## USING LIGHT-BASED TECHNOLOGIES TO SAVE LIVES

DR. MARCO MOLINARO, UC DAVIS CENTER FOR BIOPHOTONICS



Date:	Wednesday, April 13, 2011
Time:	6:30 No-host bar. Program begins at 7:00 p.m.
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**Cost:** \$5 donation requested (students free)

Location: Tahoe Center for Environmental Sciences, 291 Country Club Drive, Incline Village, Nevada

Biophotonics can be defined simply as the study of the interaction of light with biological material – where "light" includes all forms of radiant energy whose quantum unit is the photon. In biophotonics we generate and harness these photons to image, detect and manipulate biological materials as well as detect and cure disease.

With revolutionary advances in biomedical science, our understanding of the mechanisms of human health and disease has extended into the regime of cellular and molecular structure and function. The ability to image, analyze, and manipulate living tissue at this level (and to do so in a minimally- or noninvasive manner) has become essential for continued progress in biomedical Dr. Marco Molinaro has a dual B.S. in Biophysics and Chemistry from Wayne State University and a Ph.D. in biophysical chemistry from UC Berkeley. His current and on-going research interests involve: methods to engage K-12 students and teachers in learning about and conducting scientific research, approaches for facilitating public understanding of research, integrating cutting edge scientific research and researchers with the formal and informal educational enterprises, and approaches to attracting, engaging, and retaining underrepresented students in science.

research and development. Light is unique in that it can be utilized to perform exactly these functions; and for this reason, biophotonics is widely regarded as the key science upon which the next generation of clinical tools and biomedical research instruments will be based.

The Center for Biophotonics Science and Technology advances research, development, and applications of new optical/photonic tools and technology in medicine and the life sciences. Join Dr. Marco Molinaro in learning about the fascinating new field of biophotonics.

