

Tupper 4pm seminar

Tuesday, April 10, 4pm
seminar speaker will be Pedro Pruna Goodgall, Cuban Academy of Sciences
Charles Darwin and Panama

Bambi seminar

No Bambi seminar scheduled for Thursday, April 12. If you wish to give a Bambi, please contact Adam Roddy.

Arriving next week

Participants of the field course - Third International Workshop on Crocodylian Genetics and Genomics, at Naos.

John Withey, to study the tropical forest songbird behavior and movements in human-dominated landscapes, at Tupper and Gamboa

Dina Dechmann, to study the role of odours for mate choice and social structure in *Noctilio albiventris*, the lesser Bulldogbat, in Gamboa.

Mark Bulmer, Adam Smith and Tammy Hartke, to study parasites, pathogens and the breeding strategies of social insects, in Gamboa.

Brooks Barrett, to conduct a screening of Panamanian trans-isthmus macrophytes using DNA sequence analysis, onboard the RV Urraca.

Michelle Paddock, to assess change on coral reefs: long term trends in Caribbean reef fish abundance, at Naos.

Ursula Melissa Ruiz, to study the diversity, distribution and demographic effects of seed-associated fungi in Neotropical *Cecropia*, in Gamboa.



Smithsonian Tropical Research Institute, Panamá

www.stri.org

April 5, 2007



Nature & Science analyze Smithsonian challenges and chances for a fresh start

Two articles in the April 5 issue of *Nature* (vol. 446, no. 7136) “Museums need two cultures” (page 583) and “Smithsonian looks beyond ousted boss” (page 594) and another in the April 6 issue of *Science* (vol. 316, p. 30) “Turnover at the top, but problems persist at the Smithsonian” analyze latest changes at the institution, highlighting challenges and chances for a fresh start.

Smithsonian officials and scientists are proud of the mission statement of the British

scientist James Smithson, who funded the creation of their institution in 1846 for the “increase and diffusion of knowledge”, reports *Nature*. “The scientists’ desire to fulfil both strands of Smithson’s vision is notable. Yet the combination of missions leads to a special form of science communication.” “Exhibits get the media attention and attract donors. But take away the in-house scholars who help build them, and museum take another step towards becoming little more than theme parks.”

On the other hand, there’s the problem of funding. Smithsonian officials say they don’t have figures for how much money from the institution’s overall budget goes towards science, but researchers from a variety of specialties told *Nature* that “as many as a third of full-time positions have been lost from their departments over the past 15 or so years.”

“The value of long-term monitoring depends on its continuity.” says Ira Rubinoff,

Arrived last week

Roberto C. Frias Soler from La Habana, Cuba, to conduct studies at STRI's molecular laboratories on crocodiles population in Cuba.

Departures

Vielka Chang-Yau to Buenos Aires, to participate at 2º. Congreso Iberoamericano de Bibliotecología and visiting the 33ª Feria del Libro de Buenos Aires.

Fernando Pascal to Washington DC on official business at SI.

New publications

Guzman, Hector M., and Cortes, Jorge. 2007. "Reef recovery 20 years after the 1982–1983 El Niño massive mortality." *Marine Biology* 151: 401-411.

Herrera J., Ligia. 2007. "La historia de nuestra prehistoria: Las investigaciones de Dolores Piperno." *Tareas* (125):119-130.

Pohl, Mary E.D., Piperno, Dolores R., Pope, Kevin O. and Jones, John G. 2007. "Microfossil evidence for pre-Columbian maize dispersals in the neotropics from San André's, Tabasco, Mexico." *Proceedings of the National Academy of Sciences*

STRI in the news

"Colombiano es nombrado Secretario encargado del Instituto Smithsonian." 2007. *El Tiempo* March 27.

"El personaje: Ira Rubinoff". 2007. *La Prensa*: April 3.

"Nuevo director del Smithsonian" by Urania Cecilia Molina. 2007. *La Prensa*: April 3.

acting under-secretary for science at the institution. Rubinoff has secured a private donation to maintain the forest work, but only for five more years. Like other researchers, he says that he now needs to devote more time to fundraising."

