

Poster Session A (P1 to P230)
Reception: Wednesday 27 July

Session A posters must be put up by the end of the morning break on Tuesday July 26.
Presenters should stand by their 'A' posters from 8pm to 9:30pm on Wednesday July 27.

'A' Posters must be removed by 10:30pm on Wednesday July 27.*

G: ABS Genesis Award; F: ABS Founders' Award; T: Charles H. Turner Poster

# Session		Poster title	Authors	Affiliation
IMU Georgian Room				
COGNITION AND LEARNING 1 (P12 TO P32)				
IMU Georgian Room				
P12		Letting go: autotomy and personality in the octopus <i>Abdopus aculeatus</i> from Okinawa, Japan.	Amy Arnett, Yuzuru Ikeda	Japan
P13		Does environmental enrichment affect learning, memory and temperament in Nile tilapia?	Laura Batista, Marisa de Castilho	Universidade Federal do Paraná Brazil
P14		Mercurys effect on spatial memory in zebra finch, <i>Taeniopygia guttata</i>	Amanda Bessler, Daniel Cristol, John Swaddle	College of William and Mary USA
P15		Causal structure in predation: Behavior systems and Bayes networks	Robert Bowers, William Timberlake	Indiana University USA
P16		Audience effects on cognitive task performance in capuchin monkeys (<i>Cebus apella</i>)	Sean Coyne, Erica Dunayer, Peter Judge	University of Chicago USA
P17		Dissecting visual inputs to the honey bee sun compass	Fred Dyer	Michigan State USA
P18		Finders keepers: Attribution of perception in North Island Robins (<i>Petroica longipes</i>)	M. Alexis Garland, Jason Low, KC Burns	Victoria University of Wellington New Zealand
P19	GT	A tale/tail of two orcas - The sleep patterns and care of a mother and her calf	Caitlyn Geraci, Heather Hill	USA
P20	F	Observational learning and cognition in zoo African Elephants (<i>Loxodonta africana africana</i>)	Brian Greco, Nancy Caine	Cal. State San Marcos/San Diego Zoo USA
P21		Spatial navigation in fiddler crabs: gaining absolute direction reference for goals away from home	Luke Hong, John Layne	University of Cincinnati USA
P22		How to encode the world: Integrating multiple frames of reference	Lucia Jacobs, Anna Waisman, Molly Nicholas, Mikel Delgado	University of California, Berkeley USA
P23		Concurrent spatial relations challenge capuchin monkeys <i>Cebus apella</i> using hand tools	Lucy la Cour, Dorothy Fragaszy	USA
P24	F	Wild capuchin monkeys (<i>Cebus libidinosus</i>) use novel irregular stones effectively in nut-cracking	Qing Freya Liu, Dorothy Fragaszy	USA
P25		Risk aversion in lemurs	Tara Mandalaywala, E MacLean, E Brannon	Univ Chicago USA
P26		Do animals need watches? Ordinal and interval timing in pigeons (<i>Columba livia</i>)	Neil McMillan, William Roberts	University of Western Ontario Canada
P27		Automated cognitive test performance by monkeys in laboratory and large semi-natural social groups	Regina Paxton, Emily Brown, Benjamin Basile, Robert Hampton	Emory University USA
P28		Devil in the details: social learning in wolves & dogs	Friederike Range, Zsófia Virányi	Univ Vienna, Austria
P29	F	Thinking about thinking - Studying a theory of mind in chimpanzees	Martin Schmelz, Josep Call, Michael Tomasello	Max Planck Institute for Evol Anthro Germany
P30	G	Effects of sexual experience on spatial memory and behavioral flexibility in male rats	Leanne Shulman, Mark Spritzer, Mark Stefani	Middlebury College USA
P31	F	Inference by exclusion in the Clark's nutcracker	Jan Tornick, Brett Gibson	Univ New Hampshire USA
P32		Following gazing and pointing in domestic dogs and in wolves: communication or behaviour-reading?	Zsofia Viranyi, Friederike Range	University of Vienna Austria
BEHAVIORAL COMMUNITY ECOLOGY 1 (P63 TO P68)				
IMU Georgian Room				
P63		Why do clownfish host in only 10 anemone species? A toxilogical explanation	Karen Burke da Silva, Anita Nedosyko	Flinders University Australia
P64	F	The digging behavior of the red imported fire ant <i>Solenopsis invicta</i> in relation to body size	Jason Carbaugh, S. Bradleigh Vinson	Texas A&M University USA
P65	G	The effects of blood parasites on immunity and reproductive success of <i>Protonotaria citrea</i>	Cara Carne, Sarah Huber	Randolph-Macon College USA
P66		Research on adaptability of multiple species of Chiroptera in various regions of Korean Peninsula.	Rachel Moon	South Korea
P67	G	Tracking fine-scale dispersal in birds using trace element analysis	Ben Nickley, Douglas Nelson, H. Lisle Gibbs, John Olesik, Angelika Poesel	Ohio State University USA
P68		Interspecific dominance & song interactions mediate altitudinal zonation in Neotropical singing mice	Bret Pasch, Steven Phelps	University of Florida USA

MATING SYSTEMS 1 (P110 TO P122)					
IMU Georgian Room					
	P110		Does rearing environment affect correlations between attractiveness and competitive success?	Aitor Alvarez-Fernandez, Allen Moore, Christine Miller	University of Florida USA
	P111	F	A tug-of-war game theory model of mixed-strategy parasitism	Nicole Baran, Hudson Reeve	Cornell University USA
	P112		Spatial evolution of reproductive strategies: A multiple-solution puzzle in a lizard model	Margarita Chiaraviglio, Sergio Naretto, C Blengini, G Cardozo, P Rivera, V Di Cola	Universidad Nacional de Cordoba Argentina
	P113		Extra-pair paternity matches patterns of female receptivity: Evidence for female choice	Elise Ferree, Janis Dickinson	Claremont Colleges USA
	P114	G	Do male physiological condition and territory quality affect female choice in the Brown Anole?	Sarah Flanagan, Catherine Bevier	Colby College USA
	P115		Female choice in the lek-mating prairie mole cricket (<i>Gryllotalpa major</i>)	Daniel Howard, Norman Lee, Carrie Hall, Andrew Mason	Augustana College USA
	P116	GT	Male advertisement strategies on leks: better to be erratic and flashy, or a reliable average Joe?	Christina Johnson, Courtney Moore, Brooke Woelber, Daniel Howard, N Lee, C Hall	Augustana College USA
	P117	F	Functions of sexual promiscuity in female Blue-Footed Boobies (<i>Sula nebouxi</i>)	Lynna Kiere, Hugh Drummond Durey	UNAM Mexico
	P118	F	Density dependent female-biased sexual size dimorphism in Tarrkawarra (Mammalia: <i>Notomys</i>)	Nansi Ngahere, Alan Taylor	Macquarie University Australia
	P119		Testosterone manipulation in multi-brooded house sparrows and success in acquiring alternative mates	Patricia Schwagmeyer, Patricia Parker, Douglas Mock, Hubert Schwabl	University of Oklahoma USA
	P120		Consequences of alternative reproductive tactics in male prairie voles (<i>Microtus ochrogaster</i>)	Nancy Solomon, Regina Willen, Brian Keane	Miami University USA
	P121	GT	Substrate choice by female bean beetles <i>Callosobruchus maculatus</i> & competition	Delawrence Sykes, Lawrence Blumer	Indiana University USA
	P122		Pacific traveller: epic migration of the long-tailed cuckoo	Mark Hauber, Brian Gill	Hunter College/CUNY USA
IMU Alumni Hall/Solarium					
APPLIED ANIMAL BEHAVIOR 1 (P1 TO P11)					
IMU Alumni Hall/Solarium					
	P1	G	Does cannibalism aid the development of the Colorado potato beetles when expose to pesticide.	Vanessa Acosta	USA
	P2		Aggression in domestic dogs: recent selection for morphology rather than behavior	Stan Braude	Washington University USA
	P3		Impact of habitat size on repetitive behavior and activity budgets of elephants at Los Angeles Zoo	Cathleen Cox, Shari Carroll, Nancy Yen, Ruth Yakushiji, Marissa Heil, J Becker	Los Angeles Zoo USA
	P4		Prevalence of pica in domestic cats kept in Japanese households.	Yoshie Kakuma, Atsuko Ohnaru, Yoshito Nishino, Nodoka Onodera, Miki Ito	Teikyo University of Science Japan
	P5		Spontaneous epilepsy and fitness in a wild living rat (<i>Trinomys yonenagae</i>)	Elisabeth Oliveira, Lais Cantano	Universidade de São Paulo Brazil
	P6	F	An evaluation of stress level indicating an acclimatisation period of wild mice for lab study	Nattida Puenphasook, Steve Harris, Innes Cuthill	Bristol University UK
	P7		The world is a natural laboratory, social media the new petri dish: Video mining of behavioral data	Jean-Loup Rault, Monica Elmore, Dara Biehl, Mark Russell, Joseph Garner	Purdue University USA
	P8	G	Effects of operant conditioning on the reactivity of Nellore heifers during handling	Paola Rueda, Aline Sant'Anna, Cintia Gonçalves, M Rodrigues Paranhos da Costa	Universidade Estadual Paulista Brazil
	P9		Genetic variability for beef cattle temperament using different methods of assessment	Aline Sant'Anna, P Rueda, F Baldi, L Galvão de Albuquerque, M Paranhos da Costa	State University of São Paulo Brazil
	P10		High aggression associated with bold profile in Nile tilapia	Graziela Valença-Silva, Fernanda Corbeira-da-Silva, Gilson Volpato	Unesp-Botucatu, SP, BR Brazil
	P11		Behaviors related to marking, olfaction and scent detection in Lumholtz's tree kangaroo	Emma Young	Vassar College USA
COMMUNICATION 1 (P33 TO P62)					
IMU Alumni Hall/Solarium					
	P33		Bubble, bubble, surprise, play, or, trouble?	Stephanie Artz, Christie Gutierrez, Marielle Kahn, Lucas Brilliot, B Roberts, H Hill	University of Texas At San Antonio USA
	P34	F	Angry Birds: Do vocal signals predict attack in Black-capped Chickadee song contests?	Tyne Baker, David Wilson, Daniel Mennill	University of Windsor Canada
	P35	F	Fly parasitism, tradeoffs, and the evolution of communication in a field cricket	Oliver Beckers, William Wagner Jr.	University of Nebraska, Lincoln USA
	P36		Description of courtship vocalizations in brocket deer (<i>Mazama</i> sp.)	Patricia Black-Decima, Alejandra Hurtado, Rita Albarracin, Ana Maria Nieves	Universidad Nacional de Tucuman Argentina
	P37		The selection free evolution of complex signals	Nicholas Brandley, Sönke Johnsen	Duke University USA
	P38	F	Long-term social recognition in bottlenose dolphins	Jason Bruck	University of Chicago USA
	P39		Southern House Wren and Rufous Hornero song pitch does not correlate with background noise level	Alexandre Dias, Rafael Braga, Diego Gil, Regina Macedo	Brazil

