INSIDE SFI:  
ON AND OFF THE COWAN CAMPUS  
http://www.santafe.edu/events/update/insidesfi.php

West Presents Two Lectures at National Science Foundation  
Geoffrey West (SFI President and Distinguished Professor) was invited to give two lectures on June 12 and 13 in Arlington, Virginia, as part of the National Science Foundation’s Distinguished Lecture Series.

The lectures were entitled “Santa Fe Institute: An Experiment in Transformational, Transdisciplinary Science,” and “On the Scale and Unity of Life from Cells to Cities: Towards a Unified Quantitative Theory of Biological and Social Structure and Organization.”

Bowles Gives Federico Caffé Lecture  
Samuel Bowles (SFI Professor) gave the Federico Caffé Lecture in Rome on May 16, 2007, commemorating the disappearance of the well-known economist and public intellectual 20 years ago. The talk, delivered in Italian in the hall where Caffé gave his last lecture, was entitled “Equality’s Fate.” Bowles related Caffé’s work to the research of the ongoing SFI working group on the dynamics of inequality. The Mayor of Rome, the head of the Italian trade unions and the President of Confindustria, and the National Business Organization participated in a follow-up roundtable.

Scientists Model Hepatitis C Virus  
Alan Perelson (LANL and SFI External Professor) in collaboration with other scientists from LANL and the Center for HCV Research at Rockefeller University developed the first mathematical model of intracellular HCV (hepatitis C virus) replication. The model is designed to help scientists and medical researchers develop a better understanding of the dynamics of replication, as well as the mechanisms of drugs currently being used to treat HCV.

SFI in Nature  
New work by Max Wolf (Graduate Student, University of Groningen and SFI), Sander van Doorn (SFI Postdoctoral Fellow), Franz Weissing (University of Groningen), and Olof Leimar (Stockholm University) offers an explanation for the evolution of animal personalities. Their findings are detailed in “Life-History Trade-Offs Favour the Evolution of Animal Personalities” in the May 31, 2007, issue of Nature.

July Public Lecture  
The next Public Lecture will be on Wednesday, July 25, 2007, at the James A. Little Theatre. Elisabeth Wood (Professor of Political Science at Yale University and SFI Professor), will give a talk entitled “Sexual Violence During War.” Chris Wood (SFI Vice President) will join her as a discussant.

Abstract: Wartime sexual violence inflicts unspeakable suffering on some of the world’s most vulnerable populations — girls and women in conflict areas. In some conflicts such as those in Bosnia and Rwanda, sexual violence was rampant. But contrary to popular perception, it is not one of the unavoidable horrors of war. In other wars, including some ethnic conflicts marked by extensive violence against defenseless civilians, it is quite limited. The form of sexual violence also varies, including sexual slavery in some conflicts and sexualized torture in others. Wood suggests an explanation, and considers ways of limiting the occurrence of sexual violence during war.

Prizes for Scientific Excellence  
The Santa Fe Institute presented the annual Prizes for Scientific Excellence to 11 seniors from local high schools on Thursday, May 3, 2007. This award goes to graduating high school students whose work embodies the spirit and rigor of SFI science. Students were nominated by their science teachers for their creativity, originality, and academic excellence. One student from each high school received a $500 award: Eveli Abeyta, Santa Fe Indian School; Anasha Cummings, Santa Fe Waldorf High School; Ben Foreback, Santa Fe High School; Peer Hofstra, Monte del Sol Charter School; Ben Knudsen, Academy for Technology and the Classics; Amy Lucero, New Mexico School for the Deaf; Daniel Nizio, SER/SFPS Career Academy; Mischa Noll, Santa Fe Preparatory School; Lizcet Ochoa, Capital High School; Jennifer With, St. Michael’s High School; Ann Theresa Wittman, Desert Academy.

The 2007 Prize for Outstanding Teaching in Math/Science was presented to Jay Shelton of Santa Fe Preparatory School. Jay was nominated and introduced by Santa Fe Prep Head of School Jim Leonard. Jay received a $1,000 award.

Special thanks to the Los Alamos National Bank for supporting this program.

