an interest in embryonic development? We are looking for new Master's level students to join the team to investigate the role of regulated cell adhesion during early embryogenesis, using the model system *Xenopus laevis* (African-clawed frog).

Regulated cell adhesion is critical for establishing new tissues and boundaries, as the embryo progresses from a single-cell to thousands of cells (and beyond). The Yoder lab is specifically interested in exploring how a family of proteins called protocadherins contributes to cell behavior in the early embryo, with an emphasis on notochord morphogenesis. Protocadherins have been shown to serve both as effectors of cell-cell adhesion and as modulators of cell signaling events, so their contributions to embryogenesis are fascinatingly complex and critically important to understand. New lab members will be trained in the use of *Xenopus laevis* as a model system, as well as techniques in microscopy, molecular biology, and developmental biology. Students will be able to apply their interests in cell, development, and/or genetics to address the question of 'how does the embryo get its shape'. For more information please visit our website: <https://blogs.uca.edu/myoder3/>.

The Department of Biology at the University of Central Arkansas includes over 33 full-time faculty and staff and a strong M.S. graduate program (~30 students), in a diversity of research areas spanning ecology and evolution, genetics, and cell and molecular biology. Students are generally expected to conduct their thesis research project and complete required course work within 2 years. Students can apply for competitive teaching assistantships, providing an annual stipend (~\$9000/year), as well as in-state and out-of-state tuition waivers (~ \$3000/term). Additional competitive funding is available for conference travel and summer stipends.

Qualifications

B.S. in Biology, Genetics, or related fields. Minimum GPA of 3.0. The applicant must have the ability to work both as an independent researcher and as a team member. Prior experience in microscopy, molecular biology, or animal-related research is preferred, but not required.

To apply

Send cover letter, resume/C.V., academic transcripts, and contact information for three references to Dr. Mick Yoder (myoder3@uca.edu). Application documents should be sent as a single pdf. For full consideration, materials need to be received by February 1st, 2021.