



CONFERENCE PROGRAM

*54th Annual Conference
of the Animal Behavior Society*



**University of Toronto - Scarborough Campus
June 12 - 16, 2017**

The official journal of the
European Federation for Primatology

Folia Primatologica

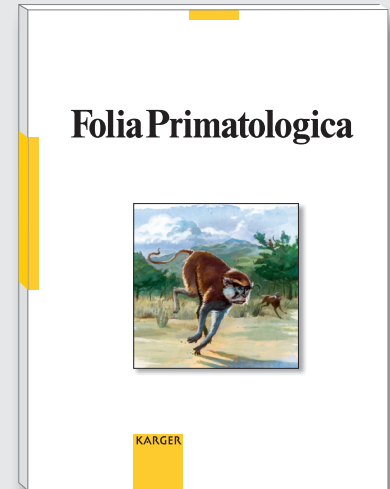
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Official Journal of the

European Federation for Primatology

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Primate Society of Great Britain

Recognizing that research in human biology must be founded on a comparative knowledge of our closest relatives, this journal is the natural scientist's ideal means of access to the best of current primate research. *Folia Primatologica* covers fields as diverse as molecular biology and social behaviour, and features articles on ecology, conservation, palaeontology, systematics and functional anatomy. In-depth articles and invited reviews are contributed by the world's leading primatologists. In addition, special issues provide rapid peer-reviewed publication of conference proceedings. *Folia Primatologica* is one of the top-rated primatology publications and is acknowledged worldwide as a core journal for primatologists, zoologists and anthropologists.

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Selected contributions

- New Material of the Hominoid *Ouranopithecus macedoniensis* from the Late Miocene of Axios Valley (Macedonia, Greece) with some remarks on its sexual dimorphism: **Koufos, G.D.** (Thessaloniki); **Louis de Bonis, L.** (Poitiers); **Kugiumtzis, D.** (Thessaloniki)
- Effects of Fragment and Vegetation Structure on the Population Abundance of *Ateles hybridus*, *Alouatta seniculus* and *Cebus albifrons* in Magdalena Valley, Colombia: **Marsh, C.** (Poole); **Link, A.** (Bogotá); **King-Bailey, G.** (New Orleans, La.); **Donati, G.** (Oxford)
- Is Tickling Torture? Assessing Welfare towards Slow Lorises (*Nycticebus* spp.) within Web 2.0 Videos: **Nekaris, K.A.I.**; **Musing, L.**; **Vazquez, A.G.**; **Donati, G.** (Oxford)
- Scapular Morphology and Forelimb Use during Foraging in Four Sympatric Cercopithecids: **Dunham, N.T.**; **Kane, E.E.**; **McGraw, W.S.** (Columbus, Ohio)
- Hand Preference during Tool Use in Wild Bearded Capuchins: **Moura, A.C.** (João Pessoa)
- Lifespan and Reproductive Senescence in a Free-Ranging Ring-Tailed Lemur (*Lemur catta*) Population at Berenty, Madagascar: **Ichino, S.**; **Soma, T.**; **Miyamoto, N.** (Kyoto); **Chatani, K.** (Kitanagoya); **Sato, H.**; **Koyama, N.** (Kyoto); **Takahata, Y.** (Sanda)
- Locomotor Ecology of *Propithecus verreauxi* in Kirindy Mitea National Park: **Furnell, S.** (Manchester); **Blanchard, M.L.**; **Crompton, R.H.** (Liverpool); **Sellers, W.I.** (Manchester)
- Genetic Evidence for Male and Female Dispersal in Wild *Lemur catta*: **Parga, J.A.** (Los Angeles, Calif.); **Sauter, M.L.** (Boulder, Colo.); **Cuozzo, F.P.** (Grand Forks, N.Dak.); **Youssef Jacky, I.A.** (Toliara); **Gould, L.** (Victoria, B.C.); **Sussman, R.W.** (St. Louis, Mo.); **Lawler, R.R.** (Harrisonburg, Va.); **Pastorini, J.** (Zürich/Rajagiriya)

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KARGER

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UNIVERSITY OF
TORONTO
SCARBOROUGH



GENERAL INFORMATION

DATES

The 54th Annual Animal Behavior Society Conference begins Monday, June 12th and concludes Friday, June 16th, 2017.

REGISTRATION INFORMATION

The Registration Desk is located in the "Meeting Place" and will be open during the following hours:

Sunday	6:00 pm - 8:00 pm
Monday	8:00 am - 7:00 pm
Tuesday	7:30 am - 7:00 pm
Wednesday	7:30 am - 6:00 pm
Thursday	7:30 am - 6:00 pm
Friday	7:30 am - 5:00 pm

INSTRUCTIONS TO POSTER PRESENTERS

All posters will be displayed in the Science Wing Hall. There is a single poster session day this year. Assigned poster numbers are listed in this program and in the online conference program (<http://program.abs2017.org>).

All posters must fit within an area no larger than 42" wide X 40" high and must be hung using velcro (will be provided). Poster boards will be available by 2 PM on Tuesday and can be posted that day. Please place your poster on the board with the correct number leaving the board number visible.

Presenters are asked to stand by and present their poster from 6:00 pm - 9:00 pm during the poster session and reception on Wednesday. Poster session details can be found on pages 26-35.

INSTRUCTIONS TO TALK PRESENTERS

- Talks will be strictly timed by moderators to keep the concurrent sessions synchronous.
- Contributed Talks should be 12 minutes long. There will be 3 minutes allotted for questions & transition between speakers.
- All rooms will have only PC connected to the presentation system.
- You will not be able to connect your own computer to the projection system for a contributed or symposium talk.
- PCs will have Window 7 & MS Office 2016.
- All presentations should be formatted for 4:3 aspect ratio. Power Point: Design -> Slide Size: Standard (4:3).
- VLC Player is the default video player on these PCs. Apple discontinued support for QuickTime on PC. Please note, VLC will play .MOV, .MP4 and other file types associated with QT. Links to online videos that play directly in the browser/.ppt are more like to play without issue (than embedded files).
- Please note 'presenter view' will not be available.
- It is highly recommended that speakers bring their presentations on a jump drive to their sessions as back-up.
- All talks must be uploaded using the speaker presentation upload station in Room AC286A located in the Library at least 4 hours before the scheduled presentation time. The speaker upload room will be open during the following hours:
 - Monday, June 12: 6:30PM - 8:00PM
 - Tuesday, June 13 - Thursday, June 15: 8:00AM - 6:30PM

PRIVACY STATEMENT

Audio recording of presentations at ABS meetings is permitted only with prior approval of the speaker. Video recording may be allowed only under special circumstances with prior approval of the Program Officers, the Executive Committee and the speaker.

WiFi ACCESS

WiFi is available for all conference attendees using these details:

Network ID: UofT
Login: absconf17
Password: ABSquest17

ONLINE/MOBILE PROGRAM

ABS attendees may access the online conference program using the following link: <http://program.abs2017.org>.

CAMPUS HOUSING CHECK-IN

Delegates who are staying on campus will proceed to the Student Residence Centre (1295 Military Trail, Toronto ON, M1C 3A8) to check in. The Residence Front Desk will be open between 7:00am-11:00pm, 7 days per week. Those that arrive before 7am, or after 11pm can access our front desk staff by dialing the on-call number that will be posted on the doors of the Residence Centre. Our staff will direct guests to their room and provide parking details at check in. Please note that there is a \$25.00 lost key fee.

DINING INFORMATION

The Marketplace (Campus Meal Plan)

Monday:	11:00 am - 4:00 pm
Tuesday-Wednesday:	11:00 am - 7:30 pm
Thursday-Friday:	11:00 am - 4:00 pm

Breakfast Timing

Monday-Friday:	7:00 am - 8:30 am
Saturday:	8:00 am - 9:00 am

Use pre-purchased meal plan cards or guest cash/credits for payment. Please note meal plan holders can add funds to their cards onsite. Should a pre-ordered card be lost, please report it as soon as possible, and it may be possible to issue a new card, transfer any remaining balance and cancel the original.

Tim Horton's

Monday:	7:30 am - 7:00 pm
Tuesday-Thursday:	7:30 am - 8:00 pm
Friday:	7:30 am - 5:00 pm

Starbucks

Monday:	8:00 am - 6:00 pm
Tuesday-Friday:	7:30 am - 6:00 pm

Additional Campus Food Outlets: (not included on the meal plan)

The Student Centre:

Rex's Den (full restaurant):	Monday-Friday - 12 noon - 7:00 pm
Asian Gourmet:	11:00 am - 7:30 pm
Hero Burger:	11:00 am - 9:00 pm
Subway:	9:00 am - 8:30 pm

Instructional Centre:

Le Prep:	Monday-Friday - 8:00 am - 5:30 pm
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PARKING

For those delegates that pre-purchased their parking, your designated lot is Parking Lot F, this lot is off of Ellesmere Road just east of Military Trail. For those delegates that did not pre-purchase parking and require a daily parking pass, you will pay at the "pay and display" machines in Parking Lots G & H. These are your designated lots throughout the conference. All "pay and display" machines accept American Express, Visa, MasterCard, or Cash.

WELCOME LETTER

Dear ABS members and friends,

Dear ABS members and friends,

We are pleased to welcome you to Toronto and the 54th annual meeting of the Animal Behavior Society. We are pleased to be hosting you on our campus at the University of Toronto Scarborough (UTSC) for a full academic program.

UTSC is nestled in a green belt, close to a national urban park, giving lots of opportunities for connecting with nature while you are here. We know some of you are staying on campus in our town-house style dorms, others in local hotels, or coming from a bit further afield, commuting in from downtown Toronto. We recommend you all enjoy the conference program and allow lots of time at breaks and in the evenings to reconnect with colleagues. Of course we know the city is a huge draw, as Toronto is an exciting place, and one of the most multicultural cities in the world. The schedule includes an opportunity to get to know the city in a Thursday night excursion, without missing out on the rich academic program on campus each day. The area surrounding the campus also hosts an interesting and diverse culinary culture, with lots of opportunities for adventurous eating nearby. If you are looking for a more relaxed evening, there is the ABS film festival on Tuesday night, and an 'ABS Pub' hosted at different locations on campus each night, an easy default for conference socializing.

The line-up of plenary and symposium speakers is outstanding and international in scope. Plenary speakers will include Anita Aisenberg (Clemente), Rebecca Kilner (Cambridge), Elizabeth Tibbetts (Michigan) and James Dale (Massey), and the fellows lecture will be given by Molly Morris (Ohio).

The ABS president's plenary will be given by William Searcy (Miami). Conference symposia include 'Animal Cognition: Mechanisms, Ecology and Evolution', '50 years of Zoo Behaviour', 'Behavioural Biodiversity' and the President's symposium, 'Predicting Behaviour'. Of course, another highlight is your own contributed talk or poster! We have over 700 registrants, with many speaking in 5 to 6 concurrent talk sessions, or presenting their work at the Wednesday-night poster session. We promise you a diverse array of interesting and exciting new work to think about.

Other highlights include the annual graduate student Allee Award session, the Charles H. Turner workshop for undergraduates (by invitation), a pre-conference Outreach Day, Teaching and Conservation Behaviour workshops before the 5 day meeting.

In addition, for the first time in many years, a conference in Canada means: Pictures with Mounties (Well, only if you go downtown. Or to Ottawa). Colourful money with cute nick-names (Loonie! Toonie!). Poutine (Google it). Maple everything. Lots of apologies (sorry). Trudeau – the next generation (need we say more?).

We look forward to seeing you at what promises to be a memorable conference!

Warm regards,



Maydianne Andrade



Andrew Mason



Mark Hauber



Jonathan Pruitt

WELCOME FROM UTSC CAMPUS INDIGENOUS ELDER

We welcome registrants from Indigenous nations to our campus, and invite them to meet with Wendy Phillips, a Ceremonial Leader, Indigenous Spiritual Educator, Traditional Indigenous Healer, Ahwidokazit (One Who Helps), Bezhagobe (One Who Stands Alone), who belongs to the Bald Eagle Clan. She is Ojibwa and Potawatami from Wasauksing First Nation in the heart of the Muskokas and will attend the conference on Tuesday 13 June. To arrange a meeting, please email her at elder@utsc.utoronto.ca.

MEETING-RELATED AWARDS

THE WARDER CLYDE ALLEE AWARD COMPETITION

The 2017 Warder Clyde Allee Session for Best Student Paper Competition will be held during the annual meeting of the Animal Behavior Society scheduled June 12-16, 2017 at the University of Toronto Scarborough in Toronto, Canada. All eligible students and recent graduates are encouraged to participate. Any independent graduate student research (including, but not limited to, the doctoral dissertation) is suitable for the application. The work presented may be part of a larger collaborative effort, but the student must be first author and have principal responsibility for conceptualization and design of the research, collection and analysis of the data, and interpretation of the results. The entrant cannot have been awarded the Ph.D. degree before the start of the preceding ABS annual meeting (for the 2017 meeting, this date is July 30, 2016). An individual can enter the session only once per lifetime.

THE CHARLES CARPENTER POSTER PAPER AWARD (FOUNDERS MEMORIAL POSTER PAPER AWARD)

This year's award is named after Charles Carpenter, who died in January 2016. This award is in honor of the founders of the Animal Behavior Society. It is for outstanding posters presented at the annual meeting. Any graduate student or postdoctoral member of the society in good standing is eligible to enter the competition. Applicants can indicate their intention to enter the competition by marking the appropriate box on the Meeting Abstract submission form. All Founders presenters will be expected to provide a single page preview of their poster for the judges.

CHARLES H. TURNER AWARD

Beginning in 2002, the Animal Behavior Society created the Charles H. Turner Program for undergraduate participation at the annual Society meetings. This program, previously funded by an NSF grant but now supported entirely by the Animal Behavior Society, is a travel grant that supports the goals of increasing the diversity of our membership. Selected Turner Program Fellows will receive support to travel to the Annual Conference, and participate in a one-day workshop structured to integrate students into both the meeting experience and the broader community of the Animal Behavior Society.

GENESIS AWARD FOR UNDERGRADUATE RESEARCH

First presented at the 2000 ABS Annual Meeting the Genesis Award honors the best undergraduate poster presentation at the meeting.

DIVERSITY FUND STUDENT REGISTRATION AWARD

The Animal Behavior Society is strongly committed to increasing the diversity of attendees at the ABS Annual meeting and within its membership. A limited number of registration fee bursaries are available to aid attendance by students who will increase the participation of racial minorities under-represented in our field. This includes, but is not limited to students of Black, Hispanic/Latino, Asian, American Indian/First Nation, Aboriginal or Maori heritage. If funds are available, the bursaries may be extended to help defray costs of African, Asian, Central American, South American or Mexican researchers who are not students. Preference is given to individuals presenting research results.

LATIN AMERICAN TRAVEL AWARD

The Latin American Travel Awards are intended to encourage greater participation of Latin American researchers in ABS meetings, by helping to defray the costs of international travel, housing, and/or meals at meetings. These awards are restricted to Latin American graduate students enrolled in programs in Latin American institutions, who will be presenting a talk/poster at the ABS meeting. Priority will be given to Ph.D. students who are attending an ABS meeting for the first time and who have not received a Latin American Travel Award in previous years. Award values vary according to funds available.

GRADUATE STUDENT TRAVEL AWARD

The Graduate Student Travel Grant award is intended to provide financial support for graduate students to attend and present at the annual Animal Behavior Society meeting by helping to defray the costs of travel, housing and/or meals at the meetings.

CAREGIVER TRAVEL GRANT

The Caregiver Travel Grant award is intended to provide financial assistance for active ABS members whose caregiving responsibilities for dependent persons would otherwise limit their ability to attend and present at the annual ABS meeting. Dependents include but are not limited to young children and aging parents. Receiving this award does not preclude ABS members from applying for additional funding from ABS.

Announcement of Meeting and Career Award winners will be made at the Awards Ceremony immediately following the Presidential plenary talk Friday afternoon.



PLENARIES & KEYNOTES

TUESDAY, JUNE 13TH - 8:30 - 9:30 AM

HOW BEHAVIOR CHANGES EVOLUTION: EXPERIMENTS WITH BURYING BEETLES - Rebecca Kilner, Cambridge University

Behavioural ecologists analyse animal behaviour to understand how it is adaptive, and therefore why it persists. In our lab, the focus is slightly different. We want to know how adaptive traits, like animal behaviour, influence the subsequent course of evolution. We address this question by using experimental evolution and we focus in particular on a social trait, namely parental care. Our model species is the burying beetle, a remarkable insect that breeds upon the body of a small dead vertebrate. It shows elaborate parental care, which involves preparing the carcass to make an edible nest for its offspring and provisioning larvae after hatching. I will describe experiments that manipulate the provision of parental care and measure the way in which traits then evolve and adapt, in both parents and offspring. The general conclusion is that there are diverse ways in which behaviour can change evolution.



TUESDAY, JUNE 13TH - 1:30 - 2:30 PM

THE EVOLUTION OF ALTERNATIVE REPRODUCTIVE TACTICS - Molly Morris, Ohio University

Variation within a species has long been appreciated by evolutionary biologists, given that genetically influenced variation is necessary for evolution. However, the presence of discrete differences in morphology, behavior and physiology suggests multiple optima, or adaptive variation. Alternative reproductive tactics (ARTs) are prime examples of adaptive variation in suites of life history traits that can provide valuable insights into several areas of active research. I first highlight how work on the evolution of ARTs in swordtail fishes could lead to a better understanding of the evolution of behavioral plasticity, genetic assimilation and constraints on the evolution of tactical dimorphisms. Second, I consider the role that variation in female mate preference and sexual conflict has played in increasing our understanding of the evolution of ARTs within ARTs within ARTs. And finally, I suggest how the conceptual underpinnings of the evolution of ARTs could potentially be applied to research on diabetes in humans.



WEDNESDAY, JUNE 14TH - 8:30 - 9:30 AM

PLUMAGE COLOUR IN MALES AND FEMALES - James Dale, Massey University

Research on animal coloration has led to amazing insights into the nature of natural selection, sexual selection, sensory ecology and the evolutionary maintenance of biological diversity. However quantifying coloration can be challenging because it is a complex, multi-dimensional trait that is often perceived differently by the animals under investigation and the investigators themselves. In this talk I will first review methods to quantify "colour elaboration". Using birds as a model system, I will then argue that quantifying how "male-like" or "female-like" a colour is provides an intuitive and effective means for interspecific comparison of colour diversity. Finally, I will apply this method to the ~6000 species of perching birds (Order: Passeriformes) to help resolve some of the key evolutionary predictors of colour elaboration in both sexes.



THURSDAY, JUNE 15TH - 8:30 - 9:30 AM

ANIMAL SIGNALS INFLUENCE SOCIAL BEHAVIOR, PHYSIOLOGY, AND COGNITION: LESSONS FROM WASP FACES - Elizabeth Tibbetts, University of Michigan

The effects of animal signals extend beyond social interactions to shape the way animals look, think, act, and evolve. In the first section of the talk, I will draw examples from multiple taxa to illustrate that communication is a key factor shaping phenotypic and genetic diversity in social animals. The goal is to develop a useful framework for future behavioral and evolutionary research on animal signals. I will show how signals that convey different kinds of information differ in terms of the type of selection acting on signalers, patterns of phenotypic variation, developmental mechanisms, and evolutionary consequences. In the second section of the talk, I will experimentally examine the factors that prevent low-quality individuals from cheating by signaling that they are strong. Experiments in paper wasps show that dishonest individuals are aggressively punished, and this punishment has lasting effects on the physiology of the dishonest signaler and those they interact with. Therefore, interactions between behavioral and physiological costs of dishonesty could play an important role in maintaining honest communication over evolutionary time.



FRIDAY, JUNE 16TH - 8:30 - 9:30 AM

JOURNEY TO AN UPSIDE-DOWN WORLD: A TRANSGRESSIVE SOUTH AMERICAN SPIDER AS A MODEL FOR SEXUAL SELECTION STUDIES - Anita Aisenberg, Instituto de Investigaciones Biológicas Clemente Estable

This talk will be focused on the outstanding *Allocosa brasiliensis*, a sand-burrowing spider that inhabits the coasts of South America. Conversely to what is expected in spiders, males are larger than females, while females are wanderers that look for mating partners and initiate courtship. Both sexes are choosy when it is time for mating: females prefer males with long burrows and males prefer virgin females with good body condition. Furthermore, males can attack and cannibalize rejected females. This Neotropical species gives us the opportunity to study the factors governing their atypical behaviors, while discussing the causes shaping sex roles in spiders. In this talk we will get to know this spider-exception through a journey to experimental and field-work performed on this species, ending with perspectives for future studies.



FRIDAY, JUNE 16TH - 1:30 - 2:30 PM

BIRD SONG AND THE PROBLEM OF SIGNAL RELIABILITY - William Searcy, University of Miami (ABS President)

Signaling systems are expected to be stable only if signals are to some extent reliable, but the maintenance of reliability is a problem in all systems in which the interests of signalers and receivers are not identical. Among the mechanisms proposed to maintain reliability, three seem particularly important: the handicap mechanism, in which reliability is maintained by intrinsic signal costs; conventional signaling, in which reliability is maintained by receiver-dependent costs; and index signaling, in which physical or informational constraints impose honesty. All three of these mechanisms can be found acting on bird song. Intrinsic costs imposed during development reliably tie developmental history to learned aspect of song, explaining female preferences for better-learned songs. Receiver dependent costs act on aggressive signals, explaining the otherwise puzzling reliability of specific song signals as predictors of aggression. Recent findings have shown that informational constraints make duet codes and duet coordination reliable signals of pair stability.



SYMPOSIA

TUESDAY, JUNE 13TH**PRESIDENTIAL SYMPOSIUM: PREDICTING BEHAVIOR**

Organizer: Emília P. Martins

AC223

Predictions are a powerful tool for understanding animal behavior, and the need for accurate predictions has become increasingly pressing with the growing impact of anthropogenic forces such as urbanization, pollution and climate change. However, animal behavior is inherently complex, such that making specific predictions about future behavior can seem a daunting task. To predict future behavior, we need to understand the underlying mechanisms, environmental factors, developmental forces, and evolutionary contexts that constrain or promote particular types of changes. We also need to know how these aspects interact with each other, and to obtain quantitative estimates of their relative importance. As an important consequence, the process of prediction often leads to the identification of simple rules that explain complex phenomena as well as powerful manipulations that can effectively confirm or refute hypotheses.

For this symposium, we bring together experts who work on a wide range of animals from a diversity of perspectives and challenge them to make specific predictions about behavioral change in response to climate shifts, urbanization or other forces. Along the way, we asked speakers to review what is known about plasticity and change, and to recommend future research that would facilitate the prediction process for other researchers.

- Rebecca J. Safran, University of Colorado
- Karen L. Carleton, University of Maryland, College Park
- Michael J. Sheehan, Cornell University
- Barbara Taborsky, Universität Bern, Switzerland
- Monserrat Suárez-Rodríguez, Universidad Nacional Autónoma de México
- Ximena E. Bernal, Purdue University
- Mikus Abolins-Abols, Indiana University
- Diana K. Hews, Indiana State University

TUESDAY, JUNE 13TH**THE FUTURE OF ZOO RESEARCH: 50 YEARS OF ZOO BEHAVIOR**

Organizers: Susan Margulis and Nancy Scott

AA112

In 1967, a symposium was held at the annual meeting of the American Association of Zoological Parks and Aquariums on the Use of Zoos and Aquariums in Teaching Animal Behavior. The value of zoos as research venues remains somewhat overlooked; lamentable, given the rich resource that zoos present for both basic and applied studies. Fifty years later, we reflect on the current trends in zoo research by bringing together experts who will speak to the nature of zoo behavioral studies, the kinds of questions that can be addressed, application to scientific management and husbandry, and future directions in zoo behavioral research. The growing emphasis on animal welfare science makes this symposium particularly timely, as zoos remain at the forefront of applied animal welfare studies. Behavioral research in zoos spans a range of sub-disciplines within the broad field of animal behavior, and these will be represented in the symposium. We aim to highlight the extent to which zoo behavioral research has grown beyond development of short-term projects for college classes and emergent problem-solving to hypothesis-driven research with substantial theoretical underpinnings and statistical validity as well as real-world application. The list of potential speakers bridges the zoo and academic worlds and emphasizes the contributions that have been, and can be, made to basic biological knowledge, animal welfare, and conservation.