BUSINESS NETWORK NEWS  
http://www.santafe.edu/events/update/businessnetwork.php

Business Network Fellowships Announced  
SFI is pleased to award 2007-2008 Business Network Fellowships to Dr. Brian Tivnan (MITRE Corporation), and Mr. William Glenney (CNO-SSG). Congratulations to Dr. Tivnan and Mr. Glenney and thank you to all who contributed to this year’s high-quality pool of applicants.

More information regarding Dr. Tivnan’s and Mr. Glenney’s projects will be posted online next month.

Complex Systems Summer School 2007  
We are pleased to report that the Complex Systems Summer School, held in June in Santa Fe, was yet another success. Thanks to all Business Network representatives who participated in this year’s school.

2007 Topical Meeting Schedule  
July 30 – Dynamics of Flows on Distributed Networks with David Krakauer, Seattle, WA
SFI Welcomes Two New Business Network Members

Southeastern Asset Management is a $34.0 billion, independently owned, registered investment advisory firm, advisor to the Longleaf Partners group of no-load mutual funds: Longleaf Partners Fund, Longleaf Partners International Fund, and Longleaf Partners Small Cap Fund. It also advises institutional accounts including endowments, foundations, public, and private retirement funds.

The Tudor Group, which consists of Tudor Investment Corporation and its affiliates, is involved in active trading, investing, and research in the global equity, debt, currency, and commodity markets.

SFI Professor in New York Times

“Darwin Still Rules, but Some Biologists Dream of a Paradigm Shift,” an essay by SFI Professor Doug Erwin (Smithsonian Institution and SFI Professor) appeared in the June 26, 2007, issue of Science.

SFI Science Board Member in National Geographic

An article entitled “Swarm Theory,” by Deborah Gordon (Stanford University and SFI Science Board member) was featured in the July 2007 issue of National Geographic.

West featured in New Scientist

SFI President and Distinguished Professor Geoffrey B. West and collaborator Luis Bettencourt (Los Alamos National Laboratory) were featured in New Scientist May 23, 2007. The article entitled “Ideas: The Lifeblood of Cities,” can be found online at http://www.newscientist.com/channel/being-human/mg19426051.400-ideas-the-lifeblood-of-cities.html

Marquet featured in PNAS

An article entitled “Scaling Metabolic Rate Fluctuations,” by Pablo Marquet (SFI International Fellow), was featured in PNAS. For more information, please see http://www.pnas.org/cgi/gca?allchb=&SEARCHID=1&FULLTEXT=pablo+marquet&FIRSTINDEX=0&hits=10&RESULTFORMAT=&gca=pnas%3B104%2F26%2F10900&allchb=

PUBLICATIONS

http://www.santafe.edu/events/update/publications.php

Working Papers

http://www.santafe.edu/research/publications/working-papers.php

07-06-012
The Ontogeny of Scale-Free Syntax Networks through Language Acquisition
Bernat Corominas-Murtra, Sergi Valverde, and Ricard V. Solé

07-06-011
Scaling Metabolic Rate Fluctuations
Fabio A. Labra, Pablo A. Marquet, and F. Bozinovic

07-06-010
Prokaryote Phylogeny Meets Taxonomy: An Exhaustive Comparison of Composition Vector Trees with Systematic Bacteriology
Lei Gao, Ji Qi, Jiandong Sun, and Bailin Hao

07-06-009
Cancer Stem Cells as the Engine of Tumor Progression
Ricard V. Solé, Carlos Rodriguez-Caso, Thomas S. Deisboeck, and Joan Saldanya

Refereed Literature

http://www.santafe.edu/events/update/publications.php


Library Acquisitions
For a list of recent purchases by the SFI Library, please see http://www.santafe.edu/events/update/library.php.

CALENDAR OF EVENTS
http://www.santafe.edu/events/

**July 8-21, 2007**
Educational Program — “Graduate Workshop in Computation Social Science Modeling and Complexity,” organized by John Miller (Carnegie Mellon University & SFI) and Scott Page (University of Michigan & SFI). Held at the James A. Little Theater, New Mexico School for the Deaf.

