



INTER-AMERICAN INSTITUTE FOR GLOBAL CHANGE RESEARCH

DATA-SHEET
2017
IAI - United States of America

This document has been prepared by the IAI Directorate on 1 March 2018

Note: This document compiles IAI activities involving USA, existed in 2017 (regardless if they started in 2017 or before). This document does not contain information on activities completed before 2017.

The United States Government ratified the Agreement Establishing the IAI in 1993 and is represented by the National Science Foundation (NSF). This agreement implies a commitment to mutual cooperation, i.e., support of science in USA by the IAI and support of Institute's operations by the USA.

1. RESEARCH PROGRAM

USA participates in the following projects of the 3rd Collaborative Research Network Program (CRN 3) 2012 – 2018:

Code	Project title	Budget	USA researcher	Institution	Additional funds	Participating countries
CRN 3005	Nitrogen Cycling in Latin America: Drivers, Impacts and vulnerabilities	996.100	Ariel Stein	Air Resources Laboratory of National Oceanic and Atmospheric Administration	345.689	Argentina, Bolivia, Brazil, Chile, Mexico, USA, Venezuela
CRN 3025	Tropi-Dry II: Enhancing knowledge exchange for conservation and management of tropical dry forests in the Americas	882.500	Carlos Portillo-Quintero	Texas Tech University	1.930.357	Brazil, Canada, Chile, Costa Rica, USA
			Jennifer Powers	University of Minnesota		
			Alex Pfaff	Duke University		
			Stefan Schnitzer	University of Wisconsin-Madison		
CRN 3035	Towards usable climate science – Informing decisions and provision of climate services to the agriculture and	765.500	Hugo Berbery	University of Maryland	1.930.357	Argentina, Brazil, Paraguay, USA
CRN 3036	"LUCIA" - Land use, climate and infections in Western Amazonia	906.500	William Pan	Duke University	10.938.518	Brasil, Ecuador, Peru, USA
			Beth Feingold	University at Albany		
CRN 3038	Sensing the America's Freshwater Ecosystem Risk (SAFER) from climate change	902.100	Thomas Harmon	University of California	3.597.808	Argentina, Canada, Chile, Colombia, Uruguay, USA
CRN 3056	Innovative Science and Influential Policy Dialogues for Water Security in the Arid Americas	800.000	Christopher Scott (PI)	University of Arizona	9.725.116	Argentina, Brazil, Chile, Mexico, USA
CRN 3070	Variability of Ocean Ecosystems around South America (VOCES)	869.360	Ricardo P. Matano	Oregon State University	5.706.719	Argentina, Brazil, Chile, Peru, Uruguay, USA
CRN 3076	Effects of Anthropogenic Habitat Perturbation on Rodent Population Dynamics and Risk of Rodent-Born	884.870	Daniel Bausch (PI)	Tulane University	33.217	Bolivia, Ecuador, Peru, USA
			Valerie Paz-Soldan	Tulane University		
			Townsend Peterson	The University of Kansas		
			Xiangming Xiao	University of Oklahoma		
			Victor Raul Pacheco Torres	San Marcos University		
			Hugo R. Razuri-Yori	Naval Medical Research Center		
Claudia Guezala	Naval Medical Research Center					
CRN 3094	Assessment of marine ecosystem services at the latin-american antares time-series network	700.000	Roberto Frouin	University of California	1.345.827	Argentina, Brazil, Colombia, Chile, Mexico, Peru, USA, Venezuela
CRN 3095	Bridging Ecosystem Services and Territorial Planning (BEST-P)	699.000	Gerardo Bocco	University of Maryland	2.072.548	Argentina, Chile, Mexico, Uruguay and USA
CRN 3105	Interdisciplinary Science Team Skill Building Through the Study of Socioecological Impacts from Bioe	200.000	Kathleen E Halvorsen (PI)	Michigan Technological University	3.003.681	Argentina, Brazil, Canada, Mexico, Uruguay, USA
CRN 3106	Transferring climate knowledge in the science-policy interface for adaptation to drought in Uruguay	162.000	Guillermo Podesta	University of Miami	-	Argentina, Brazil, Uruguay, USA

*Additional funding is reported by the scientists and refers to funds granted by funding agencies (others than IAI) towards the project. Amounts are expressed in American dollars and refers to funds received by the project and not only by USA.

For the Third Collaborative Research Network Program (period between 2012-2018), agreements have been signed between the IAI and USA researchers and institutions to grant USD 981.273.

