

7-2019

Human-Animal Bonding in Animal-Assisted Interventions in Counseling

Ariann Evans Robino
Nova Southeastern University, arobino@nova.edu

Virginia Buechener-Maxwell
Virginia-Maryland College of Veterinary Medicine, bmax@vt.edu

Follow this and additional works at: https://nsuworks.nova.edu/cps_facpresentations

 Part of the [Psychology Commons](#)

NSUWorks Citation

Robino, A. E., Buechener-Maxwell, V. (2019). Human-Animal Bonding in Animal-Assisted Interventions in Counseling. .

Available at: https://nsuworks.nova.edu/cps_facpresentations/4166

This Conference Presentation is brought to you for free and open access by the College of Psychology at NSUWorks. It has been accepted for inclusion in Faculty Proceedings, Presentations, Speeches and Lectures by an authorized administrator of NSUWorks. For more information, please contact nsuworks@nova.edu.



ISAZ
2019

ANIMALS
in the Public Eye:
INTERACTIONS AND
PERCEPTIONS OF ANIMALS

PROCEEDINGS



Abstracts represent the information as submitted by the corresponding author. Content has not been altered; however, not all submitted information was included. Appearance may have been changed for stylistic reasons.

© International Society for Anthrozoology



Purina is Proud to Sponsor

International Society for Anthrozoology - Animals in the Public Eye: Human Interactions and Perceptions of Animals



Your Pet, Our Passion.™

Trademarks owned by Société des Produits Nestlé S.A., Vevey, Switzerland



Opportunities in human-animal interaction, applied animal behaviour and data science coming soon

Contact Dr Darren Logan, Head of Research, for more information
contactwaltham@effem.com

MARS
Petcare

A Better 
World For Pets

 **WALTHAM**™

About the International Society for Anthrozoology

The International Society for Anthrozoology (ISAZ) was formed in 1991 as a supportive organization for the scientific and scholarly study of human–animal interactions. ISAZ is a nonprofit, nonpolitical organization with a worldwide, multi-disciplinary membership of students, scholars and interested professionals.

Our mission is to serve the growing community of scholars and scientists working in the field of Anthrozoology (the study of human–animal interactions and relationships) by supporting research, publishing and disseminating new insights and discoveries, and promoting the exchange of knowledge and expertise within the field.

To learn more, please explore our web site: www.isaz.net.

ISAZ Board 2019

PRESIDENT

Cheryl A. Krause-Parello, PhD, RN, FAAN
Florida Atlantic University, USA

TREASURER & PRESIDENT-ELECT

Kristen Jacobson, PhD
University of Chicago, Department of Psychiatry
& Behavioral Neuroscience, USA

SECRETARY FOR COMMUNICATIONS

Maggie O’Haire, PhD
Purdue University, College of Veterinary
Medicine, Center for the Human-Animal Bond,
USA

INTERIM SECRETARY FOR DEVELOPMENT

James Serpell, PhD
University of Pennsylvania, School of Veterinary
Medicine, USA

PROGRAMS OFFICER

Carri Westgarth, MPH, PhD
University of Liverpool, Faculty of Health and Life
Sciences, UK

EDITOR, ANTHROZOÖS (ex officio)

Anthony Podberscek, PhD
University of Sydney, Faculty of Science, Australia

RECENT PAST PRESIDENT (ex officio)

Erika Friedmann, PhD
University of Maryland, School of Nursing, USA

RECENT PAST TREASURER (ex officio)

Benjamin L. Hart, DVM, PhD
University of California, Davis, School of
Veterinary Medicine, Department of Anatomy,
Physiology, and Cell Biology, USA

BOARD MEMBERS

Sandra Barker, PhD
Virginia Commonwealth University, Medical Cen-
ter, Department of Psychiatry, USA
Director, School of Medicine Center for
Human-Animal Interaction

Pauleen Bennett, PhD
La Trobe University, Department of Psychology
and Counselling, Australia

Matt Chin, PhD
University of Central Florida, Department of
Psychology, USA

Nancy Gee, PhD
State University of New York at Fredonia,
Department of Psychology, USA
Professor & Waltham HAI Research Manager

