



STRI NEWS

JAN 9, 2015

HECTOR GUZMÁN PRESENTS PANAMA'S NEW MARINE PROTECTED AREAS

Full story: www.stri.edu



SEMINARS

TUPPER SEMINAR

Tue, Jan. 13, 4pm

Jan Sapp

York University

Tupper Auditorium

Coexistence: The Evolution and Ecology of STRI

BAMBI SEMINAR

TBA

EVENTS

JANUARY 14 - 17

4th meeting of the Network for Neotropical Biogeography

www.stri.si.edu/sites/nnb4/index.html

(STRI ID Required)

JANUARY 26-31

Dumbarton Oaks Archaeology Workshop

(Closed workshop)

WHAT'S HAPPENING AT STRI?

FIELD COURSES

University of Wisconsin-Green Bay

Contact person: Vicki Medland

Ongoing From: Jan 2 - Jan 18

North Eastern University

Contact person: Liz Bently

Ongoing From: Jan 3 - Jan 11

IGERT

Contact person: Owen McMillan

Ongoing From: Jan 6 - Jan 30



Ihle, K. E., Fondrk, M. K., Page, R. E. and Amdam, G. V. 2015. Genotype effect on lifespan following vitellogenin knockdown. *Experimental Gerontology*, 61: 113-122. doi:10.1016/j.exger.2014.12.007

Laliberté, E., Lambers, H., Burgess, T. I. and Wright, S. J. 2014. Phosphorus limitation, soil-borne pathogens and the coexistence of plant species in hyperdiverse forests and shrublands. *New Phytologist*, doi:10.1111/nph.13203

Venegas-Anaya, M., Escobedo-Galván, A. H., Balaguera-Reina, S., Lowrance, F., Sanjur, O. I. and Densmore, L. D., III. 2014. Population Ecology of American Crocodile (*Crocodylus acutus*) in Coiba National Park, Panama. *Journal of Herpetology*, doi:10.1670/13-193

Jones, A. 2015. Belowground fine root productivity, traits, and trees. *New Phytologist*, 205: 461-462. doi:10.1111/nph.13222

Castillo-Cardenas, M., Diaz-Gonzales, F., Ceron-Souza, I., Sanjur, O. and Toro-Perea, N. 2014. Jumping a geographic barrier: diversification of the mangrove species *Pelliciera rhizophorae* (Tetrameristaceae) across the Central American Isthmus. *Tree Genetics and Genomes*, doi:10.1007/s11295-014-0822-1

Clay, N. A., Donoso, D. A. and Kaspari, M. 2014. Urine as an important source of sodium increases decomposition in an inland but not coastal tropical forest. *Oecologia*, doi:10.1007/s00442-014-3183-4

Dechmann, D. K. N., Wikelski, M., Varga, K., Yohannes, E., Fiedler, W., Safi, K., Burkhard, W. and O'Mara, M. T. 2014. Tracking Post-Hibernation Behavior and Early Migration Does Not Reveal the Expected Sex-Differences in a "Female-Migrating" Bat. *PLOS ONE*, 9(12) doi:10.1371/journal.pone.0114810

Pasquini, S. C., Wright, S. J. and Santiago, L. 2014. Lianas always outperform tree seedlings regardless of soil nutrients: results from a long-term fertilization experiment. *Ecology*, doi:10.1890/14-1660.1

Turner, B. L. and Laliberté, E. 2014. Soil Development and Nutrient Availability Along a 2 Million-Year Coastal Dune Chronosequence Under Species-Rich Mediterranean Shrubland in Southwestern Australia. *Ecosystems*, doi:10.1007/s10021-014-9830-0

Zalamea, P., Sarmiento, C., Arnold, A. E., Davis, A. and Dalling, J. 2014. Do soil microbes and abrasion by soil particles influence persistence and loss of physical dormancy in seeds of tropical pioneers? *Frontiers in Plant Science*, doi:10.3389/fpls.2014.00799

Sellers, A. J., Saltonstall, K. and Davidson, T. M. 2015. The introduced alga *Kappaphycus alvarezii* (Doty ex P.C. Silva, 1996) in abandoned cultivation sites in Bocas del Toro, Panama. *BioInvasions Records*, 4