P40	F	Neural correlates of threat signaling in black-capped chickadees	Jesse Ellis, Lauren Ritters	University of Wisconsin, Madison USA
P41		Rapid modulation of song frequencies in response to overlapping noise	Sarah Goodwin, Jeff Podos	Univ Massachusetts Amherst USA
P42	G	Sending mixed signals: olfactory communication in Coquerel's sifakas, <i>Propithecus coquereli</i>	Lydia Greene, George Dubay, Christine Drea	Duke University USA
P43		Comparative social function of vocalizations in nonhuman primates and prelinguistic infants	Julie Gros-Louis	University of Iowa USA
P44		Reproductive state of female voles affects male's response to same- and mixed-sex over-marks	Nicholas Hobbs, Michael Ferkin	University of Memphis USA
P45	F	Sex-differences in song and selection in female and male stripe-headed sparrows	Anya Illes	University of Washington USA
P46		Within and between male variation in the mechanical sounds of the greater sage-grouse	Rebecca Koch, Alan Krakauer, Gail Patricelli	USA
P47		Ecological influences on singing on the nest	Maureen Leonard	Mount Mary College USA
P48		A co-evolutionary mismatch between signalers and receivers in gray treefrogs	Elliot Love, Mark Bee	University of Minnesota USA
P49	F	Acoustic profiling of wild American crows	E Mates, RTarter, JHa, AClark, KMcGowan	Univ Washington USA
P50	F	Complex vocal repertoires in a leaf-roosting bat	Bianca Montero, Erin Gillam	North Dakota State USA
P51		The effect of vocal performance on male aggressive responses in swamp sparrows (<i>Melospiza georgiana</i>)	Dana Moseley, David C. Lahti, Jeffrey Podos	University of Massachusetts Amherst USA
P52		The Jacky dragon display - a tail flick catches the eye	Shaun New, Richard Peters, Jan Hemmi	Aus. Nat Univ Australia
P53	F	Variation in vocalizations by the weeping lizard <i>Liolaemus chiliensis</i>	Mario Penna, Gabriela Silva, Fernanda Norambuena, Antonieta Labra	Universidad de Chile Chile
P54		Within-island song variation in Galapagos finches: discrimination and geographical distance	Jeff Podos, Rie Dybboe, Mads Ole Jensen	Univ Massachusetts Amherst USA
P55	G	A method for the determination of electroreception thresholds in weakly electric fish	James Roach, Philip Stoddard	Florida International University USA
P56	F	Receiver use of redundant multicomponent signals	Tricia Rubi, David Stephens	Univ Minnesota USA
P57	GT	Vibrational communication in the Cook Strait giant weta (<i>Deinacrida rugosa</i>)	Ashley Schmidt, Claire Bestul, Daniel Howard, Andrew Mason	Augustana College USA
P58		Intraspecific variation in the alarm calls of a social subterranean rodent <i>Spalacopus cyanus</i>	Monica Stewart, Mauricio Soto-Gamboa, Loren Hayes, Rodrigo Vasquez, C Cecchi	University of Louisiana at Monroe USA
P59		Transmission of structurally distinct song phrases in the white-crowned sparrow	Erica Szezyller-Macolley, Angelika Poesel, Douglas Nelson	Ohio State University USA
P60		A cry for help: Juvenile distress calls in different species of ungulates	Lisa Teichroeb, Tobias Riede, Radim Kotrba, Susan Lingle	Canada
P61	F	Correlates of song in Costa's Hummingbird, <i>Calypte</i>	Uyen Tran, Anne Houtman	Calif State, Fullerton USA
P62	GT	Sexual differences of fluctuating asymmetry in <i>Polistes dominulus</i>	Cassandra Vernier, Amanda Izzo, Elizabeth Tibbetts	University of Michigan USA
DEVELOPMENT (P69 TO P80)				
IMU Alumni Hall/Solarium				
P69	F	Developmental effect of El Niño: oceanographic conditions in infancy influence onset of breeding	Sergio Ancona, Hugh Drummond	UNAM Mexico
P70		Different behavioural reactions to tonic immobility test in growing broiler and layer chickens	Eva Baranyiova, Linda Balázová, Ing. Pavel Štarha	Czech Univ Life Sciences, ITS Czech Republic
P71	F	Are dominance and beak color developmentally plastic in female mallards, <i>Anas platyrhynchos</i> ?	Mike Butler, Russell Ligon, Kevin McGraw	Arizona State University USA
P72		Sensory development: Do vertebrates and invertebrate share the same mechanism?	Ludovic Dickel, Mathieu Guibe, Marine Mortier, Cecile Bellanger, S Romagny	University of Caen Basse-Normandie France
P73		Juvenile exposure to acoustic sexual signals alters adult personality in field crickets	Nicholas DiRienzo, Jonathan Pruitt, Ann Hedrick	University of California, Davis USA
P74		An ecologically-relevant early-environment manipulation with inbred laboratory mice	Elizabeth Hill, Sylvia Malcore, Dana Wolak	University of Detroit, Mercy USA
P75	F	Aggressive competition between two-day-old crickets (<i>Gryllus veletis</i>) affects development	Kevin Judge, Briana Smith, William Cade	University of Lethbridge Canada
P76		Testosterone and development post hatching in the domestic fowl (<i>Gallus gallus</i>)	John Kent	University College Dublin Ireland
P77		Perception of the spawning environment by cuttlefish embryo increases cryptic behavior at hatching	Guibe Mathieu, Dickel Ludovic	GMPC France
P78		Consistent individual differences in camouflage patterns in cuttlefish	Kohei Okamoto, Akira Mori, Yuzuru Ikeda	Kyoto University Japan
P79	G	Temperature, development time and sibling cannibalism in Australian Redback Spiders	Nizanthan Rathitharan, Lucy Dong Xuan Li, Hosay Said, Maria Modanu, MCB Andrade	University of Toronto Canada
P80		Temperament predicts mothers' responses to separation from their infants in rhesus monkeys	Tamara Weinstein, Laura Del Rosso, John Capitanio	California Natl Primate Research Center USA

ECOLOGICAL EFFECTS 1 (P81 TO P89)				
IMU Alumni Hall/Solarium				
P81		Gerbil time management - Does temperature matter?	Doris Audet, Jody Rintoul, Nichole Vestby	Univ Alberta Canada
P82		Cathemerality in an ancient specialist: accelerometer-described activity of Northern tamanduas	Danielle Brown	University of California, Davis USA
P83		Ovipositioning behavior of <i>Pieris rapae</i> (Lepidoptera) on invasive and cultivated brassica	Rachel Collins, Ariel Firebaugh	Roanoke College USA
P84		Musking as a defensive behavior in urban garter snakes (Genus <i>Thamnophis</i>)	Jennifer Gagliardi-Seeley	Metro State College of Denver USA
P85		Effect of migratory strategy on distributional shifts of breeding bird species in Ontario, Canada	Erin Greenlee, Evan Greenlee, Ian Hamilton	Ohio State University USA
P86		Behavioral and morphological differences between urban and rural Song Sparrows	Jeremy Hyman	Western Carolina University USA
P87		Insectivorous birds are tolerant to risk; relationship between risk sensitivity and food habit	Ai Kawamori, Toshiya Matsushima	Hokkaido University Japan
P88		All-male groups affect grouping and spacing in a multi-level primate society	David Pappano, Noah Snyder-Mackler, Thore Bergman, Jacinta Beehner	University of Michigan USA
P89	G	Olfaction in the Colorado Potato Beetle	Kristina Zabierek	Queens College USA
EDUCATION (P90 TO P95)				
IMU Alumni Hall/Solarium				
P90		Troubled transitions into college and the effects of a small class intervention on retention	David Mellor, Rebecca Jordan	Rutgers University USA
P91		Teaching Animal Behavior in a learning community at Raystown Field Station	Justin Merry	Saint Francis University USA
P92	G	Field research studying whales in an undergraduate animal behavior laboratory	Christopher Round, Ronald MacLaren	Merrimack College USA
P93		Behavioral data - management, archiving, and sharing: advantages of using a library repository	Eric Snajdr	Indiana Univ - Purdue Univ Indianapolis USA
P94		Undergraduate ed reform: Where is animal behavior?	Kaci Thompson	University of Maryland USA
P95		Third-grade students learn about scientific research design by studying zebrafish behavior	Carol S. Carter, Emilia P. Martins	Clear Creek Elementary School USA
GENETICS & EVOLUTION 1 (P96 TO P109)				
IMU Alumni Hall/Solarium				
P96		Modeling the evolution of central-place foraging in digital organisms	Francis Bartlett, Fred Dyer, Robert Pennock, Charles Ofria	Michigan State University USA
P97		Variation in response to social environment affects cooperation in guppies, <i>P. reticulata</i>	Bronwyn Bleakley	Stonehill College USA
P98	F	High-throughput tests of variation in olfactory behavior in a natural population of <i>D. melanogaster</i>	Elizabeth Brown, John Layne, Stephanie Rollmann	University of Cincinnati USA
P99		Behavioral genetic characterization of hunting in domestic dogs, <i>Canis familiaris</i>	Budhaditya Chowdhury	Bowling Green State University USA
P100		The evolution of eggshell color: egg visibility, solar radiation, and microbial invasion	Stephanie Doucet, Daniel Hanley, Phillip Cassey	University of Windsor Canada
P101		How do orioles evolve orange? The phylogeny and mechanism of gains/losses of carotenoid pigments	Nicholas Friedman, Kevin McGraw, Kevin Omland	University of Maryland, Baltimore County USA
P102		Song complexity independent of anonymous and genic microsatellite diversity in a sparrow population	James King, Elizabeth MacDougall-Shackleton	University of Western Ontario Canada
P103	F	The evolutionary relationship between social mating system and sex-biased dispersal in mammals	Karen Mabry, Daniel Blumstein, Dirk Van Vuren, Erin Shelley	New Mexico State University USA
P104		Ontogeny of complex behavior: Burrow construction in deer mice (<i>Peromyscus</i>)	Hillery Metz, Linda Pan, Hopi Hoekstra	Harvard University USA
P105	F	Diverse signals: a case of sensory drive in <i>Anolis distichus</i> ?	Julienne Ng, Alison Ossip-Klein, Richard Glor	University of Rochester USA
P106	G	Retention of unexpressed ancestral behavior: cues and consequences	Shannon O'Neil	Clark University USA
P107	F	The importance of social systems in fixation of chromosomal rearrangements	Maria Sagot, Caleb Phillips, Richard Stevens, Robert Baker	Louisiana State University USA
P108	F	Relative cone opsin gene expression and behavioral variation in the cichlid fishes of Lake Malawi	Adam Smith, Ke Ma, Karen Carleton	University of Maryland USA
P109	G	The brain-body connection: Do testosterone levels, neural sensitivity and trait expression covary?	Natasha Tonge, Kimberly Rosvall, Ellen Ketterson	Indiana University USA
MECHANISMS 1 (P123 TO P134)				
IMU Alumni Hall/Solarium				
P123	F	Relationships between affiliation and tyrosine hydroxylase in social brain areas in zebra finches	Sarah Alger, Charity Juang, Lauren Ritters	University of Texas, Austin USA
P124		Evidence for sleep in the common cuttlefish <i>Sepia officinalis</i>	Jean Boal, Robert Waldrop, Marcos Frank	Millersville University USA

