

School of Engineering

Department of BIOMEDICAL ENGINEERING

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People

Faculty

Emeritus Faculty

Part-time Lecturer

Staff

Faculty

Mark Cronin-Golomb

Professor, Department of Biomedical Engineering

Education

1979 B.Sc. (Hons), University of Sydney, Physics 1983 Ph.D., California Institute of Technology, Physics

Honors and Awards

- Sydney University Postgraduate Research Traveling Scholarship
- Presidential Young Investigator Award, 1987 (National Science Foundation)
- Denison Distinguished Visitorship, 2005, University of Sydney
- Senior Member, IEEE
- · Fellow, Optical Society of America

Research Interests

Use of optics in the development of biomedical devices such as microfluidic systems. Application of nonlinear optics to biomedical engineering.

Biography

Teaching

Professor Cronin-Golomb graduated from University of Sydney with a B.Sc. in Physics and from Caltech with a Ph.D. in Physics. His research there was on photorefractive nonlinear optics in the group of Amnon Yariv where he discovered the first photorefractive self-pumped phase conjugate mirror. He worked for two years at Ortel Corporation, researching the application of photorefractive devices to semiconductor lasers. He joined Tufts University in 1986 as associate professor of Electrical Engineering and is now a member the Department of Biomedical Engineering. In 1996-1997 he was a visiting associate professor at Stanford University in Steve Chu's group.

Courses covering a wide range of topics including biomedical optics, nonlinear optics, and biomedical instrumentation.

- BME100 Design of Medical Instruments
- BME116 Applied Quantum Electronics
- BME156 Medical Optics Laboratory
- EN31-BME Exploring Laser Light

Professional Positions

Sept. 2008 - Present Professor, Tufts University, Biomedical Engineering, Medford MA

Jan. 2005 - Dec. 2005 Visiting Scholar, University of Sydney, Physics, Sydney, Australia

Sept. 2002 - Sept. 2008 Associate Professor, Tufts Univ., Biomedical Engineering, Medford MA

Aug.1996 - Aug. 1997 Visiting Associate Professor, Stanford Univ., Electrical Engineering, Palo Alto CA

Sept. 1986 - Sept. 2002 Associate Professor, Tufts Univ., Electrical Engineering and Computer Science Medford MA

Oct. 1984 - Sept. 1986 Staff Scientist, Ortel Corporation, Alhambra CA

Jun. 1983 - Sept. 1984 Research Fellow, Caltech, Applied Physics, Pasadena CA

Service Memberships

- Reviewer, New York State Office of Science, Technology, and Academic Research
- Reviewer, National Science Foundation
- Associate Editor, Optics Letters, 1986-1989
- Topical Editor, Optics Letters, 1991-1994
- Editorial Advisory Board, Optics Communications, 1991-1997



Contact Info

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View

- > Curriculum Vitae (PDF)
- > Publications
- > Research website

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