

CONTENTS

89th ANNUAL MEETING of the AAAS PACIFIC DIVISION PROGRAM with ABSTRACTS

GENERAL INFORMATION

Policies.....	4
Governance.....	5
Greeting from Dr. Terrence Gosliner, President, AAAS Pacific Division.....	7
Sections Sponsoring Sessions at the Annual Meeting.....	9
History of the Hawaiian Islands.....	9
Hawai'i's Climate.....	11
Hawai'i Preparatory Academy, The Big Island, and Waimea.....	11
Registration.....	12
Accommodations and Food Service.....	12
General Information about the HPA Campus and Dorms.....	13
Local Hotels and Motels.....	13
Travel to the Meeting and Parking.....	13
Registration Center.....	14
Messages.....	14
Breaks.....	14
Meeting Rooms.....	14
Computers and PowerPoint Presentations.....	14
Poster Sessions.....	14
Student Awards for Excellence.....	15
Special Events.....	15
Public Lectures.....	16
Field Trips.....	17
Workshops.....	19
Program at a Glance.....	22

GENERAL SESSIONS

Traditional Hawaiian Blessing.....	23
Sunday Dinner/Reception.....	23
Sunday Evening Public Plenary Lecture.....	23
Pacific Science Association and Tahiti Inter-Congress Planning Discussion.....	23
Monday Noon Public Lecture.....	23
Monday Evening Hapuna Beach Picnic.....	23
Tuesday Evening Public Lecture.....	24
Western Society of Crop Science Business Meeting.....	24
Wednesday Noon Public Lecture.....	24
Student Awards Presentations.....	24
AAAS, Pacific Division Presidential Lecture.....	24
AAAS, Pacific Division Annual Banquet.....	25
Council of the Pacific Division Business Meeting.....	25
Thursday Evening Public Lecture.....	25

TECHNICAL SESSIONS

I. Symposia

<i>Monday, June 16</i>	
Conservation Status of Hawaiian Native Land Snails.....	27
Missionaries and Museums, Imperialists and Nationalists, State Needs and Cold-War Politics: Anthropology in East and Southeast Asia.....	27
New Humanities and Science Convergences: Paradise Lost and.....Recoverable?.....	28
Current Research Perspectives on Palmyra Atoll, A Remote Central Pacific Outpost for Biodiversity.....	29
Hawaiian Anchialine Pool Ecosystem Conservation and Management: The Present Status and Future of Anchialine Pools.....	30
Physics, Materials Science and Nanotechnology.....	31
<i>Wednesday, June 18</i>	
Progress in Vaccine and Drug Development.....	32

Evolution and Conservation of Hawaiian Birds: Results of a Twenty Year Study.....	32
Putting the Science in Informal Science Education: Pathways to Broader Impacts.....	33
Celebration and Politics: Race and Ethnicity in America Seen Through United States World's Fairs and Expositions.....	33
Pacific Science: U.S. – Asia/Pacific Scientific Collaboration in the 21 st Century.....	34

Thursday, June 19

Asian American Women: Health and Welfare.....	35
Past and Future of the Fauna of the Pacific Basin.....	35
North Meets South: Special Neuroscience Research Programs in the Pacific.....	36
Hawai'i Archives: Records and Special Collections.....	37
Impacts of Disease on Native Hawaiian Species.....	37

II. Workshops

Wednesday, June 18

How to Integrate Project Based Learning in the Classroom: Strategies for Teachers.....	39
---	----

Thursday, June 19

Teaching Science as Inquiry: Marine Science.....	39
Vernier Software and Technology Workshop.....	39

III. Contributed Paper Sessions

Monday, June 16

Western Society of Crop Science.....	41
Chemistry and Biochemistry; Health Sciences.....	42
Education; History and Philosophy of Science.....	42

Wednesday, June 18

Agriculture and Horticulture; Anthropology and Archaeology; Ecology, Organismal Biology and Environmental Sciences.....	43
Atmospheric and Oceanographic Sciences; Earth Sciences; Industrial Sciences and Technology.....	44