P125	GT	Measuring water-borne cortisol in sailfin mollies: is the process stressful and can it be minimized?	Adam Contreras, Caitlin Gabor	Texas State University - San Marcos USA
P126		The neurobiology of drug-sensitive reward in crayfish <i>Orconectes rusticus</i>	Udita Datta, Robert Huber	Bowling Green State University USA
P127		Mating enhances immunity in female crickets: nuptial gift, female response or by-product?	Evan Fairn, Shelley Adamo	Dalhousie University Canada
P128		The benefits of shade-seeking by Common Grackle (<i>Quiscalus quiscula</i>) nestlings	Barb Glassey, Melanie Gunson, Robert Muir	Cape Breton University Canada
P129		Acoustic and amplexus-related social signals influence steroids and oviposition in female treefrogs	Noah Gordon, Carl Gerhardt	University of Evansville USA
P130		Population divergence in sexual dimorphism and androgen sensitivity of electrocommunication signals	Winnie Ho, G. Troy Smith	Indiana University USA
P131	G	Multimodal experience and bumble bee brain development	Beryl Jones, Anne Leonard, Daniel Papaj, Wulfila Gronenberg	University of Arizona USA
P132		Distribution of glutamic acid decarboxylase (GAD) immunoreactivity in oval squid	Shiori Kobayashi, Chitoshi Takayama, Yuzuru Ikeda	University of the Ryukyus Japan
P133		The behavioral neuroendocrinology of female dominance: a comparative study across <i>Eulemur</i>	Joseph Petty, Christine Drea	Duke University USA
P134		Variation in cricket acoustic mate attraction signaling explained by body morphology and metabolism	Ian Thomson, Susan Bertram, Bourne Auguste, Jeffrey Dawson, Charles Darveau	Carleton University Canada
PARENTAL CARE 1 (P135 TO P146)				
IMU Alumni Hall/Solarium				
P135	F	Family values: Maternal care in rattlesnakes is more than mere attendance	Melissa Amarello, Jeffrey Smith, John Slone	Arizona State University USA
P136		Concurrent lactation and pregnancy: Mother-offspring conflict in pregnant domestic horse mares	Jitka Bartosova, Martina Komarkova, Jana Dubcova, Ludek Bartos, Jan Pluhacek	Institute of Animal Science Czech Republic
P137	F	Anti-pathogenic properties of bubble nest foam in the Siamese fighting fish, <i>Betta splendens</i>	Alexandria Brown, Ethan Clotfelter	Univ Massachusetts Amherst USA
P138	G	Evolution of embryonic developmental dependence in <i>Heterandria formosa</i>	Sarah Burke, Rebecca Hale	University of North Carolina, Asheville USA
P139		How does partial brood loss in <i>Amatitlania nigrofasciatus</i> affect parental behavior?	Justin Cole, Samantha Hilber, Colette St. Mary	USA
P140		The evolution of developmental dependence or ""Why do my kids need me so much?""	Rebecca Hale, Joseph Travis	University of North Carolina, Asheville USA
P141	G	Do male European starlings use egg spots to make decisions on provisioning effort?	Mark Hornsby, Evan Fairn, Colleen Barber	Saint Mary's University Canada
P142	G	Beluga (<i>Delphinapterus leucas</i>) mother-calf swim positions during the first year of life	Jennifer Johnson, Lorae Marquez, Heather Hill	Texas A&M University USA
P143	F	The effect of mercury on parental care in captive zebra finches	Megan Kobiela, Gregory Tito, Claire Ramos, Daniel Cristol, John Swaddle	College of William and Mary USA
P144		Provisioning routines in birds: the role of self-feeding	Shai Markman, Ronald Ydenberg D Stephens	Univ Haifa - Oranim Israel
P145	G	Allomothering in the Beluga whale (<i>Delphinapterus leucas</i>)	Kimberly Patterson, Michael Noonan	Canisius College USA
P146		Mate size effect on maternal reproductive effort in the convict cichlid, <i>Amatitlania siquia</i>	Ashley Rogers	University of California, Santa Cruz USA
PREDATION & FORAGING 1 (P147 TO P163)				
IMU Alumni Hall/Solarium				
P147		Sex & danger: A two-fold approach to the evolution of aposematic polymorphism in poison frog	Adolfo Amézquita	Universidad de los Andes Colombia
P148		Effect of diet on production and attractiveness of silk in the western black widow spider	Lucianna Baruffaldi, Maydianne CB Andrade	University of Toronto Scarborough, Canada
P149		Fitness consequences of sibling cannibalism in a beetle, <i>Leptinotarsa decemlineata</i>	Karyn Collie	City University of New York USA
P150	G	Egg preference of the Colorado potato beetle larvae, <i>Leptinotarsa decemlineata</i>	Annick Fremont	USA
P151		Disguising a moving object	Joanna Hall, Nick Scott-Samuel, Roland Baddeley, Prof Innes Cuthill	University of Bristol UK
P152		Effect of body size and the sword of <i>Xiphophorus helleri</i> in the likelihood of being attacked	Armando Hernandez, Oscar Ríos-Cárdenas	Instituto de Ecología A.C. Mexico
P153	G	Family effects on sibling cannibalism in redback spiders (<i>Latrodectus hasselti</i>)	Lucy Dong Xuan Li, Nizanthan Rathitharan, Hosay Said, Maria Modanu, M C.B. Andrade	University of Toronto Scarborough, Canada
P154	G	Does aposematic equivalence explain yellow colorations in hypertoxic frogs (<i>Phyllobates</i> spp)?	Roberto Márquez, Adolfo Amézquita	Universidad de Los Andes Colombia
P155		Diving behaviors of the chinstrap penguin in relation to breeding stage and sex	Yoshihisa Mori	Teikyo University of Science Japan
P156		The specificity of predator cue detection in the Streamside Salamander	John Niedzwiecki	Belmont University USA