Ellison, A. R., Tunstall, T., DiRenzo, G. V., Hughey, M. C., Rebollar, E. A., Belden, L., Harris, R. N., Ibanez, R., Lips, K. and Zamudio, K. R. 2014. More than skin deep: functional genomic basis for resistance to amphibian chytridiomycosis. *Genome Biology and Evolution*, doi:10.1093/gbe/evu285

Forister, M. L., Novotny, V., Panorska, A. K., Baje, L., Basset, Y., Butterill, P. T., Cizek, L., Coley, P. D., Dem, F., Diniz, I. R., Drozd, P., Fox, M., Glassmire, A. E., Hazen, R., Hrcek, J., Jahner, J. P., Kaman, O., Kozubowski, T. J., Kursar, T. A., Lewis, O. T., Lill, J., Marquis, R. J., Miller, S. E., Morais, H. C., Murakami, M., et al. 2014. The global distribution of diet breadth in insect herbivores. *Proceedings of the National Academy of Sciences*, doi:10.1073/pnas.1423042112

Ingle, S. J. 2014. Sympatric populations of sister species of *Brachyrhaphis*. *Journal of Fish Biology*, doi:10.1111/jfb.12603

Killius, A. M. and Dugas, M. B. 2014. Tadpole transport by male *Oophaga pumilio* (Anura:Dendrobatidae): An observation and brief review. *Herpetology Notes*, 7: 747-749.

Lebuhn, G., Droege, S., Connor, E. F., Gemmill-Herren, B., Potts, S. G., Minckley, R. L., Jean, R. P., Kula, E., Roubik, D. W., Wright, K. W., Frankie, G. and Parker, F. 2014. Evidence-based conservation: reply to Tepedino et al. *Conservation Biology*, doi:10.1111/cobi.12438

Ryan, M. J. and Taylor, R. C. 2014. Measures of mate choice: comment on Dougherty and Shuker. *Behavioral Ecology*, doi:10.1093/beheco/aru221

Wolfé, J. D., Stouffer, P. C. and Seeholzer, G. F. 2014. Variation in tropical bird survival across longitude and guilds: a case study from the Amazon. *Oikos*, 123: 964-970. doi:10.1111/oik.00849

Zuquim, G., Tuomisto, H., Jones, M. M., Prado, J., Figueiredo, F. O. G., Moulatlet, G. M., Costa, F. R. C., Quesada, C. A. and Emilio, T. 2014. Predicting environmental gradients with fern species composition in Brazilian Amazonia. *Journal of Vegetation Science*, 25: 1195-1207. doi:10.1111/jvs.12174

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Questions/comments
Preguntas/comentarios



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→ ARRIVALS

John Longino

University of Utah
Ant Diversity of the
MesoAmerican Corridor
Panama

Camila Martinez

Cornell University
Biostratigrafía del Neotropico
Center for Tropical Paleocology

Alyssa Stark and Benjamin Adams

University of Louisville
Ecology and Behavior of Arboreal
Arthropods
Barro Colorado Island

Simon Ripperger

Leibniz Institute for Evolution and
Biodiversity Science
Predator foraging behavior
**Barro Colorado Island and
Gamboa**

Lily Harrison

University of Montana
Biased Evolutionary Transitions
in Mode of Development: Can
Differences in Morphology and
Digestive Function be Linked
to Evolvability of Gastropod
Development?

Selina Ruzi and Andrew Suarez

University of Illinois Urbana-
Champaign
Seed chemistry as a factor
influencing ant-mediated seed
dispersal Part II
**Barro Colorado Island, Gamboa
and Panama**

Denise Dalbosco

University of Cambridge
The Genomics of Speciation and
Adaptation
Naos Marine Lab and Gamboa

Rebekah Mayhew and Nick Gardner

University of Stirling

Ovidio Jaramillo

Universidad de Panamá
The importance of secondary
forests to biodiversity conservation
Barro Colorado Island

→ DEPARTURES

Johanna Balbuena and Federico Davis

To Colón
For the re-census of transect in Agua Salud
Project, Colón.

