

## Research Experiences for Undergraduates

## Plant Systematics, Conservation Biology, and Ethnobotany

[Home](#) [Mentors and Projects](#) [Frequently Asked Questions](#)

May 20 – July 29, 2012



REU Site: **Undergraduate Research in Plant Systematics, Conservation Biology, and Ethnobotany at the Missouri Botanical Garden.** (Supported by NSF award DBI-1157030)









































## 16 REU Lunch Seminars 2012

**Doug Holland and Victoria McMichael** from the MBG Peter H. Raven Library. "Library and Electronic Resources for Botanical Research." May 25.

**Mauricio Diazgranados, Cynthia Hong Wa, Jordan Teisher, Jennifer Gruhn, Justin Zweck, Monica Carlsen, Shih-Hui Liu.** Meet the MBG Graduate Students." May 28.

**Richard Keating**, MBG Research. "Climbing Mount Kilimanjaro." May 31.

**David Bogler**, MBG, REU Coordinator. "Classification and Phylogenetic Systematics: A review of concepts for novices with examples from the Agave Family." June 4.

**Richelle Weihe**, MBG Federal Grants Coordinator. "Collaboration in Research: Issues and Best Practices." June 7.

**Shirley Graham**, MBG Curator. "Lythraceae: the Loosestrife Family." June 11.

**George Yatskievych**, MBG. "In Search of the Little Hermit. Describing a New Genus of Parasitic Plants from Mexico." June 14.

**Tatyana Shulkina**, MBG and Komarov Botanical Institute, Russia. "The Caucasus – one of the Biodiversity Hot Spots of the World." June 19.

**Monica Carlsen**, MBG Research. "Understanding the origin and rapid diversification of the genus *Anthurium* Schott (Araceae) integrating molecular phylogenetics, morphology and fossils." June 21.

**Matías Morales**, Instituto de Recursos Biológicos – CNIA, Instituto Nacional de Tecnología Agropecuaria Argentina. "Systematics of the genus *Mimosa* (Mimosoideae, Leguminosae) in its southern South America diversification center: evolutionary inferences by mean multidisciplinary studies." June 25.

**Tom Brutwell**, Danforth Center. Director of the ERAC Institute for Renewable Fuels. "Engineering C3/C4 Plants to increase productivity for biofuels." June 27.

**Peter Stevens**, Professor of Biology at UMSL. "Do Species Numbers Matter?" July 5.

**Sandra Arango-Caro**, MBG, REU Coordinator. "Etiquette in Science and Academics." July 17.

**Jean Ponzi**, MBG Earthways Center, Green Resources Manager. "Community-Wide Greening: The Garden's Sustainability Efforts and Influences - Internal, International and Around Our Town!" July 19.

**Doug Ladd**, Director of Conservation Science at the Missouri Nature Conservancy. "Sustaining our natural heritage: a science-based approach." July 23.

