

Program

Sunday, November 6, 2005

Hotel: Hilton Garden Inn, 815 14th Street, NW, Washington, D.C.20005, Tel. 202-783-7800.

Room: Ballroom at Hilton Garden Inn

18:00 – 21:00 (6:00pm to 9:00pm) Welcome Reception with NSF-Director Dr. Arden L. Bement, Jr. and DFG-President Prof. Dr. Ernst-Ludwig Winnacker.

Monday, November 7, 2005

6:30-7:30, Small American Breakfast at Hotel

7:40 Garden Hilton Inn, Hotel Lobby – 5 min walk to AAAS, see directions and map in the back of the Program

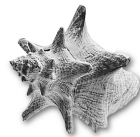
AAAS: American Association for the Advancement of Science (AAAS), 1200 New York Ave. NW, Washington D.C. 20005. Use entrance at 12th and H Street

Registration (AAAS Lobby)

Poster setup (AAAS Revelle Conference Room)

Room: Auditorium at the AAAS

8:00-8:05, Welcome by Dr. Alan Leshner (CEO, AAAS); and Announcements



Oral Presentations

Session Moderator: Michael Palmer

Topic #1: Overcoming impediments to biodiversity research

- 8:05-8:20, **Platnick**: SPIDA-web (SPecies IDentification Automated and Web-accessible)
8:20-8:35, **Wiley**: Utilizing museum collections data to model and predict species distributions
8:35-8:50, **Kalko**: Relearning the value of taxonomy: missing links and future research opportunities between universities and museums
8:50-9:05, **Ronquist**: MorphBank: Accelerating species discovery and documentation using modern information technology
9:05-9:20, **Häuser**: Current challenges and opportunities for coordinating biosystematics research at the global level
9:20-9:35, **Brandt**: Inventorying the deep-sea fauna: a case study: The macrofauna
9:35-9:50, **Martinez**: Inventorying the deep-sea fauna: a case study: The meiofauna

Topic #2: The role of molecular tools in species diversity studies

- 9:50-10:05, **Wägele**: Inventorying the deep-sea fauna: a case study: Molecular studies
10:05-10:20, **Schmid**: A population genomics approach to investigate demography and selection in *Arabidopsis thaliana*
10:20-10:35, **Hughes**: Mushroom ATBI in the Great Smoky Mountains National Park: Combining DNA and morphology to determine origins of diversity.

10:35- 10:50, Coffee break

AAAS Lobby

Session Moderator: Antje Boetius

- 10:50-11:05, **Brune**: The intestinal tracts of termites and other insects – an untapped reservoir of microbial diversity
11:05-11:20, **Meyer**: Explosive speciation, and adaptive radiations of East African cichlid fish species flocks: genetics of phenotypic diversification and molecular species delineations
11:20-11:35, **Schlegel**: Protist evolution, biogeography, and the species problem
11:35-11:50, **Vences**: Accelerating Madagascar's amphibian inventory by field exploration and DNA barcoding

Topic #3: Informatics tools? How can phyloinformatics tools help organize biodiversity information?

11:50-12:05, **Bohs**: The PBI *Solanum* Project: taxonomy in the electronic information age

12:05-12:20, **Gittleman**: Global patterns of phylogenetic diversity in mammals

Topic #4: Are trees always the best way to describe evolutionary processes? The role of hybridization in nature and in biodiversity research.

12:20-12:35, **Mason-Gamer**: Inferring hybridization from bifurcating trees

12:35-12:50, **Feldhaar**: Misleading phylogenies: Hybridization in obligate plant-ants of the genus *Crematogaster* (Decacrema)

12:50-13:05, **Kadereit**: Intergenomic recombination or introgressive hybridization: the origin of the North African *Senecio mohavensis* subsp. *breviflorus* and *S. hoggariensis*

13:05 -14:15, Lunch Break

Lunch Buffet in AAAS Lobby

14:15–17:30, *Panel Discussions*

Panel 1, Accelerating the species inventory

Room: Haskins at AAAS

Leader: Lynn Bohs

Participants: Blackwell, Boetius, Dubilier, Häuser, Haszprunar, Hughes, Kadereit, Kimsey, Martinez, Overmann, Platnick, Ronquist, Schlegel, Sierwald, Wägele

Panel 2, Role of museum collections in biodiversity research, improving accessibility to specimens and their data

Room: Abelson at AAAS

Leader: Rüdiger Bieler

Participants: Beaman, Brandt, Fredericq, Gillespie, Glaubrecht, Kalko, Neuffer, Palmer, Thiv, Wiley

Panel 3, Should biodiversity research adapt to the genomics era? Genomics as a tool for species identification, how best to utilize this tool?

Room: Auditorium at AAAS

Leader: Rudolf Amann

Participants: Ane, Blattner, Barkman, Brune, Cáceres, Cypionka, Feldhaar, Hochkirch, Mason-Gamer, Mazer, Meyer, Schmid, Siefert, Sullivan, Thorne, Vences

Panel 4, Development of new phyloinformatics tools to help organize biodiversity information.