Brinda Jegatheesan, PhD, MEd
University of Washington, College of Education,
Educational Psychology, USA

Birgit U. Stetina, PhD
Sigmund Freud University Vienna, Department of
Psychology, Austria

Mariko Yamamoto, PhD
Teikyo University of Science, Department of
Animal Sciences, Japan

Lee Zasloff, PhD
Sierra College, Department of Psychology, USA

STUDENT BOARD MEMBER

Molly Crossman, PhD Candidate
Yale University, Department of Psychology, USA

IAHAIO REPRESENTATIVE (ex-officio)

Marie-Jose Enders-Slegers, PhD
Open Universiteit Nederland, Netherlands

ADMINISTRATIVE MANAGER

Abigail Thigpen, BS
University of California, Davis, School of
Veterinary Medicine, Department of Population,
Health & Reproduction, USA



Animal Sentience

An interdisciplinary
journal of animal feeling

- Open access
- No publication fees
- Open peer commentary

CALL FOR PAPERS

animalstudiesrepository.org/animsent

→ For additional information,
contact Erich Yahner
at eyahner@humanesociety.org.



**THE HUMANE SOCIETY
OF THE UNITED STATES**

Contents

Welcome .....	.7
Acknowledgements .....	.8
Map of Conference Venue .....	.9
Conference Program Summary .....	.10
Conference Program Schedule .....	.12
ISAZ2019 Conference Program Sponsors .....	.16
Plenary Speakers .....	.18
Student Award Competition List .....	.22
Oral Presentation Abstracts .....	.23
Monday, July 1 – 9:00am–2:00pm	
<i>Special Symposium: Humane Education</i> .....	.23
Tuesday, July 2 – 10:40am–12:00pm	
<i>Concurrent Sessions: Humane Education</i> .....	.24
<i>Concurrent Sessions: AAT/AAI #1</i> .....	.26
<i>Symposium: How Do Shifting Perspectives of Nonhuman Animals Show up in Law & Policy? Special Student Panel Discussion</i> .....	.28
<i>Symposium: The Importance of Perception of Emotional Support and Service Animals, Handlers with Disabilities, and the Sources That Influence These Attitudes, Panel Discussion</i> .....	.32
Tuesday, July 2 – 1:40pm–3:00pm	
<i>Special Workshop: Why Dogs Bite People</i> .....	.33
<i>Concurrent Sessions: Educating About Animals</i> .....	.34
<i>Concurrent Sessions: Contemporary Issues in Anthrozoology</i> .....	.36
<i>Symposium: Service Dogs in the Public Eye, Panel Discussion</i> .....	.37
Tuesday, July 2 – 3:30pm–5:00pm	
<i>Concurrent Sessions: Differences between Us</i> .....	.38
<i>Concurrent Sessions: AAT/AAI #2</i> .....	.40
<i>Symposium: Taking Anthrozoology Public: Reaching a Broader Audience for Your Research, Panel Discussion</i> .....	.42
Wednesday, July 3 – 10:40am–12:20pm	
<i>Concurrent Sessions: Companion Animals in Society</i> .....	.43
<i>Concurrent Sessions: Perceptions of Zoos</i> .....	.45
<i>Symposium: Placing Animals in the Public Eye: Art and Activism as Frames of Reference</i> .....	.47

