

---

## **Notre Dame Interdisciplinary Center for the Study of Biocomplexity (ICSB)**

Activities for the Spring 2006

---

### **Distinguished Lecture Series**

Professor Ward Watt  
Department of Biological Sciences  
Stanford University

Title: "Vertically integrated biocomplexity: tracing natural selection from molecular structures to niche structures"

Time: 4:00pm March 9, Thursday

Place: Galvin Auditorium

---

### **Biocomplexity Seminars, Lectures and Workshops**

---

Wednesday, February 15, 2006 4:00 p.m. NSH 118  
(Refreshments at 3:30 p.m. NSH 284)

#### **Physics Colloquium**

Mark Alber

Departments of Mathematics and Physics and  
Center for the Study of Biocomplexity  
University of Notre Dame

Title: On Pattern Formation and Cell Aggregation in Biology

---

Tuesday, March 2 – 4:00pm

DeBartolo 140

Tea: 3:30pm

Robert D. Skeel

Computer Science & Mathematics, Purdue University

Title: "Fast electrostatics and polarizable force fields"

Host: Jesus Izaguirre

---

Monday - March 6 - 4:00PM

Qing Nie

Mathematics Department, University of California – Irvine

Title: "Robustness of Morphogen Gradients"

127 Hayes-Healy Center TEA - 3:30 PM in 257 Hurley

Host: Mark Alber

Co-sponsored by CAM and ICSB

---

Thursday, March 9 - 4pm

**Distinguished Lecture Series**

Ward Watt

Department of Biological Sciences, Stanford University

Title: "Vertically integrated biocomplexity: tracing natural selection from molecular structures to niche structures"

Place: Galvin Auditorium

Hosts: Jessica Hellmann and Mark Alber

---

**Spring CAM Workshop in Stochastic Modeling, March 23-26, 2006**

<http://www.cam.nd.edu/StochasticModeling/index.htm>

Speakers in Biomodeling:

Alan Bishop, Theoretical Division Leader, Los Alamos National Laboratory

Philip Maini, Director, Center for Mathematical Biology, Oxford University

William Kath, Co-Director, Northwestern Institute on Complex Systems

Co-sponsored by CAM and ICSB

---

Tuesday, March 28 - 4pm

DeBartolo 120

Tea: 3:30pm

Eric Darve

Mechanical Engineering, Stanford University

Title: "Computing free energy using thermodynamic integration"

Host: Jesus Izaguirre

---

Thursday, April 6 - 4pm

127 Hayes-Healy Center

\*TEA -3:30 PM in 257 Hurley

Markos Katsoulakis

Mathematics Department

University of Massachusetts

Title: TBA

Host: Mark Alber

Sponsored by CAM

---

Friday, April 7 - 3pm

229 Hayes-Healy Center

Natalia Komarova

Mathematics Department, University of California, Irvine

Title: "Cancer as Somatic Evolution"

Host: Mark Alber  
Sponsored by ICSB

---

Friday, April 7 - 4pm  
127 Hayes-Healy Center  
\*TEA -3:30 PM in 257 Hurley  
Howard Levine  
Iowa State University  
Title: "A Mathematical Analysis of SELEX"  
Host: Bei Hu  
Sponsored by CAM

---

**April 7-9: Workshop on Modeling Cancer** and a Special Session on Mathematical Biology at the AMS Meeting at Notre Dame  
DeBartolo Hall

---

Tuesday, April 25 - 4pm  
DeBartolo 120  
Tea: 3:30pm  
Ron Elber  
Computer Science & Computational Biology, Cornell University  
Title: "Computational Molecular Biophysics at broad range of time scales"  
Host: Jesus Izaguirre

---

Thursday, April 27  
DeBartolo 140  
Tea: 3:30pm  
Nathan Baker  
Biochemistry & Molecular Biophysics, Washington University St Louis  
Title: "Theory and modeling of biomolecular solvation: applications to ion-membrane interactions"  
Host: Jesus Izaguirre

---