

Summer 2014 REU Presentations

Session One:

Moderator: Kenneth Angielczyk, curator, Field Museum

Microsatellite patterns in two *Castilleja* subspecies *affinis* and *neglecta*
Hosin West, University of New Haven, and Chicago Botanic Garden

Analyzing the genetic component in caste determination of Neotropical army ants

Andrew Burchill, University of Chicago, and Field Museum of Natural History

Elucidating the lichen genus *Lecanora*

Patricia Brandt, University of Chicago and Field Museum of Natural History

Bizarre biology: morphogenesis of the freshwater bryozoan *Plumatella vaihiriaae* (Phylactolaemata)

Andrea Rummel, University of Chicago, and Field Museum of Natural History

Session Two:

Moderator: Emily Yates, Seed Bank Coordinator, Dixon National Tallgrass Prairie Seed Bank and Conservation GIS Lab Manager, Chicago Botanic Garden

GIS-based spatial analysis of rare plant populations on gravel hill prairies: habitat suitability modeling

Christopher Wright, University of Washington Bothell, and Chicago Botanic Garden

Illuminating the Tree of Life: a case study in the evolving relationship between taxonomy and phylogeny

Joshua Stevens-Stein, University of Chicago, and Field Museum of Natural History

Assessment of the effects of the introduction of *Echinacea pallida* in the pollination of native *Echinacea angustifolia* in western Minnesota

Dayvis Blasini, Northeastern Illinois University, and Chicago Botanic Garden

Seeding restorations: evaluating seed viability to improve restoration outcomes

Jessica Riebkes, Central College, and Chicago Botanic Garden

Does the attempt to restore golden Indian paintbrush to a former habitat or raising the species in isolation have an effect on genetic diversity, and if so to what extent?

Alexander Shaffer, Northwestern University, and Chicago Botanic Garden

Session Three:

Moderator: David Clarke, postdoctoral research associate, Field Museum

Decomposition and fungal diversity in restored tallgrass prairies

Mariah Allen, Lake Forest College, and Chicago Botanic Garden

Organic matter stabilization in soil aggregates during grassland restoration

Jenifer Yost, Lake Forest College, and Chicago Botanic Garden

The role of fungi in soil C-sequestration

Allison Buiser, Knox College, and Chicago Botanic Garden

Mulch-munching through the ages: one-thousand legs—up close and personal

Madeleine Metz, Emory University, and Field Museum of Natural History

Session Four:

Moderator: Lauren Umek, Graduate student, Northwestern University and Chicago Botanic Garden

A molecular phylogenetic survey of *Borrelia* from migratory birds: are migratory birds potential vectors for Lyme disease?

Sarah Kurtis, University of Chicago, and Field Museum of Natural History

The bats of Kenya: assessing the species limits of cryptic species

Kyle Reid, Olive Harvey College, and Field Museum of Natural History

A new dicynodont from the late Permian of Tanzania

Ben Otoo, Amherst College, and Field Museum of Natural History

How to grow a dinosaur: the ontogeny of the Middle Triassic

archosaur *Asilisaurus kongwe*

*Christopher Griffin, Cedarville University, and Field Museum of
Natural History*