Thursday, June 19

Social, Economic and Political Sciences.....	45
--	----

IV. Contributed Posters

Session I: Monday, June 16

Education.....	47
General and Interdisciplinary.....	47
Health Sciences.....	47
Ecology, Organismal Biology and Environmental Sciences.....	48
Chemistry and Biochemistry.....	48

Session II: Wednesday, 18 June

Physics and Materials Science.....	49
Agriculture and Horticultural Science.....	50
Earth Sciences.....	50
Anthropology and Archaeology.....	50
Social, Economic and Political Sciences.....	50

ABSTRACTS.....	51
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INDEX to AUTHORS.....	107
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MAP

Hawai'i Preparatory Academy.....	Inside Front Cover
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Wednesday, 18 June 2008

Progress in Vaccine and Drug Development

Castle Lecture Hall
 Wednesday
 8:25 AM – 4:00 PM

Program Organizer: Kenneth A. Cornell (Department of Chemistry and Biochemistry, Boise State University, Boise, ID)

Sponsored by the Pacific Division sections of Cell and Molecular Biology, Chemistry and Biochemistry, and Health Sciences.

Recent years have seen an increasing threat to human, animal and plant health due to the spread of exotic diseases and the emergence of drug resistant microbes and neoplasms. This session will focus on recent developments in vaccines and chemotherapeutics for infectious diseases and cancer. Investigators are invited to present research on identification of targets for antibiotic/chemotherapeutic development, new drug synthesis and screening strategies, and the development of novel adjuvants and vaccines. Also included in this session will be work on elucidating mechanisms of pathogenesis and cellular invasion, and the identification of emergent infectious diseases. Investigators with relevant work from the fields of cell biology, microbiology, chemistry, biochemistry and materials science are encouraged to attend and sponsor cross-disciplinary discussions.

Session Chair: Kenneth A. Cornell

0825 *Introductory Comments*

0830 **62** *Intersecting Recycling Pathways: Biochemical Analysis of E. histolytica MTA Nucleosidase as a Target for Antiparasitic Drug Development.* *DANIEL QUAPP and KEN CORNELL (Department of Chemistry and Biochemistry, Boise State University, Boise, ID)

0900 **63** *Reconstitution of Autoinducer II Effects in E. coli MTN Knockout Strains.* *J.A. MARTINEZ and K.A. CORNELL (Department of Chemistry and Biochemistry, Boise State University, Boise, ID)

0930 **64** *Adventures in Paradise: Research at the College of Pharmacy, University of Hawaii Hilo.* ROBERT P. BORRIS (College of Pharmacy, University of Hawaii - Hilo, Hilo HI)

1000 **BREAK**

1020 **65** *Bioactive Sulfated Sesterterpene Alkaloids from the Marine Sponge Fasciospongia sp.* GUANG MIN YAO¹, TAMARA P. KONDRATYUK², JOHN M. PEZZUTO² and *LENG CHEE CHANG² (¹Department of Chemistry and Biochemistry, University of Minnesota Duluth, Duluth, MN; ²Department of Pharmaceutical Sciences, College of Pharmacy, University of Hawaii at Hilo, Hilo, HI)

1050 **66** *The Marine Environment as a Resource for Discovery of Chemopreventive Agents.* *TAMARA P. KONDRATYUK, LAURA E. MARLER, JACKIE GUILFORD, KATHERINE MALONEY, WILLIAM FENICAL and JOHN M. PEZZUTO (Department of Pharmaceutical Sciences, College of Pharmacy, University of Hawaii at Hilo, Hilo, HI)

1120 **67** *Oncostatin M is a Potential Target for Inhibiting Breast Tumor Metastasis.* CHERYL L. JORCYK (Department of Biology, Boise State University, Boise, ID)

