

## LEADING WORLD SCIENTISTS

in the disciplines of Agroecology & Plant Science, Biomedical Sciences, Sustainable Agriculture, Nutrition, Medicine and Anthropology will convene to discuss the most recent scientific advances in cocoa, while exploring its potential impact on health, nutrition, culture, medicine and the environment.

## SYMPOSIUM GOALS



**Explore in-depth** the ability of agriculture to deliver life-changing advances in medicine, nutrition and public health.



**Identify and reveal** recent scientific advances in cocoa, illustrating its potential ability to positively impact health, nutrition, culture, medicine and the environment.



**Promote and build** scientific collaborations to further enhance the positive impact of cocoa and other food crops on society.



For further information  
or to register,  
visit our website at:  
[www.cocoasympoium2004.com](http://www.cocoasympoium2004.com)

or contact  
Symposium Planner Jennifer Collins at:  
[info@cocoasympoium2004.com](mailto:info@cocoasympoium2004.com)



*We gratefully acknowledge  
our symposium sponsors:*

*University of California, Davis  
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United States Department of Agriculture,  
Agricultural Research Service  
The Smithsonian Institution  
National Institutes of Health, Fogarty  
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### Symposium Steering Committee

**M.R.C. Greenwood, Ph.D.,**  
Chancellor  
University of California, Santa Cruz  
(Chair)

**Felipe Solis, Ph.D.**  
Mexican National Anthropological Museum

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German Academy of Sciences, Germany

**Peter Raven, Ph.D.**  
Missouri Botanical Gardens

**Alexandra Navrotsky, Ph.D.**  
University of California, Davis

**Catherine E. Woteki, Ph.D., RD**  
Iowa State University

# COCOA SYMPOSIUM 2004

*Please plan to join us for  
an exciting symposium  
featuring positive  
discoveries in cocoa  
science*

**February 10, 2004**

**The National Academies**

**Washington, D.C.**



# PROGRAM

8:25 am

**Symposium Called to Order** with Poetry by Francisco Alarcon, Department of Spanish and Classics, UC Davis



8:30 am

**Symposium Opening Remarks** by Chair M.R.C. Greenwood, Ph.D., Chancellor, UC Santa Cruz



8:40 am

**Session—Anthropology and History**

Louis E. Grivetti, Ph.D., Department of Nutrition, UC Davis



8:50 am

**Poetry Selection** by Francisco Alarcon, Department of Spanish and Classics, UC Davis



8:55 am

**Session—Agroecology and Plant Science**

Session Chair: Cristian Samper, Ph.D., Director, National Museum of Natural History, Smithsonian Institution

**Presentation—Can Modern Plant Science Drive the Agroecology of an Ancient Crop?** Raymond Schnell, Ph.D., Supervisory Research Geneticist, USDA

**Presentation—Biodiversity and Cocoa Farming**, Jim Gockowski, Ph.D., International Institute of Tropical Agriculture

**Panel Discussion**

Judith B. St. John, Associate Deputy Administrator, USDA ARS  
*Howard Shapiro*, Ph.D., Director of Plant Science, Mars, Incorporated  
Philippe Petithuguenin, Head, CIRAD

10:30 am

**Break – Themed Beverages**  
(Pre-Columbian, Post and Future)

11:00 am

**Session—Biomedical Sciences**, Introduction by Helmut Sies, M.D., Ph.D. (hon), FRCP, President, NRW Academy of Sciences, Germany

**Presentation—Cocoa Flavanols, Nitric Oxide Synthesis and Endothelial Function**, Norman Hollenberg, M.D., Ph.D, Professor of Medicine and Radiology, Harvard Medical School

**Presentation—Nitric Oxide: Its Role in Vascular Health**, Thomas Luscher, M.D., FRCP, Professor & Head of Cardiology, University of Zurich

**Presentation—Dietary Flavanols: Their Chemistry and Occurrence in Foods and Beverages**, Harold Schmitz, Ph.D., Director of Science and External Research, Mars, Incorporated.

**Panel Discussion**

Carl Keen, Ph.D., Chair, Department of Nutrition, UC Davis

Joseph Spence, Ph.D., Acting Associate Deputy Administrator for Animal Production, Product Value and Safety, USDA ARS

12:30 pm

Lunch



1:55 pm

**Symposium Called to Order** with Poetry by Francisco Alarcon, Department of Spanish and Classics, UC Davis



2:00 pm

**Introduction to the Afternoon** by Symposium Chair M.R.C. Greenwood



2:10 pm

**Session—Sustainable Cocoa Agroforests for Nutritional Security and Health**, Roger Leakey, Ph.D., Professor of Agroecology, James Cook University, Australia

2:40 pm

**Panel A—What are the Opportunities to Link Biomedical and Agricultural Science?**

Session Chair: Catherine Woteki, Ph.D., RD, Dean, College of Agriculture, Iowa State University

Panelists:

Joshua Rosenthal, Ph.D., Biodiversity Program Director, Fogarty International Center, National Institutes of Health

Lewis Landsberg M.D., Dean, The Feinberg School of Medicine, Northwestern University

Neal Van Alfen, Ph.D., Dean, College of Agricultural and Environmental Science, UC Davis.



3:25 pm

**Break – Themed Chocolate Tasting**  
(Milk and Dark Chocolate)



3:55 pm

**Panel B: What is Cocoa's Role in the Economic and Environmental Rural development ?**

Session Chair: Carole L. Brookins, Executive Director for the USA, World Bank

Panelists to be confirmed:

J.B. Penn Under Secretary, Farm & Foreign Agricultural Services, United States Department of Agriculture,

Emmy B. Simmons, Assistant Administrator for Economic Growth, Agriculture and Trade U.S. Agency for International Development

James P. Bond, Director of Rural Development, World Bank

5:00 pm

**Symposium Closing Remarks** by M.R.C. Greenwood



5:30 pm

**Reception and Poster Presentations**