Contents...continued

Wednesday, July 3 – 4:10pm–6:10pm	
<i>Waltham/NICHHD-Sponsored Presentations</i> . . . . .	.48
<i>Concurrent Sessions: Contemporary Companion Animal Issues</i> . . . . .	.50
Symposiums:	
<i>Dogs in First Nations: Using Community Based Participatory Research to Explore Human–Dog Relationships and Inform Dog Management Strategies</i> . . . . .	.52
<i>Animal-themed Tattoo Narratives: Insights into Ontological Perspectives and Multispecies Families</i> . . . . .	.53
Thursday, July 4 – 9:00am–10:40am	
<i>Concurrent Sessions: AAT/AAI #3</i> . . . . .	.53
Symposium: <i>A Comprehensive Review of Therapy Animal Standards, Procedures, and Registration Information Represented in the Existing Animal-Assisted Interventions Literature</i> . . . . .	.55
Symposium: <i>Conversing for Consensus: Emotional Support Animals</i> . . . . .	.55
Thursday, July 4 – 11:00am–12:20pm	
<i>Concurrent Sessions: Perceptions of Wildlife</i> . . . . .	.56
<i>Concurrent Sessions: Shifting Perceptions</i> . . . . .	.57
Symposium: <i>My Dog Needs a Letter! Multidisciplinary Implications of Certifying Emotional Support Animals</i> . . . . .	.58
<i>Concurrent Sessions: Undergraduate Research Highlights: Are More Involved Pet Owners Better Prepared for Disasters?</i> . . . . .	.59
Abstracts of Posters (in alphabetical order by author’s last name) . . . . .	.61
Author Index . . . . .	.80

Dear colleagues and fellow anthrozoologists,

It is my privilege to welcome you to Orlando, The City Beautiful! Each year, the city welcomes more than 70 million visitors from around the world. From its humble beginning as the hub of Florida's citrus industry, Orlando has transformed into the 6th largest metropolitan area in the southern United States.

Beyond the world-class theme parks, this area is a favorite for travelers because of the many cultural and natural experiences available. Florida is recognized as a global biodiversity hotspot due to the fact it is home to more than 2,000 endemic species of flora and fauna. This extraordinary biodiversity can be found throughout the eighty distinct ecosystems in the state. Florida is also the only place in the world where alligators and crocodiles coexist.

This year's theme of *Animals in the Public Eye: Human Interactions and Perceptions of Animals* was selected due to the contemporary changes in societal expectations regarding the relationship and interactions with the multitude of non-human animals we share our lives with. Additionally, this theme reflects Orlando's unique position as an entertainment destination featuring several recognizable animal facilities and the fallout from recent controversies surrounding these facilities.

This year's presentations represent every aspect of contemporary anthrozoology, from conservation of wild animals to zoos and aquariums to companion animal studies. I hope you are able to expand your horizons, create new connections, and reconnect with old friends during your time here in Orlando.

Thank you for attending the 28th annual conference, your continued support of the International Society for Anthrozoology, and for your continued contributions in examining the complex relationship between humans and non-human animals. I hope you enjoy the conference and everything Orlando has to offer.



Brian Ogle, EdD
2019 Conference Chair
Assistant Professor of Anthrozoology, Beacon College

Acknowledgements

CONFERENCE COMMITTEE & SUPPORTERS

Brian Ogle
Carri Westgarth
Bryan Cushing
Kristen Jacobson
James Serpell
Chrissy Case

GRAPHIC DESIGN AND PROGRAM LAYOUT

Andrea Leigh Ptak/**Communicating Words & Images**
andrealeighptak@me.com
www.andrealeighptak.com

We would like to thank the numerous individuals who volunteered their time to serve as an abstract reviewer for the 2019 conference.

We would like to thank the continued support of the **Beacon College Administration** as well as the **Board of Directors of the International Society for Anthrozoology**. In addition, we thank the **students in the anthrozoology program at Beacon College** for their contributions and time in making the conference run smoothly.