Acting secretary Cristián Samper hopes to reverse core funding decrease by improving the advertising of Smithsonian research to Congress and the public, "in part by getting more of that science into the exhibitions that the Smithsonian runs. Samper is one of many names being suggested to fill the position as permanent secretary, but he comments that he would be happy as head permanently, or to go back to running the national museum. "The search is being run by members of the museum's Board of Regents and is expected to take about a year" concludes *Nature*.

Science also highlights Samper and Rubinoff's scientific background, "Although it's too soon to tell what this will mean for the institution's programs, the new leaders are speaking in a way that's bound to please scientists. "I want to strengthen the programmatic side—the scholarship and science" said Samper. "Rubinoff says his goal is to get "more balance" among the institution's priorities, suggesting a closer look at research objectives and not a single-minded emphasis on refurbishing museum."

According to Roger Sant, a member of the Smithsonian's Board of Regents, Small's job is still unfinished "Our biggest need is still facilities." When Small came on board, the Smithsonian's finances were in shambles, and construction projects were underfunded. "The place really did need fixing" concluded Sant.

You may obtain these articles from: calderom@si.edu

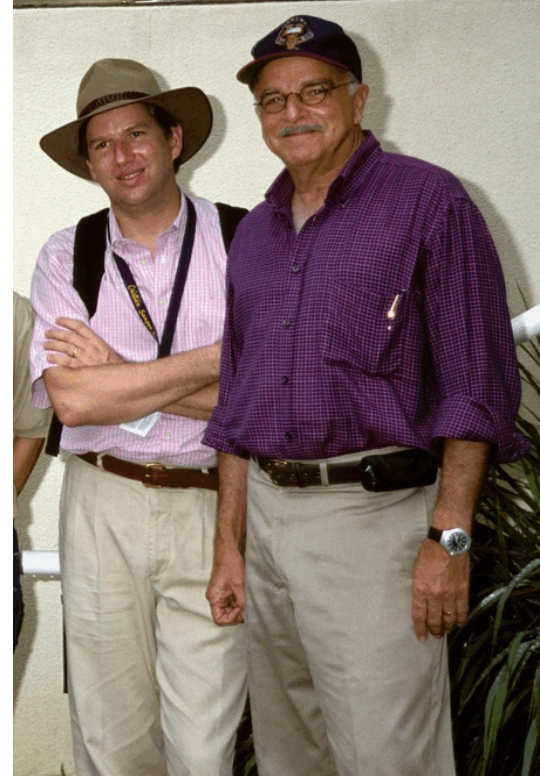
Dos artículos en el número del 5 de abril de *Nature* (vol. 446, no. 7136) "Museums need two cultures" [Museos necesitan dos culturas] (pág 583) y "Smithsonian looks beyond ousted boss" [Smithsonian mira más allá de la salida del jefe] (página 594), y otro en el número del 6 de abril de *Science* (vol. 316, p. 30) "Turnover at the top, but problems persist at the Smithsonian"

[Remolino en la cúspide, pero persisten los problemas en el Smithsonian] analizan los últimos cambios en la institución, destacando los retos y la oportunidad de un nuevo comienzo.

Los funcionarios y científicos del Smithsonian están orgullosos de lo que establece la misión del científico británico James Smithson, quien financió la creación de su institución en 1846, para el "enriquecimiento y difusión del conocimiento" reportó *Nature*. "El deseo de los científicos por cumplir ambas ramas de la visión de Smithson es notable. Pero la combinación de las misiones conlleva a una forma especial para comunicar la ciencia." "Las exhibiciones atraen la atención de los medios y a los donantes. Pero si se eliminan a los académicos institucionales que ayudan a producirlas, los museos darían otro paso hacia convertirse en algo no mucho más que parques temáticos" advierte *Nature*.

Por otro lado, está el problema del financiamiento. Los funcionarios del Smithsonian

Samper and Rubinoff on BCI



confesaron no tener a mano cifras sobre cuánto dinero de la institución, como un todo, se invierte en la ciencia, pero investigadores de varios departamentos de una variedad de especialidades dijeron a *Nature* que "casi tanto como un tercio de las posiciones de tiempo completo se habían perdido en sus departamentos en los últimos 15 años más o menos."

