

# MBL SPECIAL LECTURE SERIES

Friday, July 8, 2011 at 9 AM • Speck Auditorium



*The Nancy S. Rafferty Lectureship in Embryology*

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## *A twist of fates: developmental biology of the spiralian Lophotrochozoa*

JON HENRY, *University of Illinois*

Dr. Jonathan Henry is a professor of cell & developmental biology at the University of Illinois in Champaign-Urbana. He received his B.S. from Lehigh University in Bethlehem, Pennsylvania in 1980, and his Ph.D. from the University of Texas in Austin in 1984 while working with Dr. Gary Freeman. He subsequently performed postdoctoral research with Dr. Robert Grainger at the University of Virginia in Charlottesville (1985-1988), and with Dr. Rudy Raff at Indiana University in Bloomington (1988-1991). He spends time during the summer working at the MBL, where he is presently an adjunct senior scientist with the Marine Resources Department.

His research focuses on understanding the cellular and molecular mechanisms that regulate development and regeneration of the vertebrate eye/lens. This work is being conducted in a model system, the frog *Xenopus*, which can regenerate a completely normal lens once the original is removed. Recent studies now focus on the role of epithelial stem cells in this process. Other research in Dr. Henry's lab concerns the molecular and cellular mechanisms underlying the specification of embryonic cell fates and axial properties in a group of closely related invertebrate phyla, the spiralian Lophotrochozoa (including molluscs, annelids, etc.). The latter research is aimed at understanding the evolution of animal body plans and fundamental developmental processes within the Metazoa.

### ABOUT THE NANCY S. RAFFERTY LECTURESHIP

The Nancy S. Rafferty Lectureship in Embryology was established to recognize Dr. Rafferty's long career in eye research. Dr. Rafferty was instrumental in elucidating the ultrastructural relationship between lens accommodation and actin filament arrays in mammals and amphibians.

Dr. Rafferty received her M.S. and Ph.D. degrees from the University of Illinois in 1953 and 1958, respectively, under the tutelage of Dr. S. Meryl Rose. Following her dissertation work, Dr. Rafferty completed a postdoctoral fellowship at The Johns Hopkins University, where she subsequently served as assistant professor in the department of anatomy in the School of Medicine. In 1970, she and her husband Keen moved to the Chicago area, where she joined the department of anatomy at Northwestern University Medical School. She was promoted to professor in 1976.

During her career, Dr. Rafferty published 55 journal articles and 31 abstracts. She served on study sections of the National Institutes of Health and was a member of the Vision Advisory Research Committee. Dr. Rafferty traveled the world giving invited talks in Great Britain (Guy's Hospital Medical School, Nottingham University, Oxford University and Edinburgh University), East Germany, Holland, Spain, Canada, Japan, Australia, San Francisco, Finland, and Sweden.

Dr. Rafferty first came to the MBL in 1955 as a student in the Embryology course. She returned periodically to conduct research at the MBL beginning in 1988. Upon retirement from Northwestern in 1994, she moved her laboratory to MBL where she was a senior scientist and a member of the Corporation.

Dr. Rafferty and her husband long felt a love for the MBL and Woods Hole. She would have been particularly pleased that a lectureship in embryology has been established in her name.