PHOTO CREDIT: Andrea Leigh Ptak

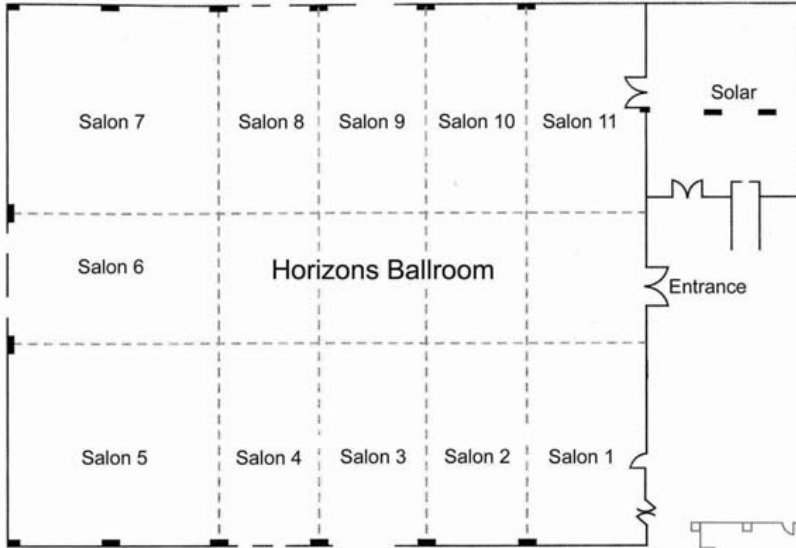
Map of Conference Venue

imagine the possibilities!

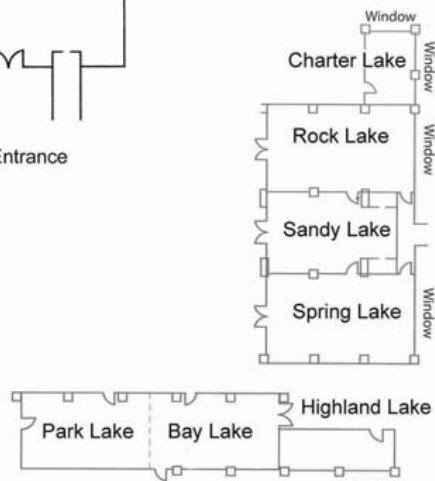
WYNDHAM
Lake Buena Vista Resort
in the WALT DISNEY WORLD® Resort



Horizons Ballroom & Solar Room
(mezzanine level)



Lakes Conference Center
(lobby level)



ISAZ2019 Conference Program Summary

Monday, July 1

8:45am–5:45pm	Registration – Horizons Ballroom Foyer
9:00am–2:00pm	Special Symposium: <i>Humane Education</i> – Salons 10 & 11
2:00pm–5:00pm	Pre-Conference Workshop for Student Attendees: <i>Research Methodology & Statistics</i> – Salons 7–9

Tuesday, July 2

8:00am–9:20am	Registration – Horizons Ballroom Foyer
9:00am–9:20am	Opening Remarks and Welcome – Salons 7–9
9:20am–10:20am	General Session: <i>Dr. Terry Curtis</i> – Salons 7–9
10:40am–12:00pm	Concurrent Sessions: <i>Humane Education</i> – Salon 5
	Concurrent Sessions: AAT/AAI #1 – Salons 10 & 11
	Symposium: <i>How Do Shifting Perspectives of Nonhuman Animals Show up in Law and Policy?</i> – Salons 7–9
	Symposium: <i>The Importance of Perception of Emotional Support and Service Animals, Handlers with Disabilities, and the Sources that Influence These Attitudes</i> – Salon 4
12:00pm–1:30pm	Lunch Workshop: <i>Research Funding Presented by Waltham & NIH</i> – Lakeview Restaurant
1:40pm–3:00pm	Special Workshop: <i>Why Dogs Bite People</i> – Salon 4
	Concurrent Sessions: <i>Educating about Animals</i> – Salon 5
	Concurrent Sessions: <i>Contemporary Issues in Anthrozoology</i> – Salons 7–9
	Symposium: <i>Service Dogs in the Public Eye</i> – Salons 10 & 11
3:20pm–5:00pm	Concurrent Sessions: <i>Differences between Us</i> – Salon 5
	Concurrent Sessions: AAT/AAI #2 – Salons 10 & 11
	Panel Discussion: <i>Taking Anthrozoology Public: Reaching a Broader Audience for Your Research</i> – Salons 7–9
5:10pm–6:10pm	General Session: <i>Dr. Bernard Unti</i> – Salons 7–9
6:15pm–?????	Reception and Mixer – Lakeview Restaurant