"El valor de los estudios a largo plazo dependen de su continuidad" alega Ira Rubinoff, subsecretario para ciencias interino de la institución. Rubinoff se aseguró una donación privada para mantener el trabajo del bosque, pero sólo por cinco años más. Al igual que otros investigadores, él dice que ahora necesita invertir más tiempo en actividades para la obtención de fondos."

El secretario encargado Cristián Samper espera revertir la disminución de fondos centrales aumentando la publicidad de las investigaciones del Smithsonian en el Congreso

STRI in the news

“Warming may not spark tree growth” by Alvin Powell. 2007. *Harvard News Office*, April 5.

“Smithsonian scrambles to regain its footing” by Robin Pogrebin. 2007. *New York Times*: April 4.

“Anfibios, con la muerte a flor de piel. Amphibians, a death that is more than skin deep” by Sofia Kalormakis de Kosmas. 2007. *Panorama* February: 87-90.

“Paradigmas de un clima cambiante. Paradigms of a changing climate” by Sofia Kalormakis de Kosmas. 2007. *Panorama* April: 80-96.

“Smithsonian chief's replacement reverberates in Panama” by Eric Jackson. 2007. *Panama News - Panama* 13(7): April 8 - 21.

Miscellaneous

Andrew Nottingam, from the University of Cambridge, seeks apartment or shared house close to the Tupper Center. Please contact him at: atn24@cam.ac.uk

For sale: Swinging chair (hammock-like) \$285. Picnic table \$90. Wooden hand-painted mailboxes \$65. Interested please contact Nélida Gómez 212-8059, nelengomez@yahoo.es

For sale: Whirlpool side-by-side white refrigerator 27 cubic feet, ice and water dispenser on freezer door. Interest please write Monica Alvarado at e-mail: malvaradog@cwpanama.net

y ante el público, “en parte inyectando más de esa ciencia en las exhibiciones que el Smithsonian administra.” Samper es uno de los muchos nombres que se han sugerido para llenar la posición de secretario permanente, pero comenta que aunque estaría contento de mantenerse en esa posición, también volvería a la dirección del museo nacional. “La búsqueda que llevan a cabo los miembros del Comité de Regentes del Smithsonian se espera tome cerca de un año” concluye *Nature*.

Science también subraya la formación científica de Samper y Rubinoff. “Aunque es muy pronto para saber lo que esto significará para los programas de la Institución, los nuevos líderes están hablando de una forma que complacerá a los científicos. “Quiero reforzar el lado programático—la academia y la ciencia” dijo Samper. “Rubinoff comenta que su objetivo es obtener “mayor balance” entre las prioridades de la institución, sugiriendo una mirada cercana hacia los objetivos de investigación y no

solamente el mejoramiento físico de los museos.

De acuerdo a Roger Sant, miembro del Comité de Regentes del Smithsonian, el trabajo de Small no se completó “Nuestras necesidades más grandes siguen siendo las instalaciones.” Cuando Small se unió al Smithsonian, las finanzas estaban por el suelo y los proyectos de construcción no tenían fondos. “El lugar realmente necesitaba reparaciones” concluyó Sant.

Scientists finds earliest evidence of maize farming in Mexico

Mary E. D. Pohl, Florida State University, Dolores R. Piperno, from STRI and the National Museum of Natural History in Washington DC, Kevin O. Pope from Geo Eco Arc Research, and John G. Jones from Washington State University, offer new evidence that ancient farmers in Mexico were cultivating an early form of maize (*Zea mays* L.)—one of the most debated topics in New World archaeology—about 7300 years ago. This study places cultivated maize 1200 years earlier than previously thought.

Pohl and colleagues conducted their analyses in the Gulf Coast

of Tabasco, Mexico, and concluded that people were planting crops in the "New World" of the Americas around 5300 BC. The analyses extend the main author's previous work in this area and validates principles of microfossil data collection.

The article “Microfossil evidence for pre-Columbian maize dispersals in the Neotropics from San Andre's, Tabasco, Mexico” will be published in this week's issue of *Proceedings of the National Academy of Sciences*.