**Adam Smith**, Post-Doc, MBG CCSD, "Biogeographic Vulnerability of Threatened Plants to Climate Change." July 26.

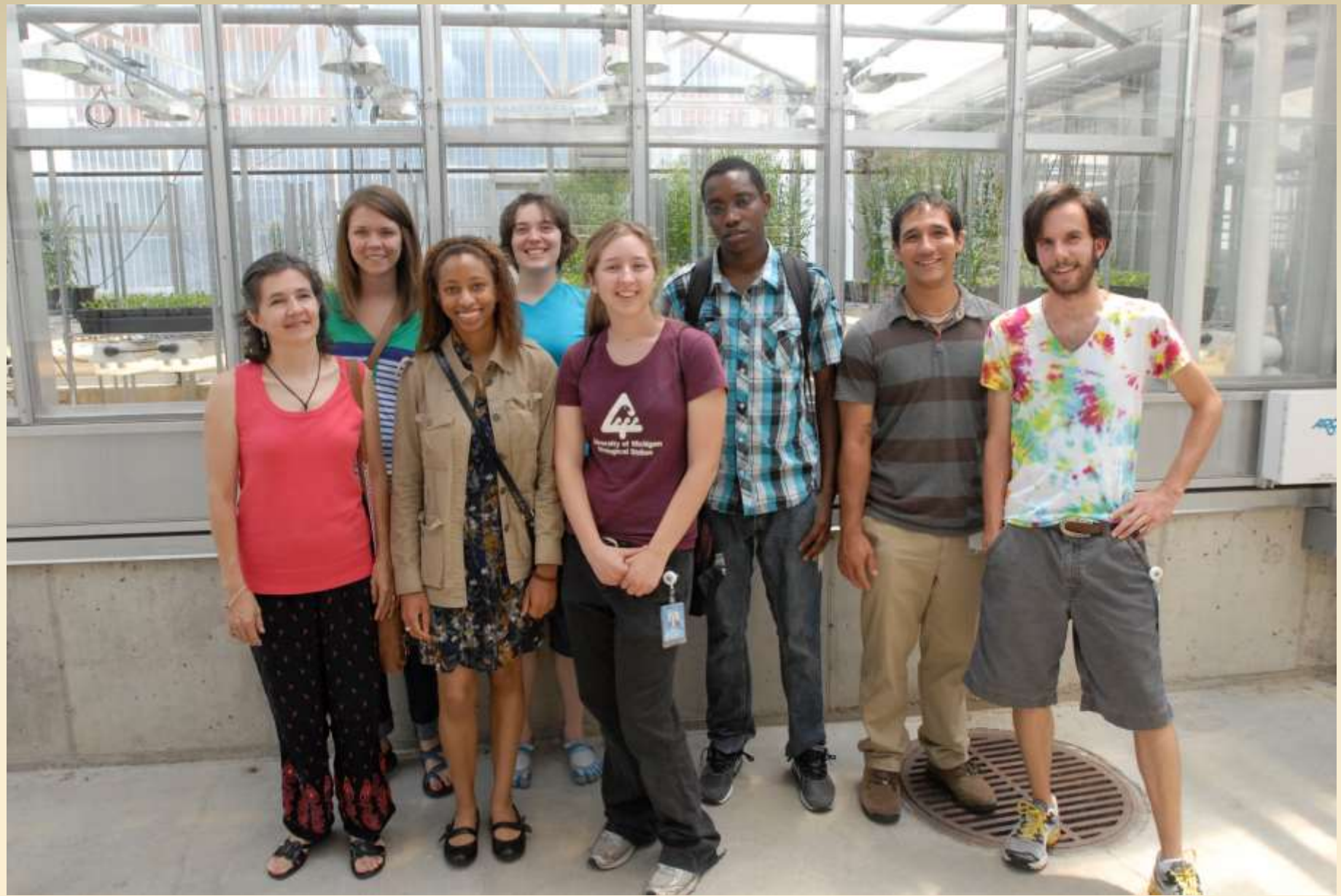
**Thank You !!**





**RESULTS**  
New species  
(i.e. I discovered something cool!)







# The Genome Center is at the cutting edge of genome research.

Over the years, The Genome Center has helped shape the future of sequencing to drive scientific discovery.

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**Genome**  
CENTER  
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Washington  
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With a focus on human  
genetic research, the  
Genome Center is  
dedicated to advancing  
our understanding of  
human health.



Collaborating with the  
University of Missouri  
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Center is a leading  
force in the study of  
genetic diseases.



Genome research is  
essential to understanding  
the genetic basis of  
disease.



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2007 2008 2009

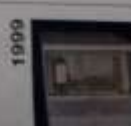
## Sequencing Machines Used by The Genome Center