Wednesday, July 3

8:00am–9:00am	Registration – Horizons Ballroom Foyer
9:00am–10:00am	General Session: <i>Dr. John Fraser</i> – Salons 7–9
10:00am–10:30am	ISAZ Annual General Meeting – Salons 7–9
10:40am–12:20pm	Concurrent Sessions: <i>Companion Animals in Society</i> – Salons 7–9
	Concurrent Sessions: <i>Perceptions of Zoos</i> – Salon 5
	Symposium: <i>Placing Animals in the Public Eye: Art and Activism as Frames of Reference</i> – Salons 10 & 11
12:20pm–1:30pm	Lunch – Lakeview Restaurant
1:30pm–3:00pm	Poster Presentations – Horizon Ballroom
3:00pm–4:00pm	General Session: <i>Dr. Larry Killmar</i> – Salons 7–9
4:10pm–6:10pm	Waltham/NICHD-Sponsored Presentations – Salons 7–9
	Concurrent Sessions: <i>Contemporary Companion Animal Issues</i> – Salons 10 & 11
	Symposiums: – Salon 5 - <i>Dogs in First Nations: A Decolonising Framework to Explore Human-Dog Relationships and Inform Dog Population Management</i> - <i>Animal-themed Tattoo Narratives: Insights into Ontological Perspectives and Multispecies Families</i>
Evening	Reception at Epcot – Additional ticket required

Thursday, July 4

8:00am–9:00am	Registration – Horizons Ballroom Foyer
9:00am–10:40am	Concurrent Sessions: AAT/AAI #3 – Salons 7–9
	Symposium: <i>A Comprehensive Review of Therapy Animal Standards, Procedures, and Registration Information Represented in the Existing Animal-Assisted Interventions Literature</i> – Salons 10 & 11
	Symposium: <i>Conversing for Consensus: Emotional Support Animals</i> – Salon 5
11:00am–12:20pm	Concurrent Sessions: <i>Perceptions of Wildlife</i> – Salons 10 & 11
	Concurrent Sessions: <i>Shifting Perceptions</i> – Salons 7–9
	Symposium: <i>My Dog Needs a Letter! Multidisciplinary Implications of Certifying Emotional Support Animals</i> – Salon 5
	Concurrent Sessions: <i>Undergraduate Research Highlights</i> – Salon 4
12:00pm–1:00pm	Lunch – Lakeview Restaurant
1:00pm–2:00pm	ISAZ Distinguished Scholar Award – Salons 7–9
2:00pm	Closing Remarks – Salons 7–9 Announcement of Student Award Winners Announcement of Anthrozoös 2018: Most Popular Paper

ISAZ2019 Conference Program Schedule

Monday, July 1

8:45am–5:45pm	Registration
9:00am–2:00pm	Special Symposium: Humane Education
2:00pm–5:00pm	Pre-Conference Workshop for Student Attendees: Research Methodology & Statistics

Tuesday, July 2

8:00am–9:20am	Registration
9:00am–9:20am	Opening Remarks and Welcome
9:20am–10:20am	General Session – Learning and Communication: Speaking Dog & Cat Why It's So Important – <i>Dr. Terry Curtis</i>
10:40am–12:00pm	<p>A. Concurrent Sessions: Humane Education</p> <ul style="list-style-type: none"> ■ A Qualitative Study of Childhood Cruelty – <i>Wauthier</i> ■ “They’ll Love You Anyway”: The Protective Role of the Human–Animal Bond for Marginalized Youth – <i>Wenocur</i> ■ Children’s Reasoning about the Moral Welfare of Companion, Farm, and Wild Animals – <i>Tardif-Williams</i> ■ Is ‘Storied-Mourning’ an Effective Tool for Engaging Millennials from Countries Linked to Rhino Horn Consumption with the Rhino-Poaching Crisis? – <i>Hurn</i> <hr/> <p>B. Concurrent Sessions: AAT/AAI #1 <i>Sponsored by Nestlé Purina</i></p> <ul style="list-style-type: none"> ■ The Multiplicity of the Medical Detection Dog – <i>Holland</i> ■ Examining the Effect of a Animal-Assisted Intervention on Patient Distress in Outpatient Cystoscopy – <i>Barker</i> ■ Facility Dogs in Pediatric Hospitals: The Effects on Mental Health and Burnout in Healthcare Personnel – <i>Jensen</i> ■ Dog Bite Safety at Work: An Injury Prevention Perspective on Reported Occupational Dog Bites in the UK – <i>Owczarczak-Garstecka</i> <hr/> <p>C. Symposium: How Do Shifting Perspectives of Nonhuman Animals Show up in Law and Policy?</p> <hr/> <p>D. Symposium: The Importance of Perception of Emotional Support and Service Animals, Handlers with Disabilities, and the Sources that Influence These Attitudes</p> <hr/> <p>12:00pm–1:30pm Lunch Workshop: Research Funding <i>Presented by Waltham & NIH</i></p> <hr/> <p>1:40pm–3:00pm A. Special Workshop: Why Dogs Bite People – <i>Curtis</i></p> <hr/> <p>B. Concurrent Sessions: Educating about Animals</p> <ul style="list-style-type: none"> ■ Towards a Common Methodology for the Quantification of a ‘Caring For Animals’ Schema – <i>Albone</i> ■ Animals in Education: A Systematic, Defensible Moral Framework for Using Wildlife to Teach – <i>Nichols</i> ■ Evaluating the Need for Humane Education to Improve Canine Welfare Comparing Baseline Attitude Scores for Dog-Ownning vs Non-Dog-Ownning Children – <i>Anderson</i> ■ “Rabbit Rescuers”: An Animal Welfare Education Intervention For 5–7-Year-Olds – <i>Williams</i>

