

LYNCH, OZDAGLAR NAMED EECS ASSOCIATE DEPARTMENT HEADS

Two Department of Electrical Engineering and Computer Science (EECS) faculty members were named associate department heads during the 2016-2017 academic year.

Nancy Lynch, the NEC Professor of Software Science and Engineering, became associate department head in September 2016. She succeeded Silvio Micali, the Ford Professor of Computer Science and Engineering, who had served as associate department head since January 2015.

Lynch is known for her fundamental contributions to the foundations of distributed computing. Her work applies a mathematical approach to explore the inherent limits on computability and complexity in distributed systems.

Her best-known research is the “FLP” impossibility result for distributed consensus in the presence of process failures. Other research includes the I/O automata system modeling frameworks. Lynch’s recent work focuses on wireless network algorithms and biological distributed algorithms.

The longtime head of the Theory of Distributed Systems research group in the Computer Science and Artificial Intelligence Laboratory (CSAIL), Lynch joined MIT in 1981. She received a BS from Brooklyn College in 1968 and a PhD from MIT in 1972, both in mathematics. Recently, Lynch served as head of CSAIL’s Theory of Computation (TOC) group for several years.

She is also the author of several books and textbooks, including the graduate textbook *Distributed Algorithms*, considered a standard reference in the field. Lynch has also co-authored several hundred articles about distributed algorithms and impossibility results, and about formal modeling and verification of distributed systems. She is the recipient of numerous awards, an Association for Computing Machinery (ACM) Fellow, a Fellow of the American Academy of Arts and Sciences, and a member of both the National Academy of Science and the National Academy of Engineering.

Asu Ozdaglar, the Joseph F. and Nancy P. Keithley Professor of Electrical Engineering, became associate department head in January 2017. Ozdaglar succeeded David Perreault, professor of electrical engineering, who had served in the role since November 2013.

Ozdaglar is best known for her contributions in the areas of optimization theory, economic and social networked systems, and game theory. She has made several key contributions to optimization theory, ranging from convex analysis and duality to distributed and incremental algorithms for large-scale



Nancy Lynch



Asu Ozdaglar

systems and data processing. She is a co-author of *Convex Analysis and Optimization*.

Ozdaglar’s research focuses in large part on integrating analysis of social and economic interactions into the study of networks. Her work spans many dimensions of this area, including analysis of learning and communication, diffusion and information propagation, influence in social networks, and study of cascades and systemic risk in economic and financial systems. She continues to make key game-theory contributions, including learning dynamics and computation of Nash equilibria.

In October 2014, Ozdaglar became the director of the Laboratory for Information and Decision Systems (LIDS) and the associate director of the Institute for Data, Systems, and Society (IDSS). Ozdaglar was also a Technical Program Co-Chair of the 2015 Rising Stars program in EECS.

Ozdaglar has also organized numerous conferences and sessions on game theory, networks, and distributed optimization. She received the prestigious Donald P. Eckman Award from the American Automatic Control Council, and she was the inaugural recipient of the Steven and Renee Finn Faculty Research Innovation Fellowship at MIT. 🇺🇸

Editor’s Note: As this issue went to press, long-time EECS department head Anantha Chandrakasan was named Dean of the MIT School of Engineering, effective July 1. Ozdaglar will serve as interim department head during the search for Chandrakasan’s successor.