- Bonnie Baird, Cleveland Metroparks Zoo
- Erika Bauer, Smithsonian Institution
- Eduardo Fernandez, University of Washington
- Susan Margulis, Canisius College
- Georgia Mason, University of Guelph
- Gabriela Mastromonaco, Toronto Zoo
- Kathy Carlstead, Smithsonian
- Jill Mellen, Disney's Animal Kingdom
- Beth Stark Posta, The Toledo Zoo
- Nancy Scott, Dallas Zoo
- Jason Watters, San Francisco Zoological Society

WEDNESDAY, JUNE 14TH**ALLEE SYMPOSIUM FOR BEST STUDENT PAPER**

Organizer: John P. Swaddle

SW309

This symposium features outstanding graduate student research, with an award for the best paper, and is a highlight of ABS meetings. The session honors Dr. Warder Clyde Allee (1885–1955), an animal behavior researcher who was very influential in the development and direction of animal behavior research in the 20th century. He was elected to the National Academy of Sciences in 1951 and ranks among the leading twentieth century ecologists, especially for his work in behavioral and animal ecology. In the 2017 ABS Allee Session, students will present their research to ABS members and talk judges.

- Jesse Balaban-Feld, Saint Louis University
- Marcela E. Benítez, Georgia State University
- Carrie L Branch- University of Nevada
- Sheena Fry, University of Toronto Scarborough
- Sarah Guindre-Parker, Columbia University
- Morgan L. Gustison, University of Michigan
- Jennifer Hellmann, Ohio State University
- Amanda K. Hund- University of Colorado
- Matthew Nielsen, University of North Carolina
- Kelly L. Ronald, Purdue University
- Avery/L Russell, University of Arizona
- Brett M. Seymoure, Colorado State University
- Delia S. Shelton, Oregon State University

SYMPOSIA (CONTINUED)

THURSDAY, JUNE 15TH**ANIMAL COGNITION: MECHANISMS, ECOLOGY AND EVOLUTION**

Organizers: Reuven Dukas and John Ratcliffe

AC223

Cognitive ecology focuses on the ecology and evolution of cognition, defined as the neuronal processes concerned with the acquisition, retention, and use of information. The past few decades have seen an increasing number of researchers within the discipline of cognitive ecology. The first two "Cognitive Ecology" symposia, which were held at the 1994 and 2007 Animal Behavior Society meetings, summarized some of the research in the growing discipline and resulted in the publications of two edited volumes (Dukas 1998, Dukas and Ratcliffe 2009). The proposed 2017 symposium will allow us to gather some of the experts in the area for formal overviews and brainstorming. We will focus on speakers who can integrate ecology and evolution with mechanisms of animal cognition. While we will include some established researchers, the emphasis will be on newcomers to the discipline. We will ask all prospective speakers to focus on fresh ideas and novel research methods, and to devote significant time to discussing future research directions for the next decade.

- Sara Benson-Amram, University of Wyoming
- Reuven Dukas, McMaster University
- Aimee Dunlap, University of Missouri
- Alexander Kotrschal, Stockholm University
- Julie Morand-Ferron, University of Ottawa
- Steve Phelps, University of Texas
- Vladimir Pravosodov, University of Nevada
- John Ratcliffe, University of Mississauga
- Mike Ryan, University of Texas
- Emilie Snell-Rood, University of Minnesota

THURSDAY, JUNE 15TH**BEHAVIOURAL BIODIVERSITY: WHAT CAN UNDER-STUDIED LINEAGES REVEAL ABOUT BEHAVIOURAL ECOLOGY?**

Organizers: Maydianne Andrade, Andrew Mason and Malcolm Rosenthal

AA112

Taxonomic skew in studies of animal behaviour, and other fields, is severe. In a recent analysis of publication patterns over the history of the journal *Animal Behaviour*, the magnitude of the issue is clear. Papers on chordates make up 70% of all publications published between 2000 and 2015 despite accounting for fewer than 7% of animal species. Within chordates, birds and mammals comprise over 50% of publications, and some subject areas show even more severe skew. We argue that a broader and more representative approach is essential if research in this discipline is aimed at the discovery of general principles about behaviour and evolution. In this symposium, we tackle the issue of taxonomic skew with a focus on lineages that are understudied relative to their representation in nature, and that can provide important tests of existing paradigms, or that are likely to shed new light on our understanding. We end with a discussion centred on two questions: (1) is taxonomic skew negatively affecting our field? and (2) should we consider approaches that could support broadening of taxonomic representation in studies of animal behaviour?

- Malcolm Rosenthal, University of California Berkeley
- Shelley Adamo, Dalhousie University
- Michael Kasumovic, University of New South Wales
- Sarah Bengston, University of Rochester
- Darryl Gwynne, University of Toronto Mississauga
- Chrissie Painting, University of Auckland
- Mark Laidre, Dartmouth
- Emilie Snell-Rood, University of Minnesota
- Locke Rowe, University of Toronto St George



WORKSHOPS

MONDAY, JUNE 12TH | 9:00 AM - 5:00 PM

TURNER PROGRAM WORKSHOP (INVITE ONLY)

Organizer: Dan Howard

MW264

The Charles H. Turner Undergraduate Program, established in 2002, provides to undergraduate participants support for travel to the annual conference of the Animal Behavior Society. Participation in a pre-meeting Turner Program workshop is by invitation only, selection of participants is competitive, and students are encouraged to present research at the conference. The full-day workshop prepares students for the conference and provides advice on: careers in animal behavior, meeting faculty and graduate students at the conference, presenting posters, and identifying and applying to appropriate graduate programs. Each student is assigned a mentor, based on the student's interests, and the program typically supports from 8-12 students per year, depending upon the meeting location. The goal of the Turner program is to attract and retain in the field of animal behavior highly qualified graduate and undergraduate students from groups historically under-represented in the STEM fields.

MONDAY, JUNE 12TH | 9:30 AM - 12:30 PM

ABS OUTREACH FAIR: ADVENTURES IN ANIMAL BEHAVIOR

Organizers: Emilie Snell-Rood, Ellen J. Mahurin and Maydianne C.B. Andrade

ESCB Atrium

ABS members will present a special program for elementary school students, "Adventures in Animal Behavior." on Monday June 12, 9:30-12:30 on the University of Toronto, Scarborough campus. Faculty members and graduate students representing over a dozen animal behavior research laboratories from across the US, Canada, South America and Australia will offer multiple activities highlighting current research questions, as well as the tools and techniques used in field research. Participants will have a chance to fly "bat airplanes," check out bird parasites under a microscope, and listen to hyena calls.

MONDAY, JUNE 12TH | 10:30 AM - 5:00 PM

CONSERVATION BEHAVIOR WORKSHOP: MERGING SCIENCE AND APPLICATION

Organizers: Preston Foerder and Cassandra Nuñez

AA160/Atrium

There is often a lack of communication between the fields of conservation and animal behavior. To bridge this gap, we will be conducting a one-day workshop aimed at applying behavioral theory and research to solving real-world conservation problems. The workshop will provide a unique and valuable opportunity for the practitioners to learn about the challenges and rewards of applying behavioral biology in the field. Ideally this two-way interaction will inspire future research and networking to aid in solving the increasingly complex problems of real-world conservation. Three conservation problems for which a behavioral approach is likely to facilitate solutions will be presented by wildlife managers at the beginning of the day. We will then break out into focus groups and discuss potential solutions. At the end of the day we will regroup, report on the potential solutions and identify commonalities that may be applicable more broadly to other systems. New collaborations between wildlife managers and animal behaviorists are expected to emerge from this workshop. Workshop participants: Martin-Hugues St-Laurent, Université du Québec à Rimouski / Groupe de Recherche BORÉAS - Hiker disturbance and the effects to predator-prey relationships, Tara Cornelisse, Canisius College - Animal Behavior, Ecology, and Conservation Tiger beetles in riparian habitats OR pollinator conservation (Monarchs as a case study), Rob Rempel, Centre for Northern Forest Ecosystem Research Ontario Ministry of Natural Resources and Forestry - The response of caribou and wolves to roads. Pre-registration required for this workshop. \$25 for regular ABS registrants, \$15 for student registrants, and free for Developing Nations registrants. Lunch and snacks will be provided.

MONDAY, JUNE 12TH | 12:30 PM - 5:00 PM

TEACHING WORKSHOP: RE-INVIGORATING YOUR CLASSROOM WITH MODULE-BASED TEACHING

Organizers: Laura Sirot and Heather Zimbler-DeLorenzo

HW214/HW305

No registration fee - lunch and snacks included

The goals of this half-day workshop are to demonstrate a module-based approach for Animal Behavior courses and to develop the resources for new modules with the assistance of the attendees. A module-based approach to teaching Animal Behavior involves organizing courses or sections of courses around fundamental conceptual issues taught through a series of units focused on fascinating topics or case studies in Animal Behavior. Each module includes short "Just-In-Time" lectures, deep reading of primary literature using the C.R.E.A.T.E. method (teachcreate.org), opportunities for student-developed research projects, and multiple forms of assessment. As examples, topics used by practitioners of this method include: How do animals with the same genotype manifest different phenotypes? and The controversial evolution of monogamy. The workshop will begin with a brief demonstration of the module-based approach followed by a three-hour boot-camp style work session in which small groups complete a series of exercises leading to a final product--a module with all of the resources needed to teach it. Modules will then be made publicly available. The modules can be adapted to be appropriate for courses taught at the level of 10th grade (age of students: 15-16 years) and above. Questions can be addressed to Laura Sirot (Lsirot@wooster.edu) or Heather Zimbler-DeLorenzo (zimbler@alfred.edu).

THURSDAY, JUNE 14TH | 4:00 PM - 6:00 PM

DIVERSITY & LATIN AMERICAN AFFAIRS COMMITTEE WORKSHOP: BROADENING OUR IMPACTS; ESTABLISHING AND NURTURING RESEARCH PARTNERSHIPS WITH U.S. MINORITY-SERVING AND LATIN AMERICAN INSTITUTIONS

Organizers: Diversity Committee and Latin Affairs Committee

HW215

This panel-style workshop will feature faculty from U.S. Minority-serving Institutions, including Tribal Colleges and Universities, Hispanic-Serving Institutions, and Historically Black Colleges, along with faculty from Latin American Universities, discussing approaches to develop sustainable and productive research collaborations. The focus of the workshop is to emphasize the distinctive benefits and challenges of working at and partnering with MSI's, highlight institutional heterogeneity, and provide participants with networking opportunities.

WORKSHOPS

THURSDAY, JUNE 15TH | 4:00 PM - 5:00 PM

PUBLIC AFFAIRS COMMITTEE WORKSHOP: WRITING COMPELLING GRANT PROPOSALS: SCIENCE EDUCATION AND BROADER IMPACTS

Organizers: Public Affairs Committee

HW215

Scientific research, in addition to expanding our understanding of the natural world, is increasingly expected to achieve broader societal outcomes. In addition, there are funding streams specifically targeted to improving science literacy and cultivating future generations of scientists. Workshop participants will discuss the criteria used to evaluate scientific research and science education grant proposals. They will begin to develop broader impacts strategies by identifying natural extensions of their own research and likely campus, community, and national outreach partners. Presented by Dr. Kaci (Katerina) Thompson, Director, Undergraduate Research and Internship Programs, Associate Director, BioFIRE, College of Computer, Mathematical, and Natural Sciences, University of Maryland.

EVENTS & MEETINGS

MONDAY, JUNE 12TH - FRIDAY, JUNE 16TH

ABS SILENT AUCTION *(The Meeting Place)*

Organizer: Saethra Fritscher

Bring items to Donate! Bring items from home, pick up items in your travels, from your field sites, or obtain donations from supportive colleagues and organizations. Drop your items at the registration desk! The more items we have, the more likely the auction will be as successful as it was last year! Items that you donate for the auction will be placed at the meeting on tables next to bidding forms, or described if the item is not present. During the meeting, members will visit the tables and bid on items by entering their bid on the bidding form. The auction will continue for several days while members bid against one another. The member with the highest bid at the deadline wins the item and takes it home with them. Funds raised will support Graduate Student Research and Latin American Affairs!

MONDAY, JUNE 12TH

EXECUTIVE COMMITTEE MEETING - INVITATION ONLY

9:00 AM - 5:00 PM (IC318)

OUTREACH FAIR

9:30 AM - 12:30 PM (ESCB Atrium)

OPENING RECEPTION

4:30 PM - 6:30 PM *(Meeting Place)*

Greet old friends, meet new ones, and enjoy some great food and drink. This event is included at no additional cost with your registration.

ABS PUB

6:30 PM - 10:00 PM *(Meeting Place and H-wing Patio)*

Drinks & light snacks available for purchase

TUESDAY, JUNE 13TH

CAAB MEET AND GREET

12:00 PM - 1:30 PM *(Residence Centre)*

ABS CONSERVATION COMMITTEE MEETING

12:00 PM - 1:30 PM *(Marketplace Cafeteria Meeting Room)*

UNDERGRADUATE LUNCHEON AND ORIENTATION

12:00 PM - 1:30 PM *(HW305)*

NSF WORKSHOP 1

6:00 PM - 7:00 PM *(AA160/Atrium)*

ABS PUB

6:30 PM - 10:00 PM *(AC223 Atrium and Patio)*

Drinks & light snacks available for purchase

LGBT PUB SOCIAL

7:00 PM - 9:00 PM *(Rex's Den)*

34TH ANNUAL ABS FILM FESTIVAL

7:00 PM - 10:00 PM *(AC223)*

WEDNESDAY, JUNE 14TH

ABS 5K FUN-RUN

6:00 AM - 7:30 AM *(Check at Registration for Location)*

ABS EDUCATION COMMITTEE MEETING

12:15 PM - 1:30 PM *(Marketplace Cafeteria Meeting Room)*

ABS PUB

9:00 PM - 11:00 PM *(Rex's Den)*

Drinks & food available for purchase

STUDENT PARTY

9:00 PM - 11:30 PM *(MW130)*

THURSDAY, JUNE 15TH

ABS DIVERSITY COMMITTEE MEETING

12:00 PM - 1:30 PM *(Meet Outside Cafeteria)*

LATIN AMERICAN LUNCH AND FRIENDS

12:00 PM - 1:30 PM *(Marketplace Cafeteria Meeting Room)*

NSF WORKSHOP 2 (BRING YOUR OWN LUNCH)

12:00 PM - 1:30 PM *(AA160)*

ABS BUSINESS MEETING

1:30 PM - 2:30 PM *(AC223)*

EXCURSION BUS TRIP TO DOWNTOWN TORONTO (TICKET REQUIRED)

6:30 PM - 11:30 PM

Depart: 7:00 pm sharp (Residence Centre)

Return: 11:30pm (Residence Centre or Delta East hotel)

ABS PUB

6:30 PM - 11:00 PM *(Miller-Lash House)*

Outdoor tent and patio, Live music, Drinks & BBQ food available for purchase

FRIDAY, JUNE 16TH

BANQUET (TICKET REQUIRED)

6:00 PM - 10:00 PM *(Meeting Place)*

2017 ANIMAL BEHAVIOR SOCIETY FILM FESTIVAL in Toronto, Ontario
TUESDAY JUNE 13th | 7:00-10:00pm | Location: AC223

Non-Commercial Films

Made by an individual or persons largely associated with animal behavior from a teaching, research, and/or applied perspective, not with the primary goal of earning an income.

Person of the Forest

Approximate start time **7:05pm**

Directed by: Melissa Lesh

In the disappearing lowland rainforests of Borneo, research is underway to uncover unique cultural behaviors in wild orangutans. Photographer Tim Laman, researcher Cheryl Knott, and explorer Robert Suro shed new light on the similarities between ourselves and our ancient ancestors, before it's too late.
<https://vimeo.com/216404001>



Daroji

Approximate start time **7:30pm**

Directed by: Sugandhi Gadadhar

Daroji is a short film for children, introducing them to wildlife, specifically those from in and around Daroji Sloth Bear Sanctuary in Karnataka, India. Bindu, a female Indian Sloth Bear, tells the story of different families, including her own, and shares a friendly note with her audience, suggesting that man and animal can co-exist in harmony.



Commercial Films

Made by professional photographers and filmmakers with the express purpose of earning a profit.

Lemming – The Little Giant of the North

Approximate start time **7:50pm**

Directed by: Zoltán Török

They are small. They are angry. And every four year or so they appear in masses seemingly from nowhere. Meet the Norway lemming, perhaps the most misunderstood and mysterious animal of the Scandinavian mountains... And the hero of our latest wildlife documentary! <http://wildtales.net/films/>



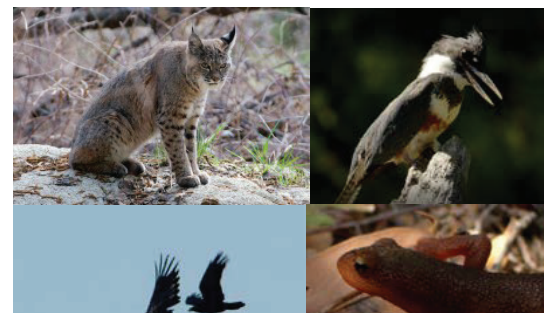
Yosemite

Approximate start time **8:50pm**

Directed by: Oliver Goetzl

Yosemite National Park is a place of superlatives. Where else can you find sheer granite cliffs 900 meters high and giant sequoias well over 1000 years old? Beneath these towering heights live animals that make Yosemite their home: from bobcats, to black bears, to coyotes and golden eagles. Follow Yosemite's inhabitants throughout the seasons, in a unique portrait of this legendary park.

<http://www.gulofilm.com>



SAVE THE DATE!

55th Annual Conference
University of Wisconsin-Milwaukee
Milwaukee, Wisconsin
August 2-6, 2018



PROGRAM SUMMARY

MONDAY, JUNE 12TH

9:00 am - 5:00 pm	Turner Workshop by Invitation MW264	Executive Committee Meeting IC318
9:30 am - 12:30 pm	Outreach Fair ESCB Atrium	
10:30 am - 5:00 pm	Conservation Behavior Workshop AA160/Atrium	
12:30 pm - 5:00 pm	Teaching Workshop HW214/HW305	
4:30 pm - 6:30 pm	Opening Reception Meeting Place	

TUESDAY, JUNE 13TH

8:00 am - 8:30 am	Opening Remarks AC223					
8:30 am - 9:30 am	Plenary Talk: How Behavior Changes Evolution: Experiments with Burying Beetles. Rebecca Kilner - Cambridge University AC223					
9:30 am - 10:00 am	Morning Snacks Meeting Place					
10:00 am - 12:15 pm	Presidential Symposium: Predicting Behavior AC223	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium AA112	Social Behavior SW309	Neuro/Endocrine & Physiological Mechanisms HW216	Predation & Foraging SW319	Applied Animal Behavior HW215
12:00 pm - 1:30 pm	Lunch Break (On Your Own)			Ad Hoc Talks HW215	Conservation Behavior Committee Meeting Marketplace Meeting Room	Undergraduate Luncheon and Orientation HW305
1:30 pm - 2:30 pm	Fellow's Talk: The Evolution of Alternative Reproductive Tactics. Molly Morris - Ohio University AC223					
2:30 pm - 3:30 pm	Presidential Symposium: Predicting Behavior AC223	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium AA112	Education HW215	Agonism SW309	Behavior Genetics/ Genomic & Genetics & Evolution SW319	Development HW216
3:30 pm - 4:00 pm	Afternoon Snacks Meeting Place					
4:00 pm - 6:15 pm	Presidential Symposium: Predicting Behavior AC223	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium AA112	Conservation SW309	Cognition and Learning SW319	Social Evolution HW216	Applied Animal Behavior HW215
6:00 pm - 8:00 pm	Dinner (On Your Own)		NSF Workshop 1(Bring your own dinner) AA160		Allee Symposium Dinner (invitation only) Fratelli Village Pizzeria	
7:00 pm - 10:00 pm	Film Festival AC223			LGBTQ- Pub Social Rex's Den		

WEDNESDAY, JUNE 14TH

6:00 am - 7:30 am	ABS 5K Run Location TBD (check at registration)					
8:15 am - 8:30 am	Morning Announcements & Notices AC223					
8:30 am - 9:30 am	Plenary Talk: Plumage Colour in Males and Females. James Dale - Massey University AC223					
9:30 am - 10:00 am	Morning Snacks Meeting Place					
10:00 am - 12:00 pm	Allee Symposium for Best Student Poster Paper SW209	Social Behavior SW319	Predation and Foraging AC223	Parental Care HW216	Sexual Selection and Sexual Conflict AA112	Mating/Breeding Systems HW215
12:00 pm - 1:30 pm	Lunch Break Marketplace			Education Committee Meeting Marketplace Meeting Room		
1:30 pm - 3:30 pm	Allee Symposium for Best Student Poster Paper SW209	Sexual Selection and Sexual Conflict SW319	Communication AC223	Behavioral Plasticity HW216	Ecological Effects AA112	
3:30 pm - 4:00 pm	Afternoon Snacks Meeting Place					
4:00 pm - 6:00 pm	Allee Symposium for Best Student Poster Paper SW209	Social Behavior SW319	Ecological Effects AC223	Cognition and Learning HW216	Communication AA112	Diversity and Latin American Affairs Committees Joint Workshop HW215
6:00 pm - 9:00 pm	Poster Session Science Wing Hall					
9:00 pm - 11:30 pm	Student Party MW130			ABS Pub Rex's Den		

PROGRAM SUMMARY

THURSDAY, JUNE 15TH

8:15 am - 8:30 am	Morning Announcements & Notices AC223					
8:30 am - 9:30 am	Plenary Talk: Animal Signals Influence Social Behavior, Physiology, and Cognition: Lessons from Wasp Faces. Elizabeth Tibbetts - <i>University of Michigan</i> AC223					
9:30 am - 10:00 am	Morning Snacks Meeting Place					
10:00 am - 12:00 pm	Behavioral Biodiversity Symposium AA112	Animal Cognition: Mechanisms, Ecology and Evolution AC223	Communication SW309	Behavioral Plasticity SW319	Sexual Selection and Sexual Conflict HW216	
12:00 pm - 1:30 pm	Lunch Break (On Your Own)	NSF Workshop AA160	Animal Cognition: Mechanisms, Ecology and Evolution Discussion (invitation only) MW264	Latin American Lunch & Friends Marketplace Meeting Room	Diversity Committee Meeting (meet outside the cafeteria after picking up lunch)	
1:30 pm - 2:30 pm	ABS Business Meeting AC223					
2:30 pm - 3:30 pm	Behavioral Biodiversity Symposium AA112	Animal Cognition: Mechanisms, Ecology and Evolution AC223	Agonism SW309	Behavior Genetics/Genomic & Genetics & Evolution SW319	Ecological Effects HW216	Three Minute Thesis (3MT) Competition HW215
3:30 pm - 4:00 pm	Afternoon Snacks Meeting Place					
4:00 pm - 6:00 pm	Behavioral Biodiversity Symposium AA112	Animal Cognition: Mechanisms, Ecology and Evolution AC223	Neuro/Endocrine & Physiological Mechanisms SW309	Social Behavior SW319	Parental Care HW216	Public Affairs Committee Workshop: Writing Compelling Grant Proposals: Science Education and Broader Impacts HW215
6:30 pm - 11:00 pm	Excursion Bus Trip to Downtown Toronto (ticket required) Residence Centre			The Pub at the House Miller Lash House		

FRIDAY, JUNE 16TH

8:15 am - 8:30 am	Morning Announcements & Notices AC223					
8:30 am - 9:30 am	Plenary Talk: Journey to an Upside-Down World: A Transgressive South American Spider as a Model for Sexual Selection Studies. Anita Aisenberg - <i>Laboratorio de Etología, Ecología y Evolución, Instituto de Investigaciones Biológicas Clemente Estable, Avenida Italia</i> AC223					
9:30 am - 10:00 am	Morning Snacks Meeting Place					
10:00 am - 12:00 pm	Communication SW309	Social Behavior SW319	Sexual Selection and Sexual Conflict AC223	Cognition and Learning HW216	Predation and Foraging AA112	
12:00 pm - 1:30 pm	Lunch Break (On Your Own)			Food Truck Lunch Option (tickets required) AC223 Patio		
1:30 pm - 3:30 pm	Award Ceremony and President's Address: Bird Song and the Problem of Signal Reliability. William Searcy - <i>University of Miami</i> AC223					
6:00 pm - 10:00 pm	Closing Banquet (ticket required) Meeting Place					

MONDAY, JUNE 12

Time	ESCB Atrium
9:30 am - 12:30 pm	ABS Outreach Fair: Adventures in Animal Behavior
Time	IC318
9:00 am - 5:00 pm	Executive Committee Meeting Turner Workshop MW264
Time	AA160/Atrium
10:30 am - 5:00 pm	Conservation Behavior Workshop: Merging Science and Application
Time	HW214/HW305
12:30 pm - 5:00 pm	Teaching Workshop: Re-Invigorating the Classroom with Module-Based Teaching
Time	Meeting Place
4:30 pm - 6:30 pm	Opening Reception