**July 8 - August 4, 2007**
Educational Program — “Complex Systems Summer School - Beijing,” Co-directors: David P. Feldman (College of the Atlantic & SFI) and Chen Xiao-song (Institute for Theoretical Physics, CAS). Sponsored by SFI in cooperation with the Institute of Theoretical Physics and the Graduate School, Chinese Academy of Sciences (CAS). Held at the Institute of Theoretical Physics in Beijing, China.

**July 9-13, 2007**
Workshop — “Scaling in Biological and Social Networks,” organized by Paul Bourgine (Ecole Polytechnique & ISC-PIF Paris), Cris Moore (University of New Mexico & SFI), and Michel Morvan (Ecole Normal Superieure de Lyon, IXXI Lyon & SFI). Held at the Santa Fe Institute.

**July 23 - August 3, 2007**
Educational Program — “Growing Up Thinking Scientifically (GUTS) Program,” organized by Irene Lee (SFI). Held at the Santa Fe Institute.

**July 25, 2007**
Public Lecture — “Sexual Violence during War,” Elisabeth Wood (Yale University, Political Science & SFI) organized by Ginger Richardson (SFI). Held at the James A. Little Theater, New Mexico School for the Deaf.

**August 13-24, 2007**
Educational Program — “Growing Up Thinking Scientifically (GUTS) Program,” organized by Irene Lee (SFI). Held at the Santa Fe Institute.

**August 15, 2007**
Public Lecture — “Investor Behavior and Market Efficiency,” Terrance Odean (Haas School of Business, University of California at Berkeley) organized by Ginger Richardson (SFI). Held at the James A. Little Theater, New Mexico School for the Deaf.

**September 6-7, 2007**
Business Network Topical Meeting — “Conflict and Cooperation: Strategy in Complex Systems,” Co-presented by William Glenney (CNO-SSG) and Shannon Larsen (SFI). This meeting will take place in Washington, D.C.

**September 11, 12, & 13, 2007**
ULAM Memorial Lecture Series — “Ancient Perspectives on Future Climate,” Daniel Schrag (Harvard University, Laboratory for Geochemical Oceanography), organized by Ginger Richardson (SFI). Held at the James A. Little Theater, New Mexico School for the Deaf.

**September 27, 2007**
Business Network Topical Meeting — “ARCS 2007 (Adaptive and Resilient Computer Security) Workshop.” This meeting is co-organized by Dr. Robert Ghanea-Hercock (BT) and Shannon Larsen (SFI). Held at the Imperial War College, London.

**October 7-10, 2007**
Workshop — “High-Level Perception and Low-Level Vision: Bridging the Semantic Gap,” organized by Melanie Mitchell (Portland State University & SFI) and Garrett Kenyon (LANL). Held at the Santa Fe Institute.

**October 17, 2007**
Public Lecture — “Borders and Gateways: Computer Networking in Everyday Life,” Stephanie Forrest (University of New Mexico & SFI) organized by Ginger Richardson (SFI). Held at the James A. Little Theater, New Mexico School for the Deaf.

**October 28-31, 2007**

**November 14, 2007**

JULY VISITORS AND ARRIVALS
http://www.santafe.edu/events/monthlyvisitors.php

Nancy Abrams (7/18-20) Purpose of visit: Colloquium. SFI host: Geoffrey West.


Patrick Ball (7/8-15), CTO & Human Rights Program Director, the Benetch Initiative. Purpose of visit: Research Collaboration. SFI host: Libby Wood.

Jenna Bednar (7/8-21), Dept. of Political Science, University of Michigan. Purpose of visit: Research Collaboration. SFI host: Chris Wood.

Elhanan Borenstein (7/1-8/5), School of Computer Science, Tel-Aviv University. Purpose of visit: Postdoctoral Research. SFI host: Chris Wood.
Sam Bowles (7/6-8/23), Professor, Santa Fe Institute. Purpose of visit: Resident Faculty. SFI host: Chris Wood.


Juan-Camilo Cardenas (7/7-21), Facultad de Economia - CEDE, Universidad de los Andes. Purpose of visit: Research Collaboration. SFI host: Sam Bowles.

Rob de Boer (7/1-8/6), Theoretical Biology, Utrecht University. Purpose of visit: External Faculty. SFI host: Alan Perelson.