Note: For the sake of brevity, just the lead author has been listed in the schedule.

Tuesday, July 2 *continued*

1:40pm–3:00pm	<p>C. Concurrent Sessions: Contemporary Issues in Anthrozoology</p> <ul style="list-style-type: none"> ■ Digital Archival Collections As Data: Applying Digital Humanities Tools for Qualitative and Quantitative Human–Animal Studies Research – <i>Thayer</i> ■ Analysis of Human–Animal Interaction in Animal-Assisted Intervention – <i>Fournier</i> ■ Do Animals Engage in Greater Social Attention in Autism? An Eye Tracking Analysis – <i>Valiyamattam</i>
<hr/>	
<p>D. Symposium: Service Dogs in the Public Eye – <i>Moran</i></p>	
<hr/>	
3:20pm–5:00pm	<p>A. Concurrent Sessions: Differences between Us</p> <ul style="list-style-type: none"> ■ Perceptions of Animal Abilities: Smarts, Sensitivity, Or Something Else? – <i>Callahan</i> ■ Happy Cows and Jealous Dogs: Construct Use in Attributions of Animal Mentality – <i>Spence</i> ■ Does Identifying with Animals Imply Bringing Animals up to Par with Humans (Or Not?): Investigating the Dimensions of Animal Identification – <i>Amiot</i> ■ Ape & I – What It Means to Be Human – <i>Cieslik</i> ■ From Representation to Appropriation: The Use of Live Animals As Objects in the Art World – <i>Torres</i>
<hr/>	
<p>B. Concurrent Sessions: AAT/AAI #2</p> <ul style="list-style-type: none"> ■ The Effects of Assistance Dogs on Psychosocial Health and Wellbeing: A Systematic Literature Review – <i>Rodriguez</i> ■ Animal-Assisted Therapy (AAT) and Eating Disorders: Preliminary Research Findings and Practice Applications – <i>Fischette</i> ■ Animal-Assisted Activity Improves Socials in Psychiatrically Hospitalized Youth with Autism Spectrum Disorder – <i>O’Haire</i> 	
<hr/>	
<p>C. Panel Discussion: Taking Anthrozoology Public: Reaching a Broader Audience for Your Research – <i>Herzog</i></p>	
<hr/>	
5:10pm–6:10pm	<p>General Session – Animal Advocacy and Scholarship in the Anthropocene – <i>Dr. Bernard Unti</i></p>
<hr/>	
6:15pm	<p>Reception and Mixer</p>
<hr/>	

