Colorado State University

College of Veterinary Medicine and Biomedical Sciences

Cardiovascular Research Center

Role of flow in development of the embryonic heart

Wednesday, 4/15/15 – 1:00-2:00pm – Room W205, Anatomy/Zoology Building

Debbie Garrity, PhD

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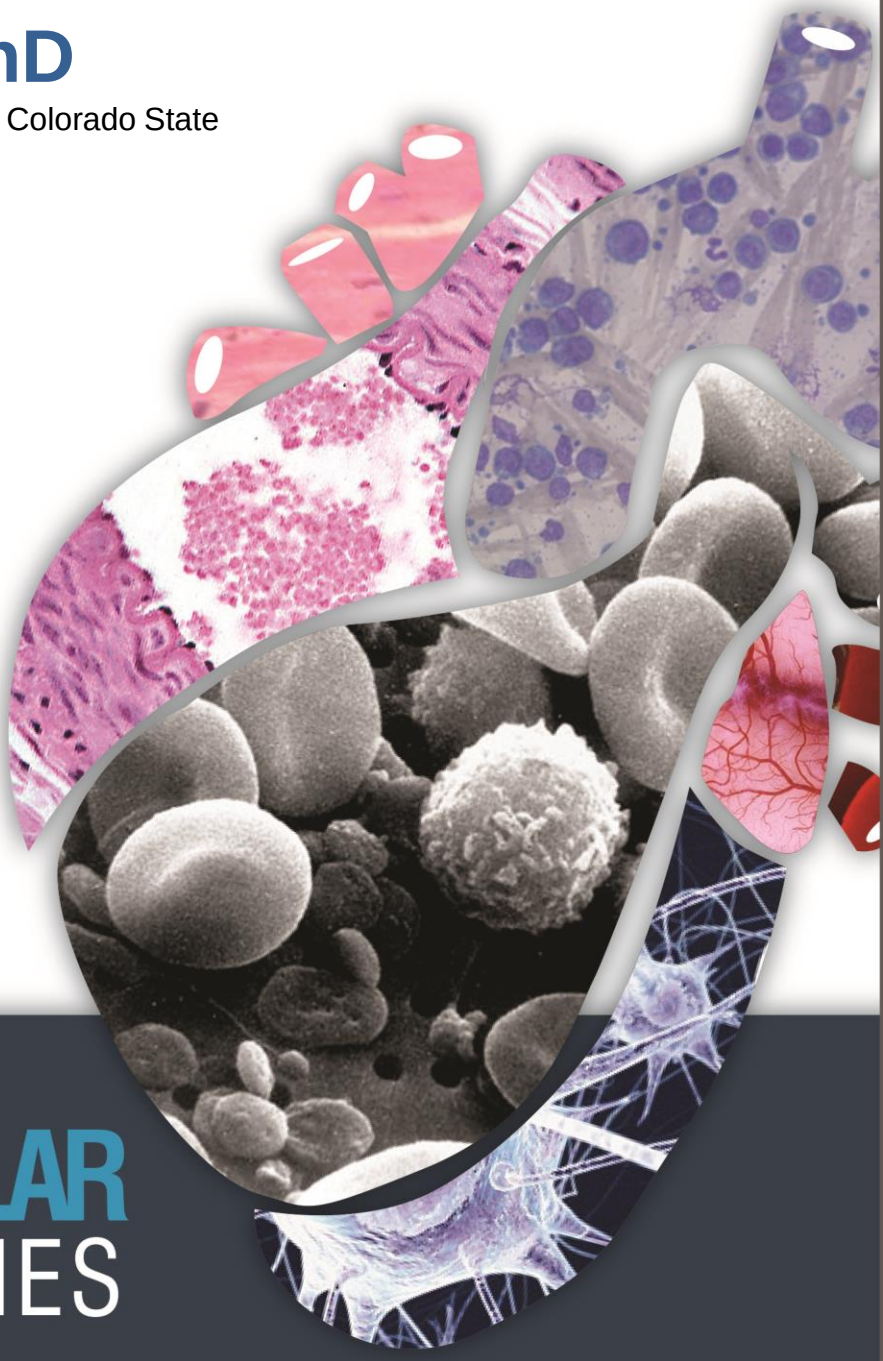

The embryonic heart begins pumping blood even before the cardiac organ is fully formed. Research in the Garrity lab focuses on genetic and biomechanical factors that contribute to normal heart development. To study how the newly formed heart tube transitions into a rhythmic, efficient multi-chambered organ, we employ quantitative imaging in live zebrafish embryos. The seminar will focus upon the roles that hemodynamic forces play in shaping the heart as it proceeds from a linear heart tube through cardiac looping, chamber morphogenesis and valve formation. Our data suggest that hemodynamic forces have significant impact as a morphogenetic factor in cardiac development and that particular stages in cardiac development are acutely sensitive to disruptions in flow.

CARDIOVASCULAR SEMINAR SERIES

Full Schedule at
http://csu-cvmbs.colostate.edu/academics/bms/Pages/cardiovascular-research-center.aspx