P157	G	Visual fields and foraging techniques in Blue Jays and Red-winged Blackbirds	Diana Pita, Bret Moore, Esteban Fernandez-Juricic	Purdue University USA
P158	G	Quantitative comparisons of generalist tyrant flycatcher foraging behaviors in Belize	Megan Shave	Stonehill College USA
P159		Plastic tits: seasonal changes in brain and body accompany behavioral adaptations to winter survival	Tom Smulders, Henrik Lange, Lauren Walker, E. M Toivanen, E Hohtola, M Orell	Newcastle University UK
P160		Vigilance in capuchin monkeys: Evidence for an endogenous rhythm?	B Stone, Q Liu, T Jeyaraj, G Sirianni, M Busch-Dienstfertig, M Christel, et al	University of Georgia USA
P161	F	Comparison of chemical foraging and aggressive behaviors between two sympatric hermit crab species	Mark Tran, Richard Hill	Michigan State University USA
P162		Keeping `em down on the farm: Negative contrast effects in honeybees in a natural foraging context	John Townsend-Mehler, Fred Dyer	Michigan State University USA
P163		Meadow voles differ sexually in a space-use task involving the scents of predators and conspecifics	Christian Vlautin, Michael Ferkin	University of Memphis USA
RECOGNITION (P164 TO P170) IMU Alumni Hall/Solarium				
P164		A new theory of animal phobia acquisition	Geoff Cole, Arnold Wilkins	University of Essex UK
P165		Nestmate recognition of neotropical parabiotic ants	Virginia Emery	Univ California, Berkeley USA
P166		Is face-processing species-specific in paper wasps?	Judy Jinn, Michael Sheehan, E Tibbetts	University of Michigan USA
P167	G	Multi-odor representations of individuals & underlying neural mechanisms	Robert Johnston, David Rollins	Cornell University USA
P168		Cross-modal individual recognition in large-billed crows	Noriko Kondo, Ei-Ichi Izawa, Sigeru Watanabe	Japan
P169		The effects of kin networks on physiology and survival in Belding's ground squirrels	Jill Mateo	University of Chicago USA
P170	F	Nest site selection in the European wool-carder bee, <i>Anthidium manicatum</i>	Ansel Payne, Dustin Schildroth, Philip Starks	American Museum of Natural History USA
SEXUAL SELECTION 1 (P171 TO P196) IMU Alumni Hall/Solarium				
P171		Speciation by sexual selection: ubiquitous process or special case?	Jenny Boughman, Megan Head	Michigan State University USA
P172	GT	Mate preferences associated with MHC alleles in the sailfin molly, <i>Poecilia latipinna</i>	Rachel Bowes, Shala Hankison Tami Panhuis	Ohio Wesleyan University USA
P173		The function of female copulation calls in Northern pigtail macaques (<i>Macaca leonina</i>)	Cindy Carlson, Dario Maestriperi, Ulrich Reichard	University of Chicago USA
P174		Background contrast and sexual ornaments influence detection of male wolf spiders by a predator	David Clark, Corinna Kizer, Andrew Roberts, George Uetz	Alma College USA
P175	G	Influence of habitat quality on ornamental plumage coloration of juvenile bluebirds	Amanda Doyle, Lynn Siefferman, Nicole Barrios	Appalachian State University USA
P176		Male mate choice and sexual selection in the Amboseli baboons	Courtney Fitzpatrick, Jeanne Altmann, Susan Alberts	Duke University USA
P177	F	Effects of environmental variation on courtship in the harlequin bug, <i>Murgantia histrionica</i>	Wendy Helmey-Hartman, Christine Miller	University of Florida USA
P178		Individual preference functions and sexual selection in Gray Treefrogs	Gerlinde Hoebel, Robb Kolodziej	University of Wisconsin, Milwaukee USA
P179		Song sharing in Prothonotary Warblers (<i>Protonotaria citrea</i>)	Sarah Huber, Amanda Steinagel, Cara Carne	Randolph-Macon College USA
P180		Natural variation of post-mating behavior in American and Caribbean <i>Drosophila melanogaster</i>	Joyce Kao, Sergey Nuzhdin	University of Southern California USA
P181		Altered female mate choice: loss of reproductive isolation in a threespine stickleback species pair	Alycia Lackey, Janette Boughman	Michigan State University USA
P182	G	Adaptive response to sex ratio in sperm-limited female <i>Drosophila hydei</i>	Henry Liang, Dorothy Thomas, Jeremy Davis	Vassar College USA
P183	F	Diet, maternal effects, life history and female mate preferences in <i>Xiphophorus multilineatus</i>	Susan Lyons, Molly Morris	Ohio University USA
P184	F	Female field crickets are not more risk-sensitive in populations with phonotactic parasitoids	Cassandra Martin, William Wagner Jr.	University of Nebraska, Lincoln USA
P185		Females in a flight polyphenic field cricket express alternative reproductive tactics	Chandreyee Mitra, William Wagner Jr., Anthony Zera	University of Nebraska, Lincoln USA
P186		Alternative reproductive tactics in swordtail fish as genetically influenced response thresholds	Molly Morris, Elizabeth Clowes, Susan Lyons, Donelle Robinson	Ohio University USA
P187		Complex courtship and mate-choice in a wolf spider	Malcolm Rosenthal, Eileen Hebets	Univ Nebraska USA
P188		Geographical variation in the targets of sexual selection in the Greenish warbler ring species	Elizabeth Scordato	University of Chicago USA
P189	G	The loss of female ornamentation: does the cost of migration favor sexual dichromatism in warblers?	Rick Simpson, Troy Murphy	Trinity University USA

P190	F	Gender differences in territorial defense in <i>Neolamprologus multifaciatius</i>	Piyumika Suriyampola, Perri Eason	University of Louisville USA
P191		Mating tactics in a scramble system: Phenotypic drivers of mating success at varied sex ratios	Lindsey Swierk, Tracy Langkilde	Penn State University USA
P192	F	Female choice for carotenoid-based color is linked to female carotenoid intake and accumulation	Matthew Toomey, Kevin McGraw	Arizona State University USA
P193		Mate choice decisions and the variability of quality amongst prospective mates	Daniel Wiegmann, Lisa Angeloni	Bowling Green State University USA
P194		Signal plasticity and mate recognition in the pine woods treefrog, <i>Hyla femoralis</i>	Jessica Wood	University of Missouri, Columbia USA
P195	G	Female mate choice for sand structures in the fiddler crab <i>Uca musica</i> : Is taller better?	Alison Zulick, Denise Pope	Mount Holyoke College USA
P196		Plasticity in a preexisting mating bias in response to variation in the predation environment	Andrew J. Melie, Alexandra L. Basolo	University of Nebraska, Lincoln USA
SOCIAL BEHAVIOR 1 (P197 TO P230) IMU Alumni Hall/Solarium				
P197	G	Development of dominance relationships in the domestic cat at weaning	Lucía Améndola, Hugh Drummond, Robyn Hudson	UNAM México
P198	F	Effect of competition on tree swallow (<i>Tachycineta bicolor</i>) offspring behavior and physiology	Alexandra Bentz, Lynn Siefferman	Appalachian State University USA
P199		Social rank modulates hormones and communication in a weakly electric fish	Karen Bohorquez, Amanda Buck, Troy Smith	Indiana University USA
P200	F	Heritable choice of colony size in cliff swallows: does experience trump genetics in older birds?	Charles Brown, Erin Roche, Mary Brown	University of Tulsa USA
P201	G	Temporal synchrony in the bubbling behavior of captive Beluga whales (<i>Delphinapterus leucas</i>)	Meredith Brown, Debra Burhans, Michael Noonan	Canisius College USA
P202	F	Who goes to the Mall? The social role of communal foraging areas for American Crows	Anne Clark, Andrea Vogel, Jennifer Campbell-Smith, Y Brown, K McGowan	Binghamton University USA
P203		Temporal differences in affiliative behavior among male vervet monkeys, <i>Chlorocebus aethiops</i>	Jennifer Danzy Cramer, J. Paul Grobler, Nelson Freimer, Trudy Turner	University of Wisconsin, Milwaukee USA
P204		Structure of cooperation networks in long-tailed manakins	Andrew Edelman, David McDonald	University of Wyoming USA
P205		Population dynamics in tuco-tucos (<i>Ctenomys pearsoni</i>): a preliminary field study	Gabriel Francescoli, Graciela Izquierdo, Natalia Mannise, Mariana Cosse	Facultad de Ciencias, UdelaR Uruguay
P206		Effect of cholesterol reduction on aggressive behavior in Nile Tilapia	Percilia Giaquinto	State University of São Paulo Brazil
P207	G	Individual differences in shoaling and latency to emerge in sticklebacks	Matthew Grobis, Simon Pearish, Alison Bell	University of Illinois USA
P208	F	An experimental study of behavioral coping strategies in free-ranging female Barbary macaques	Morgan Gustison, Ann MacLarnon, Stuart Semple	University of Michigan USA
P209	G	Modeling the social influences on growth in the group-living fish <i>Neolamprologus pulcher</i>	Elizabeth Hoskins, Ian Hamilton, Elizabeth Marschall	Ohio State University USA
P210	G	Effect of isolation prior to testing on the shoaling behavior of threespined sticklebacks	Lauren Hostert, Simon Pearish, Alison Bell	USA
P211		Postconflict affiliation in budgerigar, <i>Melopsittacus undulatus</i>	Yuko Ikkatai, Ei-ichi Izawa, Shigeru Watanabe	Keio University Japan
P212		Preliminary description of cooperative nest-building behavior in sociable weavers	Gavin Leighton, William Searcy	University of Miami USA
P213		Efficient predation & evolution of altruism in prey	Susan Lingle	Univ Winnipeg Canada
P214		The influence of stream flow on social structure	Arthur Martin III, Emilia Solá Gracia	Saginaw Valley St USA
P215		Sociality in newborn and young guppies	Maria Elena Miletto Petrazzini, C Agrillo, S Candilera, M Dadda, A Bisazza	Italy
P216	G	Behavioral syndromes in nest site selection by the ant <i>Temnothorax rugatulus</i>	Forrest Noelck, Takao Sasaki, Stephen Pratt	Arizona State University USA
P217		Moderate turbidity improves schooling behavior in Japanese anchovy larvae	Ryosuke Ohata, Reiji Masuda, Yoh Yamashita	Kyoto University Japan
P218	F	Grooming-related feeding affects the reciprocity and duration of grooming in Japanese macaques	Kenji Onishi, Kazunori Yamada, Masayuki Nakamichi	Osaka University Japan
P219	GT	I know you: familiarity with an audience influences male-male interactions in Siamese fighting fish	Christina Perazio, Teresa Dzieweczynski	University of New England USA
P220		Indicators of mating success in free-ranging adult male rhesus macaques	Maria Rakhovskaya	University of Pennsylvania USA
P221		What changes with evolution of sociality? A comparative study in social & solitary spiders	Linda Rayor	Cornell University USA
P222		Why animal behavior needs agent-based modeling: Space and movement matter	Jeff Schank	University of California, Davis USA
P223	G	Flexibility of nest site preferences based on cue validity in the ant <i>Temnothorax rugatulus</i>	Gage Schaper, Takao Sasaki, Stephen Pratt	Arizona State University USA
P224		Size and experience, but not sex, predict dominance in a monomorphic weakly electric fish	Ana Silva, Gervasio Batista	Facultad de Ciencias, UdelaR Uruguay

P225	F	Safety in numbers: Shoaling as an anti-parasite defence in fathead minnows exposed to cercariae	Anthony Stumbo, Clayton James, Cam Goater, Brian Wisenden	University of Lethbridge Canada
P226		Mating cycle phase and size of year-round communal nests in feral monk parakeets in Brooklyn, NY	Alfie Supan, Frank Grasso	USA
P227		Mate familiarity and reproductive success in <i>Mesocricetus</i> hamsters	Mary Timonin, Sumona Bhattacharya, Robert Johnston	Cornell University USA
P228		Development of sex differential play behavior in Langur Infants (<i>Semnopithecus entellus entellus</i>)	Prateek Vijay, Goutam Sharma, L.S. Rajpurohit, Chena Ram	Jai Narain Vyas University (JNV) India
P229		Cooperatively breeding groups as superorganisms	Haven Wiley, Kerry Rabenold	Univ North Carolina USA
P230		For small social huntsman spiders in a saturated habitat, there is no place like home	Eric Yip, Linda Rayor	Cornell University USA

Poster Session B (P231 to P449)

Reception: Thursday 28 July

Session B posters must be put up by the end of the morning break on Thursday July 28.