Wednesday, July 3

8:00am–9:00am	Registration
9:00am–10:00am	General Session – Useful Zoos – <i>Dr. John Fraser</i>
10:00am–10:30am	ISAZ Annual General Meeting
10:40am–12:20pm	<p>A. Concurrent Sessions: Companion Animals in Society</p> <ul style="list-style-type: none"> ■ Geography, Demography, and Patterns of Pet-Keeping: The Case of Dogs – Herzog ■ Why Do Cats Do That?: Purring, Tripping out on Catnip, and Eating Grass – Hart ■ Use of Dog Restraints in Vehicles in the US, UK, and Australia – Hazel ■ Relinquished and Stray Dogs and Cats Entering and Leaving Danish Shelters – A Retrospective Study from 2004–2017 – Sandoe ■ Reasons for Owner-Relinquishment of Dogs and Cats to a Danish Animal Shelter 1996–2017 – Hanquist Jensen <hr/> <p>B. Concurrent Sessions: Perceptions on Zoos</p> <ul style="list-style-type: none"> ■ Listening to the Zoo – Rice ■ Perceptions of Animal Emotions During Human–Animal Interactions in an Aquarium Setting – Lacinak ■ Species Conservation vs Animal Welfare: The Problem with Zoo Elephants – Daly ■ Tame in One Another: Mapping Human–Animal Communications between Maali the Elephant and Her Zoo Keepers – Dela Cruz <hr/> <p>C. Symposium: Placing Animals in the Public Eye: Art and Activism as Frames of Reference – Unti</p>
12:20pm–1:30pm	Lunch
1:30pm–3:00pm	Poster Presentations
3:00pm–4:00pm	General Session – Captive Wildlife, the Challenges and Rewards – <i>Dr. Larry Killmar</i>
4:10pm–6:10pm	<p>A. Waltham/NICHD-Sponsored Presentations</p> <ul style="list-style-type: none"> ■ Interactions with a Therapy Dog Buffer the Adverse Effects of Stress on Prosocial Behavior: An Experimental Study of Young Adults – Jacobson ■ Veterans and Shelter Dogs: A Longitudinal Study Examining the Impact of Dog-Walk Intervention on Psychological and Physiological Stress Measures – Krause-Parello ■ Pet Ownership Patterns and Health Outcomes in Community-Living Older Adults – Friedmann ■ Randomized Controlled Trial Examining Effects of Varying Levels of Human Canine Interaction on College Students... – Pendry ■ The Impact of Pet Ownership on Learning Outcomes (Cognition, Education, and Language Development) of Children and Adolescents: A UK Population Study – Purewal <hr/> <p>B. Concurrent Sessions: Contemporary Companion Animal Issues</p> <ul style="list-style-type: none"> ■ And They're off: A Critical Examination of the Horse Racing Film Subgenre – Murdock ■ "A Very Photogenic Cat": Sociological Aspects of Sharing Cat Photos Online – Austin ■ Cultural Debates to Political Movement: A Shift of Dog Meat Issues in Korea – Joo ■ Do People Interact with Dogs Differently when Dogs Are Dressed? – Yamamoto ■ The Grumpy Cat Phenomenon and the Commodification of Companion Animals – Fassenko ■ The Very Public Presence of Carriage Horses in New York City: A Cultural Analysis and Identification of Key Stakeholders – Clancy <hr/> <p>C. Symposiums: Dogs in First Nations: A Decolonising Framework to Explore Human-Dog Relationships and Inform Dog Population Management – <i>Beaumont</i> Animal-themed Tattoo Narratives: Insights into Ontological Perspectives and Multispecies Families – <i>Hill</i></p>
Evening	Reception at Epcot – Additional ticket required