TUESDAY, JUNE 13

Time	AC223
8:15 am - 8:30 am	Welcome/Opening Remarks
Time	AC223
8:30 am - 9:30 am	Plenary Talk: <i>How Behavior Changes Evolution: Experiments with Burying Beetles</i> . Rebecca Kilner - Cambridge University
Time	Meeting Place
9:30 am - 10:00 am	Morning Snacks

Time	AC223	AA112	SW309	SW319	HW216	HW215
10:00 am - 12:15 pm	Presidential Symposium: Predicting Behavior Moderator: E. Martins	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium Moderator: S. Margulis & N. Scott	Social Behavior Moderator: Noa Pinter-Wollman	Predation and Foraging Moderator: Theodore Stankowich	Neuro/Endocrine & Physiological Mechanisms Moderator: Malloy L. Wiper	Applied Animal Behavior Moderator: Dan Blumstein
10:00	Introduction . E. Martins	Introduction . S. Margulis	Multilayer networks can advance the study of animal social behavior. N. Pinter-Wollman - UCLA	Avoiding the Stink: Coyotes Learn and Generalize About The Aposematic Coloration Of Striped Skunks. T. Stankowich, C. Fay - California State University Long Beach	Pace-of-life variation among populations and species in Temnothorax ants . S. Bengtson(1), J. Waters(2) - (1)Rice University, (2)Providence College	The impact of Felway on behavioral and physiological stress responses in cats. J. Ellis, R. McGowan, F. Martin - Nestlé Purina Research
10:15	Global Warming and Lizard Communication: Changes in Reliance On Chemical Versus Visual Signaling. D. Hews(1), E. Martins(2) - (1)Indiana State University, (2) Indiana University	Animal behavior science in zoos and aquariums: An historic perspective. J. Mellen - Disney's Animal Kingdom - retired	Interspecific information transfer among gleaning neotropical bats.. K. Patricin(1), R. Page(2), J. Ratcliff(1) - (1)University of Toronto Mississauga, (2) Smithsonian Tropical Research Institute	Synchronized vigilance in response to shared local conditions . P. Bednekoff - Eastern Michigan University	Scaring the fiddler crab <i>Uca pugilator</i> in order to determine their spectral sensitivities . J. Didon(1), J. Laynes(1) - (1)Department of Biological Sciences, University of Cincinnati, (2)Department of Biological Sciences, University of Cincinnati	Relationship Based Training to Increase the Success of Shelter Dog Adoptions. C. Faughn(1), A. Locklin(2,3) - (1)Best Friends Animal Society, (2)Acadiana Animal Aid, (3) ZenDog Training
10:30			Disability predicts dominance rank in female but not male free-ranging Japanese macaques (<i>Macaca fuscata</i>). S. Turner(1), M. Nakamichi(2), T. Nobuhara(3), H. Nobuhara(3), S. Reader(1) - (1) McGill University, (2)Osaka University, (3)Awajishima Monkey Center	Alternative Strategies for Dealing with Prey Toxins by Jumping Spiders. M. Vickers, L. Taylor - University of Florida	DHEA Induces Aggression and Brain Region Specific Androgen Receptor and Aromatase mRNA Expression. D. Wacker(1), S. Khalaj(1), L. Jones(1), T. Champion(2), J. Davis(3), S. Meddle(4), J. Wingfield(6) - (1)University of Washington Bothell, (2)Seattle University, (3)Radford University, (4)The Roslin Institute and Royal (Dick) School of Veterinary Studies, University of Edinburgh, (5)University of California, Davis	Behavioral and Physiological Assessment of Captive Heterosexual Gorilla Groups with Multiple Silverbacks. K. Tennant(1,2), M. Morris(1,2), V. Segura(1), D. Maloney(1), T. Maple(1) - (1)Jacksonville Zoo and Gardens, (2)University of North Florida
10:45	Intrinsic and extrinsic state interact with stressors to regulate territorial behavior. M. Abolins-Abols - Indiana University	THE BEHAVIORAL ENRICHMENT ANIMAL RESEARCH (BEAR) GROUP: ACADEMIC RESEARCH IN THE MODERN ZOO. E. Fernandez, PHD - None	The role of density and frequency on selection for aggression in periods of limited resources. R. Kligour, A. McAdam, G. Belmi, R. Norris - University of Guelph	Comparative Analysis of Two Object-Manipulation Activities in Balinese Long-tailed Macaques. A. Pelletier(1), S. Slat(2), E. Neugebauer(3), N. Gunst(1), S. Pellis(4), J. Leca(1) - (1)Department of Psychology, University of Lethbridge, (2) Department of Physiology, Federal University of Rio Grande do Norte, (3) Goethe University, (4)Department of Neuroscience, University of Lethbridge	The perception of water waves with echolocation: answers from a frog-eating bat. L. Baier(1,2) - (1) Ludwig Maximilians University, (2)Smithsonian Tropical Research Institute	Opportunities and Challenges of Conducting Observational Research at a Chimpanzee Sanctuary. B. Hansen(1,2), S. Rossi(1), L. Hopper(1), A. Fultz(2) - (1) Lincoln Park Zoo, (2)Chimp Haven
11:00			The Vocal Repertoire and Alarm Calling in Barbary Ground Squirrels. A. van der Mare(1), M. Lopez-Darias(2), J. Waterman(1) - (1)University of Manitoba, (2)IPNA-CSIC	Is alert behavior a good proxy of visual detection? . E. Fernandez-Juricic(1), B. Blackwell(2), T. DeVault(2), T. Seamans(2), N. Ikerd(1) - (1)Purdue University, (2)APHIS - USDA	Seasonal male stress levels are independent of competition and testosterone in a partially semelparous mammal. P. Edwards(1), R. Palme(2), R. Boonstra(1) - (1)University of Toronto, (2)University of Veterinary Medicine	Examining Stress-Related Behavior and Allostatic Load in Zoo-Housed Western Lowland Gorillas. A. Edes(1), B. Wolfe(2), D. Crews(1) - (1)The Ohio State University, (2)Morris Animal Foundation
11:15	Predicting visual behavior in a changing aquatic world. K. Carleton(1), D. Escobar-Canacho(1), O. Seehausen(2), N. Marshall(3) - (1)University of Maryland, (2)EAWAG, University of Bern, (3) University of Queensland	The Role of Research in Zoo Behavioral Husbandry Programs. B. Postle - Toledo Zoo and Aquarium	Effects of Neighbor Familiarity on Intrusion Risk and Behavioral Plasticity in the North American Red Squirrel. E. Sircusa(1), D. Wilson(2), S. Boutin(3), M. Humphries(4), J. Gorrell(5), D. Colman(3), B. Dantzer(6), J. Lane(7), A. McAdam(1) - (1)University of Guelph, (2) Memorial University of Newfoundland, (3)University of Alberta, (4)McGill University, (5)Vancouver Island University, (6)University of Michigan, (7)University of Saskatchewan	The Boys of Summer: Sex-Specific Patterns of Urban Habitat Use by Big Brown Bats . C. Guy, K. Patricin, J. Ratcliffe - University of Toronto	Effects of corticosterone and social isolation on song stereotypy and HVC in male zebra finches. P. Faltynek(1), K. Sewall(2), S. MacDougall-Shackleton(1) - (1)University of Western Ontario, (2)Virginia Tech	Zoo Versus Domestic Animals: What We Can Learn From Each Other. A Veterinarian's Perspective.. M. Desmarchelier(1,2), S. Ferrell(2), D. Frank(1) - (1) Université de Montréal, (2) Zoo de Granby
11:30	A behavioral approach to understanding the ecology and evolution of interspecific eavesdropping. X. Bernal(1,2) - (1)Purdue University, (2)Smithsonian Tropical Research Institute	The Importance of Studying Keeper-Animal Relationships in Zoos (11:45pm -12:15pm). K. Carlistead - Smithsonian's Conservation Biology Institute	Individual Variation in Neophobia and the Influence of Dominance Rank in Jackdaws (<i>Corvus monedula</i>). V. West, T. Smulders, E. Price - Centre for Behaviour and Evolution, Institute of Neuroscience, Newcastle University	Daily Foraging Routines: The Role of Environmental Harshness, Food-Gathering, and Spatial Memory. A. Plietari(1), R. Croston(1), C. Branch(1), D. Kozlovsky(1), E. Bridget(2), V. Pravosudov(1) - (1)University of Nevada, Reno, (2)University of Oklahoma	Exploring the role of sensitivity differences in social insect division of labor. N. Leitner, A. Domhaus - University of Arizona	Puppies that succeed as guide dogs get tough love, solve problems quickly, and stay cool under pressure. E. Bray, M. Sammel, D. Cheney, J. Serpell, R. Seyfarth - University of Pennsylvania
11:45			Social and non-social odor discrimination by African giant pouched rats. A. Freeman, M. Sheehan, A. Ophir - Cornell University	Predation risk, body condition and immunity: Life history-related resource allocation in a dragonfly, R. Murray(1,2), L. Rowe(2), S. McCauley(1) - (1)University of Toronto (Mississauga), (2)University of Toronto	Is There a Neural Basis to Lateralized Behaviour in Chinook Salmon (<i>Oncorhynchus tshawytscha</i>)? . M. Wiper, D. Higgs - University of Windsor	
12:00			Inactive workers act as 'reserve' labor, but are not replaced when they are removed. D. Charbonneau(1), T. Sasak(2), A. Dornhaus(3) - (1) Graduate Interdisciplinary Program in Entomology & Insect Science, University of Arizona, (2)Department of Zoology, University of Oxford, (3)Department of Ecology and Evolutionary Biology, Univ of Arizona	Recovery from a high-risk phenotype in a social fish . A. Crane, M. Ferrari - University of Saskatchewan	BEHAVIORAL AND SENSORIAL PLASTICITY IN A NET-CASTING SPIDER. J. Staštröm(1), P. Michalk(2), E. Hebeš(1) - (1)University of Nebraska, (2)University of Greifswald	

Time	HW215 (Library)	Marketplace Cafeteria Meeting Room	Residence Centre	Marketplace Cafeteria	HW305
12:00 pm - 1:30 pm	Ad Hoc Talks	Conservation Behavior Committee Meeting	CAAB Meet & Greet	Lunch Break (on your own)	Undergraduate Luncheon and Orientation
AC223					
Fellow's Talk: The Evolution of Alternative Reproductive Tactics. Molly Morris - Ohio University					
Time	AC223	AA112	HW215	SW319	HW216
2:30 pm - 3:30 pm	Presidential Symposium: Predicting Behavior Moderator: E. Martins	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium Moderator: S. Margulis & N. Scott	Education Moderator: Nishant Singh	Behavior Genetics/Genomic & Evolution Moderator: Amy L. Toth	Development Moderator: Brett M. Frye
2:30	Social Assessment in a Changing World. M. Sheehan, S. Blüher - Cornell University	Using phylogenetic comparative methods to understand how wild animals adjust to captivity. G. Mason - University of Guelph	Teaching critical skills using concepts from animal behavior. I. Course design and student outcomes. K. Thorington, J. Lyons, S. Viscido - Winston-Salem State University	The hidden structure of dominance hierarchies. E. Hobson(1,2), D. Monster(3), S. DeDeo(1,4) - (1)Santa Fe Institute, (2) ASU-SFI Center for Biosocial Complex Systems, Arizona State University and Santa Fe Institute, (3)Aarhus University, (4) Carnegie Mellon University	Who's Listening: Developmental Response to Changes in Acoustic Environment in the Fall Field Cricket. G. Ferguson, S. Bertram - Carleton University
2:45			Teaching critical skills using concepts from animal behavior. II. Assessment artifacts. S. Viscido, K. Thorington, J. Lyons - Winston-Salem State University	All by myself: meta-analysis of contest resolution rules show support for self-assessment models. P. Peixoto(1), N. Pinto(2) - (1)Universidade Federal de Minas Gerais, (2)Programa de Pós-Graduação em Ecologia e Biomonitoramento, Universidade Federal da Bahia	Ontogenetic cues of density vs. disturbance drive different patterns of variation in widow spiders. N. DiRienzo, A. Dominus - University of Arizona, Department of Ecology and Evolutionary Biology
3:00	Nest Materials in Cities: Sparrows and Finches Use Cigarette Butts at a Potentially High Cost. M. Suárez-Rodríguez, C. Macías García - Universidad Nacional Autónoma de México, Instituto de Ecología	Non-invasive hormone monitoring: improving animal management plans. G. Mastromonaco - Toronto Zoo	Why gamified learning and using games to teach are not the same thing. M. Kasumovic - UNSW Australia	Influence of Sex, Territorial Ownership, and Species on Aggression in Two Species of Terrestrial Salamander. C. Lynn, S. Mathis - Missouri State University	Consistent Behavioral Traits in Captive Common Marmoset (<i>Callithrix jacchus</i>) Infants. B. Frye(1), L. Rapoport(1), S. Tardiff(2) - (1)Clemson University, (2)Southwest National Primate Research Center
3:15				The genetic basis for song-preference coevolution in the Hawaiian cricket <i>Laupala</i> . M. Xu, K. Shaw - Cornell University	
Meeting Place					
Afternoon Snacks					
Time	AC223	AA112	SW309	SW319	HW215
4:00 pm - 6:15 pm	Presidential Symposium: Predicting Behavior Moderator: E. Martins	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium Moderator: S. Margulis & N. Scott	Conservation Moderator: Daniel Rubenstein	Cognition and Learning Moderator: Maria Cristina Tello-Ramos	Applied Animal Behavior
4:00	Role of Developmental Plasticity in Shaping Sociality of Cooperative Cichlids Under Global Change. B. Taborsky - University of Bern	The Zoo-logical Choice: Collaborations between Zoos and Universities. B. Baird(1,2) - (1)Cleveland Metroparks Zoo, (2)Case Western Reserve University	Can we use sensory ecology to reduce birds' collisions with building towers, and turbines? J. Swaddle - College of William and Mary	Spatial cognition and exploration in scatter hoarders along an urban gradient. M. Thompson, J. Morand-Erron - University of Ottawa	Behavioral Correlation of Development of Keel Bone Damage in Laying Hens. S. Baker(1), R. Robinson(1), D. Karcher(2,3), M. Toscani(4), M. Magalon(1), (1)University of California, Davis, (2)Michigan State University, (3)Purdue University, (4)University of Bern
4:15			Facilitation or Competition: How Livestock and Wildlife Grazing can Flip Interactions from Bad to Good. D. Rubenstein - Princeton University	The Effect of Ingested Aluminum On Forage Quality Assessment And Patch Fidelity In Honey Bees. A. Chicas-Mosier(1,2), B. Cooper(2), A. Melander(2,4), M. Pérez(2,4), C. Abranson(1,2), (1)Oklahoma State University, (2)Memik Kemal University, (3)University of Oklahoma, (4)University of Puerto Rico	Endocrine, metabolic, and behavioural effects in quail exposed to a currently-used flame retardant. M. Guisasa(1,2), A. Hanas(1), F. Chamberland(1), K. Fennie(2), J. Head(1) (1)Department of Natural Resource Sciences, McGill University, (2)Environment and Climate Change Canada
4:00				Effects of nutritional deprivation on development and behavior in the subsocial bee <i>Carafina calcarata</i> . S. Lawson, S. Rehan - University of New Hampshire	
4:15				Direct benefits and evolutionary transitions to complex societies. S. Balshine(1), J. Fitzpatrick(2), C. Day(3), C. O'Connor(4), S. Shultz(5) - (1)McMaster University, (2)Stockholm University, (3)University of Windsor, (4)Wildlife Conservation Society of Canada, (5)University of Manchester	

4:30	Predicting the evolution or collapse of reproductive isolation in a changing world. R. Saitan - <i>University of Colorado</i>	Important Information to Know When Conducting Research with Zoological Institutions. E. Bauer - <i>Smithsonian's National Zoological Park</i>	Potential effects of chronic anthropogenic sound on bottlenose dolphins in Jacksonville, FL. C. King, Q. Gibson - <i>University of North Florida</i>	Personality and problem solving in captive Asian elephants. L. Barrett, S. Benson-Amiram - <i>University of Wyoming</i>	Cooperative Breeding is Associated with Increased Communicative Complexity in Avian Species. G. Leighton - <i>Cornell University</i>	Behavioral Responses to Environmental Extremes in an African Cichlid. S. Gray, R. Oldham, L. Pihor - <i>The Ohio State University</i>
4:45			The interface of ecological novelty and behavioral context in the formation of ecological traps. B. Robertson(1), D. Campbell(1), C. Durovich(1), I. Heterich(1), J. Les(1), G. Horvath(2) - (1) <i>Bard College</i> , (2) <i>EoVos University</i>	Cognitive Responses to Winter Temperature Variation in Black-capped Chickadees (<i>Poecile atricapillus</i>). R. Martin, D. Sherry - <i>Western University</i>	Experimental induction of alloparental behavior in a solitary carpenter bee. M. Richards, A. Cardama-Garate - <i>Brook University</i>	Testing Ruffed Lemurs Color Vision Using Subject Mediated Automatic Remote Testing Apparatus (SMARTA). R. Vagell(1), V. Vagell(2), R. Jacobs(3), J. Gordon(1), A. Baden(4,5,6) - (1) <i>Animal Behavior and Conservation, Department of Psychology, Hunter College of the City University of New York</i> , (2) <i>Queens, New York</i> , (3) <i>Center for the Advanced Study of Human Paleobiology, Department of Anthropology, The George Washington University</i> , (4) <i>Department of Anthropology, Hunter College of the City University of New York</i> , (5) <i>Department of Anthropology, The Graduate Center of the City University of New York</i> , (6) <i>The New York Consortium in Evolutionary Primatology</i>
5:00	Zoo Animal Behavior Research: Asking Applied Questions and Finding Basic Answers. J. Walters - <i>San Francisco Zoological Society</i>	Using Behavioral Methods for Conservation. B. Clucas - <i>Humboldt State University</i>	Why are train strikes on grizzly bears increasing in the mountain parks and what can we do about it? C. St. Clair(1), J. Backs(1), A. Friesen(1), A. Gangadharan(1), S. Gilhooly(1), M. Murray(1), P. Pollock(1), S. Nelsen(2), J. Whittington(3) - (1) <i>Department of Biological Sciences, University of Alberta</i> , (2) <i>Department of Renewable Resources, University of Alberta</i> , (3) <i>Parks Canada</i>	Apes Demonstrate Flexible Problem Solving with a Causally-Clear Food Acquisition Task. S. Jacobson, L. Hopper - <i>Lincoln Park Zoo</i>	How do a male's physiological and social profiles predict rank duration and mating success? B. Habig(1), D. Janssen(1), L. Gesquiere(2), S. Alberts(2), J. Altmann(3), E. Achleit(1) - (1) <i>University of Notre Dame</i> , (2) <i>Duke University</i> , (3) <i>Princeton University</i>	Social Behavior and Ecology May Interact to Shape the Gut Microbiome in Feral Horses (<i>Equus caballus</i>). C. Nunez, J. Adeliman, H. Carr, M. Jones - <i>Iowa State University</i>
5:15		Many Places Called Home: the Adaptive Value of Seasonal Adjustments in Range Fidelity. M. St-Laurent(1), A. Latontains(1), P. Drapau(2), D. Fortin(3) - (1) <i>Université du Québec à Rimouski</i> , (2) <i>Université du Québec à Montréal</i> , (4) <i>Université Laval</i>	Visual and Olfactory Recognition of Humans and Elephants by African Elephants. V. Perret, P. Poeder - <i>University of Tennessee, Chattanooga</i>	Social Models Enhance African Apes' Memory for Novel Events. L. Hopper(1), L. Howard(2), K. Wagner(1), A. Woodward(3), S. Ross(1) - (1) <i>Lincoln Park Zoo</i> , (2) <i>Franklin & Marshall College</i> , (3) <i>University of Chicago</i>	Selection for colony aggression favors the evolution of social susceptibility. J. Pruitt(1), C. Wright(1), J. Lichtenstein(1), N. Pinter-Wollman(2) - (1) <i>JUC Santa Barbara</i> , (2) <i>UC Los Angeles</i>	Up and down in a complicated way: the altitudinal migration of the Yellow-legged Thrush in Brazil. A. Guaraldo, J. Bczuska - <i>Universidade Federal do Paraná</i>
5:30	Discussion. N. Scott	Why are train strikes on grizzly bears increasing in the mountain parks and what can we do about it? C. St. Clair(1), J. Backs(1), A. Friesen(1), A. Gangadharan(1), S. Gilhooly(1), M. Murray(1), P. Pollock(1), S. Nelsen(2), J. Whittington(3) - (1) <i>Department of Biological Sciences, University of Alberta</i> , (2) <i>Department of Renewable Resources, University of Alberta</i> , (3) <i>Parks Canada</i>	Individual Variation in Spatial Memory and Fitness in Food-caching Chickadees. M. Tello-Ramos(1), R. Crossin(2), C. Branch(1), D. Kozlovsky(1), A. Pifer(1), E. Briget(3), V. Pravosudov(1) - (1) <i>University of Nevada, Reno</i> , (2) <i>United States Geological Survey</i> , (3) <i>University of Oklahoma</i>	Cryptic "royal" subfamilies in honey bee (<i>Apis mellifera</i>) colonies. J. Withrow(1,2), D. Tarry(1,2) - (1) <i>North Carolina State University</i> , (2) <i>W.M. Keck Center for Behavioral Biology, NCSU</i>	Changing Things Up: Measuring the Effects of Proximity to Conspecifics and Enrichment for a Male Jaguar. M. Morris(1,2), K. Termani(1,2), V. Segura(1), D. Maloney(1), T. Maple(1) - (1) <i>Jacksonville Zoo and Gardens</i> , (2) <i>University of North Florida</i>	Development of a Behavioral Feeding Assay to Test Pesticide Toxicity in Amphibians. K. Scarlett(1), J. Cusaac(1, 2), T. Anderson(1), K. Dudley(1), J. Belcent(1), C. Popel(1, 3), S. McNairy(1) - (1) <i>Department of Integrative Biology, Oklahoma State University</i> , (2) <i>Department of Forestry, Wildlife and Fisheries, University of Tennessee Center for Wildlife Health</i> , (3) <i>Physiological Sciences, Center for Veterinary Health Sciences, Oklahoma State University</i>
5:45		Using ornamental coloration of tree swallows as a non-invasive indicator of aquatic pollution. N. Lisnitz, C. St. Clair - <i>University of Alberta</i>	Do female budgetrigars choose males based on their cognitive abilities? A. Medina-García, T. Wright - <i>New Mexico State University</i>	The Ontogeny of Independence, Nest Egression in Prairie Voles. J. Powell, G. Prounis, A. Ophir - <i>Cornell University</i>	Competitive Effects and Their Potential as an Evolutionary Constraint in North American Red Squirrels. D. Fisher(1), A. McCann(1), A. Wilson(2) - (1) <i>University of Guelph</i> , (2) <i>University of Exeter</i>	

Time	AA160/Atrium	Meeting Place	Fratelli Village Pizzeria
6:00 pm - 8:00 pm	NSF Workshop 1 (Bring your own dinner)	Dinner (on your own)	Allee Symposium Dinner (invitation only)
Time	AC223		Rex's Den
7:00 pm - 10:00 pm	Film Festival		LGBTQ+ Pub Social

Time		TBD
6:00 am - 7:30 am	Abs 5K Run	
Time		AC223
Morning Announcements and Notices		
Time		AC223
Plenary Talk: Plumage Colour in Males and Females. J. Dale - Massey University		
Time		Meeting Place
Morning Snacks		

