

# The second meeting of the Northeastern Evolutionary Primatologists

## 1 | INTRODUCTION

Hunter College, City University of New York (CUNY), hosted the second meeting of the Northeastern Evolutionary Primatologists (NEEP) on November 4<sup>th</sup> and 5<sup>th</sup>, 2016, in New York City. The conference was organized by Andrea Baden (Hunter College, CUNY), Megan Petersdorf (New York University, NYU), Rachel Jacobs (George Washington University, GWU), Andreas Koenig (Stony Brook), and Carola Borries (Stony Brook). In all, 101 students and 40 faculty members were in attendance, representing over 30 research institutions. Student participation was excellent and the meeting facilitated and encouraged networking among undergraduate and graduate students in the northeastern area.

The conference kicked off with a keynote address by Christopher Schmitt from the Department of Anthropology at Boston University. Schmitt gave an overview of his career, through his dissertation, post-doctoral, and assistant professorship experiences investigating growth and development in primates. Schmitt's dissertation work challenged the life-history hypothesis of delayed maturation as a result of juvenile foraging incompetence in two species of sympatric atelines. After receiving his PhD, Schmitt's research focus shifted to a more medically oriented area of research: the genomics of obesity during development. During his postdoctoral appointment at the International Vervet Research Consortium, Schmitt determined that the development of obesity in vervet monkeys occurs through bimaturism. Furthermore, obesity in male offspring, but not female offspring, is linked to maternal diet while in utero. Finally, at the University of California, Berkeley, Schmitt applied his expertise in growth and development to the fossil record, using quantitative genetic methods to trace the evolution of catarrhine tooth morphology. Schmitt's presentation, which was geared toward student attendees, not only highlighted his research, but encouraged multidisciplinary research and offered insight into personal success within academia.

## 2 | PODIUM PRESENTATIONS

The following day of the conference consisted of three sessions of podium presentations, then an evening poster session. The first session of podium presentations, focused on diet, nutrition, and seed dispersal, began with a presentation by Andrea DiGiorgio (Boston University), who discussed the importance of combining geometric models with optimal foraging models to better understand orangutan feeding

behavior. Andrea Blackburn (Boston University) discussed the role of Bornean orangutans as effective seed dispersers and their importance in fruit-tree recruitment. Mareesa Takahashi (Columbia) reported that blue monkeys incorporate non-natural foods into their diet to fulfill nutritional requirements. Mareike Janiak (Rutgers) presented her exploration of possible amino acid convergence in insectivorous New World monkeys and insectivorous bats. Findings presented by Camille Stewart (Hunter College, CUNY) indicated that foods selected by forest baboons contain less starch than those selected by savanna baboons, suggesting that early hominins did not eat starchy foods until they moved into open habitats. Caley Johnson (The Graduate Center, CUNY), the recipient of this year's award for best student talk, discussed operationalization of the macronutrient niche of olive baboons using the right-angled mixture triangle.

The second session, which focused on social strategies and vocalizations, began with a presentation by Nicole Thompson (Columbia), who used fecal glucocorticoid metabolites (FGCMs) to investigate the relationship between affiliative ties and allostatic load in juvenile blue monkeys. Surprisingly, she found that there was a positive relationship between time spent grooming and higher baseline FGCMs. Shahrina Chowdury (The Graduate Center, CUNY) reported that, among two troops of chacma baboons with different ranging patterns, there was a positive relationship between fecal glucocorticoid (GC) levels and time spent in suburban areas, while there was a negative relationship between GC levels and time spent in the forest. Amy Scott (Boston University) investigated how infanticide may shape the reproductive strategies of female orangutans, focusing on spatial proximity between a mother and her dependent offspring and between males and females. Alexis Amann (The Graduate Center, CUNY) investigated reproductive strategies among female hamadrayas baboons and reported that females may terminate pregnancies as a counterstrategy to male take-overs. Holly Fuong (Columbia) quantitatively assessed variation in blue monkey grunt vocalizations. She found no evidence that calls differed by context and limited evidence that they differed by individual callers or matriline.

