

# School of Biological Sciences

Spring 2012



## THE LECTURE SERIES AND ITS PURPOSE

The R. Omar and Evelyn Rilett Family Life Sciences Lecture Series was established in April 2007. It recognizes Dr. Rilett's vision and leadership, which built a Department of Biological Sciences at Illinois State University that advanced education in the natural sciences, fostered scholarly endeavors, and nurtured the development of research to the benefit of all who chose to teach and learn at this institution. The purpose is to bring outstanding life scientists and lectures to Illinois State University to benefit academic and local communities.

# School of Biological Sciences

—presents—

R. Omar and Evelyn

Rilett Family

Life Sciences Lecture Series

Co-Sponsored by the

School of Biological Sciences, Phi Sigma,  
College of Arts and Sciences, Provost Office,  
and Research and Sponsored Programs



Dr. Jack Kaplan, Ph.D., F.R.S.  
Benjamin Goldberg Professor and Head  
University of IL at Chicago

**March 22nd, 2012 7:00 P.M.**

**Prairie Room**

**Bone Student Center**

**Illinois State University**

## LECTURE SERIES PROGRAM

### WELCOME

Dr. Craig Gatto

Director, School of Biological Sciences

### HISTORY OF LECTURE SERIES

Dr. Herman Brockman

Professor of Genetics, Emeritus

Distinguished Professor

### INTRODUCTION OF SPEAKER

Dr. Craig Gatto

Director, School of Biological Sciences

### PRESENTATION

**“Let there be light!**

**Using Photochemistry to  
Probe Biological Processes”**



The power of using light microscopy at higher and higher levels of resolution has been appreciated in biological sciences for the last three hundred years. We have advanced from exciting but rudimentary views of organisms and cells to the amazing sub-cellular resolution of the confocal microscope. During the last thirty years we have begun to appreciate that we can use light in other equally exciting ways. We can use light to trigger very rapid chemical reactions, which can be used to probe how fast and how and where in cells certain biological processes occur. This talk will discuss how these new technologies were developed, what they can be used for and how they might be improved.

### Highlights of Dr. Jack Kaplan's career, thus far:

#### Education:

1966 B.Sc. (Hons) Univ. of Manchester (Chemistry)  
1969 M.Sc. Univ. of Warwick (Mol. Enzymology)  
1973 Ph.D. Univ. of London (Biophysics)

#### Postgraduate Training and Fellowship Appointments:

1973-75 Max Planck Institute for Biophysics, Frankfurt, Germany

#### Faculty Appointments:

1975-1978 Research Associate, Dept of Physiology, Yale University  
1978-1981 Assistant Professor, Dept of Physiology & Biophysics, University of Iowa  
1981-1985 Assistant Professor, Dept of Physiology, University of Pennsylvania  
1985-1988 Associate Professor, Dept of Physiology, University of Pennsylvania  
1988-1994 Professor of Physiology, University of Pennsylvania  
1994- 2003 Professor and Chair, Dept of Biochemistry & Molecular Biology, Oregon Health & Science University  
2003- Benjamin Goldberg Professor & Head, Dept of Biochemistry & Molecular Genetics, University of Illinois (UIC) at Chicago  
2004- 2005 Interim Sen. Assoc. Dean for Research, COM, UIC  
2011- Associate Director for Basic Science, University of Illinois Cancer Center

#### Awards and Honors:

1973 Max Planck Society Post-Doctoral Fellowship  
1980 Travel Award to attend XXVIII IUPS Congress, Budapest, Hungary from IUPS National Committee  
1982-1987 Awarded Research Career Development Award (KO4 HL 01092) by National Heart, Lung & Blood Institute (NIH)  
1983 Appointed Visiting Senior Scientist, Biochemistry Department, Weizmann Institute of Science, Rehovot, Israel  
1985 M.A. (Hon. Caus) University of Pennsylvania  
1990 Royal Society Guest Fellow, Nat. Inst. for Med. Res. London, Host Dr. N.M. Green, F.R.S  
1995 Alexander Von Humboldt Senior Scientist Award  
1995 Fellow of the Royal Society, London  
1999 Fellow of the Biophysical Society