Presenters should stand by their 'B' posters from 8pm to 9:30pm on Thursday July 28.

'B' Posters must be removed by 5:00pm on Friday July 29.*

G: ABS Genesis Award; F: ABS Founders' Award; T: Charles H. Turner Poster

# Session		Poster title	Authors	Organization
IMU Georgian Room				
ECOLOGICAL EFFECTS 2 (P309 TO P319)				
IMU Georgian Room				
P309		Alkylphenol effects on development, growth, reproductive behavior, and survival of crayfish	Daniel Bergman, Steve Gauthier	Grand Valley State University USA
P310		Effect of blood sampling on survivorship and site fidelity in field sparrows	Michael Carey, Robert Smith	University of Scranton USA
P311		Cognition and environmental toxicology: using maze tests to monitor fish contamination	Marisa Fernandes-de-Castilho, Bruno Strapasson, Ciro Ribeiro, Laura Batista	Universidade Federal do Paraná Brazil
P312		A novel resource-service mutualism between bats and pitcher plants	Ulmar Grafe, Caroline Schöner, Gerald Kerth, Anissa Junaidi, Michael Schöner	Universiti Brunei Darussalam
P313		Behavioral effects of pesticides on the agricultural pest predator, <i>Oxyopes salticus</i>	Catie Hanna, Chadwick Hanna	Robert Morris University USA
P314		Urban black widow infestations: the effect of relatedness on habitat choice and cannibalism	James Johnson	Arizona State University USA
P315		Female reproductive physiology and behavior in red colobus monkeys, <i>Procolobus rufomitratus</i>	Krista Milich, Rebecca Stumpf, Janice Bahr	University of Illinois USA
P316	F	Context-dependent effects of the environment on marmot personality traits	Matthew Petelle, Daniel Blumstein	University of California, Los Angeles USA
P317		Behavioral correlations in a jumping spider differ between treated and non-treated orchards	Raphael Royaute, Chris Buddle, Charles Vincent	McGill University Canada
P318		Handedness influences Darwinian fitness components	Sara Schaafsma, Reint Geuze, Wulf Schiefenhövel, Ton Groothuis	University of Groningen Netherlands
P319		Man-made mirror-like surfaces generate serious sensory illusions for echolocating bats	Björn Siemers, Sándor Zsebok, Daniela Schmieder, Stefan Greif	Max Planck Institute for Ornithology Germany
GENETICS & EVOLUTION 2 (P320 TO P332)				
IMU Georgian Room				
P320		Effects of environmental conditions on standing behavioral isolation in two species of killifish	Emma Berdan, Rebecca Fuller	University of Illinois USA
P321		Song complexity independent of anonymous and genic microsatellite diversity in a sparrow population	Jacob Brewer, Elizabeth MacDougall-Shackleton	University of Western Ontario Canada
P322		Experimental evolution of aggression, foraging and antipredation in <i>Drosophila melanogaster</i>	Michael DeNieu, Ian Dworkin	Michigan State University USA
P323		Paternal identity affects offspring swimming performance in Chinook salmon	Britney Falica, Dennis Higgs	University of Windsor Canada
P324		Seasonal variation in metabolism, flight activity, and ecology of <i>Anopheles gambiae</i> in Mali	Diana Huestis, A Yaro, A Traore, K Dieter, J Nwagbara, A Bowie, A Dao, T Lehmann	National Institutes of Health USA

	P325		Differences in survival found in t-haplotype carriers correlate with different animal personality	Barbara Koenig, Yannick Auclair, Anna Lindholm	University of Zurich Switzerland
	P326	F	Parasites and pathogens as players in the evolution of animal personality traits	Raine Kortet, Ann Hedrick, Anssi Vainikka	University of Eastern Finland Finland
	P327		Arachnolingua: a controlled vocabulary for spider behavior	Peter Midford	National Evolutionary Synthesis Center USA
	P328	F	A population genetic approach investigating effects of urbanization on the black widow spider	Lindsay Miles, Robert Ziemba, Brian Verrelli, J. Chadwick Johnson	Arizona State University USA
	P329	F	Transgenerational effects of lead on behavior in <i>Drosophila melanogaster</i>	Elizabeth Peterson, Helen Ghiradella, Bernard Possidente, Helmut Hirsch	SUNY Albany USA
	P330	F	Does host genetic structure reflect that of their bloodborne parasites?	Yanina Sarquis-Adamson, Elizabeth MacDougall-Shackleton	University of Western Ontario Canada
	P331		Heritability of exploratory/boldness behavioral syndrome in zebrafish	Brian Wisenden, Cory Sailer, Sonny Radenic, Randy Sutrisno	Minnesota State University Moorhead USA
	P332		The genetic architecture of fear: A QTL and eQTL experiment in the chicken	Dominic Wright, Per Jensen, Martin Johnsson	Linköping Universitet Sweden
PREDATION & FORAGING 2 (P371 TO P386)					
IMU Georgian Room					
	P371		Characteristics of water loss and gain in the wolf spider <i>Pardosa milvina</i>	Ryan Bell	Ohio State University USA
	P372		Behavioral syndrome in anti-predator responses of a beetle	Tatjana Krama, Indriks Krams, Santa Znotina	University of Daugavpils Latvia
	P373		Prey recognition response and the evolution of toxin resistance in a non-specialist predator	Leleña Avila, Edmund Brodie III	University of Virginia USA
	P374		Prey recognition of predator scent cues in a changing climate manipulative experiment	Sonny Bleicher, Burt Kotler, Joel Brown, Keren Embar	Ben Gurion University of the Negev Israel
	P375		An experimental study of exploitative behavior in <i>Argyrodes</i> spiders	Meghan Fitzgerald	University of Wisconsin, Madison USA
	P376		What is attacking prey models in warning color studies?	Hanh Han, Kimberly Pegram, Ron Rutowski	Arizona State Univ USA
	P377		Do female Japanese Water Snakes forage for toads to protect their offspring with toxins?	Yosuke Kojima, Akira Mori	Kyoto University Japan
	P378		Evolution of fearfulness and boldness in a bird population	Nan Lu, Yue-Hua Sun	Chinese Academy of Sciences China
	P379		Green Tree Frogs do not eavesdrop on prey signals	Daniel Neelon, Diana Kim, Gerlinde Höbel	Univ Wisconsin, Milw. USA
	P380		Blue jay calls affect the caching behavior of eavesdropping gray squirrels	Shawn Nordell, Thomas Valone, Courtney Harrington Tina Mozelewski	Saint Louis University USA
	P381		Fecal cortisol concentrations and behavior of Allenby's Gerbil foraging under the risk of predation.	Justin St. Juliana, Burt Kotler, Berry Pinshow, Noga Kronfeld-Schor	Indiana State University USA
	P382		Predator-naïve southeastern field crickets respond to the chemical cues of wolf spiders	Jon Storm, Ronnetta Sartor	University of South Carolina Upstate USA
	P383		Innate predator recognition and cultural transmission in domesticated Zebra Finches	Jennifer Templeton, Kelly Wiggen	Knox College USA
	P384	F	The effects of prey quantity and quality on black widow habitat choice and foraging behavior	Patricia Trubl, Lindsay Miles, J. Chadwick Johnson	Arizona State University USA
	P385		Slipper lobsters adjust bivalve-shucking behavior with prey size and shape	Maksim Vlasjuk, Frank Grasso	Brooklyn College, CUNY USA
	P386		Influence of learned handling times on hunting decisions in praying mantises	Kyle Whelan, Ethan Rundell, Jeremy Davis	USA
IMU Alumni Hall/Solarium					
APPLIED ANIMAL BEHAVIOR 2 (P231 TO P240)					
IMU Alumni Hall/Solarium					
	P231		Behavioral characterization of spontaneous epilepsy in <i>Trinomys yonenagae</i> , a Neotropical rodent	Lais Cantano, Elisabeth Oliveira	Universidade de São Paulo Brazil
	P232		Hot topics in wild snakes: Operant learning and thermal discrimination training in Burmese pythons	Sherri Emer, Michael Grace	Florida Institute of Technology USA
	P233		<i>Canis familiaris</i> conformation in hobby herding	Karen Kostan	Missouri Southern St USA
	P234		Group training of predator-naïve fish to recognize and respond to predators	Justin Olson, Jenae Olson, Rachel Walsh, Brian Wisenden	Minnesota State University USA
	P235	F	Pre-breeding behavior and breeding success in captive Puerto Rican Parrots (<i>Amazona vittata</i>)	Brian Ramos	University of Puerto Rico, Mayaguez Puerto Rico
	P236		Communal nest construction activity in monk parakeets varies with mating cycle and nest section	Hager Salem, Christopher Petersen, Frank Grasso	USA
	P237		Ethosearch: a new online resource for behavioral ethograms	Marisa Shender, E Lonsdorf, S Ross, S Thompson, M Ross, L Melber, A Clark	Lincoln Park Zoo USA
	P238		Effects of sexual pheromones and maturation on locomotor behavioral patterns in female sea lampreys	Erin Walaszczyk, Nicholas Johnson, Henry Thompson, Weiming Li	Michigan State University USA