The research done by Pohl and colleagues expands our

knowledge on the transition to agriculture in Mesoamerica. It expands previous research that demonstrates that maize spread rapidly from its hearth of domestication in southwest Mexico to southeast Mexico and other tropical areas in the New World including Panama and South America."

“The article also discusses misconceptions about the paleoecological method, which recovers microfossil evidence, such as pollen, starch grains, or phytoliths, as opposed to macrofossils or whole plant parts, such as maize cobs” reports a press release from Florida State University.

CTFS seeks postdoctoral fellow: Carbon in Tropical Forests and Climate Change Ecologist

STRI's Center for Tropical Forest Science (CTFS) is currently expanding its core science program to better address critical questions in the science of tropical forests. The Carbon and Climate Change Initiative builds on the unparalleled global forest monitoring program of CTFS to investigate the role of tropical forests in the global carbon cycle. The Research Fellow for the Carbon and Climate Change Initiative will

work with CTFS scientists to implement this scientific program. The successful candidate will be expected to catalyze research activities focused on carbon across CTFS sites; to assist in initiating and maintaining new studies monitoring annual tree growth, litterfall, coarse woody debris, and soil carbon; and to develop his/her own research program associated with the CTFS Carbon and Climate Change Initiative. Candidates should

have a Ph.D. in ecology or related subject, the ability to work with colleagues from other disciplines and cultures, and a proven track record in publishing and developing research programs.

Send CV and names of three references to: Center for Tropical Forest Science; Smithsonian Tropical Research Institute, Unit 0948, APO AA 34002-0948, USA. E-mail to: sautua@si.edu

Multi-disciplinary approach to early human-mollusks interactions

Multi-disciplinary work is one of the most fruitful approaches to science. Working with scientists interested in the history of human societies, ecology, fisheries, and quantitative biology is "...quite a thrill... learning is never ending..." says Roberto Cipriani, an evolutionary biologist interested in morphometrics and numerical simulations applied to biological processes, and a STRI research postdoctoral collaborator from Universidad Simón Bolívar, Venezuela.

Using data from ancient shell middens, Cipriani has implemented a harvest model of the gastropod *Strombus gigas*, or Queen Conch, to simulate its exploitation 800 years ago in hands of the

Valencioids, a group of Native Americans that regularly traveled to Los Roques Archipelago from the western coast of Venezuela.

"...The objective of this project is to understand the effects of humans on marine resources in the past, as well as the effects of those resources on the development of human societies..."

The next step in this project is to start a world-wide, free access database of human-mollusks interactions. The project is partially funded by HMAP (History of Marine Animal Populations) and is also chaired by archaeologists Andrzej Antczak and María Magdalena Antczak, from Universidad Simón Bolívar.

El trabajo multi-disciplinario es una de las fórmulas más fructíferas para las ciencias. Trabajar con científicos interesados en la historia de sociedades humanas, ecología, pesquerías es "realmente excitante... un proceso de aprendizaje sin final..." asevera Roberto Cipriani, biólogo evolucionista interesado en morfometría y simulaciones numéricas aplicadas a procesos biológicos, y colaborador científico postdoctoral en STRI de la Universidad Simón Bolívar de Venezuela.

Utilizando información de desechos de conchas antiguas, Cipriani ha puesto en marcha un modelo para recolectar el

gasterópodo *Strombus gigas*, o concha reina, para simular su explotación hace 800 años por valencioides, un grupo de americanos nativos que viajaban regularmente al Archipiélago de los Roques desde la costa oeste de Venezuela.

"...El objetivo de este proyecto es entender los efectos de los humanos sobre los recursos marino en el pasado, así como los efectos de estos recursos en el desarrollo de las sociedades humanas..."

El próximo paso en este proyecto es empezar una base de datos por internet sin costo, sobre las interacciones entre humanos y moluscos. El proyecto está financiado parcialmente por HMAP [Historia de Poblaciones de Animales Marinos] cuyos investigadores

principales incluyen también a los arqueólogos Andrzej Antczak y María Magdalena Antczak, de la Universidad Simón Bolívar.

Story: Roberto Cipriani
Edited by M Alvarado & ML Calderon
Photo: MA Guerra