



Smithsonian Tropical Research Institute

[stri.si.edu/sites/strinews](http://stri.si.edu/sites/strinews)

JUL 31, 2015

# STRI NEWS



## Star gazing from the sea floor

Full story: [www.stri.si.edu](http://www.stri.si.edu)  
[issuu.com/strinewspanama](http://issuu.com/strinewspanama)

A brittle star's "brain" extends from its central body into its arms. Decentralized processing challenges scientists who try to understand how these sea creatures respond to their environment.

Photo: *Ophiocoma wendtii*.  
By Sarah Davies, NOAA.

El "cerebro" de un oífiuro se extiende desde el centro de su cuerpo hacia sus brazos. El procesamiento descentralizado desafía a los científicos que tratan de entender cómo estas criaturas marinas responden a su entorno.

Foto: *Ophiocoma wendtii*.  
By Sarah Davies, NOAA.

## SEMINARS

### TUPPER SEMINAR

Tue., Aug. 4, 4pm

Patrick Krug

Cal State LA

Tupper Auditorium

Challenging a paradigm of larval biology:  
evidence that species selection favors  
planktotrophy, not lecithotrophy

### TUPPER PUBLIC TALK

Wed., Aug. 5, 6pm

Tony Coates

Sub-Director Emérito de STRI

Tupper Auditorium

Herramientas de un geólogo para medir la  
edad del Istmo

### BAMBI SEMINAR

Thu., Aug. 6, 7:15pm

Roland Kays

North Carolina State University  
and Museum of Natural Sciences

Barro Colorado Island

Adaptations needed for carnivores to  
survive the Anthropocene

## WHAT'S HAPPENING AT STRI?

### FIELD COURSES and SPECIAL EVENTS

#### Nudibranchs Workshop

July 22 – August 6

Contact person: Rachel Collin

#### University of California, Riverside Tropical Ecology field course

July 26 - August 22

Contact person: Louis Santiago

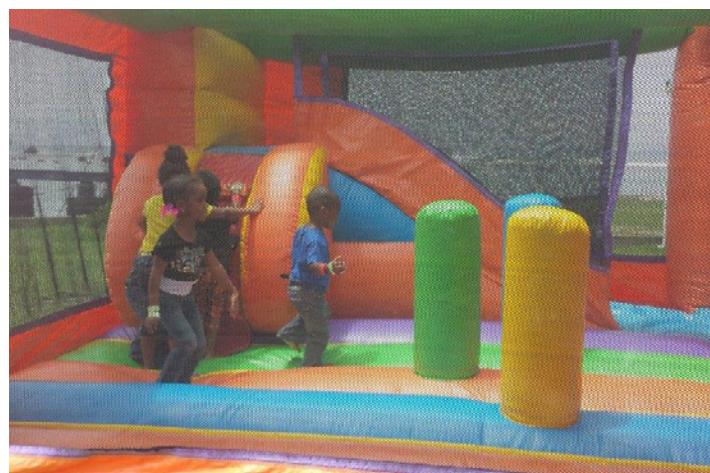
#### Golden Frog Festival

August 14 - 30

Contact person: Jimena Pitty

Sea slug - Bocas del Toro. Photo by Christian Ziegler / Babosa - Bocas del Toro Panamá. Foto por Christian Ziegler.





## Children's Day Celebration at Galeta Point

On Sunday July 19, as part of the Galeta Point Marine Laboratory Education Program's 15th anniversary and celebrating Children's Day, we were visited by 300 young children in social risk from the province of Colon.

Hosted by the Galeta staff, the children enjoyed tours of the aquariums, trails, played with clowns, ate popcorn, cotton candy and had lots of fun.

This beautiful event was made possible thanks to the Lions Club, Sabanitas Chapter, Colon Container Terminal, J. Cain & Co., Transporte Roda, Colon Import & Export, Talleres Industriales, Laura Benedetti (Colon Gardening Club), Rodeo Sport, RCN and Logistics Services.

## Celebración del día del niño en Punta Galeta

El domingo 19 de Julio, en el marco de los 15 años del Programa Educativo del Laboratorio Marino de Punta Galeta y del Día del Niño, nos visitaron 300 chiquitos en riesgo social de la provincia de Colón.

