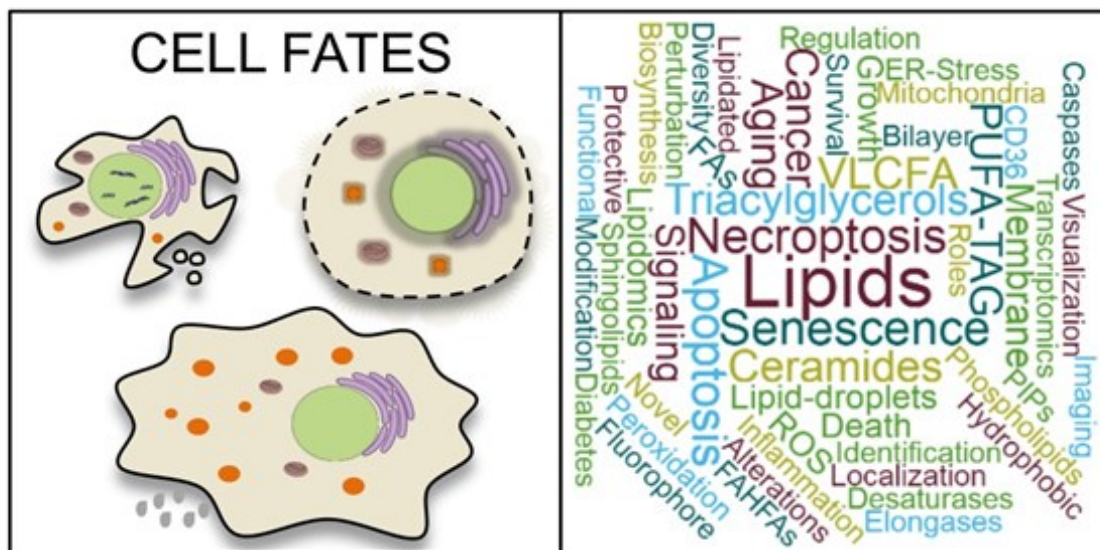


# Organic Seminar



“Non-canonical Roles of Lipids in Different Cellular Processes”



Friday, Feb. 23rd, 9:00am  
Hutchison Hall 473  
University of Rochester  
Department of Chemistry

Guest Speaker:  
**Professor**  
**Ekin Atilla-Gokcumen**  
**SUNY Buffalo**  
**Department of Chemistry**

**Abstract:** Lipids are a highly regulated and chemically diverse class of biomolecules. The biosynthesis and transport of these molecules are controlled by a considerable number of proteins, which facilitate spatio-temporal regulation of lipids during different fundamental cellular processes such as cell division and death. Although lipids are traditionally recognized as molecules for energy storage and as structural components of membranes, there is a growing appreciation of their chemical diversity. Lipids are being increasingly recognized for their signaling roles, capable of transmitting information within and between cells. I will discuss recent discoveries from our laboratory and others on the involvement of polyunsaturated triacylglycerols, very long chain fatty acids and ceramides in different cellular fates. I will also highlight recent work on the development of innovative methods that have enabled the recognition of previously unknown roles for lipids in different biological processes. Gaining a better fundamental understanding of the physiological roles of lipids will ultimately enable new diagnostic and therapeutic strategies for different diseases.

Host: Rudi Fasan • Email: [fasan@chem.rochester.edu](mailto:fasan@chem.rochester.edu)