1150 **LUNCH**

1315 **68** *Marine Sources of New Alzheimer's Drug Leads.* PHILIP WILLIAMS (Department of Chemistry, University of Hawaii at Manoa, Honolulu, HI)

1345 **69** *From Snail Venom to Therapeutics: How Conotoxins Provide Insight Into Drug Design.* OWEN M. MCDOUGAL (Department of Chemistry and Biochemistry, Boise State University, Boise, ID)

1415 **70** *In Vivo Regulation of Hepatocyte Proliferation by the Aryl Hydrocarbon Receptor.* *KRISTEN A. MITCHELL¹ and CORNELIS J. ELFERINK² (¹Department of Biological Sciences, Boise State University; ²Department of Pharmacology and Toxicology, University of Texas Medical Branch, Galveston, TX)

1510 **71** *Immunodominance in Dengue Virus Infection.* *ALLISON IMRIE¹, JANET MEEKS², MUNKHZUL SUKHBAAATAR¹ and ALEXANDRA GURARY² (¹Department of Public Health Sciences; ²Department of Pediatrics, John A. Burns School of Medicine, University of Hawaii at Manoa, Honolulu, HI)

1540 **72** *Bacterial Population Signaling: Examining the Effects of Natural and Unnatural Messages.* KEN CORNELL (Department of Chemistry and Biochemistry, Boise State University, Boise, ID)

**Evolution and Conservation of Hawaiian Birds:
 Results of a Twenty Year Study**

Gerry Clark Art Center
 Wednesday
 8:30 AM – 12:00 PM

Program Organizer: Leonard Freed (Department of Zoology, University of Hawaii at Manoa, Honolulu, HI)

Sponsored by the Pacific Division section on Ecology, Organismal Biology and Environmental Science

Each paper in this symposium is based on long-term study of Hawaiian forest birds at Hakalau Forest National Wildlife Refuge. These birds are renowned among evolutionary biologists for their spectacular adaptive radiation as reflected in their plumage coloration and bill morphology. They

are equally well known among conservation biologists for extinction and endangerment. The long term study reported here will extend the study of adaptation in these birds to life history and behavior, and extend the study of extinction and endangerment to introduced species ranging from pathogens to ectoparasites to ecological competitors for food. Several papers will be about special adaptation and problems of the endangered Hawaii akepa, one of the Hawaiian honeycreepers. Each paper includes data collected over no fewer than 13 years.

Session Chair: Leonard Freed

0830 *Introductory Comments*

0840 *73 Origin, Radiation, and Current Status of Hawaiian Birds*, ***REBECCA L. CANN**¹ and **LEONARD A. FREED**² (¹Department of Cell and Molecular Biology, University of Hawaii at Manoa, Honolulu, HI; ²Department of Zoology, University of Hawaii at Manoa, Honolulu, HI)

0910 *74 Life History Diversification of Hawaiian Honeycreepers*, **LEONARD A. FREED**¹ (¹Department of Zoology, University of Hawaii at Manoa, Honolulu, HI)

0940 *75 Adaptation of the Hawaii Akepa to Molt and Breed During a Seasonal Food Decline: The Importance of Offspring Mass*, ***MATTHEW C. MEDEIROS**¹, **LEONARD A. FREED**², and **J. SCOTT FRETZ**² (¹Department of Biology and the Whitney Harris World Ecology Center, University of Missouri-St. Louis, St. Louis, MO; ²Department of Zoology, University of Hawaii at Manoa, Honolulu, HI)

1010 **BREAK**

1030 *76 Sexual Dimorphism and the Evolution of Seasonal Variation in Sex Allocation in a Hawaiian Bird*, ***REBECCA L. CANN**¹ and **LEONARD A. FREED**² (¹Department of Cell and Molecular Biology, University of Hawaii at Manoa, Honolulu, HI; ²Department of Zoology, University of Hawaii at Manoa, Honolulu, HI)