Nuestros visitantes fueron atendidos por el staff de Galeta, los niños disfrutaron de tours por los acuarios, senderos, jugaron con los payasos, comieron palomitas de maíz, algodón de azúcar y tuvieron mucha diversión.

Este hermoso evento fue posible, gracias al Club de Leones de Sabanitas, Colon Container Terminal, J. Cain & Co., Transporte Roda, Colon Import & Export, Laura Benedetti (Club de Damas Jardineras de Colón), Rodeo Sport, RCN y Logistics Services.



## ARRIVALS

Andres Vega and  
Roman Nava-Landeros  
California State University  
Northridge  
Aislamiento genético y de  
comportamiento de la rana de  
ojos rojos  
**Gamboa**

Jeffrey Burchfield and Phillip Bitzer  
University of Alabama  
in Huntsville  
Ecology of Lightning in Tropical  
Forests  
**Barro Colorado Island**

Rogelio Luque-Lora  
University of Cambridge  
Assessing the importance of  
litterfall for tree growth and nutrient  
dynamics by a large scale litter  
removal experiment  
**Barro Colorado Island**

Ethan Van Arnam  
Harvard University  
Chemical ecology and specificity of  
symbiotic interactions in fungus-  
growing ants  
**Gamboa**

Austin Carey  
University of Wyoming  
Ecosystem Services in the Panama  
Canal Watershed  
**Aqua Salud**

Roland Kays  
North Carolina State  
University  
Food for thought: Does “smart  
foraging” explain how primates can  
afford big brains?  
**Barro Colorado Island**

Juan Villarreal  
Universite Laval  
Genomic scale study of symbiosis  
between plants and nitrogen-fixing  
cyanobacteria  
**Tupper and Naos**

Daniel Silva  
Universidad de Antioquia  
Morpho-anatomy and floral  
development *Manekia naranjoana*  
(C.D.C.) Callejas  
**Gamboa, Bocas del Toro, Tupper and  
Fortuna**

Eric Alvarez  
Universidad de Panamá  
Neotropical Collections for  
Biodiversity Studies  
**Tupper and Naos**

Peter Marra  
Smithsonian Conservation  
Biology Institute  
Exploratory visits  
**Gamboa and Barro Colorado Island**

## DEPARTURES

Rachel Collin  
To San Francisco, CA  
To speak at the Pan-American Society  
for Evolutionary Developmental  
Biology meeting



## PUBLICATIONS

Armstrong, A. F. and Lessios, H. A. 2015. The evolution of larval developmental mode: insights from hybrids between species with obligately and facultatively planktotrophic larvae. *Evolution & Development*, doi:10.1111/ede.12133

Baldeck, C. A., Asner, G. P., Martin, R. E., Anderson, C. B., Knapp, D. E., Kellner, J. R. and Wright, S. J. 2015. Operational Tree Species Mapping in a Diverse Tropical Forest with Airborne Imaging Spectroscopy. *PloS One*, 10(7)doi:10.1371/journal.pone.0118403

Kurten, E. L., Wright, S. J. and Carson, W. P. 2015. Hunting alters seedling functional trait composition in a Neotropical forest. *Ecology*, 96(7): 1923-1932. doi:10.1890/14-1735.1

Ortiz, O. O., Croat, T. B. and Baldini, R. M. 2015. Two new species of Anthurium section Xialophyllum (Araceae) from Panama. *Phytotaxa*, 219(3): 253-260.doi:10.11646/phytotaxa.219.3.5

Reynolds, J. J. H., Hirsch, B. T., Gehrt, Stanley D. and Craft, M. E. 2015. Raccoon contact networks predict seasonal susceptibility to rabies outbreaks and limitations of vaccination. *The Journal of Animal Ecology*, doi:10.1111/1365-2656.12422