1993  
Applied Biosystems  
Model 4700



1995  
Applied Biosystems  
Model 4700



1999  
Applied Biosystems  
Model 4700



2002  
Applied Biosystems  
Model 4700



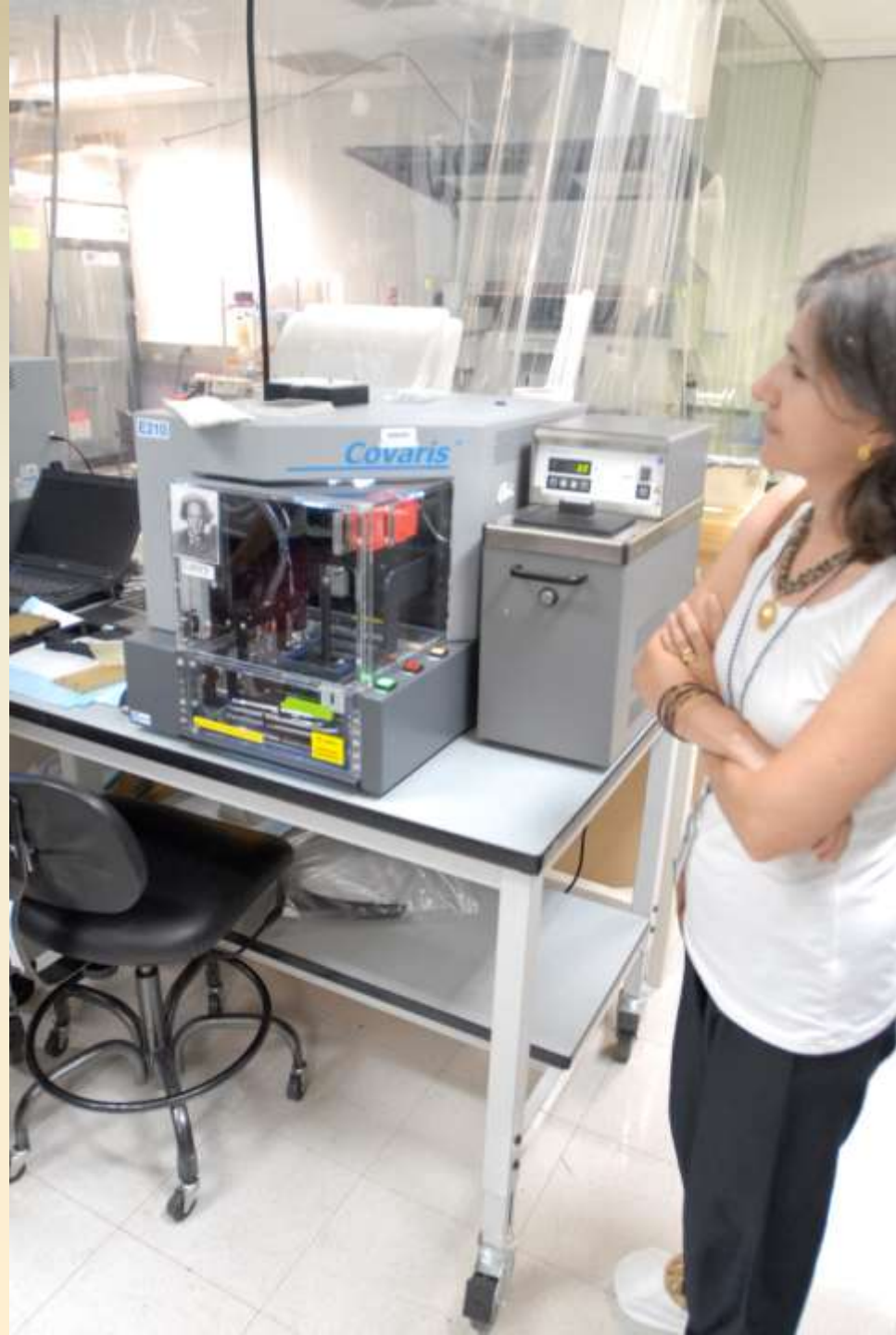
























## Acknowledgements

Sally O'Connor - NSF

Chuck Sullivan - NSF

**Mary McNamara** - arrangements

Charles Zidar - moving

Jan Simons - furniture

Dianne Schmidt - checks

Cheryl Mill - checks

Gene Peimann - tickets

James Trager – SNR tour

Jim Solomon – Herbarium

Karen Hill – news story

Mike Latzel – web page

Myriam Fica – web page

Keith Warfield – room setup