Time	SW309	SW319	AC223	HW216	AA112	HW215
10:00 am - 12:15 pm	Allee Symposium for Best Student Poster Paper Moderator: J. Swaddle	Social Behavior Moderator: Kenneth Chapin	Predation and Foraging Moderator: Lynne E. Beaty	Parental Care Moderator: Stephen Trumbo	Sexual Selection and Sexual Conflict Moderator: Susan N. Gershman	Mating/Breeding Systems Moderator: James S. Quinn
10:00	Abiotic cues linked to adaptive male development in male western black widow spiders (<i>Latrodectus hesperus</i>). S. Fry, M. Andrade - University of Toronto Scarborough	The Relationship between Social Play and Hormones in Spotted Hyenas. T. Montgomerie, K. Holekamp - Michigan State University	Preference for safety over warmth can reduce growth rate in hatchling ornate box turtles. A. Neyer, G. Bachman - University of Nebraska	Experimental manipulation of vasotocin and mesotocin: effects on parental care in poison frogs. K. Summers(1), L. Schulte(1,2) - (1)East Carolina University, (2)Vrije Universiteit Brussel	Contingent Feticide and Infanticide By Male Baboons. M. Zippel(1), J. Grady(1), J. Gordon(1), L. Chow(1), E. Archie(2,3), J. Altmann(3,4), S. Alberts(1,3) - (1)Duke University, (2)University of Notre Dame, (3)Institute of Primate Research, (4)Princeton University	When concessions become tugs-of-war: questioning assumptions of pukeko reproductive control. J. Quinn - McMaster University
10:15		Social security: how social relationships may make animals safer. D. Blumstein - Department of Ecology and Evolutionary Biology, University of California	Behavioral responses to warming and consequences for intraguild predation interactions. D. Frances, S. McCauley - University of Toronto Mississauga	Seek and hide: burying beetles exploit and then suppress microbially derived semiochemicals. S. Trumbo(1), C. Melvin(2), P. Philbrick(1) - (1)University of Connecticut, (2)Texas Tech University	Service with a smell: mating has opposite effects on male and female CHC attractiveness. S. Gershman - The Ohio State University at Marion	Influence of Male Phenotypic Traits on Male Mate-Choice Copying in a Promiscuous Fish. R. Pusiak, J. Godin - Carleton University
10:30	Color Plasticity Alters Thermoregulatory Behavior in <i>Battus philenor</i> Caterpillars by Changing the Cue Received. M. Nielsen(1,2), D. Papa(2) - (1)University of North Carolina, (2)University of Arizona	Cueing in predation risk: background risk alters how tadpoles release and respond to a social cue. K. Bairos-Novak(1), M. Mitchell(1), A. Crane(1), D. Chivers(1), M. Ferrari(1,2) - (1)Department of Biology, University of Saskatchewan, (2)Department of Veterinary Biomedical Sciences, University of Saskatchewan	Antipredator behaviors of ruby-throated hummingbirds: are wasps a threat? J. Carr - Washington College	Environmental Cues Influence Parental Brood Structure Decisions in the Burying Beetle <i>N. marginatus</i> . B. Woelber, C. Hall, D. Howard - University of New Hampshire	Colourful robots and complex communication. M. Thaker(1), A. Balabai(1), A. Zambri(1,2) - (1)Centre for Ecological Sciences, Indian Institute of Science, (2)University of Minnesota	Sex differences in the propensity of a songbird to migrate. J. Deakin, Y. Morbey, C. Guglielmo - Western University, The Advanced Facility for Avian Research
10:45		Echolocation behaviour in bats and poisons hunting alone and in pairs. H. Mayberry(1), L. Jakobsen(2), M. Wahlgren(2), A. Surlykke(2), J. Ratcliffe(1) - (1)University of Toronto Mississauga, (2)University of Southern Denmark	Chemical Cues Mediate Headfirst Ingestion of Mice By Gophersnakes, <i>Pituophis catenifer</i> . M. Bealor(1), D. Chiszar(2) - (1)Rowan University, (2)University of Colorado at Boulder	Mating success increases nest site fidelity in a Neotropical harvestman with exclusive paternal care. A. Rojas(1,2), D. Muniz(1), D. Solano-Brenes(3), G. Machado(1) - (1)University of São Paulo, (2)Veragua Foundation for Rainforest Research, (3)University of Costa Rica	Why do males spend so much time courting? L. Batufaldi, M. Andrade - Departments of Biological Sciences and Ecology & Evolutionary Biology, University of Toronto Scarborough.	Coordination and cooperation in shared parental care increase with pair bond duration. O. Sanchez-Macouzet, H. Drummond - Universidad Nacional Autonoma de Mexico
11:00	How a generalist bee achieves high efficiency of pollen collection on diverse floral resources. A. Russell, S. Buchmann, D. Pappal - University of Arizona	Exploring the effects of queen personality on fitness and colony success in <i>Polistes wasps</i> . C. Wright(1), E. Tibbetts(2), J. Pruitt(3) - (1)University of California, (2)University of Michigan, (3)University of California	Flirting with danger: how predation risk affects male flight display in a Neotropical songbird. G. Machado(1), P. Diniz, R. Macedo - Universidade de Brasilia	Post-ovipositional parental care in insects: a review of its frequency and taxonomic distribution. G. Machado(1), S. Trumbo(2) - (1)Universidade de São Paulo, (2)University of Connecticut	Expanding the Bateman Gradient: Limits and Fitness Consequences of Male Re-mating Strategies. T. Douglas, J. Saltz - Rice University	Immature Mating of <i>Latrodectus</i> in the Lab and Field: Implications for Sexual Selection Research. S. McCann, C. Scott, L. Batufaldi, M. Andrade - University of Toronto Scarborough
11:15		Social rank reversals in a long-term study of spotted hyenas. E. Strauss, K. Holekamp - Michigan State University	Geographical variation in multiple traits induced by differential predation in the fire-bellied toad. C. Kang(1), T. Sherratt(1), Y. Kim(2), Y. Shin(2), J. Moon(2), U. Song(3), J. Kang(4), K. Kim(2), Y. Jang(2) - (1)Carleton University, (2)Ewha Womans University, (3)Jeju National University, (4)National Institute of Ecology Korea	White-tailed deer mothers use mule deer mothers as baby-sitters for their fawns. S. Lingle, K. Naylor - University of Winnipeg	Sperm competition games when males invest in paternal care. G. Requena(1), S. Alonzo(2) - (1)Universidade de Sao Paulo, (2)University of California - Santa Cruz	ddRAD-sequencing outperforms costly microsatellite loci at assigning paternity in a highly promiscuous bird. D. Thrasher(1,2), B. Butcher(1), L. Campagna(1,2), M. Webster(1,2), I. Lovette(1,2) - (1)Cornell Lab of Ornithology, (2)Cornell University
11:30	A Few Cadmium-Treated Fish Affect Group Dynamics and Social Behavior in Zebrafish. D. Shelton(1,2,3,4), Z. Austin(4), A. Khemka(4), E. Martins(4) - (1)Oregon State University, (2)Leibniz Institute for Freshwater Ecology and Inland Fisheries, (3)University of Windsor, (4)Indiana University	Unbiased Estimators of Association. C. Weko - Headquarters, Department of the Army	Sensory biases impose trade-offs for a host-searching butterfly. M. Steck, E. Shell-Rood - University of Minnesota		Females prefer nest quality over male care. V. Montagner, G. Requena - Universidade de São Paulo	Consequences of group-living for parentage in the colonial Hispaniolan Woodpecker (<i>Melanerpes striatus</i>). J. LaPerge(1,2) - (1)Cornell University, (2)Cornell Lab of Ornithology
11:45		Ignore Information, Make Mistakes, and Underestimate Enemies: Behavioral Plasticity in Animal Contexts. K. Chabini(1,2), P. Nonacs(2) - (1)University of California, Davis, (2)University of California, Los Angeles	Fear of predators halves juvenile survival to recruitment and permanently handicaps the survivors. M. Allen, M. Clinchy, L. Zanette - Western University		Understanding how male cooperative and non-cooperative courtship influences female choice in a lekking species. C. Vanderbilt, M. Jones, E. DuVal - Florida State University	
12:00	Neighbor Effects: Impacts of Colony-Level Social Structure on Within-Group Dynamics in a Social Fish. J. Hellmann(1,2) - (1)The Ohio State University, (2)University of Illinois Urbana-Champaign	Vaginal Shape Variation in Cetaceans: Effects of alleometry, ontogeny, natural and sexual selection. P. Brennan(1), D. Osoch(2) - (1)Mount Holyoke College, (2)Dalhousie University	The Effect of Tadpole Predation Risk on Frog Behavior after Metamorphosis. L. Beaty, B. Luttberg - Oklahoma State University		The couple that sings together stays together: duetting, aggression, and promiscuity in red-backed fairy-wrens. D. Baidassarre(1), E. Greig(2), M. Webster(2) - (1)Princeton University, (2)Cornell University	

Marketplace Cafeteria Meeting Room		Marketplace Cafeteria	
Time	Education Committee Meeting	Lunch Break (on your own)	
12:15 pm - 1:30 pm	Marketplace Cafeteria Meeting Room		
	Education Committee Meeting		
	SW309	HW216	AA112
1:30 pm - 3:30 pm	<p>Allee Symposium for Best Student Poster Paper Moderator: J. Swaddle</p> <p>The Social Functions of Vocal Complexity in Wild Geeladas (<i>Theropithecus gelada</i>), M. Gustison - <i>University of Michigan</i></p> <p>Multiple fitness benefits of alloparental care in fluctuating environments, S. Guindre-Parker, D. Rubenstein - <i>Columbia University</i></p> <p>Evidence for mutual assessment in a wild primate, M. Benitez(1), D. Papiano(2), T. Bergman(3) - (1) <i>Georgia State University</i>, (2) <i>Princeton University</i>, (3) <i>University of Michigan</i></p>	<p>Behavioral Plasticity Moderator: Melissa Graham</p> <p>Distinguishing Novelty from Re-emergence of Ancestral Behavioral Traits in an Adaptive Radiation S. Foster - <i>Clark University</i></p> <p>The influence of behavioral type structure on foraging among invasive and native praying mantids, C. Jones(1), N. Dirkenzo(2), A. Hedrick(1) - (1) <i>University of California, Davis</i>, (2) <i>University of Arizona</i></p> <p>Internal state and behavioural variation in the redback spider, M. Mowley, R. Pakirathan, A. Mason, M. Andrade - <i>University of Toronto Scarborough</i></p> <p>Effects of season, sex, and body size on dispersal in a semi-aquatic insect, C. Barnes, S. McCauley - <i>University of Toronto Mississauga</i></p> <p>Nocturnal flight and the origins of echolocation and diet in bats, J. Thiegsavel(1), C. Cecchetti(2), S. Siani(3), L. Jakobsen(2), E. Ventrone(4), J. Ratcliffe(1,2) - (1) <i>Department of Ecology and Evolutionary Biology, University of Toronto</i>, (2) <i>Department of Biology, University of Southern Denmark</i>, (3) <i>Department of Biology and Burke Museum, University of Washington</i>, (4) <i>Department of Biology, Lund University</i></p>	<p>Ecological Effects Moderator: Nick Keiser</p> <p>Katydid personality hypervolume decreases their space and the survival of an invasive froggopper, J. Lichtenstein(1), B. McEwen(2), N. Finlier-Vollmer(3), J. Pruitt(1) - (1) <i>University of California Santa Barbara</i>, (2) <i>University of Pittsburgh</i>, (3) <i>University of California Los Angeles</i></p> <p>Comparing Effects of Recurrent Invariant Winter Weather Cues on White-throated Sparrows, A. Boyer, S. MacDougall-Shackleton - <i>University of Western Ontario</i></p> <p>Neonic Exposed Honey Bee Flights, N. Tsvetkov, A. Zayed - <i>York University</i></p> <p>Oviposition behaviour leads to differential winter survival & phenology of eggs in <i>Sympetrum</i> dragonflies, R. Martin, S. McCauley - <i>University of Toronto at Mississauga</i></p> <p>Annual climate variation is associated with differences in reproduction in mountain chickadees, C. Branch, B. Cronin, A. Pflera, V. Pravosudov - <i>University of Nevada Reno</i></p> <p>Intra-brood rank predicts novelty seeking in individual Arabian babblers, T. Hoddes, A. H. H. (1), P. Santer(2), H. Hubert(3) - (1) <i>Yale University</i>, (2) <i>May Plankin Institute of Ornithology</i>, (3) <i>City University of New York</i></p> <p>Effects of ambient temperature on vibratory signals and mate choice in a jumping spider, H. Aborn(1), C. E. Brandt(2), D. Elias(1) - (1) <i>University of California, Berkeley</i>, (2) <i>Florida State University</i></p> <p>Open Cup Nests Evolved from Roofed Nests in the Early Passerines, J. Pines(1,2), S. Griffith(2), J. St. Mary's College of Maryland, (2) <i>Macquarie University</i></p>
1:45	<p>Sexual Selection and Sexual Conflict Moderator: Joel W.G. Slade</p> <p>Jack-of-all-Trades, Guarder of none? Does guarding require trade-offs with sperm counts in jumping spiders? L. Taylor(1), M. Mowley(1), M. Rosenblatt(2), M. Andrade(1) - (1) <i>University of Toronto</i>, (2) <i>University of California, Berkeley</i></p> <p>Behavioural plasticity in female mate choice behaviours in fruit flies, D. Filice(1,2), T. Long(2) - (1) <i>McMaster University</i>, (2) <i>Wilfrid Laurier University</i></p>	<p>Greater Spear-nosed Bats Advertise Social Status Using Olfactory Signals, D. Adams, Y. Li, G. Wilkinson - <i>University of Maryland</i></p> <p>Vocal Learning in the Costa's Hummingbird, K. Johnson, C. Clark - <i>University of California, Riverside</i></p> <p>Acoustic parasitoid foraging: Using proximate mechanisms to explain parasitoid host localization, A. Masson, A. Mason - <i>University of Toronto Scarborough</i></p>	<p>Body size, predation risk and ornamentation in birds, C. Day(1), M. Vaicu(2), J. Dale(3) - (1) <i>University of Windsor</i>, (2) <i>Max Planck Institute for Ornithology</i>, (3) <i>Massey University</i></p>
2:00	<p>Follow your nose: chemical cues of MHC compatibility, and acoustic cues of MHC diversity, in song sparrows, J. Slade, M. Watson, T. Kelly, G. Gloor, M. Bernards, E. MacDougall-Shackleton - <i>University of Western Ontario</i></p> <p>Influence of dietary nutrient ratio on multiple reproductive behaviours in field crickets, S. Hamson, J. Godin, S. Brittram - <i>Carleton University</i></p> <p>Choosy males in Jamaican field crickets, S. Brittram(1), T. Tomson(1), M. Lounger(1), S. Hamson(1), G. Ferguson(1), M. Reiler(1), P. Gowaty(2,3) - (1) <i>Carleton University</i>, (2) <i>University of California Los Angeles</i>, (3) <i>Smithsonian Tropical Research Institute</i></p>	<p>The Function of Signal Synchronization in a Neotropical Tree Frog: Avoiding Predatory Eavesdroppers?, H. Leggett(1), R. Page(2), X. Bernal(1,2) - (1) <i>Purdue University</i>, (2) <i>Smithsonian Tropical Research Institute</i></p> <p>Is acoustic signal degradation a reliable cue of distance for open-habitat birds?, A. Strauss(1), J. Rodos(1,2) - (1) <i>Organismic and Evolutionary Biology Graduate Program, University of Massachusetts</i>, (2) <i>Department of Biology, University of Massachusetts</i></p> <p>The Co-evolution of Hummingbird Plumage Coloration and Courtship Displays, R. Simpson, K. McGraw - <i>Arizona State University</i></p>	<p>Internal state and behavioural variation in the redback spider, M. Mowley, R. Pakirathan, A. Mason, M. Andrade - <i>University of Toronto Scarborough</i></p> <p>Effects of season, sex, and body size on dispersal in a semi-aquatic insect, C. Barnes, S. McCauley - <i>University of Toronto Mississauga</i></p> <p>Nocturnal flight and the origins of echolocation and diet in bats, J. Thiegsavel(1), C. Cecchetti(2), S. Siani(3), L. Jakobsen(2), E. Ventrone(4), J. Ratcliffe(1,2) - (1) <i>Department of Ecology and Evolutionary Biology, University of Toronto</i>, (2) <i>Department of Biology, University of Southern Denmark</i>, (3) <i>Department of Biology and Burke Museum, University of Washington</i>, (4) <i>Department of Biology, Lund University</i></p> <p>Within-individual variation in behavior and where to find it, R. Royauté, N. Doehlemann - <i>North Dakota State University</i></p> <p>Effects of male quality and territory quality on female preference of varying condition, L. Chino, C. Miller - <i>University of Florida</i></p>
2:15	<p>Multiple fitness benefits of alloparental care in fluctuating environments, S. Guindre-Parker, D. Rubenstein - <i>Columbia University</i></p>	<p>Acoustic signal degradation a reliable cue of distance for open-habitat birds?, A. Strauss(1), J. Rodos(1,2) - (1) <i>Organismic and Evolutionary Biology Graduate Program, University of Massachusetts</i>, (2) <i>Department of Biology, University of Massachusetts</i></p> <p>The Co-evolution of Hummingbird Plumage Coloration and Courtship Displays, R. Simpson, K. McGraw - <i>Arizona State University</i></p>	<p>Internal state and behavioural variation in the redback spider, M. Mowley, R. Pakirathan, A. Mason, M. Andrade - <i>University of Toronto Scarborough</i></p> <p>Effects of season, sex, and body size on dispersal in a semi-aquatic insect, C. Barnes, S. McCauley - <i>University of Toronto Mississauga</i></p> <p>Nocturnal flight and the origins of echolocation and diet in bats, J. Thiegsavel(1), C. Cecchetti(2), S. Siani(3), L. Jakobsen(2), E. Ventrone(4), J. Ratcliffe(1,2) - (1) <i>Department of Ecology and Evolutionary Biology, University of Toronto</i>, (2) <i>Department of Biology, University of Southern Denmark</i>, (3) <i>Department of Biology and Burke Museum, University of Washington</i>, (4) <i>Department of Biology, Lund University</i></p> <p>Within-individual variation in behavior and where to find it, R. Royauté, N. Doehlemann - <i>North Dakota State University</i></p> <p>Effects of male quality and territory quality on female preference of varying condition, L. Chino, C. Miller - <i>University of Florida</i></p>
2:30	<p>Evidence for mutual assessment in a wild primate, M. Benitez(1), D. Papiano(2), T. Bergman(3) - (1) <i>Georgia State University</i>, (2) <i>Princeton University</i>, (3) <i>University of Michigan</i></p>	<p>Acoustic signal degradation a reliable cue of distance for open-habitat birds?, A. Strauss(1), J. Rodos(1,2) - (1) <i>Organismic and Evolutionary Biology Graduate Program, University of Massachusetts</i>, (2) <i>Department of Biology, University of Massachusetts</i></p> <p>The Co-evolution of Hummingbird Plumage Coloration and Courtship Displays, R. Simpson, K. McGraw - <i>Arizona State University</i></p>	<p>Internal state and behavioural variation in the redback spider, M. Mowley, R. Pakirathan, A. Mason, M. Andrade - <i>University of Toronto Scarborough</i></p> <p>Effects of season, sex, and body size on dispersal in a semi-aquatic insect, C. Barnes, S. McCauley - <i>University of Toronto Mississauga</i></p> <p>Nocturnal flight and the origins of echolocation and diet in bats, J. Thiegsavel(1), C. Cecchetti(2), S. Siani(3), L. Jakobsen(2), E. Ventrone(4), J. Ratcliffe(1,2) - (1) <i>Department of Ecology and Evolutionary Biology, University of Toronto</i>, (2) <i>Department of Biology, University of Southern Denmark</i>, (3) <i>Department of Biology and Burke Museum, University of Washington</i>, (4) <i>Department of Biology, Lund University</i></p> <p>Within-individual variation in behavior and where to find it, R. Royauté, N. Doehlemann - <i>North Dakota State University</i></p> <p>Effects of male quality and territory quality on female preference of varying condition, L. Chino, C. Miller - <i>University of Florida</i></p>
2:45	<p>The frequency distribution of female quality types affects male reproductive decisions, J. Balaban-Feld - <i>Saint Louis University</i></p>	<p>Acoustic signal degradation a reliable cue of distance for open-habitat birds?, A. Strauss(1), J. Rodos(1,2) - (1) <i>Organismic and Evolutionary Biology Graduate Program, University of Massachusetts</i>, (2) <i>Department of Biology, University of Massachusetts</i></p> <p>The Co-evolution of Hummingbird Plumage Coloration and Courtship Displays, R. Simpson, K. McGraw - <i>Arizona State University</i></p>	<p>Internal state and behavioural variation in the redback spider, M. Mowley, R. Pakirathan, A. Mason, M. Andrade - <i>University of Toronto Scarborough</i></p> <p>Effects of season, sex, and body size on dispersal in a semi-aquatic insect, C. Barnes, S. McCauley - <i>University of Toronto Mississauga</i></p> <p>Nocturnal flight and the origins of echolocation and diet in bats, J. Thiegsavel(1), C. Cecchetti(2), S. Siani(3), L. Jakobsen(2), E. Ventrone(4), J. Ratcliffe(1,2) - (1) <i>Department of Ecology and Evolutionary Biology, University of Toronto</i>, (2) <i>Department of Biology, University of Southern Denmark</i>, (3) <i>Department of Biology and Burke Museum, University of Washington</i>, (4) <i>Department of Biology, Lund University</i></p> <p>Within-individual variation in behavior and where to find it, R. Royauté, N. Doehlemann - <i>North Dakota State University</i></p> <p>Effects of male quality and territory quality on female preference of varying condition, L. Chino, C. Miller - <i>University of Florida</i></p>
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3:15	<p>Male preference for sexually attractive conspecifics in the absence of females, S. Poll(1), H. Alid(1,2), T. Sherratt(1), J. Godin(1) - (1) <i>Carleton University</i>, (2) <i>Oregon State University</i></p>	<p>Acoustic signal degradation a reliable cue of distance for open-habitat birds?, A. Strauss(1), J. Rodos(1,2) - (1) <i>Organismic and Evolutionary Biology Graduate Program, University of Massachusetts</i>, (2) <i>Department of Biology, University of Massachusetts</i></p> <p>The Co-evolution of Hummingbird Plumage Coloration and Courtship Displays, R. Simpson, K. McGraw - <i>Arizona State University</i></p>	<p>Internal state and behavioural variation in the redback spider, M. Mowley, R. Pakirathan, A. Mason, M. Andrade - <i>University of Toronto Scarborough</i></p> <p>Effects of season, sex, and body size on dispersal in a semi-aquatic insect, C. Barnes, S. McCauley - <i>University of Toronto Mississauga</i></p> <p>Nocturnal flight and the origins of echolocation and diet in bats, J. Thiegsavel(1), C. Cecchetti(2), S. Siani(3), L. Jakobsen(2), E. Ventrone(4), J. Ratcliffe(1,2) - (1) <i>Department of Ecology and Evolutionary Biology, University of Toronto</i>, (2) <i>Department of Biology, University of Southern Denmark</i>, (3) <i>Department of Biology and Burke Museum, University of Washington</i>, (4) <i>Department of Biology, Lund University</i></p> <p>Within-individual variation in behavior and where to find it, R. Royauté, N. Doehlemann - <i>North Dakota State University</i></p> <p>Effects of male quality and territory quality on female preference of varying condition, L. Chino, C. Miller - <i>University of Florida</i></p>
3:30 pm - 4:00 pm	<p>Meeting Place</p> <p>Afternoon Snacks</p>		