More information: http://www.iai.int/?page_id=4118

2. SCIENTIFIC PUBLICATONS

In 2017, within the framework of CRN3, researchers from USA were author or co-authors of five publications:

Project CRN3105:

- ✓ Understanding public perceptions of wood-based electricity production in Wisconsin, United States: the place-based dynamics of social representations
Environmental Sociology, Vol. 3, No. 4. (23 January 2017), pp. 381-393, doi:10.1080/23251042.2016.1272181 by A. Banerjee, C. Schelly, K. E. **Halvorsen**
- ✓ Sustainable Development for Whom and How? Exploring the Gaps between Popular Discourses and Ground Reality Using the Mexican Jatropha Biodiesel Case

PubMed In Environmental Management, Vol. 59, No. 6. (2017), pp. 912-923, doi:10.1007/s00267-017-0848-x by A. Banerjee, K. E. **Halvorsen**, A. Eastmond-Spencer, S. R. Sweitz

Project CRN3056:

✓ Historical Analysis of Riparian Vegetation Change in Response to Shifting Management Objectives on the Middle Rio Grande

Land, Vol. 6, No. 2. (22 April 2017), 29, doi:10.3390/land6020029

by R. Petrakis, W. van Leeuwen, M. L. Villarreal, P. Tashjian, R. Dello-Russo, C. **Scott**

✓ Drought adaptation and development: small-scale irrigated agriculture in northeast Brazil

Climate and Development (27 March 2017), pp. 1-10, doi:10.1080/17565529.2017.1301862

by L. Herwehe, C. A. **Scott**

Project CRN3105:

✓ Spatial, Temporal, and Dietary Variables Associated with Elevated Mercury Exposure in Peruvian Riverine Communities Upstream and Downstream of Artisanal and Small-Scale Gold Mining

International Journal of Environmental Research and Public Health, Vol. 14, No. 12. (15 December 2017), 1582, doi:10.3390/ijerph14121582

by L. Wyatt, E. J. Ortiz, B. **Feingold**, et al.

3. STUDENT PARTICIPATION IN IAI SCIENCE RESEARCH PROGRAM

The IAI projects enabled completion of graduation, master, doctoral and post-doctoral programs. USA students involved in IAI projects in 2017, completed nine programs: two of these received full scholarships from the IAI, amounting USD 24.913.

Project	Student	Level	Expertise	Institution	Support
CRN 3036	Axel Berky	Master	Environmental Management	Duke University	-
CRN 3036	Caren Weinhouse	Postdoctorate	Epigenetics	Duke University	2.913
CRN 3036	Justin Lana	Master	Environmental Health	Duke University	-
CRN 3036	Mark Janko	Postdoctorate	Geography & Statistics	Duke University	-
CRN 3076	Kelly Jensen	Postdoctorate	Environmental Health	Fogarty International Fellow	-
CRN 3076	Gwen Lee	Postdoctorate	Environmental Health	Inter-American Training for Innovations in Emerging Infectious Diseases	-
CRN 3025	Vaughn Smith	Undergraduate	Computing sciences	Texas Tech University	22.000
CRN 3076	Lindsey Campbell	Postdoctorate	Geography and modeling	The University of Kansas	-
CRN 3038	Steven Jepsen	Postdoctorate	Mountain hydrology	University of Nevada, Reno	-

Besides, in 2017 three students from USA, Roy Petrakis, from American Geophysical Union, and Julie Huigens and Sophia Borgias from University of Arizona, participated in capacity building activities of CRN 3.

4. CAPACITY BUILDING PROGRAM

The PDS are training activities designed to encourage network building, to promote the application of the training provided to pressing real-world issues that have a significant global change dimension, to foster multinational and multidisciplinary collaboration, and to develop proposal writing skills. The seminar involves two sessions, each one a weeklong. Between sessions (1 year approx.), participants interact among themselves and with IAI staff and seminar instructors through Internet-based tools. Then the teams present results and products at the second session of the PDS.

**PDS: Transdisciplinary approaches to integrating policy and science for sustainability (Canada)
3 – 7 October 2017 – Calgary and Banff, Canada**

Up to 25 participants from IAI Parties (Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Jamaica, Mexico, Panama, Paraguay, Peru, United States, Uruguay, and Venezuela) in each PDS below, covered a diversity of roles in decision-making and research including: (1) policy decision-makers from different tiers and sectors of government (e.g. agriculture, finance, science and technology, environment and natural resources, international affairs); (2) graduate students, early to mid-career scientists and faculty in the humanities, and social, natural and engineering sciences; (3) NGOs and community organization staff and (4) private sector employees.