P239		Stereotypic behavior of Aye-Ayes <i>Daubentonia madagascariensis</i> at Zoo Frankfurt/Main, Germany	Stephan Zander	Germany
P240		Ethics, invertebrates and animal welfare	Jennifer Mather	Univ Lethbridge Canada
BEHAVIORAL COMMUNITY ECOLOGY 2 (P241 TO P248) IMU Alumni Hall/Solarium				
P241		Hanuman Langur (<i>Semnopithecus entellus entellus</i>) females live longer than male langurs	L.S. Rajpurohit, Goutam Sharma	Jai Narain Vyas University (JNV) India
P242		Change in natural behavior of Hanuman Langur (<i>Semnopithecus entellus</i>) due to artificial feeding	Goutam Sharma, Prateek Vijay, Devi Lal, Lal Singh Rahpurohit	Jai Narain Vyas University (JNV) India
P243		The effects of an invasive shrub on antipredator behaviors of larval amphibians	Caleb Hickman, James Watling, John Orrock	USA
P244		Dangerous blossoms: how honey bees respond to signals and cues of competition and predation	James Nieh, Eben Goodale	University of California, San Diego USA
P245		Interference competition between a resident and migrant passerine during the non-breeding season	Kathryn Peiman, Greg Grether	University of California, Los Angeles USA
P246		Interactions between ectoparasites and innate immune function in free-living rodents	Evelyn Rynkiewicz, Hadas Hawlena, Keith Clay	Indiana University USA
P247		A game model for food competition and size composition of fish society	Takashi Uehara	SOKENDAI Japan
P248	F	Competition of geese species for nesting area near Peregrine falcon nests on Kolguev Island.	Elmira Zaynagutdinova	Saint Petersburg State University Russia
P248	½	Can predators assess the quality of their prey's resource?	Amanda C. Williams, Samuel S. Flaxman	University of Colorado, Boulder
COGNITION AND LEARNING 2 (P249 TO P272) IMU Alumni Hall/Solarium				
P249		The role of <i>fen-1</i> in long term memory formation following a learning challenge in honey bees	Arián Avalos, Tugrul Giray, Sandra Peña de Ortiz	University of Puerto Rico, Rio Piedras USA
P250		Cooperative social object play with seaweed by Atlantic spotted dolphins (<i>Stenella frontalis</i>)	Courtney Bender, Denise Herzing, Ashley Garlick	USA
P251		Ignoring personal and social information leads to persistence of habits by captive chimpanzees	Kristin Bonnie, Marissa Milstein, Steve Ross, Sarah Calcutt, Elizabeth Lonsdorf	Beloit College USA
P252		Ontogenetic effects on cooperative behaviour in marine cleaning mutualism	Redouan Bshary, Sharon Wismer, Ana Pinto	University of Neuchâtel Switzerland
P253		Perseveration and learning in orange winged Amazon parrots, <i>Amazona amazonica</i>	Victoria Cussen, Joy Mench	University of California, Davis USA
P254		The role of the cholinergic system and cerebellum in spatial cognition in zebra finch	Lainy Day, Diarra Williams, Brittany Simpson, M Coltharp, J Hamer, G Stinson	University of Mississippi USA
P255	F	The Behavioral Correlates of Frustration in the Fox Squirrel, <i>Sciurus niger</i>	Mikel Delgado, Lucia Jacobs	University of California, Berkeley USA
P256		Learning the concentration of an herbivore-related tomato volatile by <i>Cotesia congregata</i>	William Franklin, David Lincoln, Karen Kester	USA
P257		Insights from mobile robot controllers for resolution of conflict behaviors in a single animal	Frank Grasso	Brooklyn College, CUNY USA
P258		Pigeons (<i>Columba livia</i>) may monitor their own knowledge states and seek information.	Sumie Iwasaki, Sota Watanabe, Kazuo Fujita	Kyoto University Japan
P259		Learning kills: the effect of learning on honeybee survival	Sarah Jaumann, Dhruva Naug	Colorado State University USA
P260	F	Bayesian-like integration of terrestrial and celestial information in desert ants	Eric Legge, Antoine Wystrach, Marcia Spetch, Ken Cheng	University of Alberta Canada
P261		Spatial learning by pollinators behind the evolution of floral color change	Takashi Makino, Kazuharu Ohashi	University of Toronto Canada
P262		A novel case of tool-use in zoo-housed Western Lowland Gorillas (<i>Gorilla gorilla gorilla</i>)	Sue Margulis, Gary Steele, Raymond Kleinfelder	Canisius College USA
P263	F	Assessing mate preferences via operant conditioning in cichlid fishes	Angela Medina-Garcia, Moira van Staaden	Bowling Green State University USA
P264		A chimpanzee (<i>Pan troglodytes</i>) recognizes acoustically impoverished synthetic speech.	Michael Owren, Lisa Heimbauer, Michael Beran	Georgia State University USA
P265		Signaling interactions in a skinner's box	Timothy Polnaszek	Univ Minnesota USA
P266	F	Ontogenetic changes in learning capability of jack mackerel during habitat shifts	Kohji Takahashi, Reiji Masuda, Yoh Yamashita	Kyoto University Japan
P267		Conditioned flavour preference in pigs: comparison between caloric and/or gustative reinforcements	David Val-Laillet, Caroline Clouard, Mathieu Chataignier, Marie-Christine Meunier-Salaün	Institut Nat Recherche Agro (INRA) France
P268	F	Color preference in the pipevine swallowtail, Battus philenor: Is hue or brightness more important?	D. Lisa Wang, Daniel Papaj	University of Arizona USA
P269		Revisiting action perception in cotton-top tamarins (<i>Saguinus oedipus</i>)	Daniel Weiss, Kate Chapman	Penn State University USA
P270		Head-colour reflects personality in the Gouldian finch (<i>Erythrura gouldiae</i>)	Leah Williams, Andrew King, Claudia Mettke-Hofmann	Liverpool John Moores University UK

P271	F	Prospective memory in the rat	Arlington Wilson, Jonathon Crystal	Indiana University USA
P272		How do salticid secondary eye optics correlate with visually guided behavior?	Daniel Zurek, David O'Carroll, Ximena Nelson	Macquarie University Australia
CONSERVATION (P273 TO P281)				
IMU Alumni Hall/Solarium				
P273		The effect of human activities and their associated noise on ungulate behavior	Lisa Angeloni, Casey Brown, Amanda Hardy, Jesse Barber, K Fristrup, K Crooks	Colorado State University USA
P274		Variation in personality of urban vs natural lands San Joaquin kit fox, <i>Vulpes macrotis mutica</i>	Samantha Bremner-Harrison, Brian Cypher	Nottingham Trent University UK
P275		Generalization of introduced predators by a threatened salamander	Drew Davis, Caitlin Gabor	Texas State University - San Marcos USA
P276		Predator recognition in response of the Barton Springs salamander, <i>Eurycea sosorum</i>	Dominic DeSantis, Drew Davis, Caitlin Gabor	Texas State University - San Marcos USA
P277	F	Changes in population density & ranging movements of Mariana Crows (<i>Corvus kubaryi</i>) from 1996-2010	Sarah Faegre, Renee Ha, James Ha	University of Washington USA
P278		Hatchling behavioral differences in high and low recruitment populations of the gopher tortoise	Aaron Holbrook, Jodie Jawor, Carl Qualls	University of Southern Mississippi USA
P279	F	Pedestrian foot traffic disturbs ovipositing Karner blue butterflies	Vanessa Quinn, Victoria Bennett, Patrick Zollner	Purdue University North Central USA
P280	F	Effects of turbidity and visual versus chemical cues on predator avoidance in the fountain darter	Lily Swanbrow, Caitlin Gabor	Texas State University - San Marcos USA
P281		Behavior of reared Japanese flounder as both predator & prey: implications for stock enhancement	Michelle Mick Walsh, Reiji Masuda, Yoh Yamashita	University of New Hampshire USA
COMMUNICATION 2 (P282 TO P308)				
IMU Alumni Hall/Solarium				
P282		Nuclear species dynamics: an experimental study of Carolina chickadees and tufted titmice	Julia Bartmess-LeVasseur, Alexandria Hickman, Joseph Wright, Jesse Papa	University of Tennessee USA
P283		Tail-lifting as an anti-predator signal in trogons	Pierre-Paul Bitton, Stéphanie Doucet	Univ Windsor Canada
P284	F	Differences in <i>Lemur catta</i> responses to the vocalizations of a novel predator	Laura Bolt	University of Toronto Canada
P285		Testing hypotheses on distress calling in tufted titmice: support for vocal protean defense	Carrie Branch, Todd Freeberg	Univ North Carolina, Willmington USA
P286		Vocal and behavioral responses of mixed-species flock members to novel stimuli at feeding stands	Sheri Browning, Sheri Browning, Kathleen Morrison, C Newton, S Winters, V Terry	University of Tennessee, Knoxville USA
P287	F	Song and male quality in Black-throated Sparrow, <i>Amphispiza bilineata</i>	Carina Castro, Anne Houtman	California State, Fullerton USA
P288		Neighbor-stranger discrimination in the Bolivian gray titi monkey, <i>Callicebus donacophilus</i>	Kimberly Dingess, Anna Gabel	Indiana University USA
P289		The evolution of fairy-wren trills from alarm context to display: a possible path to novel signals	Emma Greig, Michael Webster	Cornell University USA
P290		Burying beetle bioacoustics: The role of sound in intraspecific communication in <i>Nicrophorus</i>	Carrie Hall, Daniel Howard, Andrew Mason, Rosemary Smith	Augustana College USA
P291	F	Signal complexity and female memory in gray treefrogs (<i>Hyla versicolor</i>)	Sarah Humfeld	University of Missouri USA
P292		Interspecific diversity of acoustic signal structure in nocturnal lizards, <i>Gekko</i> species	Teppej Jono	Kyoto University Japan
P293		Human-directed gazing in Japanese Akita Inu	Akitsugu Konno, Toshikazu Hasegawa	Univ Tokyo Japan
P294		The scream of the weeping lizard: investigating its function	Antonietta Labra, Misque Hoare, Andrea Zapata, Javiera Constanzo	University of Oslo; Univ Chile Norway
P295		Early vocal development and associated parental behavior in grasshopper sparrows	Bernard Lohr, Lacey Laudick	University of Maryland, Baltimore County USA
P296		Territorial intrusions are related to the peak frequencies of yodels given by male common loons	Jay Mager, Charles Walcott, Julie Backus, Emily Nebgen, Dexter Norris	Ohio Northern University USA
P297	F	Motivation-structural code and extended song in neighbor-stranger discrimination interactions	Leesia Marshall	University of Arkansas, Fayetteville USA
P298	F	Tail signals of eastern gray squirrels include both generic and predator-specific alarms	Thaddeus McRae	University of Miami USA
P299		Song and syllable use evolution in Fuelleborn's Sunbirds, <i>Nectarinia fueleborni</i>	Nadje Najar, Jay McEntee	USA
P300	F	Ancestral state reconstruction and life history correlates of duetting in the New World blackbirds	Karan Odom, Kevin Omland, J. Jordan Price	University of Maryland, Baltimore County USA
P301	F	Effects of urban noise on song structure in a sedentary and migratory bird species	Jenny Phillips, Pedro Garcia, Lauryn Moles	California State University, Fresno USA
P302		Variation in male-built courtship structures in the fiddler crab <i>Uca musica</i> : Signal or noise?	Denise Pope, Kathryn Chang, Alison Zulick	Mount Holyoke College USA
P303	F	Field test of an affordable wireless microphone array that fits in a backpack	Matthew Battiston, David Wilson, Daniel Mennill	Univ Windsor Canada
P304		Complex communication via acoustic and seismic signals in <i>Gladicosa gulosa</i> wolf spiders	Alexander Sweger, George Uetz	University of Cincinnati USA