1100 *77 Explosive Increase in Ectoparasites in Hawaiian Forest Birds*, ***GUSTAV R. BODNER**¹, **LEONARD A. FREED**¹ and **MATTHEW C. MEDEIROS**² (¹Department of Zoology, University of Hawaii at Manoa, Honolulu, HI; ²Department of Biology and the Whitney Harris World Ecology Center, University of Missouri-St. Louis, St. Louis, MO)

1130 *78 Why Introduced Birds Are the Most Important Threat to Hawaiian Forest Birds*, ***LEONARD A. FREED**¹, **REBECCA L. CANN**² and **GUSTAV R. BODNER**¹ (¹Department of Zoology, University of Hawaii at Manoa, Honolulu, HI; ²Department of Cell and Molecular Biology, University of Hawaii at Manoa, Honolulu, HI)

Putting the Science in Informal Science Education: Pathways to Broader Impacts

Library
Wednesday
1:15 PM – 5:00 PM

Program Organizer: *Margaret Gould Burke* (California Academy of Sciences, San Francisco, CA)

Sponsored by the Pacific Division section on Education.

Through case studies and lessons learned, the speakers will address the opportunities and challenges facing informal science education (ISE) institutions in connecting to and effectively translating science research for public audiences, in fostering science literacy and environmental stewardship, in dealing with topics such as evolution that are viewed as controversial by some, and in effectively measuring long-term impacts of their efforts. The intricate interfaces with formal education and the world of federal funding with its mandate for broader impacts will also be explored. The last portion of the symposium is reserved for a free-wheeling exchange among speakers and the audience on these topics.

Session Chair: Margaret Gould Burke

1315 *Introductory Comments*, Margaret Gould Burke

1320 *79 Integrating Research and Education – Opportunities and Mandates*, **MARGARET GOULD BURKE** (California Academy of Sciences, Golden Gate Park, San Francisco, CA)

1400 *80 Engaging the Public in Science – It Matters*, **JUDITH G. SCOTCHMOOR** (University of California Museum of Paleontology, Berkeley, CA)

1440 **BREAK**

1510 *81 Bridging the Gap between Research and Informal Education – A New Model*, **JESSICA I. NEELY** (KQED Public Broadcasting, San Francisco, CA)

1550 *82 The Value of Sharing Our Science*, **DAVID R. LINDBERG** (University of California Museum of Paleontology, Berkeley, CA)

1630 *Discussion, Questions and Answers with Audience*

Celebration and Politics: Race and Ethnicity in America Seen Through United States World's Fairs and Expositions

Room 42
Wednesday
1:15 PM – 5:00 PM

Program Organizer: *Alan L. Bain* (Smithsonian Institution Archives)

Sponsored by the Pacific Division sections on Anthropology and Archaeology, and Social, Economic and Political Sciences

After the Civil War, the United States showed the world its growing industrial might and engineering prowess in large extravaganzas called world's fairs and invited other nations to join in the fanfare and celebration. The United States also used these exhibition cities to promote cultural identity and national pride. In so doing, the organizers of the fairs and the U. S. government both reflected America's attitude and helped shape the discussion of race and ethnicity. Over time, attitudes changed, reflecting America's changing values in foreign policy and in domestic politics.

This session examines how ideas about race and ethnicity were represented at world's fairs, starting with the 1893 World's Columbian Exposition in Chicago through the 1939 New York world's fair, and looks ahead at what may lie ahead as the United States anticipates participation in the 2010 Shanghai World Expo. In addition, the audience is shown another perspective, as the participants open the discussion from the viewpoint of Asian nations invited to participate at the fairs, the Asian American communities that joined in the fairs, and Asians that were imported to be placed on exhibition as symbols of non-civilized, non-white people and their place in what American depicted as the journey towards civilization.

