





Smith Departmental Seminar at PennBIO: Team Camponotus				
environmental	elevational	relationship	sequences	found
community	gradient	cloud(s)	environmental	Dan and Winnie
mid-elevation	increased		evolutionary	ant
diversity	Guanacaste	linear	competition	specimens
precipitation	taxonomic	turnover	species	change

Smith Departmental Seminar at PennBIO: Team Azteca				
Guanacaste	Dan and Winnie	mid-elevation	increased	phylogenetic
evolutionary	ant	diversity	Guanacaste	linear
competition	specimens		taxonomic	turnover
species	change	phylogenetically	DNA	along
neotropical	high-elevation	phylogeny	tropical	elevation


Smith Departmental Seminar at PennBIO: Team Odontomachus

change	linear	competition	specimens	precipitation
taxonomic	turnover	species	change	phylogenetically
DNA	along		high-elevation	phylogeny
tropical	elevation	temperature	high	sampled
forest	ants	between	powerpoint	climate


Smith Departmental Seminar at PennBIO: Team Adelomyrmex

tropical	change	phylogenetically	DNA	along
neotropical	high-elevation	phylogeny	tropical	elevation
temperature	high		forest	ants
between	powerpoint	climate	richness	tree
volcanoes	ACG	Janzen	low-elevation	Costa Rica

Smith Departmental Seminar at PennBIO: Team Pheidole

powerpoint	elevation	temperature	high	sampled
forest	ants	between	powerpoint	climate
richness	tree		ACG	Janzen
low-elevation	Costa Rica	habitat	abiotic	Staphylinid (s)
climate change	evidence	pattern	area	sites

Smith Departmental Seminar at PennBIO: Team Solenopsis

Costa Rica	climate	richness	tree	volcanoes
ACG	Janzen	low-elevation	Costa Rica	habitat
abiotic	Staphylinid (s)		evidence	pattern
area	sites	collection	barcode	samples
communities	Cacao	abundance	sampling	volcan