	P305		Light-environment-dependent female choice for male ornamental coloration in a jumping spider	Lisa Taylor, Kevin McGraw	Arizona State University USA
	P306		Comparison of <i>Anabrus simplex</i> and <i>Peranabrus scabricollis</i> calls	Lara Trozzo, Patrick Lorch	Kent University USA
	P307	F	Changing the song: vocal plasticity in the Clay-colored Thrush <i>Turdus grayi</i> through time	Luis Vargas, Natalie Sánchez, Gilbert Barrantes	Universidad de Costa Rica Costa Rica
	P308		Anthropogenic noise, calling behavior, and habitat use by the frog <i>Ranitomeya bombetes</i>	Fernando Vargas-Salinas, Adolfo Amezcuita	University of Los Andes Colombia
MATING SYSTEMS 2 (P333 TO P344)					
IMU Alumni Hall/Solarium					
	P333		Ecological and neuroanatomical correlates of mating system variation in <i>Microtus kikuchii</i>	Amanda Chappell, Kirk Lin, Larry Young, Sara Freeman, Loren Hayes	University of Louisiana at Monroe USA
	P334		Seasonal variation in singing behavior reflects high competition for mates in a tropical bird	Ioana Chiver, Bridget Stutchbury, Eugene Morton	York University Canada
	P335	F	Behavioral studies in lizard species of the Liolaemidae family: Experiences from Argentina	Monique Halloy, Cecilia Robles, María José Salica	Fundación Miguel Lillo Argentina
	P336	F	Parallel changes in mating calls and female preferences in autotriploid treefrogs	Mitch Tucker, H. Carl Gerhardt	University of Missouri USA
	P337	F	Differences in behavioral type among females of a unisexual-bisexual mating complex	James Muraco, Caitlin Gabor, Andrea Aspbury	Texas State University - San Marcos USA
	P338		Testosterone and pair-bonding effects on ultrasonic courtship vocalizations in a monogamous mouse	Joshua Pultorak, Matina Kalcounis-Rueppell, Matthew Fuxjager, C Marler	University of Wisconsin, Madison USA
	P339		The effects of avian malaria on reproductive success and migration behaviour in a colonial swallow	Cassandra Silverio, Bridget Stutchbury	York University Canada
	P340	F	The ontogeny of multi-level societies: The Socio-genetic structure of geladas (<i>Theropithecus gelada</i>)	Noah Snyder-Mackler, Susan Alberts, Thore Bergman	University of Pennsylvania USA
	P341		Group characteristics affect aggression levels and pregnancy outcomes in pigtailed macaques	Adrienne Sussman, James Ha, Hayley Alloway	University of Washington USA
	P342		Higher temperatures mean fewer eggs? The impact of the warming world on a tropical seabird species	Adriana Vallarino, César González-Zuath, Alfonso Vázquez-Botello	UNAM Mexico
	P343	F	Cooperative breeding in Kalij Pheasant (<i>Lophura leucomelanos</i>): the role of habitat saturation	Lijin Zeng	University of California, Riverside USA
	P344		Song variation in Carolina chickadees (<i>Poecile carolinensis</i>) and implications for hybridization	Karen Zusi, Robert Curry	Villanova University USA
MECHANISMS 2 (P345 TO P357)					
IMU Alumni Hall/Solarium					
	P345		Stress physiology, sexually selected traits, and reproductive success in the mountain white-crowned	Ondi Crino, Creagh Breuner	University of Montana USA
	P346		The complex relationship of male Northern Cardinals, aggression, and testosterone (T)	Susan DeVries, Caitlin Winters, Jodie Jawor	University of Southern Mississippi USA
	P347	F	Visual perception and object recognition of the African cichlid, <i>Melanochromis auratus</i>	Jeremy Didion, Robert Huber, Moira van Staaden	Bowling Green State University USA
	P348		Energetic stress in a tropical forest guenon: causes and implications for female reproduction	Steffen Foerster, Marina Cords, Steven Monfort	Boston College USA
	P349		Changes in sex steroids and territorial aggression in free-living hummingbirds	Paulina Gonzalez-Gomez, WS Blakeslee, S Hiebert, J Wingfield	University of California, Davis USA
	P350		Plasma androgens & brain AR cell counts correlate with species differences in aggression in <i>Sceloporus</i>	Diana Hews, Erina Hara, Maurice Anderson	Indiana State University USA
	P351		Reproductive and physiological costs of repeated immune challenges in female Wellington tree weta	Clint Kelly	Iowa State University USA
	P352		Feather testosterone and cortisol predict survival in wild house sparrows	Lee Koren, Shinichi Nakagawa, T Burke, K Soma, K Wynne-Edwards, E Geffen	University of Calgary Canada
	P353	F	Sexual signals, immunity and CORT in two Icterid blackbirds: static signals meet current condition	Loren Merrill, Adrian O'Loughlen, Stephen Rothstein, John Wingfield	University of California, Santa Barbara USA
	P354		Effects of T on spatial strategies of adult male rats	Mark Spritzer, Elliott Fox, Greg Larsen	Middlebury College USA
	P355		Pterin, not carotenoid, pigments underlie the female-specific ornament of striped plateau lizards	Stacey Weiss, Katharina Foerster, Jocelyn Hudon	University of Puget Sound USA
	P356		GABA, glutamate and ant aggressive behavior: inter-specific differences	A Wnuk, W Kostowski, J Korczynska, A Szczuka, B Symonowicz, et al.	Nencki Institute of Exp Biology Poland
	P357		Behavioral and hormonal correlates of rednecks in masculinized female threespine sticklebacks	Lengxob Yong, Devaleena Pradhan, Matthew Grober, Jeffrey McKinnon	East Carolina University USA
PARENTAL CARE 2 (P358 TO P370)					
IMU Alumni Hall/Solarium					
	P358		Parental care in an Arizona population of <i>Helobdella stagnalis</i> (Hirudinea: Glossiphoniidae)	Becky Beresic-Perrins, Stephen Shuster	Northern Arizona University USA
	P359	F	Nest defense behavior by Carolina Wrens (<i>Thryothorus ludovicianus</i>) in an urban environment.	Ashley Bogrand, Diane Neudorf	Sam Houston State University USA
	P360		Parental care by an avian brood parasite: provisioning offspring with enhanced immune defenses	Caldwell Hahn, Lawrence Igl, Gisela Erf, James Burnett	USGS - Patuxent Wildlife Research Center USA