Session Chair: Robert W. Rydell (Montana State University)

- 1315** *Introductory Comments*, Robert W. Rydell
- 1325** **83** *America's World's Fairs: Negotiating Boundaries of Race and Ethnicity*, **ROBERT W. RYDELL** (Department of History and Philosophy, Montana State University, Bozeman, MT)
- 1355** **84** *Chinese-American Identity in the Making: World Fairs in Chicago and Seattle*, **CHUIMEI HO** (Ph.D., Independent Scholar, Bainbridge Island, WA)
- 1430** **85** *Japanese Participation in the Two Chicago World Fairs: The Road Leading to Manchuria*, **ANDREA L. STAMM** (Librarian, Northwestern University Library, Northwestern University, Evanston, IL)
- 1500** **BREAK**
- 1520** **86** *Modern Displays and the Skeptical 'Savage': Revisiting the Philippine Experience in St Louis, 1904*, **CHERUBIM A. QUIZON** (Department of Sociology and Anthropology, Seton Hall University, South Orange, NJ)
- 1550** **87** *Chinese and Japanese Participation in the Panama-Pacific International Exposition*, **ABIGAIL MARKWYN** (Department of History, Carroll College, Waukesha, WI)
- 1625** *Commentator's Comments*, Robert W. Rydell
- 1640** *General Discussion*

Pacific Science: U.S.–Asia/Pacific Scientific Collaboration in the 21st Century

Gerry Clark Art Center

Wednesday

1:25 PM – 4:10 PM

Organized by: *John Burke Burnett* (Executive Director, Pacific Science Association, Honolulu, HI)

Sponsored by the Pacific Division section on Ecology, Organismal Biology and Environmental Science, and the Pacific Division General and Interdisciplinary Section

This symposium brings together scientists with experience in collaborative international research in Asia and the Pacific to discuss the opportunities and challenges for enhanced collaboration between American scientists and their counterparts in the Asia-Pacific region. There are many examples of very successful U.S. – Asia-Pacific scientific collaborations. Yet collaborative endeavors between U.S. individuals and institutions and those in countries with less sophisticated scientific infrastructure and academic capacity can also present challenges for researchers. While addressing broader issues of collaboration, a focus of this symposium is to present examples of successful efforts of designing and conducting research that has both advanced scientific research, and also advanced goals such as capacity-building and information repatriation that are important to less-developed nation-states. Regional scientific organizations, such as the Pacific Science Association, the ICSU's Regional Office for Asia & Pacific, and the Science Council of Asia, are addressing these issues. Given increasingly critical issues of common concern such as climate change, biodiversity loss, and the demographic, environmental and social implications of globalization, greater emphasis on research that is both multidisciplinary in nature and international in scope is critical to advancing our scientific understanding of these issues and in providing information required to make scientifically sound decisions to societies and policymakers.

Session Chair: John Burke Burnett

- 1325** *Introductory Comments*
- 1330** **88** *The Pacific Science Association: Advancing International Collaborative Research in the Asia-Pacific Since 1920*, ***NANCY D. LEWIS¹ and JOHN BURKE BURNETT²** (¹Vice-President, Pacific Science Association and Director, Research Program, The East-West Center, Honolulu, Hawaii; ²Executive Director, Pacific Science Association, Honolulu, HI)
- 1350** **89** *Highlights of International Cooperation in the Study of Plant Diversity in Vietnam, 1993-2008*, ***JACINTO C. REGALADO, JR.¹, LE XUAN CANH, TRAN HUY THAI, TRAN MINH HOI, NGUYEN TIEN HIEP, VU XUAN PHUONG, NINH KHAC BAN², PHAN KE LOC, NGUYEN NGHIA THIN³, NGUYEN VAN TAP⁴, VU VAN DUNG, NGUYEN HUY DUNG⁵ and LEONID V. AVERYANOV⁶** (¹Missouri Botanical Garden, St. Louis, MO; ²Institute of Ecology and Biological Resources, Vietnam Academy of Science and Technology, Hanoi, Vietnam; ³Hanoi National University, Hanoi, Vietnam; ⁴National Institute of Medicinal Materials, Ministry of Health, Hanoi, Vietnam; ⁵Forest Inventory and Planning Institute, Ministry of Agriculture and Rural Development, Hanoi, Vietnam; ⁶Komarov Botanical Institute of the Russian Academy of Sciences, St. Petersburg, Russia)