Participant from USA, institution and proposal:

- Alexander Liebman, University of Minnesota. Their team presented the proposal *Strategies for Coping and Adaptation in Caribbean and South America Coupled Human-Natural Systems*, final product of the PDS and work plan to submit the proposal to a funding agency.

The IAI covered the costs of his participation which amounted to USD 1.591

USA speakers:

Carol Franco, Virginia Polytechnic Institute and State (speaker and organizer)

Erin Pischke, Michigan Technological University (speaker and organizer)

Jessie L. Knowlton, Michigan Technological University (speaker and organizer)

Kathleen E. Halvorsen, Michigan Technological University (speaker and organizer)

Lily House-Peters, California State University, Long Beach

Marga Gual Soler, American Association for the Advancement of Science (speaker and organizer)

Valentin Picasso, University of Wisconsin-Madison (speaker and organizer)

The IAI covered the costs of their participation which amounted to USD 14.836.

The seminar trained participants in transdisciplinary approaches in global change-related projects, such as agriculture, land use, public health, sustainable development, biodiversity, energy, water, air, and climate.

More information: <http://www.iai.int/?p=24364&lang=en>

São Paulo School of Advanced Science on Climate Change: Scientific basis, adaptation, vulnerability and mitigation. 3 – 15 July 2017 – São Paulo, Brazil

Organized by the Interdisciplinary Climate Investigation Center (INCLINE) and the Inter-American Institute for Global Change Research (IAI), and sponsored by the São Paulo Research Foundation (FAPESP), Pró Reitoria de Pesquisa/University of São Paulo (PRP/USP), IAI and Santander.

This School was for graduate students and early career scientists. Priority was given to candidates currently enrolled in graduate programs (Masters/MSc and Doctoral/PhD courses) from different academic disciplines (natural, social and human sciences, engineering) provided their academic work and study is related to the themes of the school and related topics.

About 100 applicants, 67 from Brazil and 33 from other countries were selected to participate in the Advanced School. Participants were selected based on the merit of their application information, the relevance of the academic work and studies related to the school themes, and disciplinary, gender and regional balance considerations.

Participants from USA, institutions and poster presented:

Jacob Sullivan Diamond, Virginia Tech. *Emerald ash borer simulation reveals ecohydrologic feedbacks in black ash Wetlands* http://www.iai.int/wp-content/uploads/AMERICAS-JacobDiamond_Poster.pdf

Katharyn Helen Duffy, Northern Arizona University (NAU). *How close are we to the temperature tipping point of the biosphere?* http://www.iai.int/wp-content/uploads/AMERICAS-KatharynDuffy_Poster.pdf

Lidia Huaman ChuquiHuaccha, Texas A&M University. *Assessing the vertical structure of the east Pacific ITCZ using the Cloudsat CPR and TRMM PR* http://www.iai.int/wp-content/uploads/AMERICAS-LidiaHuaman_Poster.pdf

The goal was to provide graduate students with advanced knowledge on climate change science and related topics: Observations and future projections; impacts; vulnerability; adaptation and mitigation; and the Paris Agreement: how to reach the 1.5°C target, including aspects of public policy. Participants discussed with renowned scientists important themes of the three IPCC Fifth Assessment Report Working Groups, in a multidisciplinary and multicultural context.

More information: <http://www.iai.int/?p=18546&lang=es>

5. PARTICIPATION IN THE IAI BODIES

Scientific Advisory Committee (SAC)

The Scientific Advisory Committee (SAC) is composed of ten members elected by the CoP. These members are scientists recognized internationally for their expertise in a variety of disciplines relevant to global change research. As the main scientific advisory body of the IAI, it makes recommendations to the Conference of the Parties regarding the Science Agenda, long-range plans and annual program of the Institute. The SAC also leads the peer-review system for scientific proposals and results of IAI funded programs.

There is one member from USA in the SAC:

Joshua Tewksbury
University of Washington
Area of expertise: Biology, ecology
Appointment: 2016-2019

Executive Council (EC)

The EC is composed of nine members, who are elected by the Conference of the Parties for two-year terms. The Executive Council develops policy recommendations for submission to and approval by the Conference of the Parties, and ensures that policies adopted by the Conference of the Parties are implemented by the Directorate. USA is part of the current composition of the EC:

Composition 2016 – 2018:

Argentina, Bolivia, Brazil, Canada, Chile, Costa Rica, Panama, Paraguay, and the **United States of America**.