P361	F	Incubation behavior in a hummingbird is explained by self-maintenance, not embryonic temperature	Rachel Hanauer, Gustavo Londoño	Indiana University USA
P362		Effects of breeding habitat on other reproductive traits of poison frogs	José Alfredo Hernández Díaz, Adolfo Amézquita	Colombia
P363		Effect of paternal care on offspring behavior and whole genome expression in threespined stickleback	Katie McGhee, Alison Bell	University of Illinois USA
P364		Spawning same-sex pairs of convict cichlids show parental roles are chosen based on gender not ability	Nick Santangelo, Alyssa Underwood	Eastern Kentucky University USA
P365		Parental favoritism for offspring sex and ornamentation is influenced by mate quality	Lynn Siefferman, Nicole Barrios	Appalachian State University USA
P366	F	Modeling the coevolution of biparental care, brood need, and pair-bond networks	Zhiyuan Song, Joan Roughgarden, Marc Feldman	Stanford University USA
P367		Natural variation in parenting behavior in the threespine stickleback <i>Gasterosteus aculeatus</i>	Laura Stein, Alison Bell	University of Illinois USA
P368	F	Factors affecting variability of infant development during parental period in Common Marmosets	Ikuko Tatsuta, Nobuyuki Kitsukake, Chihiro Yokoyama, H Onoe, M Hasegawa	SOKENDAI Japan
P369		Where to place your eggs: the effects of conspecific eggs and water depth on oviposition decisions	Daniel Welsh, Rebecca Fuller	University of Illinois USA
P370		Anti-predator competence in convict cichlids: offspring development, brood defense and predators	N Williams, K Fritel, A Stumbo, P Self, J Sneker, D McEwen, E Brisch, B Wisenden	Minnesota State University Moorhead USA
SEXUAL SELECTION 2 (P387 TO P413)				
IMU Alumni Hall/Solarium				
P387		Does lek disruption alter female mate preferences?	Richard Buchholz	Univ Mississippi USA
P388		Were feeding responses involved in the evolution of the sword as a sensory trap in swordtail fishes?	Jaime Camacho, Oscar Rios-Cardenas, Constantino Macías Garcia	UNAM México
P389		Male size versus breeding site possession: Female mate choice behavior in Convict Cichlids	Melissa Carlile, A McHenry, J Gagliardi-Seeley, M Kyer, N McVay-Bartnes	Metro State College of Denver USA
P390		Fluctuating asymmetry in the breeding biology of the blue-black grassquit	Leonardo Castilho, Jonas Maravalhas, Regina Macedo	Universidade de Brasília Brazil
P391		Nuptial Thief: Male spiders steal food from partners	Anne Danielson-Francois, Yevhen Drobot	Univ Michigan - Dbn USA
P392		Female preference for novel males in guppies: does a fresh face matter?	Robin Graber, Madhavi Senagolage, Elizabeth Ross, Anne Houde	Lake Forest College USA
P393		Traits influencing male mating success in a field caught cricket, <i>Gryllus pennsylvanicus</i>	Caitlin Grant, Ian Thomson, Sarah Harrison, Susan Bertram	Carleton University Canada
P394		Dietary nutrient balance and cricket fitness: a geometric analysis approach to studying nutrition	Sarah Harrison, Susan Bertram	Carleton University Canada
P395		What overcome body size adverse?	Yoshihito Hongo	Kyoto University Japan
P396		Sex and weaponry: female aggression in sexually dimorphic, monogamous snapping shrimp	Melissa Hughes, Kathleen Hollowell, Rachel Vickery	College of Charleston USA
P397	F	Alt tactics & male attractiveness in <i>Hyla versicolor</i>	Diana (Son Young) Kim, Gerlinde Hoebel	Univ Wisconsin, Milw USA
P398		Should he stay or should he go: the function of male attendance in a parasitic wasp	Bethia King, Kaylee Kuban	Northern Illinois University USA
P399		Female mate preference is independent of male hormone-mediated courtship behavior in a cichlid	Joseph Leese	Lehigh University USA
P400		Preference for lateral projection area in Poeciliids	Ronald MacLaren, Adam Fontaine	Merrimack College USA
P401	F	Evolution of iridescence in <i>Coeligena</i> hummingbirds: new methods, new insights	Rafael Maia, Juan Parra, Matthew Shawkey	University of Akron USA
P402		Divergence of secondary sexual traits in allopatry	Michael Martin, Tamra Mendelson	Univ Maryland, BC USA
P403	F	Dietary protein affects iridescent coloration in Anna's hummingbirds (<i>Calypte anna</i>)	Melissa Meadows, Kevin McGraw	Arizona State University USA
P404		Sick but sexy? Manipulation of host sexual signals for parasite transmission	Adrienne Mora, Marlene Zuk	University of California, Riverside USA
P405		Mate sampling & choice: a conceptual framework	Christopher Murphy	Indiana State Univ USA
P406		Differences in sperm attributes across populations of the horseshoe crab, <i>Limulus polyphemus</i>	Daniel Sasson, Jane Brockmann	University of Florida USA
P407		Temporal variability of sexual selection in Australian <i>Drosophila bipectinata</i>	Jane Sledd, Alexandra Warner, Michal Polak	USA
P408		Mate availability and hybridization in the three-spined stickleback	Robin Tinghitella, Janette Boughman	Michigan State University USA
P409	F	Differential effects of a stressor on the expression of acoustic and visual ornaments.	Jeff Van Camp, Rianne Pinxten, Marcel Eens	Universiteit Antwerpen Belgium
P410	F	Egg color influences the nestling provisioning rate of male house wrens	Lindsey Walters	Northern Kentucky University USA
P411		Protein-specific manipulation of ejaculate composition in response to female mating status	Laura Sirot, Stuart Wigby, Mariana Wolfner	College of Wooster USA
P412	F	Socially monogamous male prairie voles recognize male, but not female identity.	Da-Jiang Zheng, Britta Larsson, Alex Ophir	Oklahoma State University USA

SOCIAL BEHAVIOR 2 (P414 TO P448)

IMU Alumni Hall/Solarium

P414		Social Interactions in the colonial Mygalomorph <i>Heterothele villosella</i> (Strand 1907)	Jennifer M. Bosco, Brian Moskalik	College of the Holy Cross USA
P415	F	Tolerance & cooperation in social felids, <i>Panthera leo</i>	Natalia Borrego	University of Miami USA
P416		Evidence for direct but not indirect reciprocity in the exchange of services between rhesus macaques	Lauren J Brent, Ann MacLarnon, Stuart Semple	Duke University USA
P417	F	A non-invasive method for the automatic recording of movements of naked mole-rats in the laboratory.	Frank Castelli	Cornell University USA
P418		The effect of group size on rheotactic performance in schooling giant danio	Joseph Coleman, Sachit Butail, Derek Paley, Sheryl Coombs	Bowling Green State University USA
P419		Subordinate eastern chipmunks preferentially rob the caches of dominant animals	Katherine Daniels, Lynn Devenport	USA
P420		Sociality in freshwater aquatic turtles (Emydidae)	Karen Davis	Univ Tennessee USA
P421		Do Social Factors Influence Sexual Badge Dimorphism in Cooperatively Breeding Pukeko?	Cody Dey	McMaster University Canada
P422		Color vision in Canada geese: an "oblique" violet-sensitive system	Megan Doppler, Patrice Baumhardt, Bret Moore, J Randolet, E Fernández-Juricic	Purdue University USA
P423		Division of labor, movement and stability in the sea anemone <i>Anthopleura elegantissima</i>	Anthony D'Orazio, Ian Hamilton, Marymegan Daly	Ohio State University USA
P424		The effects of social environment on mangrove rivulus <i>Kryptolebias marmoratus</i>	Adam Fuller	University of Alabama USA
P425	F	Mechanisms driving winner and loser effects in the green anole lizard (<i>Anolis carolinensis</i>)	Mark Garcia, Joe Murphree, Jonathan Wilson, Ryan Earley	University of Alabama USA
P426		Hormonal effects of maltreatment in Nazca booby nestlings: implications for the cycle of violence	Jacquelyn Grace, Karen Dean, Mary Ann Ottinger, David Anderson	Wake Forest University USA
P427		The interplay between monkey see and monkey do: Visual access in a social preference task	Helen Marie Graves, Daniel Weiss	Pennsylvania State University USA
P428		Phenotypic variation and the evolution of eviction and unconditional self-restraint	Ian Hamilton	Ohio State University USA
P430		Enriched open field facilitates exercise & social interaction in guinea pigs, <i>Cavia porcellus</i>	Gale Kleven; J.S. Brewer, M. Voogd, L. Rosenthal, and G.A. Kleven	Wright State University USA
P431	F	Influence of social encounters in captivity on new interactions between <i>Microtus pennsylvanicus</i>	Amaranta Kozuch, Elsbeth McPhee	University of Wisconsin, Oshkosh USA
P432		Lateral bias in aggressive behavior among male sage-grouse?	Alan Krakauer, Melissa Blundell, Tawny Scanlan, E McCloskey, J Yu, G Patricelli	University of California, Davis USA
P433		Does peer pressure matter? Social environment influences on behavioral strategy use in sticklebacks	Kate Laskowski, Alison Bell	University of Illinois USA
P434		The impact of third-party interactions on behavior and growth in <i>Neolamprologus pulcher</i>	Isaac Ligocki, Ian Hamilton	Ohio State University USA
P435		Social hierarchy and the development of dancing ability in young manakins	Katrina Lukianchuk, Stephanie Doucet	University of Windsor Canada
P436		Distribution & function of affiliative behavior in lions	T Matoba, N Kutsukake, T Hasegawa	University of Tokyo Japan
P437		Cooperation without enforcement in incipient colonies of the ant <i>Camponotus floridanus</i>	Dani Moore, Jürgen Liebig	Arizona State University USA
P438		Individual differences in social behavior: part of a behavioral type with consequences for growth	Simon Pearish, Alison Bell	University of Illinois USA
P439		Group mates: how closely is vigilance monitored?	J Randolet, J Lucas, E Fernandez-Juricic	Purdue University USA
P440		How and when to cooperate: social foraging dynamics in neotropical spiders	Maxence Salomon, Karen Whitaker	University of British Columbia Canada
P441		Examining dominance and stress relationship in a non-cooperative breeder (<i>Equus caballus</i>)	Bruce Schulte, Carly Sinderbrand	Western Kentucky University USA
P442	F	Social network dynamics among spotted hyenas	Jennifer Smith, C Strelhoff, K Holekamp	UCLA USA
P443		Automated video analysis of animals in natural habitat	Martin Stumpe	USA
P444		Food abundance, group foraging and territorial interaction in a California orb weaving spider	Mark Tiemeier, George Uetz	University of Cincinnati USA
P445		Decision making during group movement in feral horses (<i>Equus caballus</i>)	Kaori Tsuboyama, Masaru Akita, Mariko Hasegawa, Nobuyuki Kutsukake	SOKENDAI Japan
P446		Seeing (wild) dogs through 'new eyes': 'Reading' body language and cooperative behavior	Harry Wels	VU University Amsterdam Netherlands
P447		Shoal choice in Killifish (<i>Aphanius chantrei</i>) (Galliard, 1895), an endemic species from Turkey	Elif Yamac, Serdar Öncül	Anadolu University Turkey
P448		Chick-a-dee call variation in the context of 'flying' avian predator stimuli	Chris Zachau	USA