Time	SW309	SW319	AC223	HW216	AA112	HW215
4:00 pm - 6:00 pm	<p>Allee Symposium for Best Student Poster Paper Moderator: J. Swaddle</p> <p>Environmental variation along an elevation gradient is associated with pre-mating mechanisms. C. Branch - <i>University of Nevada</i></p>	<p>Social Behavior Moderator: Jennifer M. Jandt</p> <p>Distributed defenses: Individual and collective nest choices in turtle ants. M. Donaldson-Macaso (1), M. Patagoni (2), L. Ramirez (2), L. Mudd (2), L. Mudd (2) - (1) <i>Princeton University</i>, (2) <i>Keck Science Department</i></p>	<p>Ecological Effects Moderator: Toshi R. Kelly</p> <p>Resisting experimental malarial infection affects timing of fall migration in a migratory bird. T. Kelly (1,2), S. MacDougall-Shackleton (2,3), E. MacDougall-Shackleton (2) - (1) <i>Biology Department, Western University</i>, (2) <i>Advanced Facility for Avian Research, Western University</i>, (3) <i>Psychology Department, Western University</i></p>	<p>Cognition and Learning Moderator: Elizabeth A. Capaldi</p> <p>Testing the cognitive buffer hypothesis with rufous nighthawk (Procyon mexicanus). L. Stanton, S. Benson-Amram - <i>University of Wyoming</i></p>	<p>Communication Moderator: Stephen Nowicki</p> <p>Coarse vision isn't useless: Cleaner shrimp use low-res vision to discriminate between stimuli. E. Cavas, C. Chen, S. Johnsen - <i>Duke University Biology Department</i></p>	<p>Diversity and Latin American Affairs Committees Joint Workshop</p>
4:15		<p>The reproductive consequences of queen cooperation in a honeybee ant. B. Haney, J. Powell - <i>Arizona State University</i></p>	<p>Anthropogenic effects on the perception of fear in African forest mammals. B. Mugenot (1,2,3), M. Clancy (1), D. Broccolo (2), L. Zanette (1), Department of Biology, Western University, (2) <i>Wildlife Conservation Research Unit, The Reanait-Kaplan Centre, Department of Zoology, University of Oxford</i>, (3) <i>Institute of Tropical Forest Conservation, Mbarara University of Science and Technology</i></p>	<p>Achromatic contrast determines interaction time with novel objects in naive <i>Peromyscus</i> seedlings. S. Song (1), T. Ishii (2), H. Yam (2), U. Lee (2,3), P. Jablon (2) - (1) <i>South National University</i>, (2) <i>Seoul National University</i>, (3) <i>Daegu-Kyungbuk Institute of Science and Technology</i></p>	<p>Context isn't Everything, It's the Only Thing: Social Effects on Responses to Multifunctional Calls. A. Gersick, D. Rubenstein - <i>Princeton University</i></p>	
4:30	<p>Behavior mediates the association between sexual signals and costly parasites. H. Clutton (1), P. Munday (2), C. Sinden (3), P. Munday (4), R. Soffran (1) - (1) <i>University of Colorado</i>, (2) <i>University of Nebraska-Lincoln</i>, (3) <i>Oregon State University</i>, (4) <i>Chapman University</i></p>	<p>Angry wasps vs. less angry wasps: Colony-level differences in aggression in <i>Vespa vulgaris</i> wasps. M. Landi (1), K. Lopez (2), D. Sennaro (3), P. Lester (3), O. Umm (3), D. Sennaro (3) - (1) <i>University of Otago</i>, (2) <i>University of California - Riverside</i>, (3) <i>Victoria University</i></p>	<p>Are forests a barrier to dragonfly dispersal? S. French (1,2), S. McCauley (1,2) - (1) <i>University of Toronto Mississauga</i>, (2) <i>University of Toronto</i></p>	<p>Can Honey Bees Use Floral Scent Cues to Make Foraging Decisions? E. Capaldi (1), J. Kenyon (1) - (1) <i>Bucknell University</i>, (2) <i>Bucknell University</i></p>	<p>How are you? Tits learn to identify predators. C. Templeton (1,2), N. Carlson (2), S. Healy (2) - (1) <i>Pacific University</i>, (2) <i>University of St. Andrews</i></p>	
4:45		<p>Plasticity in Social Network Structure Arises from Nutritional Variation. E. Wice, J. Saltz - <i>Rice University</i></p>	<p>Comparing Visual, Olfactory and Mechanosensory Systems in Divergent Stickleback Populations. R. Moberly, J. Bougman - <i>Michigan State University</i></p>	<p>Exploring the Predictors of Individual Problem Solving Efficiency in Wild-Caught Black-Capped Chickadees. S. P. Rashner, J. Morand-Ferron - <i>University of Ottawa</i></p>	<p>Testing Hypotheses about Why the Hyena Laughs. K. Lehmann, K. Holekamp - <i>Michigan State University</i></p>	
5:00	<p>Is mate choice in the eye and ear of the beholder? Multifunctional sensory configuration shapes mating preferences. K. Román (1,2), (1) <i>Purdue University</i>, (2) <i>Indiana University</i></p>	<p>Where should we meet? Mapping social network interactions of sleepy lizards shows sex-dependent structure. O. Spies (1), A. Shi (1), S. Leu (2,3,4), C. Bull (2), (1) <i>Department of Environmental Science and Policy, University of California, Davis</i>, (2) <i>School of Biological Sciences, Florida State University</i>, (3) <i>Department of Biology, Georgetown University</i>, (4) <i>Department of Biological Sciences, Macquarie University</i></p>	<p>Behaviour and Physiological Impacts of Anthropogenic Noise on Freshwater Fish. M. Mickle, D. Higgs - <i>University of Windsor</i></p>	<p>Size and social rank influences the transmission of social information in <i>Neotropical guppies</i> pulcher. E. Hoskins (1), A. Papes (1), L. Hamilton (1,2), (1) <i>Department of Evolution, Ecology, and Organismal Biology, The Ohio State University</i>, (2) <i>Department of Mathematics</i></p>	<p>Ovenbird nocturnal flight songs do not function as intra-sexual signals. J. Foote, H. Al-Ahli - <i>Algonia University</i></p>	
5:15		<p>Individual coordination in collective choice in the seed harvester ant <i>Pogonomyrmex californicus</i>. L. Bernal, J. Powell - <i>Arizona State University</i></p>	<p>Potential impacts of the invasive shrimp, <i>Palaeomonetes macrondactylus</i> on native populations in New Jersey. L. Berney, P. Ritchie, K. Arnao, J. Mattingly, C. Susan - <i>Centenary University</i></p>	<p>Individual recognition and face inversion effect in medaka fish (<i>Oryzias latipes</i>). M. Wang (1,2), H. Takahashi (1,2) - (1) <i>The University of Tokyo</i>, (2) <i>Okayama University</i></p>	<p>Vocal dialects in parrots: evolutionary patterns and processes. T. Wright (1), C. Dahlin (2) - (1) <i>Department of Biology, New Mexico State University</i>, (2) <i>Department of Biology, University of Pittsburgh at Johnstown</i></p>	
5:30	<p>Mimicry in a new light: The preference for microhabitat segregation in mimetic speckles. B. Seymours (1,2,3), E. Loefer (4), W. McMillan (2), K. McGraw (3), R. Rubow (3) - (1) <i>Colorado State University</i>, (2) <i>Smithsonian Tropical Research Institute</i>, (3) <i>Arizona State University</i>, (4) <i>Cornell University</i></p>	<p>Flexible Use of Social Information and Learning in Zebrafish. N. Miller, R. Ayoub - <i>Wilfrid Laurier University</i></p>	<p>Urban areas may be food deserts for house finches too. R. Fox - <i>Pennsylvania State University</i></p>	<p>A Population Difference in Exploratory Behavior in a Novel Maze in Trinidadian Guppies. P. Sims, S. Reader - <i>Department of Biology, McGill University</i></p>	<p>Long Term Monitoring of Cultural Evolution in Parrot Vocal Dialects. C. Dahlin (1), D. Hellmich (2), G. Smith-Vidaurre (2), D. Moly (1), T. Wright (2) - (1) <i>University of Pittsburgh at Johnstown</i>, (2) <i>New Mexico State University</i></p>	
5:45		<p>Reactivity in bumble bees: tradeoffs associated with rapid responses. T. Polunaszek, D. Papaj, A. Domhaeus - <i>University of Arizona</i></p>		<p>The role of the hippocampus in encoding retention and retrieval of spatial memory in brown-headed cowbirds. M. Brodbeck, S. Lomber, D. Sherry, S. MacDougall-Shackleton - <i>Western University</i></p>	<p>Perception of a Carotenoid Signal: Continuous or Categorical? S. Nowicki, E. Cavas, P. Green, M. Zippel, S. Johnsen, S. Peters - <i>Duke University</i></p>	

Time	Science Wing Hall
9:00 pm - 9:30 pm	Poster Session
Time	MW130
9:00 pm - 11:30 pm	Student Party

Time	AA112 Behavioral Biodiversity Symposium	AC223 Animal Cognition: Mechanisms, Ecology and Evolution	SW309 Agonism Moderator: P. A. Green	SW319 Behavior Genetics/Genomic & Genetics & Evolution Moderator: Sandra M. Rehan	HW216 Ecological Effects Moderator: Doris Audet	HW215 Three Minute Thesis (3MT) Competition
2:30 pm - 3:30 pm	Files as Novel Systems to Understand Sexual Selection on Females. D. Gwynne - University of Toronto Mississauga	Some do, most don't: constraint, opportunity, and the evolution of echolocation. J. Ratcliffe - University of Toronto	Do varying levels of predation risk affect territorial behavior by male and female Ozark Zigzag salamanders? S. Heimbach, A. Mathis - Missouri State University	Genetic Correlations between Sociability, Activity, and Aggression in Fruit Flies. A. Scott, C. Baxter, I. Dworkin, R. Dukas - McMaster University	Has behavior-dependent parasite exposure risk led to immune function divergence between two zebras? K. Tombak, D. Rubenstein, L. Wail, L. Easterling - Princeton University	
2:45			Aggressive female house wrens are more successful during experimentally enhanced competition. C. Krieg, T. Getty - Michigan State University	On the genetic basis of hygienic and overwintering behaviour in the Honeybee. H. Patel, C. Kent, T. Twari, S. Rose, A. Dey, K. Doganizis, A. Zayed - York University	Exploring Variation in Seasonal Territoriality in Carolina Chickadees. D. Rocher(1), S. Mugal(1), A. Karipadath(1), T. Freeberg(2), K. Sieving(3), J. Lucas(1) - (1)Purdue University, (2) University of Tennessee, (3) University of Florida	
3:00	Alternative reproductive tactics and sexual selection in the New Zealand giraffe weevil. C. Painting, G. Holwell - University of Auckland	Receiver Biases in the Perception and Interpretation of Acoustic Communication Signals. M. Ryan - University of Texas	The energetics of ultrafast displays: kinetic energy of ritualized sparring strikes in mantis shrimp. P. Green(1), M. McHenry(2), S. Patek(1) - (1)Biology Department, Duke University, (2) Department of Ecology and Evolutionary Biology, UC Irvine	Comparative Social Evolution and Behavioral Genomics of <i>Ceratina</i> Small Carpenter Bees. S. Rehan - University of New Hampshire	Bats in the Playground: A Field Test for Interspecific Comparisons of Exploratory Behaviour. D. Audet, E. Haave Audet - University of Alberta	
3:15			Density-dependent behavior and agonistic interactions in female black widow spiders (<i>Latrodectus hesperus</i>). N. Singh - University of Toronto	Ecological speciation in Amazon waters: molecular and behavioral evidence from the sailfin tetra. T. Pires(1), E. Borghezan(1), V. Machado(2), I. Farias(2), J. Zuanon(1) - (1) Behavioral and Evolutionary Ecology Lab (LECE), National Institute for Amazonian Research (INPA), (2) Evolution and Genetics Lab (LEGAL), Federal University of Amazonas (UFAM)		

Meeting Place

Afternoon Snacks

Time

3:30 pm - 4:00 pm

Time	AA112	AC223	SW309	SW319	HW216	HW215
4:00 pm - 6:00 pm	Behavioral Biodiversity Symposium	Animal Cognition: Mechanisms, Ecology and Evolution	Neuro/Endocrine & Physiological Mechanisms Moderator: Brent Stoffer	Social Behavior Moderator: Matthew J. Hasenjager	Parental Care Moderator: Angela Freeman	Public Affairs Committee Workshop: Writing Compelling Grant Proposals: Science Education and Broader Impacts
4:00	Signals, Sociality, and Sexual Selection: Crabby Insights. M. Laidre - Department of Biological Sciences, Dartmouth College	Memory and Cognitive Flexibility Trade-Offs: To Be or Not To Be Flexible, That Is The Question. V. Pravosudov - University of Nevada Reno	Potential molecular conflict between detoxification and immune defense in <i>Manduca sexta</i> . L. Hall, S. Adamo - Dalhousie University	Age, social group, and body-site related variation in spotted hyena microbiota. C. Rojas(1), K. Theis(2), K. Holckamp(1), (1)Michigan State University, Department of Integrative Biology, (2)Wayne State University, Department of Immunology and Microbiology	Provisioning tactics of great tits in response to brood size manipulations differ across years. K. Watnot(1), A. Nilsen(2), A. Nilzvet(3), Y. Yraberoy(2), M. Nicolaus(4), D. Vestheim(3), J. Wright(2), B. Kempenaers(5), N. Dingemanse(5), (1)University of Alberta, (2)Norwegian University of Science and Technology (NTNU), (3)University of Kentucky, (4)University of Groningen, (5)Max Planck Institute for Ornithology, (6) Ludwig-Maximilians University of Munich (LMU)	
4:15			Organizational effects of androgens on aggression in a sex-role reversed species, spotted hyenas. S. Jones(1), J. Montgomery(1), J. French(2), K. Holckamp(1) - (1)Michigan State University, (2)University of Omaha Nebraska	Leadership in Mammalian Societies: Emergence, Distribution, Power, and Profit. J. Smith(1), S. Gavrillas(2), M. Borger-Mulder(3), P. Good(4), C. E. Sueden(5), D. Nettle(6), C. Hayward(1), K. Hill(8), S. Perry(9), A. Papes(10), M. van Vugt(11), E. Shultz(12), (1)Illinois College, (2)University of Tennessee, (3)University of California at Davis, (4) Emory University, (5)University of Oxford, (6)Swicaste University, (7)University of British Columbia, (8)Arizona State University, (9)University of California Los Angeles, (10)Duke University, (11)VU University Amsterdam, (12)University of Washington	Fit Daddies: Body Condition Increases Male Attractiveness in an Aramid with Exclusive Male Care. L. Alissa, G. Requena, G. Machado - Universidade de São Paulo	
4:30	Butterflies as a system to study the evolution and development of behavior in anthropogens. E. Snell-Rood(1), M. Emlen(1), K. Sikkink(1), A. Espeseth(2) (1)University of Minnesota, (2)University of Nevada	Social and ecological influences in problem-solving abilities. S. Benson-Arian - University of Wyoming	Experience or endocrine: do nonapeptides regulate long term pair bonds in zebra finches? E. Kelly, E. Adkins-Regan - Cornell University	Grooming as An Agonistic Behavior in Garnett's Small-Eared Bushbaby (<i>Otocoryza garnetti</i>). J. Christopher, T. Baker, H. Lyn - University of Southern Mississippi	Leeches and Parental Care: Evidence of Oral Adaptation in <i>Hiridobdella coresta</i> . R. Beresic-Petras, J. E. Bouchard, C. Kovanishi, A. Rincon, S. Shuster - Northern Arizona University	
4:45			Aggression within a Mating Context: the Effects of Biogenic Amines on Spider Mating Behaviors. B. Soffer(1), J. Price(2), R. Wilson(2), T. Jones(2), G. Uetz(1) (1)University of Cincinnati, (2)Eastern Tennessee State University	Heterospecific networks connect disconnected conspecific networks in chickadees and titmice. J. Lucas(1), S. Mugal(1), D. Rohrer(1), N. Lancaster(1), K. Shing(2), T. Friesberg(3), (1)Purdue University, (2)University of Florida, (3)University of Tennessee	Influences of parental brain and behavior and nest composition on offspring social behavior. M. R. (1), R. D. (2), (1)Albany State University, (2)Cornell University	
5:00	Ecological and developmental views of conflict in water striders. L. Rowe - University of Toronto	Artificial selection reveals the costs and benefits of large brain size. A. Kolrschall - Stockholm University	Increased testosterone decreases medial cortical volume and neurogenesis in territorial side-blotched lizards. L. LaDage(1), T. Roth(2), C. Downs(3), B. Sinervo(4), V. Pravosudov(5) - (1)Penn State Altoona, (2)Franklin & Marshall College, (3)Hamilton College, (4)UC-Santa Cruz, (5)University of Nevada, Reno	Testing optimal acceptance threshold theory in egg rejections: hosts of avian brood parasites. M. Hauber(1), D. Hately(2), A. Lopez(3), V. Florin(4), T. Grim(5), (1)Hunter College of the Graduate Center of the City University of New York, (2)University of Illinois Urbana-Champaign, (3)Long Island University, (4)University of Buenos Aires, (5)Palacky University	Paternity and cannibalism: male earwigs eat fewer eggs from clutches they sired. A. Jacobs(1), T. Stigall(1) (1)Allegheny College, (2)Georgia Southwestern State University	
5:15			Dopamine receptors are differentially involved in modulation of learning tasks in zebrafish (<i>Danio rerio</i>). M. Nader(1), S. Niyogi(1,2), D. Chivers(1) - (1)Department of Biology, University of Saskatchewan, 112 Science Place, (2)Toxicology Centre, University of Saskatchewan, 44 Campus Drive	Feared of predation shapes social network structure and the acquisition of foraging information. M. Hasenjager	Flexibility in the duration of parental care: female leopard prioritize cub survival over reproductive output. G. Balme(1,2), H. Robinson(1,3), R. Pymant(1), L. Hunter(1,4) - (1)Parthena, (2)University of Cape Town, (3)University of Montana, (4)University of Kwazulu-Natal	
5:30	Discussion Taxonomic Bias: Should we care? Should we act? M. Andrade	The cognitive ecology of alternative male tactics: Memory & fidelity among mostly monogamous voles. S. Phelps, M. Vacheklavay, G. Wallace - Department of Integrative Biology, University of Texas	Visual learning in tethered honeybees. Apis mellifera. C. Risch(1), E. Roth(1,2), C. Vinaver(1), J. Riffel(1,2) - (1)Department of Biology, University of Washington, (2)University of Washington Institute for Neuroengineering	Helpful Recruitment in a Cooperative Breeder: The Role of Individual and Habitat Quality. J. Cusick(1), E. DuVal(1), J. Cox(2) - (1)Florida State University, (2) Tall Timbers Research Station and Land Conservancy	Parents Do Know Best: Evidence of Trans-generational Effects on Offspring Behavior Across Taxa. C. Garrison, N. Dochtermann - North Dakota State University	
5:45						

Time	Residence Centre
6:30 pm - 11:00 pm	Excursion Bus Trip to Downtown Toronto (ticket required)

Miller Lash House

The Pub at the House (Miller Lash House)

AC223		AC223		AC223		AA112	
Morning Announcements and Notices							
AC223							
Plenary Talk: Journey to an Upside-Down World: A Transgressive South American Spider as a Model for Sexual Selection Studies. Anita Aisenberg - Laboratorio de Etología, Ecología y Evolución, Instituto de Investigaciones Biológicas Clemente Estable, Avenida Italia							
Meeting Place							
Morning Snacks							
AC223							
Time	SW309	SW319	Sexual Selection and Sexual Conflict	Cognition and Learning	Predation and Foraging		
8:15 am - 8:30 am	Moderator: Daniel B. Zurek The Effects of Habitat on the Courtship Signal Active Space of Two Wolf Spiders. E. Pickett, G. Uetz - <i>University of Cincinnati</i>	Moderator: Chelsea N. Cook Foraging Phenotypes Influenced by Learning Behavior: Neurotransmitters in Honey Bees. C. Cook(1), T. Mosnier(2), N. Pinter-Wollman(2), C. Brent(3), B. Smith(1) - (1) <i>Arizona State University</i> , (3) <i>USDA And Land Agriculture Research Center</i>	Moderator: Kyle Summers Dietary nutrient effects on life history and sexually selected traits in male Jamaican field crickets. M. Rella, S. Barfani - <i>Department of Biology, Carleton University</i>	Moderator: Colin Wright Experimental evidence for innate biases in vocal sequencing learning. L. James, J. Sakata - <i>McGill University</i>	Moderator: Michael Vickris Fear of predators has long-lasting effects on the brain and behaviour in wild animals. Witterick(1), Hynkiewicz(1), S. MacDougall-Shackleton(1), C. Bailey(2), M. Clinchy(1), L. Zanette(1) - (1) <i>Western University</i> , (2) <i>University of Guelph</i>		
10:00 am - 12:00 pm	Moderator: Daniel B. Zurek The Interaction Of Female Gaze And Male Courtship Displays in <i>Habronattus</i> Jumping Spiders. D. Zurek(1,2), S. Echeverri(2), S. Long(3,4), E. Jakob(3), N. Morenouse(1,2) - (1) <i>University of Cincinnati</i> , (2) <i>University of Pittsburgh</i> , (3) <i>University of Massachusetts Amherst</i> , (4) <i>University of Arizona Tucson</i>	The fitness consequences of spiderling interactions on the group web in the desert spider, <i>Agelenopsis aperta</i>. J. Bush, S. Rechert - <i>University of Tennessee Knoxville</i>	Re-Examining the Testosterone-Immune Suppression Hypothesis: Why Some of the Evidence Casts Doubts. Z. Tang-Martinez(1), S. Braude(2) - (1) <i>University of Missouri-St. Louis</i> , (2) <i>Washington University</i>	Testing the Potential for Cognitive Ability to Act as a Reproductive Isolating Barrier. M. McQuillan(1), T. Roth(2), A. Rigg(1) - (1) <i>Loughborough University</i> , (2) <i>Franklin and Marshall College</i>	Implications of Autotomy of Melasoma for Locomotion in Scorpions. S. Garcia-Hernández, G. Machado - <i>Universidade de São Paulo</i>		
10:30	Moderator: T. Coney, E. Hebels - <i>University of Nebraska-Lincoln</i> Quantifying interactions across social contexts in the amblyopid <i>Paraphrynus leavifrons</i>. T. Coney, E. Hebels - <i>University of Nebraska-Lincoln</i>	Male vervet monkeys use punishment and coercion to de-escalate costly intergroup conflicts. T. Arsenau-Robart(1,2), E. Müller(1,2), A. Taucher(1,2), C. van Schaik(1,2), R. Bshary(2,3), E. Williams(1,2) - (1) <i>University of Zurich</i> , (2) <i>Inkawu Vernet Project</i> , (3) <i>University of Neuchâtel</i>	Courtship Behavior and Male Size in Black-throated Hummingbirds (<i>Archilochus alexandri</i>). S. Wilcox, C. Clark - <i>University of California, Riverside</i>	Exploration as a metric for information gathering in black-capped chickadees (<i>Parus atricapillus</i>). L. Rojas-Ferrer, M. Thompson, J. Morand-Ferron - <i>University of Ottawa</i>	Group foraging on Antarctic trill in gentoo penguins. W. Lee(1), N. Kokubun(2), S. Park(1,3), N. Choi(1,4), H. Chung(1), J. Kim(1), (1) <i>Division of Polar Life Sciences, Korea Polar Research Institute</i> , (2) <i>National Institute of Polar Research, Division of Life Sciences, Incheon National University</i> , (4) <i>School of Biological Sciences, University of Nebraska</i>		
10:45	Finding Females in a Sensory Storm: How do Male Western Widows Localize Mates? C. Scott, S. McCann, M. Andrade - <i>University of Toronto Scarborough</i>	When does diversity interfere with function: the effect of phenotypic diversity in bumble bee colonies. E. Kälénen, A. Domhaeus - <i>University of Arizona</i>	Effects of arsenic exposure on female anxiety and mate preference in <i>Betta splendens</i>. M. Tudor, S. Conlin, H. Hamlin - <i>University of Maine</i>	What factors really guide domestic dogs' search for an item dropped down a diagonal tube? D. Buchsbaum, E. Tecwyn - <i>University of Toronto</i>	Effects of low environmental calcium on predator assessment of redbelly dace in undisturbed waters. R. Mirza, M. Léit - <i>Nipissing University</i>		
11:00	Songbird chemical signals reflect uropygial gland androgen sensitivity and predict aggressive behavior. D. Whittaker(1,2), K. Rosvall(3), S. Slowinski(3), H. Soimi(4,5), M. Novotny(4,5), E. Ketterson(3) - (1) <i>BEACON Center for the Study of Evolution in Action, Michigan State University</i> , (2) <i>Department of Integrative Biology, Michigan State University</i> , (3) <i>Department of Biology, Indiana University</i> , (4) <i>Department of Chemistry, Indiana University</i> , (5) <i>Institute for Pheromone Research, Indiana University</i>	Perception of Social Structure in Hermits? K. Bates, M. Laird - <i>Department of Biological Sciences, Dartmouth College</i>	Eat Prey, Love: the impact of prey density and operational sex ratios on mating behavior in an orbweaver. A. Dodson, E. Ezeokoli, A. Danielson-Francois - <i>University of Michigan-Dearborn</i>	The effects of food deprivation on exploratory behavior in meadow voles, <i>Microtus pennsylvanicus</i>. L. Pierson, M. Ferkin - <i>University of Memphis</i>	The bat-moth arms race: Evolution of an anti-predator sensory illusion. J. Rubin(1), B. Chadwell(2), C. McClure(1,3), K. Miner(1), L. Lofthus(1), A. Kawahara(4), J. Barber(1) - (1) <i>Boise State University</i> , (2) <i>Ohio University</i> , (3) <i>The Peregrine Fund</i> , (4) <i>University of Florida</i>		
11:15	SONG DIVERSITY AND BREEDING SUCCESS IN SOUTHERN HOUSE WRENS (<i>Troglodytes aedon chifensis</i>). E. Dos Santos(1), P. Lambias(2), D. Rendall(3) - (1) <i>University of Lethbridge</i> , (3) <i>University of New Brunswick</i>	Inferring dominance interactions from temporal RFID data. J. Evans, I. Devost, T. Jones, J. Morand-Ferron - <i>University of Ottawa</i>	Experimental evolution of sexual dimorphism in the nematode <i>C. remanei</i>. M. Modanu - <i>Cornell University</i>	Evidence of an Exploration-Exploitation Tradeoff in Bees Collecting Multiple Floral Resources. D. Papai(1), A. Russell(1,2), W. Sabin(3), K. Maierman(1) - (1) <i>University of Arizona</i> , (2) <i>Entomology and Insect Science Graduate Program</i> , (3) <i>Universidade de São Paulo</i>	The Selfish Herd: The Importance of Noise in Movement Models. P. Ohmann, N. Ose - <i>University of St. Thomas</i>		
11:30	Communicative Complexity in Flocks of Familiar & Unfamiliar Carolina Chickadees. B. Coppinger, T. Freeberg - <i>University of Tennessee, Knoxville</i>	Disentangling the effects of genotype and social context on individual infection risk. C. Keiser(1), S. Volodici(2), V. Rudolf(1), J. Saltz(1) - (1) <i>Rice University</i> , (2) <i>Rowan University</i>	HETEROSPECIFIC MATINGS IN WIDOW SPIDERS: DO MALES USE DIFFERENT SPERM ALLOCATION STRATEGIES? A. Rajmohan, L. Baruffaldi, M. Andrade - <i>University of Toronto</i>		Widespread Anti-Bat Ultrasound Production in Moths. J. Barber(1), P. Houlihan(2), K. Miner(1), D. Plotkin(2), N. Homziak(2), B. Leavelle(1), J. Breinholt(2), A. Kawahara(2) - (1) <i>Boise State University</i> , (2) <i>University of Florida</i>		
11:45	Why do male mated songbirds sing? M. Naguib(1), S. Griffith(2) - (1) <i>Behavioural Ecology Group, Wageningen University & Research</i> , (2) <i>Department of Biological Sciences, Macquarie University</i>	Cache life: Factors related to how long caches stay where squirrels buried them. M. Delgado, L. Jacobs - <i>University of California at Berkeley</i>	The Nocturnal bull ant, <i>Myrmecia midas</i>, orients on trees. C. Freas, A. Narendra, K. Cheng - <i>Macquarie University</i>				

