CENTER FOR EXCELLENCE in the
NEUROSCIENCES

SEMINAR SERIES

Developmental Plasticity and Programming of Health and Disease

James Coffman, Ph.D.
Associate Professor
MDI Biological Laboratory
Salsbury Cove, ME

Thursday, March 12th 2015
12:00-1:00 p.m.

Alfond 304
UNE, Biddeford Campus

Lunch will be provided

Hosted by: Ian Meng, Ph.D.

Sponsored by: The Center for Excellence in the Neurosciences and the COM Biomedical Sciences Department

Dr. James Coffman is a developmental biologist who works with sea urchins and zebrafish to investigate how the phenotype of an organism emerges developmentally via the interactions of genes, cells, and the environment. Current research in his lab asks how chronic early life stress predisposes an individual to inflammatory diseases and more rapid aging, a phenomenon known as developmental programming of health and disease. The research seeks to understand (1) how stressful conditions experienced during early development program responsiveness to the stress hormone cortisol, an important physiological regulator of inflammation, and (2) the long-term effects of that programming on the bodys capacity for tissue repair and regeneration. Zebrafish are being used as a model to investigate these issues, as the cortisol-mediated stress response is conserved between zebrafish and humans, and zebrafish are exceptionally amenable to detailed mechanistic studies of both early development and adult regeneration.

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