- 1410 90** *Global Forest Observatories: An International Network Monitoring the Health of Tropical Forests*, **STUART J. DAVIES** (Center for Tropical Forest Science, Smithsonian Tropical Research Institute and the Arnold Arboretum of Harvard University, Cambridge MA)
- 1430 91** *DNA Barcoding: International Collaboration for Species Identification in Research, Conservation, and Regulatory Affairs*, **DAVID E. SCHINDEL** (Executive Secretary, Consortium for the Barcode of Life, Smithsonian Institution, Washington DC)
- 1450 BREAK**
- 1510 92** *Global Collaboration to Address Global Problems: Trans-Pacific Collaboration for Research on Global Change and Sustainable Living on Arid Lands*, ***J. SCOTT HAUGER**¹, **QINGWEI SUN**² and **ATSUSHI TSUNEKAWA**³ (¹Desert Research Institute, Reno, NV; ²Cold and Arid Regions Environmental and Engineering Research Institute, Lanzhou, China; ³Arid Land Research Center, Tottori University, Tottori, Japan)
- 1530 93** *Exploring the Unanticipated Consequences of Ocean Acidification by Fossil Fuel CO₂*, **PETER G. BREWER** (Monterey Bay Aquarium Research Institute, Moss Landing, CA)
- 1550 94** *International Scientific Collaboration at the NOAA Pacific Islands Fisheries Science Center*, **SAMUEL G. POOLEY** (NOAA's Pacific Islands Fisheries Science Center, Honolulu, HI)

Thursday, 19 June 2008**Asian American Women: Health and Welfare**

Kono Center for English Studies

Thursday

8:00 AM – 9:45 AM

Program Organizer: *Alan L. Bain* (Smithsonian Institution Archives)

Sponsored by the Pacific Division sections on Anthropology and Archaeology, and Social, Economic and Political Sciences

Most Americans consider Asian Americans model communities. These ideas are reflected in the number of Asian Americans who attend universities and the belief that most Asian American communities are either entrepreneurial, reflected in the companies in Silicon Valley, or small business shop owners, located within communities within high crime areas, reflected in the stories about Los Angeles and the articles on store-front businesses in Washington, DC. The reality is that for Asian American women there are major, hidden problems that Americans are unaware of, poverty, lack of health care and welfare support, and high rates of cancer, and suicide.

This session takes a hard and frank look at the problems that Asian American women face in the United States. This is the only group in America where cancer is the leading cause of death. Cultural and linguistic barriers prevent cancer screening, but health insurance coverage and health care coverage play dominant roles in gaining access to physicians. Low-income Asian immigrant women have little access to prenatal care; and the roles of women and daughters within the Asian American communities, based on race and gender, racism and sexism and the pressures to perform well lead to depression and suicide.

Session Chair: *Alan L. Bain*

0800 *Introductory Comments*

0810 95 *The Role of Health Insurance and the Safety Net in Reducing Cancer Screening Disparities Among Asian American Women*, **NINEZ A. PONCE** (Department of Health Services, UCLA School of Public Health, University of California, Los Angeles CA)

0845 96 *Suicide and Depression Among Asian American Women*, **ELIZA NOH** (Asian American Studies Program, California State University, Fullerton, CA)

0925 *General Discussion***Past and Future of the Fauna of the Pacific Basin**

Gerry Clark Art Center

Thursday

8:20 AM – 11:40 AM

Organized by: *David R. Lindberg* (University of California Museum of Paleontology, Berkeley, CA)

Sponsored by the Pacific Division section on Ecology, Organismal Biology and Environmental Sciences.