Time	AC223 Patlo	Marketplace Cafeteria
12:00 pm - 1:30 pm	Food Truck Lunch Option (tickets required)	Lunch Break (on your own)
Time	AC223	
1:30 pm - 3:30 pm	Award Ceremony and President's Address: Bird Song and the Problem of Signal Reliability. William Searcy - <i>University of Miami</i>	
Time	Free Time (on your own)	
3:30 pm - 6:00 pm	Free Time (on your own)	
Time	Meeting Place	
6:00 pm - 10:00 pm	Banquet (ticket required)	

POSTER SESSION

WEDNESDAY, JUNE 14TH - 6:00 PM - 9:00 PM

P1 Founders Memorial Poster Paper Award	Hiding Health behind Hues: Information within Physiological Colour Signals in the Indian Rock Agama M. Amdekar, M. Thaker - <i>Indian Institute of Science</i>
P2 Founders Memorial Poster Paper Award	Gene Expression And Phenotypic Variation Shed Light On How Reproductive Castes Evolved In Eusocial Sweat Bees D. Awde, A. Skandalis, M. Richards - <i>Brock University</i>
P3 Founders Memorial Poster Paper Award	Estimating and disentangling the costs of plasticity M. Berdal, N. Dochtermann - <i>North Dakota State University</i>
P4 Founders Memorial Poster Paper Award	Vegetation Structural Complexity Does Not Explain Extra-Pair Paternity In Birds C. Biagolini-Jr(1), D. Westneat(2), M. Francisco(3) - (1)Programa de Pós-Graduação em Ecologia, Universidade de Brasília, (2)University of Kentucky, (3)Universidade Federal de São Carlos
P5 Founders Memorial Poster Paper Award	The Effects of Sex Ratios on Female Promiscuity in the Sheepshead Minnow (<i>Cyprinodon variegatus</i>) A. Bloch, K. O'Keefe, M. Kuchka, M. Itzkowitz - <i>Lehigh University</i>
P6 Founders Memorial Poster Paper Award	Jealousy in domestic cats? B. Bucher, H. Chijiwa, M. Arahori, S. Takagi, K. Fujita - <i>Kyoto University</i>
P7 Founders Memorial Poster Paper Award	Is social rank correlated with cognitive ability in black-capped chickadees? G. Cho, D. Sherry, W. Roberts - <i>The University of Western Ontario</i>
P8 Founders Memorial Poster Paper Award	Behavioral syndrome, but not invasive syndrome, found in hybrid <i>Xiphophorus helleri</i> populations. D. D'Amore - <i>Ohio University</i>
P9 Founders Memorial Poster Paper Award	Factors Affecting the Social Transmission of Food Preferences C. Damphousse, D. Marrone, N. Miller - <i>Wilfrid Laurier University</i>
P10 Founders Memorial Poster Paper Award	Should I Stay or Should I Go? The Factors Affecting Mating Decisions in a Golden Orb-Weaving Spider L. Del Matto, E. Santos - <i>University of São Paulo</i>
P11 Founders Memorial Poster Paper Award	Localization of circadian clock neurons and determination of diel gene expression in <i>Melibe leonina</i> V. Duback(1), W. Watson III(1), J. Newcomb(2) - (1)University of New Hampshire, (2)New England College
P12 Founders Memorial Poster Paper Award	Capuchin monkeys (<i>Cebus apella</i>) behave prosocially by sharing food with strong affiliative partners S. Faiad, C. MacArthur, P. Judge - <i>Bucknell University</i>
P13 Founders Memorial Poster Paper Award	Does anthropogenic noise affect anti-predator behavior in Carolina Chickadees and Tufted Titmice? H. Jung, A. Sherrod, S. Lebreux, T. Freeberg - <i>University of Tennessee</i>
P14 Founders Memorial Poster Paper Award	Color, Vibratory Signals, and Courtship Success in a Jumping Spider B. Kessler, K. Sanko, D. Elias - <i>UC Berkeley, Department of Environmental Science, Policy, and Management</i>
P15 Founders Memorial Poster Paper Award	The detection of ultrasonic vocalizations by adult CBA/CaJ mice (<i>Mus musculus</i>) A. Kobrina, M. Dent - <i>SUNY University at Buffalo</i>
P16 Founders Memorial Poster Paper Award	Tactile Stimulation Suppresses Peripheral Thyroid Hormone Conversion in Neonatal Rat Pups S. Lauby, P. McGowan - <i>University of Toronto Scarborough Campus</i>
P17 Founders Memorial Poster Paper Award	A framework for understanding predator-driven selection for signal concealment B. Leavell(1), R. Page(2), X. Bernal(1,2) - (1)Purdue University, (2)Smithsonian Tropical Research Institute
P18 Founders Memorial Poster Paper Award	The effects of two common antidepressant medications on larval zebrafish behavior and physiology J. McMahon - <i>Villanova University</i>
P19 Founders Memorial Poster Paper Award	Bottlenose Dolphin Females Have Stable Preferred Associations in Shark Bay, Australia M. Miketa(1), M. Stanton(2), E. Krzyszczyk(1), J. Mann(1) - (1)Department of Biology, Georgetown University, (2)Center for the Advanced Study of Human Paleobiology, The George Washington University
P20 Founders Memorial Poster Paper Award	Quiet Violence: Do soft songs predict physical aggression in Savannah Sparrows? I. Moran(1), S. Doucet(1), R. Norris(2), A. Newman(2), D. Mennill(1) - (1)University of Windsor, (2)University of Windsor, (3)University of Guelph, (4)University of Guelph, (5)University of Windsor
P21 Founders Memorial Poster Paper Award	Visual, mechanical and tactile barriers of sexual isolation in non-territorial <i>Argiadamselflies</i>. A. Nava-Bolaños(1), A. Cordoba-Aguilar(1), R. Sánchez-Guillén(2), R. Munguia-Steyer(3) - (1)Departamento de Ecología Evolutiva, Instituto de Ecología, Universidad Nacional Autónoma de México, (2)Instituto de Ecología A. C., (3)Unidad de Morfología y Función, Facultad de Estudios Superiores Iztacala, Universidad Nacional Autónoma de México,
P22 Founders Memorial Poster Paper Award	Documenting the diversity of female bird songs with the help of citizen scientists K. Odom(1,2), M. Webster(1), K. Riebel(2) - (1)Cornell Lab of Ornithology, (2)Leiden University
P23 Founders Memorial Poster Paper Award	Oviposition site selection between the sexes in a treefrog with male territoriality S. Poo(1), M. Chuang(2), Y. Kam(2) - (1)Memphis Zoo, (2)Tunghai University
P24 Founders Memorial Poster Paper Award	The plasticity of reproduction over colony size of the ant <i>Harpegnathos saltator</i> B. Pyenson(1), Y. Kang(2), J. Liebig(1) - (1)School of Life Sciences, Arizona State University, (2)Sciences and Mathematics Faculty, College of Integrative Sciences and Arts, Arizona State University

POSTER SESSION

P25 Founders Memorial Poster Paper Award	Paternal Care and the Possible Role of Females in Offspring Protection in <i>Quindina limbata</i> (Opiliones) R. Quesada-Hidalgo(1), D. Solano(2), G. Requena(1), G. Machado(1) - (1)Instituto de Biociências, Universidade de São Paulo, (2)Escuela de Biología, Universidad de Costa Rica
P26 Founders Memorial Poster Paper Award	Approaching reality: reproductive character displacement when more than two species interact A. Roth Monzón, J. Johnson - <i>Evolutionary Ecology Laboratories, Department of Biology, Brigham Young University</i>
P27 Founders Memorial Poster Paper Award	Function of vibration signals during courtship and competition in black widow spiders (Araneae: Theridiidae) S. Sivalingham, A. Mason - <i>University of Toronto Scarborough</i>
P28 Founders Memorial Poster Paper Award	Comparing Unimodal and Multimodal Sexual Signals in a Wolf Spider M. Stanley(1), A. Rypstra(2) - (1)Miami University, (2)Miami University
P29 Founders Memorial Poster Paper Award	Behavioral Flexibility of Anti-predator Responses in a Neotropical Carpenter Ant, <i>Camponotus sericeiventris</i> N. Ton That(1), E. Vargas(2), G. Grether(2) - (1)University of Davis, California, (2)University of California, Los Angeles
P30 Founders Memorial Poster Paper Award	The Forgotten Ape: Exploring the Cognitive Abilities of <i>Symphalangus syndactylus</i>. G. Vaira(1,2), P. Nealen (1) - (1)Indiana University of Pennsylvania, (2)Pittsburgh Zoo and PPG Aquarium
P31 Founders Memorial Poster Paper Award	Coevolution between a sexual ornament and hydrodynamic form in swordtails I. Vargas-Vargas(1), G. Alcaraz(1), G. Rosenthal(2), M. Lawing(2) - (1)Universidad Nacional Autonoma de Mexico, (2)Texas A&M University
P32 Founders Memorial Poster Paper Award	Body Signals Used During Social Play in Captive Immature Western Lowland Gorillas E. Weigel, C. Berman - <i>University at Buffalo</i>
P33 Genesis Award	The impact of road salt run-off on the behaviour of the dragonfly larvae <i>Erythemis simplicicollis</i>. Z. Ahmed, R. Murray, S. McCauley - <i>University of Toronto Mississauga</i>
P34 Genesis Award	Reproductive, Morphological, and Behavioral Differences in Grass Shrimp Caught in New Jersey. K. Arnao, L. Bergey, L. Ritchie - <i>Centenary University</i>
P35 Genesis Award	No Life History Trade-Offs After Immune Challenge in the Spiny Lizard L. Arroyo(1,2), R. Torres(1), A. Díaz de la Vega Pérez(2), R. Beamonte Barrientos(2) - (1)Universidad Nacional Autónoma de México, (2)Universidad Autónoma de Tlaxcala
P36 Genesis Award	“Gorillas Tossing Salads: Regurgitation and Re-ingestion Behavior” T. Bansmer, S. Margulis - <i>Canisius College</i>
P37 Genesis Award	The emergence of alloparental behavior: Male-juvenile interactions in long-tailed macaques M. Bardi, B. Eubanks, A. Prugh - <i>Randolph-Macon College</i>
P38 Genesis Award	Understanding the Effects of Juvenile Male Interactions on Social Networks and Later Social Status A. Beckman, C. Vanderbilt, E. DuVal - <i>Florida State University</i>
P39 Genesis Award	Consequences of Hybridization Between <i>Sarracenia purpurea</i> Var. <i>montana</i> and <i>Sarracenia jonesii</i> L. Beikmohamadi - <i>University of North Carolina Asheville</i>
P40 Genesis Award	Effect of Octopamine on Male and Female Mating Behaviors in the Nursery Web Spider, <i>Pisaurina mira</i> B. Bickner(1), A. Anderson(1), E. Hebets(1), T. Jones(2) - (1)University of Nebraska-Lincoln, (2)East Tennessee State University
P41 Genesis Award	Is neophobia in buderigars consistent across social contexts E. Boyd, A. Medina-Garcia, T. Wright - <i>New Mexico State University</i>
P42 Genesis Award	Light at night affects stress hormones and sperm production in <i>Poecilia latipinna</i> D. Brasel, C. Tremallo, D. Kim, C. Gabor - <i>Texas State University</i>
P43 Genesis Award	Validation of Experimental Methods to Measure Personality in Marmosets T. Brown(1), M. Keener(1), M. DeLorenzo(1), B. Frye(1), L. Rapaport(1), S. Tardif(2) - (1)Clemson University, (2)Southwest National Primate Research Center
P44 Genesis Award	Play for prey: Play behaviour in mule deer and white-tailed deer R. Carter(1), S. Pellis(2), S. Lingle(1) - (1)University of Winnipeg, (2)University of Lethbridge
P46 Genesis Award	How Gorillas See the World S. Chertoff, S. Margulis, J. Rodgers - <i>Canisius College</i>
P47 Genesis Award	Frequency Variation in the Song of Carolina chickadee: An Added Dimension of Vocal Complexity? N. Cooper-Garcia(1), S. Mugel(1), T. Freeberg(2), K. Sieving(3), J. Lucas(1) - (1)Purdue University, (2)University of Tennessee, (3)University of Florida
P48 Genesis Award	Parents listen to their children: Begging does not go unanswered in European Starlings H. Corney, C. Barber - <i>Saint Mary's University</i>
P49 Genesis Award	Eaten Out of House and Home? Effects of Cohabiting Offspring on Fitness of Female Widow Spiders S. Dano, A. David, N. Javaid, D. Srikanthan, A. Yee, N. Singh, C. Scott, M. Andrade - <i>University of Toronto Scarborough</i>
P50 Genesis Award	Sex differences in face learning in <i>Polistes fuscatus</i> paper wasps N. DesJardins, E. Tibbetts - <i>University of Michigan</i>
P51 Genesis Award	Spatiotemporal Variability In Behaviour And Space Use Of Long-Finned Pilot Whale, <i>Globicephala melas</i> S. Dier-McComb, H. Whitehead, M. Auger-Methe - <i>Dalhousie University</i>
P52 Genesis Award	Behavioural and Developmental Responses of Invasive Japanese Redback Spiders to New Temperature Challenges A. Dorison(1), M. Joshua(1), M. Mowery(1), M. Andrade(1) - (1)University of Toronto Scarborough, (2)University of Toronto Scarborough, (3)University of Toronto Scarborough, (4)University of Toronto Scarborough
P53 Genesis Award	Evidence for Aromatase Gene Promoter Methylation in a Cichlid with pH-Influenced Sex Determination R. Driscoll(1), P. Hurd(2), S. Renn(1) - (1)Reed College, (2)University of Alberta
P54 Genesis Award	Predation of chimney swifts by herring gulls at a migratory roost B. Fera(1), J. Pearce(2), J. Foote(1) - (1)Department of Biology, Algoma University, (2)Pearce & Associates Ecological Research
P55 Genesis Award	Winter Migration and Habitat Selection in Largemouth Bass (<i>Micropterus salmoides</i>) T. Fernandes(1), C. Bunt(2) - (1)McMaster University, (2)Biotactic Incorporated

POSTER SESSION

P56 Genesis Award	Threat-sensitive behavioural responses of two co-occurring semi-aquatic insects I. Feizoco, C. Baines, S. McCauley - <i>Department of Biology, University of Toronto Mississauga</i>
P57 Genesis Award	Role of Operational Sex Ratio in Shaping Prairie Vole Mating Tactics S. Galindez(1), M. Rice(1), J. Garner(2), A. Ophir(1) - (1) <i>Cornell University</i> , (2) <i>Oklahoma State University</i>
P58 Genesis Award	Spatial and temporal network dynamics of free-living California ground squirrels D. Gamboa, J. Smith - <i>Mills College</i>
P59 Genesis Award	Response to Conspecific Alarm Cues by Larval Spotted Salamanders K. Gardner, B. Dalton, A. Mathis - <i>Missouri State University</i>
P60 Genesis Award	Mate recognition by olfaction in a songbird E. Geddes, K. Woodruff, C. Templeton - <i>Pacific University</i>
P61 Genesis Award	Flubs that function: an analysis of sperm removal behavior in an orb weaving spider V. Gerios, A. Dodson, A. Danielson-Francois - <i>University of Michigan-Dearborn</i>
P62 Genesis Award	Out of Sight, Out of Mind. M. Halfdanardottir, M. Lenczewski, S. Margulis - <i>Canisius College</i>
P63 Genesis Award	Pair Compatibility and Provisioning Strategies in House Sparrows (<i>Passer domesticus</i>) H. Hamilton, G. Martin, R. Fox - <i>Transylvania University</i>
P64 Genesis Award	Early but not late singers attend to conspecific behavioural cues during the dawn chorus L. Hodgson(1), J. Waas(2), J. Foote(1) - (1) <i>Department of Biology, Algoma University</i> , (2) <i>School of Science, University of Waikato</i>
P65 Genesis Award	Social interactions in giant panda cubs: an investigation into the role of kin recognition K. Jackson(1), A. Young(1), H. Rong(2), J. Ayala(2) - (1) <i>Department of Biology and Earth Science, Otterbein University</i> , (2) <i>Chengdu Research Base of Giant Panda Breeding</i>
P66 Genesis Award	Determining Periods of High Climate Sensitivity among Migrating Birds in Southern Quebec C. Jarjour, B. Frei, K. Elliott - <i>McGill University</i>
P67 Genesis Award	Battle of the sexes: infanticide as a reproductive tactic in a cichlid fish S. Jindal(1), A. Bose(1), C. O'Connor(2), S. Balshine(1) - (1) <i>McMaster University</i> , (2) <i>Wildlife Conservation Society</i>
P68 Genesis Award	<i>Betta splendens</i> males prefer conspecific mates more so than females K. Justus, T. Mendelson - <i>University of Maryland, Baltimore County</i>
P69 Genesis Award	Validation of Experimental Methods to Measure Personality in Lion Tamarins M. Keener, T. Brown, J. Jahn, B. Frye, L. Rapaport - <i>Clemson University</i>
P70 Genesis Award	Characterization of Behavioral Changes in a Mouse Model of Niemann Pick Type-C Disease V. Kuhnel, I. Soto - <i>Rowan University</i>
P71 Genesis Award	The effect of breed and scent-training on olfactory quantity discrimination tasks in domestic dogs. O. Latham, A. Hughes - <i>Randolph Macon College</i>
P72 Genesis Award	Investigating the Dietary Preferences of Introduced Italian Wall Lizards via Chemosensory Assay J. Malinski, V. Brady, M. Bealor - <i>Rowan University</i>
P73 Genesis Award	Is more always more? Biotic noise weakens preference for multimodal signals in female prairie mole crickets R. Migotsky(1), C. Hall(1), N. Lee(2), D. Howard(1) - (1) <i>University of New Hampshire</i> , (2) <i>University of Minnesota</i>
P74 Genesis Award	A preliminary study of gait development in African elephant (<i>Loxodonta africana</i>) calves. M. Moellering, J. Machado, C. Patton, R. Dale - <i>Butler University</i>
P75 Genesis Award	Indigenous stories highlight western ethological principles in the form and function of its animal characters J. O'del, C. Hall, D. Howard - <i>University of New Hampshire</i>
P76 Genesis Award	Bark in the Park: Examining Canine Interactions in Off-Leash Dog Parks K. Oliver(1), J. Ha(1) - (1) <i>University of Washington</i> , (2) <i>University of Washington</i>
P77 Genesis Award	Nearby conspecifics buffer the trade-off between foraging and vigilance in the California ground squirrel C. Ortiz, J. Smith - <i>Mills College</i>
P78 Genesis Award	Brown-headed Nuthatch Winter Social Dynamics and Predictability of Extra-Pair helpers at the Nest C. Ortiz(1,2), J. Cox(1), E. DuVal(2) - (1) <i>Tall Timbers Research Station</i> , (2) <i>Florida State University, Dep bio sci</i>
P79 Genesis Award	Temporal segregation of song-type use in Ovenbirds K. Pearce, J. Foote - <i>Department of Biology, Algoma University</i>
P80 Genesis Award	Regional Song Dialects In The Atlantic Seaside Sparrow (<i>Ammodramus Maritimus</i>) J. Richards, G. Hough - <i>Department of Psychology, Rowan University</i>
P81 Genesis Award	Designed to attract: ontogenetic transitions from infant distress to male courtship calls in elk C. Romanow(1), T. Riede(2), S. Lingle(1) - (1) <i>University of Winnipeg</i> , (2) <i>Midwestern University</i>
P82 Genesis Award	The relationship between rate of weight gain and fluctuating asymmetry in house sparrow nestlings D. Rowe, R. Fox - <i>Transylvania University</i>
P83 Genesis Award	Nest structure variation: individual differences or external factors? T. Shoot, R. Martin, D. Sherry - <i>The University of Western Ontario</i>
P84 Genesis Award	The Reciprocal Effects of Pair Bonds between Green Iguanas and their Human Caretakers T. Simmons - <i>Bethel College</i>
P85 Genesis Award	Investigating inter-species interactions between primates in a mixed species exhibit at the Buffalo Zoo J. Simpson, H. Zimble-DeLorenzo - <i>Alfred University</i>
P86 Genesis Award	Playing it Safe? Behavioral Responses of Mosquito Larvae Encountering a Fish Predator A. Singh(1, 3), K. Chandrasegaran(1, 4), M. Laha(1), S. Quader(1,2) - (1) <i>National Centre for Biological Sciences, Tata Institute of Fundamental Research</i> , (2) <i>Nature Conservation Foundation</i> , (3) <i>Reed College</i> , (4) <i>SASTRA University</i>
P87 Genesis Award	In Sickness and In Health: Infection Influences Courtship Behavior A. Smith, A. Love, S. Wilder, S. DuRant - <i>Oklahoma State University</i>
P238 Genesis Award	Do paper wasps have personalities? Physiological and genomic mechanisms of personality in <i>Polistes fuscatus</i> C. Behrens(1), A. Toth(1), J. Jandt(2) - (1) <i>Iowa State University</i> , (2) <i>University of Otago</i>