Room: Revelle at AAAS (here also the poster displays)

Leader: William Martin

Participants: Ackerly, Gittleman, Huson, Piel, Sanderson, Suchard, Thorne, von Häseler, Yoder

17:30, all participants leave the AAAS Conference Center and walk to the Hilton Garden Inn, 815 14th Street, NW, Washington, D.C.20005

18:30-20:30, joint dinner for all participants in the Hotel

20:30–22:00, *Panel Discussion Reports*

Room: Ballroom Area at the Hilton Garden Inn Hotel

Session Moderator: Petra Sierwald

20:40-21:00, **Panel 1:** L. Bohs

21:20-21:40, **Panel 3:** R. Amann

21:00-21:20, **Panel 2:** R. Bieler

21:40-22:00, **Panel 4:** W. Martin

Adjourn



Tuesday, November 8, 2005

6:30-7:40, Small American Breakfast at Hotel

7:45 Hotel Lobby – 10 min walk to AAAS, American Association for the Advancement of Science (AAAS), 1200 New York Ave. NW, Washington D.C. 20005.

Room: Auditorium at the AAAS

8:00-8:05 Announcements, Logistics

Oral Presentations

Session Moderator: Heike Feldhaar

Topic #5: How good are our current evolutionary models in phylogenetics, do we need to reinspect them more critically?

8:05-8:20, **Blattner:** A genealogical approach reveals the impossibility of correct chloroplast phylogenies in *Hordeum* (Poaceae)

8:20-8:35, **Huson:** Application of phylogenetic networks in evolutionary studies

8:35-8:50, **Ane:** Quantification of reticulate genealogy and concordance trees.

8:50-9:05, **Wägele:** Confidence based on mainstream methods for tree inference is ill-founded: The role of data quality

9:05-9:20, **Thorne:** Assessing models of sequence change

Session Moderator: Elisabeth Kalko

Topic #6: Empirical Studies of Biodiversity

9:20- 9:35, **Neuffer:** Key innovations in the evolution of the Brassicaceae - case studies in the genus *Capsella*

9:35 -9:50, **Gillespie:** Islands as priorities for taxonomic inventory

9:50 -10:05, **Hochkirch:** Speciation processes in Orthoptera on the Canary Islands

10:05 - 10:20, **Blackwell:** Hidden biodiversity: The gut community of beetles

10:20 - 10:35, **Cypionka:** Diversity of bacteria isolated from the deep sub-seafloor biosphere

10:35 - 10:50, **Overmann:** Previously uncultured bacteria provide novel insights into the ecological significance of prokaryotic diversity

10:50 - 11:15 Coffee break

AAAS Lobby

Understanding Species Diversity on Earth

Session Moderator: Doug Soltis

Topic #7: Biodiversity in an ecological context: the diversity of communities

11:15-11:30, **Ackerly**: Functional diversity of ecological communities

11:30-11:45, **Dubilier**: How symbioses shape the diversity of communities

11:45- 12:00, **Amann**: The role of environmental genomics in understanding microbial diversity

12:00-12:15, **Cáceres**: Community assembly in newly formed lakes: the role of history and interspecific interactions

12:15-12:30, **Boetius**: Biodiversity and function: lessons from ocean life

12:30-12:45, **Mazer**: Seed size, habitat preference, and adult abundances of neotropical woody species: does size matter?

12:45-13:00, **Häseler**: Towards a map of our genetic ancestry

13:00-13:45 Lunch Break

Lunch Buffet in AAAS Lobby

13:45– 15:30, *Panel Discussion Sessions*

Panel 5, Can we quantify biodiversity independent of species definitions?

Room: Auditorium at AAAS

Leader: Pamela Soltis

Participants: Ackerly, Ane, Cáceres, Cypionka, Gittleman, Glaubrecht, Haszprunar, Hochkirch, Hughes, Meyer, Overmann, Schlegel, Schmid, Thorne, von Häseler, Wiley Yoder

Panel 6, What is the best way to integrate the accelerating pace of phylogenetic discovery with accumulating knowledge about the biota?

Room: Haskins at AAAS

Leader: Barbara Neuffer

Participants: Barkman, Beaman, Blattner, Brune, Bohs, Feldhaar, Fredericq, Huson, Kadereit, Mason-Gamer, Mazer, Piel, Siefert, Suchard, Sullivan

Panel 7, Which critical areas (endangered hot spots) can be prioritized for taxonomic inventorying?

Room: Revelle at AAAS (here also the poster displays)

Leader: Christoph Häuser

Participants: Blackwell, Gillespie, Martin, Palmer, Sierwald, Vences

Panel 8, Identify and prioritize research programs likely to serve accelerated biodiversity inventories and species discovery and description.

Room: Abelson

Leader: Lynn Kimsey

Participants: Amann, Bieler, Boetius, Brandt, Cáceres, Dubilier, Kalko, Martinez, Platnick, Ronquist, Thiv, Wägele

15:30–16:50, *Panel Discussion Reports*

Session Moderator: Michael Sanderson

Room: Auditorium at AAAS

15:30-15:50, **Panel 5**, P.Soltis

16:10-16:30, **Panel 7**, A. Brandt

15:50-16:10, **Panel 6**, F. Blattner

16:30-16:50, **Panel 8**, L. Kimsey

16:50-17:20, Coffee break and Poster take down, Revelle Conference Room
AAAS Lobby

17:20–18:00, *Plenary Discussion*
Development of Recommendations

Session Moderator: Norman Platnick

Room: Auditorium at AAAS

Lobby AAAS (New York Ave. and 12th Street)

18:30 Bus Transport to German Embassy

19:00 Reception hosted by German Embassy

21:00 Bus Transport to Hilton Hotel

Wednesday, November 9, 2005

6:30-10:30, Small American Breakfast at Hotel

Departure, 12:00 noon is check-out time at the Hotel