Doug Erwin (7/11-17), National Museum of Natural History, Smithsonian Institution. Purpose of visit: Resident Faculty. SFI host: Chris Wood.

Daniel Everett (7/24-29), Chair of Languages, Literatures, and Cultures, Illinois State University. Purpose of visit: Colloquium. SFI host: Chris Wood.

Vitaly Ganusov (7/17-22), Theoretical Biology, Utrecht University. Purpose of visit: Research Collaboration. SFI host: Alan Perelson.

Michelle Girvan (7/1-21), Postdoctoral Fellow, Santa Fe Institute. Purpose of visit: Research Collaboration. SFI host: Chris Wood.

Francisco Gutierrez (7/8-28), International Relations, IEPRI, Universidad Nacional de Colombia. Purpose of visit: International Fellow. SFI host: Shannon Larsen.

Amelia Hoover (7/8-15), Political Science, Yale University. Purpose of visit: Research Collaboration. SFI host: Libby Wood.

Sung Ha Hwang (7/14-28), Economics, University of Massachusetts, Amherst. Purpose of visit: Research Collaboration. SFI host: Sam Bowles.

Erica Jen (7/4-8/6), Faculty, Santa Fe Institute. Purpose of visit: External Faculty. SFI host: Chris Wood.

Jinyun Ke (7/12-9/3), English Language Institute, University of Michigan. Purpose of visit: Graduate Studies. SFI host: Chris Wood.

Willemien Kets (7/8-17), Econometrics and Operations Research, Tilburg University. Purpose of visit: Postdoctoral Research. SFI host: Sam Bowles.

Seth Lloyd (7/1-8/15), Dept. of Mechanical Engineering, Massachusetts Institute of Technology. Purpose of visit: External Faculty. SFI host: Chris Wood.

Earle Lomon (7/1-8/31), Physics, Massachusetts Insitute of Technology. Purpose of visit: Research Collaboration. SFI host: Geoffrey West.

Meghan Lynch (7/8-15), Political Science, Yale University. Purpose of visit: Research Collaboration. SFI host: Libby Wood.

Sperling Martin (7/17-20), Information Resources Management. SFI host: Chris Wood.

Alexander Militarev (7/8-10), Institute of Linguistics, Russian State University for the Humanities. Purpose of visit: Research Collaboration. SFI host: David Krakauer.

Michel Morvan (7/6-21), Institut des systèmes complexes, Ecole Normale Supérieure de Lyon. Purpose of visit: External Faculty. SFI host: Chris Wood.

Scott Page (7/6-20), Political Science and Economics/Ctr. for Study of Complex Systems, University of Michigan. Purpose of visit: Research Collaboration. SFI host: Chris Wood.

Joel Primack (7/18-20), Physics Department, University of California, Santa Cruz. Purpose of visit: Colloquium. SFI host: Geoffrey West.

Hal Scheintaub (7/22-8/4), Teacher Education, Governor Dummer Academy. Purpose of visit: Education. SFI host: Ginger Richardson.


Rajiv Sethi (7/11-8/14), Department of Economics, Columbia University. Purpose of visit: Research Collaboration. SFI host: Sam Bowles.

Carlos Sickert (7/1-31), Instituto de Sociologia, Universidad Catolica de Chile. Purpose of visit: Research Collaboration. SFI host: Sam Bowles.

Rohini Somanathan (7/25-8/15), Economics, Delhi School of Economics. Purpose of visit: Research Collaboration. SFI host: Sam Bowles.

Charles Stevens (7/22-8/31), Molecular Neurobiology Lab, The Salk Institute. Purpose of visit: External Faculty. SFI host: Chris Wood.

Jorge Velasco-Hernandez (7/1-9), Matematicas Aplicadas y Computacion, Instituto Mexicano del Petroleo. Purpose of visit: International Visitor. SFI host: Shannon Larsen.

Libby Wood (7/6-8/23), Professor of Political Science, Yale University. Purpose of visit: Resident Faculty. SFI host: Chris Wood.

Paolo Zanotto (7/16-29), Director of the Laboratory of Molecular Evolution and Bioinformatics [LEMB], University of Sao Paulo. Purpose of visit: Research Collaboration. SFI host: David Krakauer.