Riesgo, A., Sanchez-Vila, L., Sola, J., Bertran, A. and Avila, C. 2015. Some Like It Fat: Comparative Ultrastructure of the Embryo in Two Demosponges of the Genus Mycale (Order Poecilosclerida) from Antarctica and the Caribbean. *Plos One*, 10(3): e0118805 doi:10.1371/journal.pone.0118805

Schrodt, F., Kattge, J., Shan, H., Fazayeli, F., Joswig, J., Banerjee, A., Reichstein, M., Bonisch, G., Diaz, S., Dickie, J., Gillison, A., Karpatne, A., Lavorel, S., Leadley, P., Wirth, C. B., Wright, I. J., Wright, S. J. and Reich, P. B. 2015. BHPMF – a hierarchical Bayesian approach to gap-filling and trait prediction for macroecology and functional biogeography. *Global Ecology and Biogeography*, doi:10.1111/geb.12335

Valdespino, I. A., Heringer, G., Salino, A., Góes-Neto, L., de Ara A. and Ceballos, J. 2015. Seven new species of Selaginella subg. Stachygynandrum (Selaginellaceae) from Brazil and new synonyms for the genus. *PhytoKeys*, 50: 61-99.doi:10.3897/phytokeys.50.4873

Velazquez, E., Pine, C. E. T., May, F. and Wiegand, T. 2015. Linking trait similarity to interspecific spatial associations in a moist tropical forest. *Journal of Vegetation Science*, doi:10.1111/jvs.12313

strinews@si.edu

Questions/comments  
Preguntas/comentarios



@stri\_panama

#smithsonian



Smithsonian Tropical Research Institute

# FESTIVAL DE LA **RANA DORADA**

August 14-30, 2015

# SEARCHING FOR VOLUNTEERS

For support in:

**EVENTS • EDUCATIONAL ACTIVITIES  
GAMES • ART • COORDINATION • TALKS**



For more information  
[pittyjj@si.edu](mailto:pittyjj@si.edu)



# Herramientas de un Geólogo

para medir la edad del istmo

**Tony Coates**

Geólogo, Sub-Director Emérito  
Instituto Smithsonian

5 de agosto  
2015 | 6pm

Centro de Conferencias  
Earl S. Tupper, Ancón – Panamá

Información: 212-8000 | [pittyjj@si.edu](mailto:pittyjj@si.edu)

PRESENTADO POR PROGRAMAS PÚBLICOS de STRI  
ENTRADA LIBRE



**PRÓXIMA CHARLA**

Miércoles 2 de septiembre

El clima del área canalera  
y el fenómeno del Niño

Steve Patton – Instituto Smithsonian

SERIE DE CHARLAS

**CIENCIA**  
Smithsonian  
EN EL CANAL DE PANAMÁ

100 años revelando maravillas

EN VIVO POR WEBCAST: <http://goo.gl/a3NxR>

[www.stri.si.edu](http://www.stri.si.edu)

SmithsonianPanama

Stri\_panama



Instituto Smithsonian de Investigaciones Tropicales

**BOCAS RESEARCH STATION INVITES YOU TO THE TALK**

**LA ESTACIÓN DE INVESTIGACIÓN TE INVITA A LA CHARLA**

# **HUGS AND DRUGS FROM SEA SLUGS**

## **BABOSAS DE MAR: ABRAZOS Y DROGAS**

**Patrick J. Krug**

Marine Biologist - California State University, L.A.  
Biólogo Marino - Universidad de California, L.A.

**&**

**Angel Valdes**

Systematics and Biogeography - California Polytechnic  
Systemáticas and Biogeografía - Politécnico de California

**August 3  
2015 | 7pm**

Place: Cine Café – Second street in front of the municipal palace

**3 de agosto 2015 | 7pm**

Lugar: Cine Café – Calle segunda frente al palacio Municipal

**Information / Información: 212-8574 | smithmb@si.edu**

PRESENTED BY STRI PUBLIC PROGRAMS | FREE ENTRY  
PRESENTADO POR PROGRAMAS PÚBLICOS de STRI | ENTRADA LIBRE



**Smithsonian Tropical Research Institute**

[www.stri.si.edu](http://www.stri.si.edu)

SmithsonianPanama

BocasResearchStation

Stri\_panama