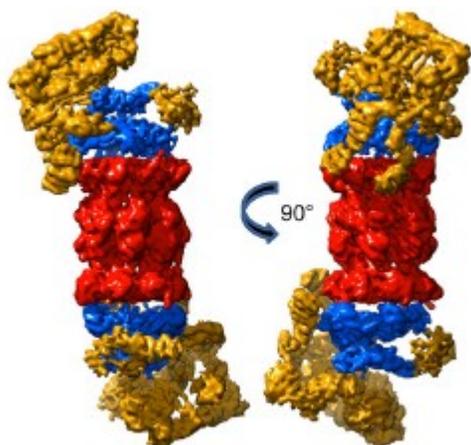


Department of Biochemistry

2016 Axelrod Distinguished Lectures

Mark Hochstrasser

Chair, Department of Molecular Biophysics & Biochemistry
Yale University



Monday, March 21

3:30 - Deans Auditorium (PFEN 241)

End of the road: How and why cells destroy their own proteins

Tuesday, March 22

3:30 - Deans Auditorium (PFEN 241)

Assembly and function of proteasomes in yeast and humans

End of the road: How and why cells destroy their own proteins - Control of cellular protein levels is exerted through changes in both their synthesis and degradation rates. Examples of highly selective protein degradation include that of cell-cycle regulators, which must be present only transiently in the cell cycle, and proteins that misfold or have been damaged, a type of protein quality control. Most short-lived eukaryotic proteins are degraded by the ubiquitin-proteasome pathway. My talk will focus on this pathway and its role in the destruction of both aberrant proteins and transcriptional regulators.

Assembly and function of proteasomes in yeast and humans - Most short-lived eukaryotic proteins are degraded by the ubiquitin-proteasome pathway. The proteasome is a very large and abundant complex that degrades a vast array of different proteins, most often after substrates have been covalently marked with the small ubiquitin polypeptide. I will discuss our recent results on the proteasome, particularly its intracellular assembly mechanism and how this might be altered under different conditions to create functionally distinct particles.

About the Axelrod Lectures:

Dr. Bernard Axelrod served as Head of the Department of Biochemistry. His efforts were instrumental in founding the biochemistry program at Purdue University. On the occasion of his 70th birthday, colleagues and friends established this lectureship in honor of Dr. Axelrod's many contributions to the field of biochemistry and its community of scientists. Dr. Axelrod passed away in 2011 at the age of 97.