The third and final session of podium presentations focused on speciation and morphology. Amanda Fuchs (Hunter College, CUNY) presented the first of the speciation talks. She used ecological-niche modeling to investigate niche differentiation in *Papio* species. She found no significant correlation between niche overlap and estimated divergence dates in *Papio* species, suggesting parapatric speciation. Jen Tinsman (Columbia, American Museum of Natural History) projected

lemur ecological niches onto predicted refugia during the last glacial maximum to determine if ecological or allopatric speciation occurred under past climate conditions. Alejandro Laserna (Queens College, CUNY) investigated the relationship between several behavioral variables and diversification rates, finding that allomothering and mating systems affected diversification rates, though dispersal rates did not. Three morphology-focused presentations followed the speciation talks. Gina Agostini (University of Massachusetts, Amherst) presented findings suggesting that multiple factors, including allometry and anatomical location, influence the level of phylogenetic signal in primate traits. Jenny Eyre (NYU) investigated the relationship between hip width, measured as bi-iliac breadth, and birth canal size, finding that although bi-iliac breadth was correlated with the size of the birth canal at the pelvic inlet, there was no correlation between bi-iliac breadth and the size of the pelvic outlet. The session concluded with a presentation by Megan Petersdorf (NYU), who presented results demonstrating that Kinda baboons are less sexually dimorphic in body mass and canine size, but have relatively larger testes than do other baboons, indicating relatively weak direct contest competition but stronger sperm competition compared with other baboon species.

### 3 | POSTER SESSION

The poster session was held following the podium presentations in the Hunter Faculty Lounge, which boasts spectacular views of the New York City skyline. Coloration and color vision, methods, and craniodental morphology were popular poster topics. In color research, Andrew Van Horn (GWU) showed that male rhesus macaque coat coloration varies by social style. Rachel Jacobs (GWU) presented findings on novel allelic variation related to color vision in four species of indriids. In methods, Melanie Fenton (Rutgers) presented results that highlighted the importance of validating photogrammetric methods for collecting body-size measurements in the field. Jane Widness (Yale) called attention to the benefits of camera traps for research in field primatology and Raymond Vagell (Hunter College, CUNY) presented a novel technique to explore color vision in lemurs called subject-mediated auto-

matic remote testing apparatus (SMARTA). In craniodental morphology, Kathleen Rust (Hunter College) presented findings on a new sivaladapid fossil from India and Chris Gilbert (Hunter College) showed that fossil euprimates consistently have higher encephalization quotients than do plesiadapiforms. Lu Gao (Columbia) was awarded the prize for best student poster for her work on adult male blue monkey influxes. She found that the relationship between the number of males and the number of sexually active females in blue monkey groups was not as strong as expected, indicating that the number of estrus females is not necessarily the primary variable influencing the number of males in groups of these monkeys.

Overall, the meeting provided numerous opportunities for student participation. Students were involved in many aspects of the meeting, from volunteering with set-up to presenting their research. They found it very beneficial to interact with faculty and students from other local institutions in an environment focused on student research.

This second meeting of the Northeastern Evolutionary Primatologists Group was supported by Hunter College, CUNY (School of Arts and Sciences; Department of Anthropology) and NYCEP (The New York Consortium in Evolutionary Primatology). Student prizes for podium and poster presentations were generously provided by Wiley Publishing and Springer Publishing. Recipients of these awards also received cash prizes. Meeting participants also voted that a new NEEP logo designed by Elaine Guevara (GWU) be used at the next NEEP meeting, currently planned for Fall 2017. Visit [neevolprimatol.org](http://neevolprimatol.org) for the full conference program, photographs from the weekend, and details on future NEEP meetings.

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The second meeting of the Northeastern Evolutionary Primatologists, Nov 4th and 5th, 2016 [Color figure can be viewed at [wileyonlinelibrary.com](http://wileyonlinelibrary.com)]