Distinguished Nucleic Acids Lectures

_Presented by the Center for Nucleic Acids Science and Technology

Kevin Weeks, Ph.D.

Kenan Distinguished Professor University of North Carolina, Chapel Hill



The Inaugural CNAST Distinguished Nucleic Acids Lectures will be given by Dr. Kevin Weeks, the Kenan Distinguished Professor in the Department of Chemistry at the University of North Carolina, Chapel Hill.

The Weeks lab has an overarching vision to create new molecular and bioinformatic microscopes for concise, generic, scalable, and accurate RNA structure analysis and to apply these technologies to compelling, and otherwise intractable, problems in biology. This work is motivated by the central role of RNA in all areas of biology and by the emerging consensus that large-scale RNA structure itself constitutes a form of the genetic code.

DECEMBER 4 - 5, 2014

CARNEGIE MELLON UNIVERSITY MELLON INSTITUTE 3RD FLOOR CONFERENCE ROOM

Toward an RNA structure of everything, concisely

THURSDAY, DECEMBER 4 4:30 P.M. – 6:00 P.M.

This seminar will outline the "SHAPE" and "RING" technologies invented in the Weeks lab that have made significant progress in solving the RNA secondary structure modeling challenge, making these developments accessible to diverse and non-expert laboratories, and are beginning to address the next frontier of large-scale analysis of through-space and tertiary interactions in RNA.

A reception will follow the seminar in the Mellon Institute Social Room.

Chemical microscopes and the RNA structural codes of viruses

Dr. Weeks has received numerous awards for his research, notably being elected a Fellow of the American Association for the Advancement of Science in 2012 and a life member of Clare House at the University of Cambridge in 2014.

Sponsored by the Center for Nucleic Acids Science and Technology and the Carnegie Mellon Department of Chemistry. For more information, please call 412-268-5472.

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and cells

FRIDAY, DECEMBER 5 2:00 P.M. – 3:00 P.M.

This seminar will emphasize biological insights obtainable using the "SHAPE" and "RING" technologies with applications to the mechanisms of RNA chaperones, efficient design of RNA-targeted therapeutics, strategies for characterizing novel RNA targets, and many surprises from RNA structure analysis in healthy living cells.

Light refreshments will be served.