POSTER SESSION

P88 Agonism	Shell wars: escalation and resolution of contests in the hermit crab <i>Calcinus californiensis</i> L. Burciaga(1), K. Kruesi(1), G. Alcaraz(1) - (1)Posgrado de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México, Circuito Exterior s/n, Ciudad Universitaria. C.P. 04510., (2)Laboratorio de Ecofisiología Animal, Facultad de Ciencias, Universidad Nacional Autónoma de México, Circuito Exterior s/n, Ciudad Universitaria. C.P. 04510
P89 Agonism	Precocial avian broodmates increase sibling aggression as food becomes more clumped H. Drummond(1), R. Hernández(2), C. Rodríguez(1) - (1)Universidad Nacional Autónoma de México, (2)Universidad Autónoma del Estado de México
P90 Agonism	Florida scrub-jays (<i>Aphelocoma coerulescens</i>) discriminate between local and nonlocal female calls S. Ferguson, S. Schoech - <i>University of Memphis</i>
P91 Agonism	Fighting ability of two coexisting hermit crab species E. García Cárdenas(1), K. Kruesi (2), G. Alcaraz(2) - (1)Posgrado en Ciencias del Mar y Limnología, UNAM, (2)Universidad Nacional Autónoma de México
P92 Agonism	A ritualized displacement behavior in hamadryas baboons (<i>Papio hamadryas hamadryas</i>) M. Painter, P. Judge - <i>Bucknell University</i>
P93 Applied animal behavior	The Role of Canine Behavior Assessments in Animal Welfare J. Barg - <i>Larimer Humane Society</i>
P94 Applied animal behavior	Semicircular canal measurements and their use in reconstructing locomotor behavior of fossil rodents R. Bhagat(1), O. Bertrand(2), M. Silcox(1) - (1)University of Toronto Scarborough, (2)University of Southern California
P95 Applied animal behavior	Behavioural Thermoregulation and Performance of Invasive Round Gobies with Acute Temperature Change J. Bridgeman, G. Tattersall - <i>Brock University</i>
P96 Applied animal behavior	Dog Trainer Perceptions of Skill and Treatment Difficulty: A Survey of 2500 Dog Training Instructors M. Burch - <i>American Kennel Club</i>
P97 Applied animal behavior	Do dogs have feeding personalities? E. DePaoli(1), M. McGowan(1), J. Villarreal(2), B. Bleakley(1) - (1)Stonehill College, (2)AFB International
P98 Applied animal behavior	A Pilot Study on Reconciliation and Consolation in King Penguins N. Dono, J. Plotnik - <i>Hunter College</i>
P100 Applied animal behavior	The Effects of Contact and Coat Color on the Hair Cortisol Level of Goats at the Philadelphia Zoo T. Fitzgerald, M. O'Brien, D. Anderson, Z. Schott, B. McCauley, A. Rundus - <i>West Chester University of Pennsylvania</i>
P101 Applied animal behavior	Sensory acclimation of Sea Lamprey (<i>Petromyzon marinus</i>) to conspecific alarm cues I. Imre(1), R. Di Rocco(1), N. Johnson(2), V. Paudel(1), G. Brown(3) - (1)Algoma University, (2)United States Geological Survey, (3)Concordia University
P102 Applied animal behavior	Enrichment Use in Shelter-Housed Cats: Controlling the Environment and Promoting Social Proximity S. Libonate, A. Kelley, M. Suchak - <i>Canisius College</i>
P103 Applied animal behavior	Creating Successful Veteran/Service Dog Teams: Case Studies K. London - <i>Northern Arizona University</i>
P104 Applied animal behavior	Are you for real? Comparison of canine responses to real versus model dogs C. Loyer(1), R. Foster(1,2), J. Ha(1) - (1)University of Washington, (2)University of Puget Sound
P105 Applied animal behavior	When we meet again: The effect of familiarity on the social interactions of companion dogs J. Posluns(1), R. Anderson(2), C. Walsh(2) - (1)Memorial University, (2)Memorial University, (3)Memorial University
P106 Applied animal behavior	First Study On Mouse Personality Based On Homecage Behavior Observations A. Resasco - <i>Faculty of Veterinary Sciences, La Plata National University</i>
P107 Applied animal behavior	Determination of Personality Variation and Behavioral Syndromes in <i>Eptesicus fuscus</i> A. Schmitt, E. Gillam - <i>North Dakota State University</i>
P108 Applied animal behavior	The goat kids respond to social or maternal isolation depending on their sex R. Soto, N. Urbina, R. Ibarra, P. Cano, A. Olazabal, F. González - <i>Facultad de Estudios Superiores Cuautitlan UNAM</i>
P109 Applied animal behavior	Manipulation of housing and enrichment items of Captive Budgerigars (<i>Melopsittacus undulates</i>). C. Voorhees - <i>D'Youville College</i>
P110 Applied animal behavior	The Effects of Human Socialization on Physiology and Behavior of Domestic Cats in an Animal Shelter J. White - <i>University of New Brunswick</i>
P111 Applied animal behavior	An Enrichment Program using Human Interaction Reduces a Standard Measure of Aggression in Fearful Shelter Dogs R. Willen, P. Schiml, M. Hennessy - <i>Wright State University</i>
P112 Behavior genetics/genomics	Picky Eaters: Variation in leptin encoding regions that regulate hunger in two Midwestern garter snakes D. Nondorf, I. Holmes, A. Davis Rabosky - <i>University of Michigan</i>
P113 Behavior genetics/genomics	Dissecting The Genetic Underpinnings Of Innate Immunity Behavior In <i>Apis mellifera</i> T. Tiwari, C. Kent, H. Patel, S. Rose, A. Dey, K. Dogantzis, A. Zayed - <i>York university</i>

POSTER SESSION

P114 Behavioral pasticity	Does perceived predation alter life history strategies? A field experiment in a passerine bird R. Abbey-Lee(1,2), N. Dingemans(2) - (1)Linköping University, (2)Ludwig Maximilians University
P115 Behavioral pasticity	Unpredictability in Background Risk Shapes Neophobia in Northern Redbelly Dace E. Demers, A. Jeanson, G. Brown - Concordia University
P116 Behavioral pasticity	The Influence of Personality on Zebrafish (<i>Danio rerio</i>) Shoaling Behavior E. Diestler, J. Sneksner - LIU Post
P117 Behavioral pasticity	Influence of Reproduction and Social Stress on Threespine Stickleback (<i>Gasterosteus aculeatus</i>) Personality S. Dokus, M. Graham, S. Foster - Clark University
P118 Behavioral pasticity	Influences of Maternal Stress on Early Life Characteristics in Threespine Stickleback (<i>G. aculeatus</i>) A. Fragata, M. Graham, J. Baker, S. Foster - Clark University
P119 Behavioral pasticity	Age-related Changes in Behavior of Woodchucks C. Maher - University of Southern Maine
P120 Behavioral pasticity	Comparing reproductive investment in three Gryllid species C. Mitra, J. Kreckman, B. Pessman, M. Ernst - North Central College
P121 Behavioral pasticity	Thermal Reaction Norms of Parental Behavior and Individual Fitness in the Biparental Burying Beetle J. Ong, F. Bonier - Queen's University
P122 Behavioral pasticity	Cueing in on migration: Role of food in timing spring migration of a Neotropical migratory songbird C. Stanley(1,2) - (1)University of Maryland, (2)Smithsonian Migratory Bird Center
P123 Behavioral pasticity	Fission-fusion behavior facilitates high fruit consumption in lowland <i>Colobus angolensis ruwenzorii</i> J. Teichroeb(1), A. Changasi(1), T. Arseneau(2) - (1)University of Toronto Scarborough, (2)University of Zurich
P124 Behavioral pasticity	Aggression, Apathy, or Avoidance: Behavioral Syndromes in the Brush-Legged Wolf Spider <i>Schizocosa ocreata</i> T. Walls, G. Uetz - University of Cincinnati
P125 Cognition & learning	One-to-One Correspondence Helps Monkeys Better Differentiate Exact Numbers K. Brown, S. Koopman, J. Cantlon - University of Rochester
P126 Cognition & learning	Title: Cognition in a changing world: effects of alternating environments on learning J. Caceres, P. Suriyampola, E. Martins - Indiana University
P127 Cognition & learning	Crows And Ravens—An Opportunity For Comparing Cultures At Risk A. Clark, A. Kroner, K. Lato - Binghamton University
P128 Cognition & learning	Connecting female fecundity to motivation and proficiency when prospecting for nests H. Davies, D. White - Wilfrid Laurier University
P129 Cognition & learning	Are domestic dogs intuitive statisticians? J. Espinosa, E. Tecwyn, D. Buchsbaum - University of Toronto
P130 Cognition & learning	Lateral line morphology influences social learning in guppies, <i>Poecilia reticulata</i> A. Guerrero, A. Boyd, T. Christiansen, S. Aron, B. Hazelton, B. Bleakley - Stonehill College
P131 Cognition & learning	Embryonic learning improves memory retention in juvenile rainbow trout M. Horn, D. Chivers - University of Saskatchewan
P132 Cognition & learning	Testing adaptive value of experimentally evolved innate sensory bias in <i>Drosophila melanogaster</i> I. Mills, A. Thompson, A. Dunlap - University of Missouri St. Louis
P133 Cognition & learning	Evolution of Associative Learning in Digital Organisms A. Pontes(1,3), R. Mobley(2,3), C. Ofria(1,3), F. Dyer(2,3) - (1)Computer Science, Michigan State University, (2)Integrative Biology, Michigan State University, (3)BEACON Center for the Study of Evolution
P134 Cognition & learning	How demonstrator aggressiveness on a cichlid fish (<i>Neolamprologus pulcher</i>) affects social learning A. Pope(1), E. Hoskins(1), I. Hamilton(1,2) - (1)Department of Evolution, Ecology, and Organismal Biology, The Ohio State University, (2)Department of Mathematics, The Ohio State University
P135 Cognition & learning	Does the lateral line influence cognitive flexibility and/or spatial ability in guppies? M. Smith, M. Maciejweski, A. Boyd, A. Guerrero, B. Bleakley - Stonehill College
P136 Cognition & learning	Problem solving by bumblebees on a flower handling task C. Strang, D. Sherry - Western University
P137 Cognition & learning	Social Learning of Predation Risk in Three-Spined Sticklebacks R. Trapp, A. Bell - University of Illinois at Urbana-Champaign
P138 Cognition & learning	Foraging costs and the tradeoff between exploration and exploitation in honey bees A. Young, F. Dyer - Michigan State University
P139 Communication	A Multiple-hypothesis Test of the Function of Multimodal Displays in a Neotropical Stream-breeding Frog V. Caldart(1), M. dos Santos(2), G. Machado(1) - (1)LAGE do Departamento de Ecologia, Instituto de Biociências, Universidade de São Paulo, (2) Laboratório de Fotobiologia, Instituto Nacional de Ciências Espaciais, INPE
P140 Communication	Group association and vocal behaviour during foraging trips in Gentoo penguins N. Choi(1,2), N. Kokubun(3), S. Park(1,4), W. Lee(1) - (1)Korea polar research institute, (2)University of Nebraska-Lincoln, (3)National institute of polar research, (4)Incheon national university
P141 Communication	Influence of Behavioral Plasticity and Visual Environment on Courtship Salience in a Jumping Spider S. Echeverri(1), D. Zurek(2), N. Morehouse(2) - (1)University of Pittsburgh, (2)University of Cincinnati
P142 Communication	Female-limited Color Polymorphism in White-necked jacobin Hummingbirds J. Falk(1), D. Rubenstein(2), M. Webster(1) - (1)Cornell University, (2)Columbia University
P143 Communication	Context-dependent Crow Vocalizations: Differences between Pre- and Post-roost Aggregations A. Greer, A. Lefort, E. McCloskey, R. Dejneka, D. Wacker - University of Washington Bothell
P144 Communication	The Diversity of Acoustic Niches in Multi-Species Assemblies of Meadow Katydid N. Harness, J. Schul - University of Missouri
P145 Communication	Modality matters; female preference for male acoustic call traits influenced by noise complexity D. Howard(1), N. Lee(2), R. Migotsky(1), C. Hall(1) - (1)University of New Hampshire, (2)University of Minnesota
P146 Communication	Say what? Productional specificity in the alarm calls of Richardson's ground squirrels S. Keesom, F. Cassidy, J. Hare - University of Manitoba

POSTER SESSION

P147 Communication	Signal Complexity in Two Wolf Spider Species M. Lallo, G. Uetz - <i>University of Cincinnati</i>
P148 Communication	Evolution of extremes: courtship phenotype evolution in the birds of paradise R. Ligon(1,2), C. Diaz(1,2), J. Troscianko(3), M. Stevens(3), A. Moskeland(1,2), J. Morano(1,2), E. Scholes III(1,2) - (1)Cornell University, (2)Cornell Lab of Ornithology, (3)University of Exeter
P149 Communication	Effects of Traffic Noise on Advertisement Call Plasticity in Japanese Kajika Frog R. Madden, H. Leggett, X. Bernal - <i>Purdue University</i>
P150 Communication	A Comparative Approach to Understanding Complex Signaling R. McGinley, E. Heberts - <i>University of Nebraska-Lincoln</i>
P151 Communication	Harmonic convergence in mosquitos: Who follows who? H. Pantoja-Sánchez(1,2), F. Ruiz(1), F. Vargas(2), X. Bernal(3,4) - (1)Program of Study and Control of Tropical Diseases, University of Antioquia, (2) Department of Electronic Engineering, University of Antioquia, (3)Department of Biological Sciences, Purdue University, (4)Smithsonian Tropical Research Institute
P152 Communication	The Sound and the Fury: Vocal Correlates of Affective Arousal in Black Howler Monkeys J. Schwartz(1), T. Bergman(2,3), L. Cortés Ortiz(3), D. Kitchen(4) - (1)Department of Psychology, Emory University, (2)Department of Psychology, University of Michigan, (3)Department of Ecology and Evolutionary Biology, University of Michigan, (4)Department of Anthropology, The Ohio State University
P153 Communication	Heat of the moment? Effects of long term temperature exposure on cricket courtship song W. Waller, K. Shaw - <i>Cornell University</i>
P154 Communication	Familiarity, consistency, and aggression: Responses to a dialect marker in the Savannah sparrow H. Williams(1), A. Lugo(1), A. Scharf(1), D. Norris(2), A. Newman(2), S. Doucet(3), D. Mennill(3) - (1)Williams College, (2)University of Guelph, (3) University of Windsor
P155 Communication	Automated acoustic localization for the study of animal spatial ecology and behaviour D. Wilson, W. Balsom, J. Ethier - <i>Memorial University of Newfoundland</i>
P156 Communication	Information out of the Blue: Phenotypic Correlates of Abdominal Color Patches in <i>Sceloporus</i> Lizards J. Zúñiga-Vega(1), J. Pruet(2), R. Seddon(2), A. Ossip-Drahos(3), V. Argaez(1), S. Price(2), E. Martins(4), D. Hews(2) - (1)Universidad Nacional Autónoma de México, Facultad de Ciencias, (2)Indiana State University, (3)University of North Georgia, (4)Indiana University
P157 Conservation	Behavioural study of vulnerable fishing cat in mangrove forests of South India G. Malla(1), P. Ray(1), S. Kuppaswamy(1) - (1)Wildlife Institute of India, (2)Wildlife Institute of India, (3)Wildlife Institute of India
P158 Conservation	Can Environmental Enrichment Successfully Create Natural Environments for Captive Animals? M. McPhee(1), R. Buchholz(2) - (1)University of Wisconsin Oshkosh, (2)The University of Mississippi
P159 Conservation	Eastern Bluebirds Lay Reduced Clutch Sizes but Larger Eggs in Response to Late Prescribed Burns S. McRae, C. Balch, E. Cunningham, D. Newhouse, A. Reed, W. Zahran - <i>East Carolina University</i>
P160 Conservation	Risky Behaviour: Can Deer Behaviour Explain Chronic Wasting Disease Prevalence? K. Saboraki, A. Pelletier, S. Lingle - <i>University of Winnipeg</i>
P161 Conservation	Nesting behavior and management in a reintroduced population of California condors E. Sandhaus(1), N. Seal Faith(1), J. Brandt(2) - (1)Santa Barbara Zoo, (2)USFWS Hopper Mountain NWRC
P162 Conservation	Evidence for vocal dialects in the endangered Cape parrot A. Young(1), D. Galbraith(1), J. Carstens(2), J. Stiles(1), K. Wimberger(2) - (1)Otterbein University, (2)Wild Bird Trust
P163 Development	Different hatching mechanisms but similar escape-hatching processes in two Neotropical treefrogs K. Cohen(1), K. Warkentin(1,2) - (1)Boston University, (2)Smithsonian Tropical Research Institute
P164 Development	Social play in hamsters: development, sex differences, and function S. Kyle, M. Cooper, G. Burghardt - <i>University of Tennessee</i>
P165 Development	Fluctuating asymmetry, body condition, and immune function in house sparrow (<i>Passer domesticus</i>) nestlings L. Martin, R. Fox - <i>Transylvania University</i>
P166 Development	Do birds that respond to early adversity by modifying their life history end up paying a delayed cost? S. Ortega, H. Drummond - <i>Universidad Nacional Autónoma de México</i>
P167 Ecological effects	Effect of Cadmium Exposure on Oviposition Behavior of <i>Drosophila melanogaster</i> A. Bixler(1), F. Schnee(2) - (1)Clarke University, (2)Loras College
P168 Ecological effects	Community composition and temporal patterns of insect emergence along the Rouge River in southeastern Michigan E. Ezeokoli, V. Gerios, H. Alhadi, A. Dodson, A. Danielson-Francois - <i>University of Michigan-Dearborn</i>
P169 Ecological effects	The effect of coral degradation on risk assessment: implication for interspecific communication M. Ferrari(1), M. McCormick(2), B. Allan(2), D. Chivers(1) - (1)University of Saskatchewan, (2)James Cook University
P170 Ecological effects	Environmental and hormonal influences on dispersal-related behaviors in brush mice (<i>Peromyscus boylii</i>) K. Mabry, R. Kelley - <i>New Mexico State University</i>
P171 Ecological effects	Urban versus Rural Milkweed Preference in Monarch Butterflies A. Marconi, T. Cornelisse - <i>Canisius College</i>
P172 Ecological effects	Carry-over Effects in Sockeye Salmon K. Peiman(1), M. Casselman(2), S. Hinch(2), D. Patterson(3), M. Power(4), S. Cooke(1) - (1)Carleton University, (2)UBC, (3)DFO, (4)University of Waterloo
P173 Ecological effects	<i>Bacillus thuringiensis israelensis</i> (Bti) effects on Loricariidae family neotropical species I. Pinheiro(1), G. Vilara(1), E. Perpetuo(1), F. Ferreira(1) - (1)Universidade Federal de Sao Paulo, (2)Universidade Federal de Sao Paulo, (3) Universidade Federal de Sao Paulo, (4)Universidade Federal de Sao Paulo
P174 Education	CUREs for introductory biology: can studying animals improve student learning and affect? L. Benedict(1), J. Olimpo(2), G. Fisher(1), S. DeChenne-Peters(1), H. Rudolph(1), R. Reinsvold(1) - (1)University of Northern Colorado, (2)University of Texas at El Paso
P176 Education	Rex: Bringing Web-Based Virtual Neuroscience Experiments About Substance Abuse to High School Students L. Blondel(1), E. Godin(1), L. Linnenbrink-Garcia(2), R. Schwartz-Bloom(1) - (1)Duke University Medical Center, (2)Michigan State University
P177 Education	Using Convict Cichlids in Undergraduate Research: Bringing Field Research into the Classroom N. van Breukelen - <i>Salem Community College</i>

POSTER SESSION

P178 Genetics & evolution	Lateral line morphology influences phenotype matching for cooperative antipredator behavior in guppies B. Bleakley(1), A. Tavares(1,2) - (1)Stonehill College, (2)Brigham and Women's Hospital
P179 Genetics & evolution	Foundations of chemosensation in paper wasps A. Legan, M. Sheehan - Cornell University
P180 Genetics & evolution	Color-biased dispersal inferred by genetic spatial autocorrelation in a color-polymorphic salamander E. Liebgold, A. Grant - Salisbury University
P181 Genetics & evolution	Genome Wide Association of Aggression and Honey Production in <i>Apis Mellifera</i> S. Rose, C. Kent, A. Zayed - York University
P182 Genetics & evolution	Molecular Evolution Underlying Individual Recognition in a Paper Wasp M. Sheehan, S. Miller, A. Legan - Cornell University
P183 Genetics & evolution	Effect of the age of the parents on the adaptive immune response to ticks of blue footed booby chicks A. Vela, H. Drummond - UNAM
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P205 Neuro/endocrine and physiological mechanisms	Effects of social stress and serotonin receptor agonists on arousal and anxiety-like behavior in crayfish. A. Tierney, M. Dinsmore, J. Falotico, B. Lacy, M. Shelley - Colgate University
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P211 Parental care	Parent Offspring Recognition in <i>Helobdella</i> Leeches J. Boothroyd, A. Rincon, R. Beresic-Perrins, K. Banister, S. Shuster - Northern Arizona University
P212 Parental care	Is terrestrial breeding a precursor to the evolution of parental care in an Ambystomatid salamander? R. Hale - University of North Carolina Asheville
P213 Parental care	The Energetic and Reproductive Costs of Building Mounds as Parental Care in Mason Spiders M. Raboin, D. Elias - UC Berkeley
P214 Parental care	Joint-Nesting Pūkeko Fail to Use Direct Recognition Of Cross-Fostered Eggs. C. Young - McMaster University
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P216 Predation & foraging	Kin discrimination in cannibalistic potato beetle neonates? K. Collie - Malone University
P217 Predation & foraging	"Use to chemical cues to find potential sites of available shells" M. Daniel Salvatore, A. Guillermina - Laboratorio de Ecofisiología Animal, Facultad de Ciencias, Universidad Nacional Autónoma de México
P218 Predation & foraging	Neophobic predator avoidance and the integration of uncertain public information by Trinidadian guppies. L. Feyten, E. Demers, G. Brown - Concordia University Department of Biology
P219 Predation & foraging	Comparative predatory behavior between generalist and specialist araneophagous spiders L. Garcia(1,2), C. Viera(3), S. Pekar(4) - (1)Grupo Multidisciplinario en Ecología para la Agricultura, Universidad de la República, (2)Grupo de Biología y Ecología de Artrópodos, (3)Facultad de Ciencias, Universidad de la República, (4)Masaryk University
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P221 Predation & foraging	Unsafe sex: Do <i>Drosophila</i> ignore predation risk to focus on mating? P. Knoops(1), A. Parigi(2), E. Etzler(1), R. Dukas(1), I. Dworkin(1) - (1)McMaster University, (2)Michigan State University
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P223 Predation & foraging	By the Scan of Our Teeth: Using Dental Topographic Analysis to Inform Behavioural Ecology M. Ramsay(1), K. Selig(2), M. Silcox(2) - (1)University of Toronto, (2)University of Toronto, Scarborough
P224 Predation & foraging	Snack Time! The timing of predation on ground-nesting warbler nests T. Ransom, R. Neville, E. Liebgold - Salisbury University
P225 Predation & foraging	Inferring Diet in Treeshrews (<i>Scandentia</i>) Based on Dental Topographic Metrics K. Selig, M. Silcox - University of Toronto Scarborough
P226 Predation & foraging	Do Red-winged Blackbird Nestlings Respond Directly to Predator Vocalizations? K. Yasukawa, J. Sollenberger - Beloit College