Matthew Larsen

To Washington D.C.
To attend the Science Executive
Committee (SEC) meeting and for
meetings with other SI staff

Héctor Guzmán

To Guayaquil, Ecuador
To participate of a meeting at Camara
Maritima de Ecuador (CAMA E) for the
design of TTS

Oris Sanjur

To Washington, D.C.
To participate in the Science Executive
Committee (SEC) and in the SIBG-GG1
Grant Review Committee



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4th meeting of the **Network** for
**NEOTROPICAL
BIOGEOGRAPHY**



Pig Family



Bear Family



Elephant Family



Camel Family



Horse Family



Dog Family



Cat Family

Jan 15-16, 2015
Panama city, Panama

The Isthmus of Panama emerged from the sea millions of years ago, joining two continents and producing one of the largest vicariance events in Earth's history: **The Great American Biotic Interchange (GABI)**. At that time, marine populations were separated while terrestrial plants and animals underwent massive migrations between North and South America, dramatically changing the Earth. The rise of the isthmus also impacted atmospheric and oceanic circulation, including substantial changes in Atlantic and Caribbean salinity.

There is no better place to have a symposium on Neotropical Biogeography!

www.stri.si.edu/sites/nnb4/index.html



Anteater Family



Porcupine Family



Possum family



Armadillo family



Sloth family



Smithsonian Tropical Research Institute | PANAMA



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Instituto Smithsonian de Investigaciones Tropicales



BECAS PARA ESTUDIANTES DE BIOLOGÍA

Del 2 al 20 de febrero

El Instituto Smithsonian de Investigaciones Tropicales y la Universidad de Princeton ofrecen becas para estudiantes universitarios panameños para participar en un curso de Ecología Tropical.

REQUISITOS:

- Ser estudiante de Biología (al menos de tercer año)
- Excelencia académica
- Dominio del inglés
- Disponibilidad a dedicarse al curso tiempo completo

Entregar carta de presentación de 2 páginas en inglés, indicando su interés en el curso, junto con su hoja de vida y créditos universitarios oficiales.

CONTACTO: STRCourses@si.edu gomezp@si.edu

Paola Gomez García - Oficina de Programas Academicos

Fecha límite para aplicar:

enero
12
2015

Smithsonian Tropical Research Institute



PANAMA

Coexistence: The Evolution and Ecology of STRI

Jan Sapp, Professor of Biology and History, York University

TUESDAY, JANUARY

13

2015

4PM

TUPPER
AUDITORIUM



TUPPER SEMINAR

For further information call: 212-8076 or email: arroyoa@si.edu



To get chicks you need bucks, but frogs get too much bang for their chucks

Wouter Halfwerk, STRI

TUESDAY, JANUARY

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2015

4PM

Tupper auditorium



Animals can communicate with sounds to attract sexual partners, but these acoustic signals can also attract all sorts of unwanted eavesdroppers that will impose a cost on the use of sexual signals. Furthermore, the production of many signals generates additional cues that can be picked up through a wide range of sensory systems, which needs to be taken into account when trying to understand how signals evolved and how they will respond to environmental changes. I study the sexual advertisement call of the tungara frog (*Physalaemus postulosus*), a species that displays in shallow puddles formed on the floor of the rainforest during the Panamanian rainy season. These frogs can produce two call types that vary in complexity. Complex calls have added elements know as 'chucks' that are energetically costly and strongly preferred by female frogs. However, the production of these calls is associated with a large vocal sac which movements generates water surface waves or ripples hat travel throughout the puddle. I will show how eavesdroppers, such as rival males or predators can use these ripples to locate a calling male. Furthermore, I will discuss the different sensory systems used as well as the role of the environment in driving selection pressures on production and transmission of signals and their by-product cues.

Smithsonian Tropical Research Institute



PANAMA

Understanding trophic interactions and patterns of marine metazoan diversity using high-throughput sequencing

Matthieu Leray, Smithsonian Museum of Natural History

TUESDAY, JANUARY

27

2015

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