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P229 Sexual selection & sexual conflict	Effects of mating status on female preference in the cricket <i>Gryllus firmus</i> L. Conroy, D. Roff - <i>University of California, Riverside</i>
P230 Sexual selection & sexual conflict	Personality, Female Choice and Reproductive Condition A. Hedrick(1), A. Adams(2) - (1) <i>University of California, Davis</i> , (2) <i>University of California</i>
P231 Sexual selection & sexual conflict	Fight Like a Girl: Female Aggression, Spacing and Social Behavior in Snapping Shrimp M. Hughes(1), W. Heuring(1,2) - (1) <i>College of Charleston</i> , (2) <i>Phoenix Zoo</i>
P232 Sexual selection & sexual conflict	Population and Genetic Variation in Thermal Sensitivity of Mating Behavior in <i>Enchenopa</i> Treehoppers D. Jocson, M. Smeester, K. Fowler-Finn - <i>Saint Louis University</i>
P233 Sexual selection & sexual conflict	Examining fitness effects of signals across contexts in a mate-guarding jumping spider M. Rosenthal(1), L. Taylor(2), A. Mason(2), M. Andrade(2) - (1) <i>University of California, Berkeley</i> , (2) <i>University of Toronto-Scarborough</i>
P234 Sexual selection & sexual conflict	The Evolution of Being a Choosy Male: The Relationship between Reproductive Investment and Mate Preference M. Spikes, I. Schlupp - <i>University of Oklahoma</i>
P235 Sexual selection & sexual conflict	Last male paternity bias in the orbweaver <i>Tetragnatha</i> – does intermating interval matter? K. Tatro, A. Dodson, A. Danielson-Francois - <i>University of Michigan-Dearborn</i>
P236 Social behavior	Who dominates? Dominance hierarchy in young cichlids A. Alvarez-Galicia, K. Kruesi - <i>Universidad Nacional Autónoma de México</i>
P237 Social behavior	Reciprocity creates interdependence, and vice versa; or why you should even help when anonymous P. Barclay - <i>University of Guelph</i>
P238 Social behavior	Do paper wasps have personalities? Physiological and genomic mechanisms of personality in <i>Polistes fuscatus</i> C. Behrens(1), A. Toth(1), J. Jandt(2) - (1) <i>Iowa State University</i> , (2) <i>University of Otago</i>
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P241 Social behavior	The Effect of Gender on Shoaling Behavior in Guppies (<i>Poecilia reticulata</i>) P. D'Ortona, G. Kocubinski, R. Daub, S. McRobert - <i>Saint Joseph's University</i>
P243 Social behavior	Male mating strategies in the Eastern carpenter bee, <i>Xylocopa virginica</i>. L. Duff, A. Cardama, M. Richards - <i>Brock University</i>
P244 Social behavior	Raccoon Social Network at an Artificial Foraging Site R. Fanelli, L. Stanton, S. Benson-Amram - <i>University of Wyoming</i>
P245 Social behavior	The organization of work in social (not just eusocial) groups J. Fewell - <i>Arizona State University</i>
P246 Social behavior	Measuring Aggressive Responses to Changing Resource Value During Food Insecurity H. Fokidis - <i>Rollins College</i>
P247 Social behavior	Reciprocal Distribution Of Aggressive Support In White-nosed Coatis (<i>Nasua narica</i>) T. Fuentes-Anaya(1), J. Morales-Mávil(2) - (1) <i>Department of Anthropology, University of California Los Angeles</i> , (2) <i>Instituto de Neuroetología, Universidad Veracruzana</i>
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P253 Social behavior	Collective decisions in slave-making ants are shaped by ecological constraints J. Miller - <i>Cornell University</i>
P254 Social behavior	Stress exposure in juvenile guppies alters the adult behavioral phenotype S. Miller, V. Braithwaite - <i>Pennsylvania State University</i>
P255 Social behavior	Husbandry of Captive Parid Flocks in Florida During Winter P. Monte(1), L. Diaz(1), T. Freeberg(2), J. Lucas(3), K. Sieving(1) - (1) <i>University of Florida</i> , (2) <i>University of Tennessee</i> , (3) <i>Purdue University</i>
P256 Social behavior	Quantification of shoaling tendency and context-dependent collective behavior of <i>Carcharhinus limbatus</i> W. Nambu(1), G. Rieucou(2,3), J. Montoya(4), M. Porter(1), S. Kajiwara(1) - (1) <i>Florida Atlantic University</i> , (2) <i>Florida International University</i> , (3) <i>Louisiana Universities Marine Consortium</i> , (4) <i>RoboticsLab</i>
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P260 Social behavior	Effects of rank, sex, age, and kinship on social relationships in captive tufted capuchin monkeys A. Schrock, C. Leard, R. Gazes - <i>Bucknell University</i>
P261 Social behavior	Multiple stable ant associations in one population of <i>Entylia carinata</i> treehopper (Hemiptera: Membracidae) W. Shoenberger, K. Fowler-Finn - <i>Saint Louis University</i>
P262 Social behavior	Does Exploratory Behavior Predict First Responders to Predation Risks in Captive Parid Flocks? K. Sieving(1), P. Monte(1), L. Diaz(1), T. Freeborn(2), J. Lucas(3) - (1) <i>University of Florida</i> , (2) <i>University of Tennessee</i> , (3) <i>Purdue University</i>
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P264 Social behavior	Macronutrient Regulation by the Desert Leafcutter Ant <i>Acromyrmex versicolor</i> N. Smith, J. Fewell - <i>Arizona State University</i>
P265 Social behavior	Age, sex, and affiliative behavior predict baseline fecal glucocorticoid levels in a wild, juvenile primate. N. Thompson(1,2), M. Cords(1,2), M. Heistermann(3) - (1) <i>Columbia University</i> , (2) <i>New York Consortium in Evolutionary Primatology</i> , (3) <i>German Primate Center</i>
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P267 Social evolution	INTRASPECIFIC VARIATION IN INDIVIDUAL RECOGNITION C. Cely, L. Knowles, E. Tibbetts - <i>University of Michigan</i>
P268 Social evolution	Unraveling cryptic speciation in the desert ant <i>Cataglyphis</i> T. Reiner Brodetzki, A. Hefetz - <i>Tel Aviv University</i>
P269 Social evolution	Cooperation, aggression, and neurobiology in the facultatively eusocial and solitary bee <i>Megalopta genalis</i>. A. Smith - <i>George Washington University</i>
P270 Social evolution	Nest Site and Kin Competition Lead to the Evolution of Unrelated Social Groups in the Eastern Carpenter Bee J. Vickruck(1), M. Richards(2) - (1) <i>University of Calgary</i> , (2) <i>Brock University</i>
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Fulmer, Andrew G	WED	2:45 PM	Ecological Effects
García-Hernández, Solimary	FRI	10:15 AM	Predation and Foraging
Garrison, Courtney R.	THUR	5:45 PM	Parental Care
Gershman, Susan N.	WED	10:15 AM	Sexual Selection and Sexual Conflict
Gersick, Andrew S	WED	4:15 PM	Communication
Graham, Melissa A.	WED	3:15 PM	Behavioral Plasticity
Gray, Suzanne M.	TUE	4:30 PM	Applied Animal Behavior
Green, P. A.	THUR	3:00 PM	Agonism
Greenberg, Julia R.	WED	11:15 AM	Parental Care
Grieves, Leanne	THUR	10:15 AM	Communication
Guaraldo, André C	TUE	5:15 PM	Applied Animal Behavior
Guigueno, Mélanie F.	TUE	4:15 PM	Applied Animal Behavior
Guindre-Parker, Sarah	WED	2:00 PM	Allee Symposium for Best Student Poster Paper
Gustison, Morgan L.	WED	1:30 PM	Allee Symposium for Best Student Poster Paper
Guy, Cylita	TUE	11:15 AM	Predation and Foraging
Gwynne, Darryl	THUR	2:30 PM	Behavioral Biodiversity Symposium
Habig, Bobby	TUE	5:00 PM	Social Evolution
Hall, LE	THUR	4:00 PM	Neuro/Endocrine & Physiological Mechanisms
Haney, Brian R.	WED	4:15 PM	Social Behavior
Hansen, Bethany K.	TUE	11:00 AM	Applied Animal Behavior
Harrison, Sarah J.	WED	2:15 PM	Sexual Selection and Sexual Conflict
Hasenjager, Matthew	THUR	5:15 PM	Social Behavior
Hauber, Mark E.	THUR	5:00 PM	Social Behavior

Heimbach, Sarah	THUR	2:30 PM	Agonism
Heinen, Virginia K.	WED	3:15 PM	Communication
Hellmann, Jennifer	WED	12:00 PM	Allee Symposium for Best Student Poster Paper
Hermer, Ethan D.	THUR	10:00 AM	Behavioral Plasticity
Hews, Diana K.	TUE	10:15 AM	Presidential Symposium: Predicting Behavior
Hobson, Elizabeth A.	TUE	2:30 PM	Agonism
Holland, Christopher	THUR	11:45 AM	Communication
Hopper, Lydia M.	TUE	5:15 PM	Cognition and Learning
Hoskins, Elizabeth A.	WED	5:00 PM	Cognition and Learning
Hund, Amanda K.	WED	4:30 PM	Allee Symposium for Best Student Poster Paper
Jacobs, Anne	THUR	5:00 PM	Parental Care
Jacobson, Sarah L	TUE	5:00 PM	Cognition and Learning
James, Logan S.	FRI	10:00 AM	Cognition and Learning
Jandt, Jennifer M.	WED	4:30 PM	Social Behavior
Johnson, Katherine E.	WED	2:00 PM	Communication
Jones, Cameron	WED	1:45 PM	Behavioral Plasticity
Jones, Sarah C.	THUR	4:15 PM	Neuro/Endocrine & Physiological Mechanisms
Kang, Changku	WED	11:15 AM	Predation and Foraging
Karippadath, Anupriya	THUR	11:00 AM	Communication
Kasumovic, Michael M	THUR	11:00 AM	Behavioral Biodiversity Symposium
Kasumovic, Michael M	TUE	3:00 PM	Education
Keiser, Carl N.	FRI	11:30 AM	Social Behavior
Kelemen, Evan	FRI	10:45 AM	Social Behavior
Kelly, E. McKenna	THUR	4:45 PM	Neuro/Endocrine & Physiological Mechanisms
Kelly, Tosha R	WED	4:00 PM	Ecological Effects
Kilgour, R. Julia	TUE	10:45 AM	Social Behavior
Kilner, Rebecca	TUE	8:30 AM	Plenary Talk: Rebecca Kilner
King, Carissa D.	TUE	4:30 PM	Conservation
Kohn, Gregory	THUR	10:45 AM	Communication
Kotrschal, Alexander	THUR	5:00 PM	Animal Cognition: Mechanisms, Ecology and Evolution
Kozlovsky, Dovid Y.	WED	2:30 PM	Ecological Effects
Krieg, Cara A	THUR	2:45 PM	Agonism
LaDage, Lara	THUR	5:15 PM	Neuro/Endocrine & Physiological Mechanisms
Laidre, Mark / E.	THUR	4:00 PM	Behavioral Biodiversity Symposium
Lange, Elizabeth C.	WED	3:00 PM	Sexual Selection and Sexual Conflict
LaPergola, Joshua B.	WED	11:30 AM	Mating/Breeding Systems
Lawson, Sarah	TUE	4:00 PM	Social Evolution
Lee, Won Young	FRI	10:30 AM	Predation and Foraging
Leese, Joseph M.	THUR	11:30 AM	Sexual Selection and Sexual Conflict
Legett, Henry D.	WED	2:30 PM	Communication
Lehmann, Kenna D S	WED	4:45 PM	Communication
Lehto, Whitley/R	THUR	11:00 AM	Behavioral Plasticity
Leighton, Gavin M	TUE	4:30 PM	Social Evolution
Leitner, Nicole E	TUE	11:30 AM	Neuro/Endocrine & Physiological Mechanisms
Lichtenstein, James L.L.	WED	1:30 PM	Ecological Effects

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Lifshitz, Natalia	TUE	5:45 PM	Conservation
Lingle, Susan	WED	11:45 AM	Parental Care
Liotta, Melissa N.	THUR	10:00 AM	Sexual Selection and Sexual Conflict
Lucas, Jeffrey R.	THUR	4:45 PM	Social Behavior
Lynn, Colton S.	TUE	3:00 PM	Agonism
Machado, Glauco	WED	11:00 AM	Parental Care
Malé, Pierre-Jean G.	TUE	2:45 PM	Behavior Genetics/Genomic & Genetics & Evolution
Manica, Lilian T.	WED	2:45 PM	Sexual Selection and Sexual Conflict
Margulis, Sue	TUE	10:00 AM	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium
Martin, Kobe	THUR	10:00 AM	Communication
Martin, Robert J.	TUE	4:45 PM	Cognition and Learning
Martin, Rosemary L.	WED	2:15 PM	Ecological Effects
Marting, Peter R.	THUR	10:30 AM	Behavioral Plasticity
Martins, Emilia	TUE	10:00 AM	Presidential Symposium: Predicting Behavior
Masco, Christina	THUR	11:15 AM	Communication
Mason, Georgia J.	TUE	2:30 PM	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium
Masson, Andrew J.	WED	2:15 PM	Communication
Mastromonaco, Gabriela F.	TUE	3:00 PM	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium
Mather, Jennifer A.	THUR	10:15 AM	Behavioral Plasticity
Mathot, Kimberley J.	THUR	4:00 PM	Parental Care
Mayberry, Heather W.	WED	10:45 AM	Social Behavior
McCann, Sean M.	WED	11:00 AM	Mating/Breeding Systems
McQuillan, Michael A.	FRI	10:15 AM	Cognition and Learning
Medina-García, Angela	TUE	6:00 PM	Cognition and Learning
Mellen, Jill	TUE	10:15 AM	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium
Mickle, Megan F.	WED	5:00 PM	Ecological Effects
Miller, Noam	WED	5:30 PM	Social Behavior
Mirza, Reehan S.	FRI	11:00 AM	Predation and Foraging
Mobley, Robert B.	WED	4:45 PM	Ecological Effects
Modanu, Maria	FRI	11:15 AM	Sexual Selection and Sexual Conflict
Montagner, Vinicius	WED	11:30 AM	Sexual Selection and Sexual Conflict
Montgomery, Tracy M.	WED	10:00 AM	Social Behavior
Morand-Ferron, Julie	THUR	11:30 AM	Animal Cognition: Mechanisms, Ecology and Evolution
Morris, Megan C.	TUE	5:30 PM	Applied Animal Behavior
Morris, Molly/R.	TUE	1:30 PM	Fellow's Talk
Mowery, Monica A.	WED	2:00 PM	Behavioral Plasticity
Mugerwa, Badru	WED	4:15 PM	Ecological Effects
Murray, Rosalind L.	TUE	11:45 AM	Predation and Foraging
Naderi, Mohammad	THUR	5:30 PM	Neuro/Endocrine & Physiological Mechanisms
Naguib, Marc	FRI	11:45 AM	Communication
Neyer, Abigail A.	WED	10:00 AM	Predation and Foraging
Nielsen, Matthew	WED	10:30 AM	Allee Symposium for Best Student Poster Paper
Nowicki, Stephen	WED	5:45 PM	Communication

Nunez, Cassandra M.	TUE	5:00 PM	Applied Animal Behavior
Ohmann, Paul R.	FRI	11:30 AM	Predation and Foraging
Painting, Christina J.	THUR	3:00 PM	Behavioral Biodiversity Symposium
Papaj, Daniel R.	FRI	11:15 AM	Cognition and Learning
Patel, Harshilkumar	THUR	2:45 PM	Behavior Genetics/Genomic & Genetics & Evolution
Patriquin, Krista	TUE	10:15 AM	Social Behavior
Peixoto, Paulo Enrique C.	TUE	2:45 PM	Agonism
Pelletier, Amanda N.	TUE	10:45 AM	Predation and Foraging
Perret, Victoria A. W.	TUE	5:30 PM	Cognition and Learning
Phelps, Steven M.	THUR	5:30 PM	Animal Cognition: Mechanisms, Ecology and Evolution
Pickett, Emily E.	FRI	10:00 AM	Communication
Pierson, Lyndsey M.	FRI	11:00 AM	Cognition and Learning
Pinter-Wollman, Noa	TUE	10:00 AM	Social Behavior
Pires, Tiago H. S.	THUR	3:15 PM	Behavior Genetics/Genomic & Genetics & Evolution
Pitera, Angela M.	TUE	11:30 AM	Predation and Foraging
Pollo, Pietro	THUR	11:45 AM	Sexual Selection and Sexual Conflict
Polnaszek, Timothy J.	WED	5:45 PM	Social Behavior
Posta, Beth	TUE	11:15 AM	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium
Potter, Sophie J.	WED	3:15 PM	Sexual Selection and Sexual Conflict
Powell, Jeanne M.	TUE	5:45 PM	Social Evolution
Prasher, Sanjay	WED	4:45 PM	Cognition and Learning
Pravosudov, Vladimir	THUR	4:00 PM	Animal Cognition: Mechanisms, Ecology and Evolution
Price, J. Jordan	WED	3:15 PM	Ecological Effects
Pruitt, Jonathan	TUE	5:15 PM	Social Evolution
Prum, Richard O.	THUR	10:15 AM	Sexual Selection and Sexual Conflict
Pusiak, Ryan	WED	10:15 AM	Mating/Breeding Systems
Quinn, James S.	WED	10:00 AM	Mating/Breeding Systems
Rajmohan, Archchana	FRI	11:30 AM	Sexual Selection and Sexual Conflict
Ratcliffe, John M.	THUR	2:30 PM	Animal Cognition: Mechanisms, Ecology and Evolution
Rehan, Sandra M.	THUR	3:00 PM	Behavior Genetics/Genomic & Genetics & Evolution
Reifer, Mykell L.	FRI	10:00 AM	Sexual Selection and Sexual Conflict
Requena, Gustavo	WED	11:15 AM	Sexual Selection and Sexual Conflict
Rice, Marissa A.	THUR	4:45 PM	Parental Care
Richards, Miriam H.	TUE	4:45 PM	Social Evolution
Robertson, Bruce	TUE	4:45 PM	Conservation
Roche, Daniel P.	THUR	2:45 PM	Ecological Effects
Rojas, Andrés V.	WED	10:45 AM	Parental Care
Rojas, Connie A.	THUR	4:00 PM	Social Behavior
Rojas-Ferrer, Isabel	FRI	10:30 AM	Cognition and Learning
Ronald, Kelly L.	WED	5:00 PM	Allee Symposium for Best Student Poster Paper
Rosenthal, Malcolm	THUR	10:00 AM	Behavioral Biodiversity Symposium
Rowe, Locke	THUR	5:00 PM	Behavioral Biodiversity Symposium

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Royauté, Raphaël	WED	2:45 PM	Behavioral Plasticity
Rubenstein, Daniel	TUE	4:15 PM	Conservation
Rubi, Tricia L.	THUR	11:30 AM	Communication
Rubin, Juliette J	FRI	11:15 AM	Predation and Foraging
Rusch, Claire	THUR	5:45 PM	Neuro/Endocrine & Physiological Mechanisms
Russell, Avery/L	WED	11:00 AM	Allee Symposium for Best Student Poster Paper
Ryan, Michael	THUR	3:00 PM	Animal Cognition: Mechanisms, Ecology and Evolution
Safran, Rebecca	TUE	4:30 PM	Presidential Symposium: Predicting Behavior
Sánchez-Macouzet, Oscar	WED	10:45 AM	Mating/Breeding Systems
Scarlett, Kendall	TUE	5:45 PM	Applied Animal Behavior
Scott, Andrew M.	THUR	2:30 PM	Behavior Genetics/Genomic & Genetics & Evolution
Scott, Catherine E.	FRI	10:45 AM	Communication
Scott, Nancy	TUE	6:00 PM	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium
Searcy, William	FRI	1:30 PM	Award Ceremony and President's Address: William Searcy
Seymoure, Brett M.	WED	5:30 PM	Allee Symposium for Best Student Poster Paper
Sheehan, Michael J	TUE	2:30 PM	Presidential Symposium: Predicting Behavior
Shelton, Delia S.	WED	11:30 AM	Allee Symposium for Best Student Poster Paper
Simpson, Richard K.	WED	3:00 PM	Communication
Sims, Paul Q.	WED	5:30 PM	Cognition and Learning
Singh, Nishant	THUR	3:15 PM	Agonism
Siracusa, Erin R.	TUE	11:15 AM	Social Behavior
Slade, Joel W.G.	WED	2:00 PM	Sexual Selection and Sexual Conflict
Smith, Jennifer E.	THUR	4:15 PM	Social Behavior
Snell-Rood, Emilie	THUR	10:30 AM	Animal Cognition: Mechanisms, Ecology and Evolution
Snell-Rood, Emilie	THUR	4:30 PM	Behavioral Biodiversity Symposium
Somjee, Ummat	THUR	10:45 AM	Sexual Selection and Sexual Conflict
Song, Soorim	WED	4:15 PM	Cognition and Learning
Spiegel, Orr	WED	5:00 PM	Social Behavior
St-Laurent, Martin-Hugues	TUE	5:15 PM	Conservation
St. Clair, Colleen Cassady	TUE	5:30 PM	Conservation
Stafstrom, Jay A.	TUE	12:00 PM	Neuro/Endocrine & Physiological Mechanisms
Stankowich, Theodore	TUE	10:00 AM	Predation and Foraging
Stanton, Lauren	WED	4:00 PM	Cognition and Learning
Steck, Meredith K.	WED	11:30 AM	Predation and Foraging
Stoffer, Brent	THUR	5:00 PM	Neuro/Endocrine & Physiological Mechanisms
Strauss, Amy V. H.	WED	2:45 PM	Communication
Strauss, Eli D.	WED	11:15 AM	Social Behavior
Suárez-Rodríguez, Monserrat	TUE	3:00 PM	Presidential Symposium: Predicting Behavior
Summers, Kyle	WED	10:00 AM	Parental Care
Swaddle, John P.	TUE	4:00 PM	Conservation

Taborsky, Barbara	TUE	4:00 PM	Presidential Symposium: Predicting Behavior
Tang-Martinez, Zuleyma	FRI	10:15 AM	Sexual Selection and Sexual Conflict
Taylor, Laini L.	WED	1:30 PM	Sexual Selection and Sexual Conflict
Tello-Ramos, Maria Cristina	TUE	5:45 PM	Cognition and Learning
Templeton, Christopher N	WED	4:30 PM	Communication
Tennant, Kaylin S.	TUE	10:45 AM	Applied Animal Behavior
Thaker, Maria	WED	10:30 AM	Sexual Selection and Sexual Conflict
Thiagavel, Jeneni	WED	2:30 PM	Behavioral Plasticity
Thompson, Megan J.	TUE	4:00 PM	Cognition and Learning
Thorington, Katherine K.	TUE	2:30 PM	Education
Thrasher, Derrick	WED	11:15 AM	Mating/Breeding Systems
Tibbetts, Elizabeth A	THUR	8:30 AM	Plenary Talk: Elizabeth Tibbetts
Tombak, Kaia	THUR	2:30 PM	Ecological Effects
Toth, Amy L.	TUE	2:30 PM	Behavior Genetics/Genomic & Genetics & Evolution
Trumbo, Stephen	WED	10:15 AM	Parental Care
Tsvetkov, Nadejda	WED	2:00 PM	Ecological Effects
Tudor, M Scarlett	FRI	10:45 AM	Sexual Selection and Sexual Conflict
Turner, Sarah E.	TUE	10:30 AM	Social Behavior
Vagell, Raymond	TUE	4:45 PM	Applied Animal Behavior
van der Marel, Annemarie	TUE	11:00 AM	Social Behavior
Vanderbilt, Carla C.	WED	11:45 AM	Sexual Selection and Sexual Conflict
Vickers, Michael E	TUE	10:30 AM	Predation and Foraging
Viscido, Steven V.	TUE	2:45 PM	Education
Wacker, Douglas W	TUE	10:30 AM	Neuro/Endocrine & Physiological Mechanisms
Wang, Mu-Yun	WED	5:15 PM	Cognition and Learning
Watters, Jason V.	TUE	5:00 PM	The Future of Zoo Research: 50 Years of Zoo Behavior Symposium
Weko, Charles W.	WED	11:30 AM	Social Behavior
West, Victoria J.	TUE	11:30 AM	Social Behavior
Westerman, Erica	THUR	10:30 AM	Sexual Selection and Sexual Conflict
Whittaker, Danielle J.	FRI	11:00 AM	Communication
Wice, Eric W.	WED	4:45 PM	Social Behavior
Wilcox, Sean C.	FRI	10:30 AM	Sexual Selection and Sexual Conflict
Wiper, Mallory L.	TUE	11:45 AM	Neuro/Endocrine & Physiological Mechanisms
Withrow, James M.	TUE	5:30 PM	Social Evolution
Witterick, Lauren E.	FRI	10:00 AM	Predation and Foraging
Woelber, Brooke K.	WED	10:30 AM	Parental Care
Wright, Colin	WED	11:00 AM	Social Behavior
Wright, Timothy F.	WED	5:15 PM	Communication
Xu, Mingzi	TUE	3:15 PM	Behavior Genetics/Genomic & Genetics & Evolution
Yadav, Pratibha	THUR	11:15 AM	Behavioral Plasticity
Zipple, Matthew N	WED	10:00 AM	Sexual Selection and Sexual Conflict
Zurek, Daniel B.	FRI	10:15 AM	Communication

NOTES

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Campus Map



LEGEND

- Accessible Entrance
- Bus Stop
- Emergency Phones
- BikeShare - D5
- Permit/Visitor Parking
- Community Gardens - C7
- Doris McCarthy Gallery UTSC - C4
- Urquhart Memorial Garden - C4
- Leigha Lee Browne Theatre - B4
- UTSC Bookstore - C4
- Gallery 1265 - C4
- Earth Tube Plaza - B2
- Construction Detour

Building Index

- AA - Arts & Administration - C4
- AC - Academic Resource Centre - C4
- AQ - Toronto Pan Am Sports Centre - B1
- BD - Dan Lang Field - Baseball Diamond - D7
- BV - Bladen Wing - C4
- CC - N'sheemaeh'n Child Care Centre - C3
- CH - Coach House - C7
- CV - Environmental Science & Chemistry - B2
- HH - Harbutt House - E7
- HW - Humanities Wing - C4
- IC - Instructional Centre - B2
- ML - Miller Lash House - C6
- MW - Social Sciences - C5
- PO - Portables - B4, C5

Walks and Drives

- Pan Am Drive - C1/2
- Centennial Circle - B2
- Scarborough Circle - C3
- Rock Walk - C4
- Gallery Walk - C4
- Scholars Walk - C4
- Beechgrove Drive - C5
- Old Ring Road - E5

Residences

- JF - Joan Foley Hall - D5
- A - Aspen Hall - D4
- B - Birch Hall - D5
- C - Cedar Hall - D5
- D - Dogwood Hall - D5
- E - Elm Hall - D5
- F - Fir Hall - D5
- G - Grey Pine Hall - D5
- H - Hickory Hall - D5
- I - Ironwood Hall - D5
- J - Juniper Hall - B3
- K - Koa Hall - B3
- L - Larch Hall - C3
- M - Maple Hall - B3

Parking Lot Index

- PA - Visitor Parking Lot - D4
- Ps - Permit Parking Lot - D5
- Pc - Permit Parking Lot - D4
- Po - Permit Parking Lot - C5
- Pt - Permit/Visitor Parking Lot - C3
- Pr - Visitor Parking Lot - D2
- Pq - Permit/Visitor Parking Lot - C2
- Ph - Permit/Visitor Parking Lot - B1, C1
- Pj - Centennial College Parking Lot - not available - B1, B2
- Pk - Permit Parking Lot - B2
- Pl - Accessible Parking only - B2

Accessible Parking

- PA - 5 spaces
 - Pc - 8 spaces
 - Po - 4 spaces
 - Pt - 4 spaces
 - Pj - 6 spaces
 - Pl - 8 spaces
 - SW - 4 spaces
 - SY - 1 space
- For more information, please visit:
map.utoronto.ca/utsr