Thursday, July 4

8:00am–9:00am	Registration
9:00am–10:40am	<p>A. Concurrent Sessions: AAT/AAI #3</p> <ul style="list-style-type: none"> ■ The Impact of Care Recipients' Pets on the Role of the Family Caregiver – Bibbo ■ Exploring Handlers' Well-Being in an on-Campus Canine-Assisted Intervention – Rousseau ■ Paws & Breathe: Animal-Assisted Stress Reduction – Singleton ■ Reducing Stress in Law Enforcement Personnel Through a Canine-Assisted Intervention: Findings from a Feasibility Study – Binfet <hr/> <p>B. Symposium: A Comprehensive Review of Therapy Animal Standards, Procedures, and Registration Information Represented in the Existing Animal-Assisted Interventions Literature – Johnson</p> <hr/> <p>C. Symposium: Conversing for Consensus: Emotional Support Animals – <i>Vincent</i></p>
11:00am–12:20pm	<p>A. Concurrent Sessions: Perceptions of Wildlife</p> <ul style="list-style-type: none"> ■ Moral Outrage from around the World: Examining the Responses to Deaths of Marius the Giraffe and Cecil the Lion – Feinstein ■ Elephant Semantics in Nepal: When an Elephant Is 'Not Just' a Wild Animal – Szydlowski ■ What Drives Illegal Hunting with Dogs? Traditional Practice in Contemporary South Africa – Chambers <hr/> <p>B. Concurrent Sessions: Shifting Perceptions</p> <ul style="list-style-type: none"> ■ Scavenger Or Working Partner: Effects for Dogs in the Public Eye – Jung ■ Certified Hogwash: Consumer and Retailer Perceptions of Higher Welfare Meat, Eggs, and Dairy – Freund ■ Memory Representations for Food in Omnivores, Vegetarians, and Restricted Eaters? – Sims ■ I Won't Be Afraid As Long As You Stand by Me: Do Dog Owners Evaluate Critical Life Events Less Stressful? – Stetina <hr/> <p>C. Symposium: My Dog Needs a Letter! Multidisciplinary Implications of Certifying Emotional Support Animals – Ames</p> <hr/> <p>D. Concurrent Sessions: Undergraduate Research Highlights</p> <ul style="list-style-type: none"> • Are More Involved Pet Owners Better Prepared for Disasters? – Asad • The Human Perception towards Dolphin Species in Captivity – Sweet • Personality, Job Satisfaction, and Human-Animal Bonds of Zookeepers – Partlow
12:00pm–1:00pm	Lunch
1:00pm–2:00pm	ISAZ Distinguished Scholar Award
2:00pm	<p>Closing Remarks Announcement of Student Award Winners Announcement of <i>Anthrozoös</i> 2018: Most Popular Paper</p>

ISAZ2019 Conference Sponsors

ISAZ Thanks our sponsors for their generous support of this conference. We wouldn't be here without YOUR HELP!

Nestle Purina

Purina works to create richer lives for pets and the people who love them through scientifically-based nutritional innovations that help dogs and cats live longer, healthier lives. Beyond the bowl, Purina supports pet welfare with efforts to bring and keep pets and people together through adoption, education and crisis response.

<https://www.purina.com>



Your Pet, Our Passion.®

WALTHAM Centre for Pet Nutrition

For over 50 years the WALTHAM Centre for Pet Nutrition has, through rigorous science, advanced pet care and our understanding of Human Animal Interaction. As part of MARS Incorporated we are a family business, and privileged with the flexibility to fight for what we believe in—and we choose to fight for: A BETTER WORLD FOR PETS.

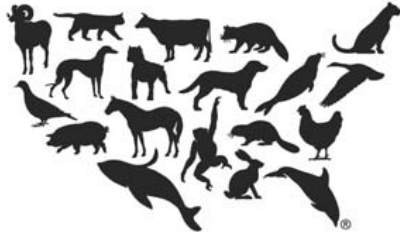
www.waltham.com / www.mars.com



MARS
Petcare

A Better 
World For Pets

Celebrating Animals | Confronting Cruelty



**THE HUMANE SOCIETY
OF THE UNITED STATES**

scientific and technical knowledge to animal welfare issues and policy questions worldwide, and to strengthen and extend understanding of the human-animal bond.

<https://animalstudiesrepository.org/animsent/>

Humane Society Institute for Science and Policy

The Humane Society of the United States, through its Humane Society Institute for Science and Policy (HSISP), works to advance the application of social science,



ZOETIS PETCARE



Routledge
Taylor & Francis Group

Plenary Speakers



General Session 1

Terry Marie Curtis, DVM, MS, DACVB

*Clinical Behaviorist
University of Florida,
College of Veterinary Medicine*

Learning and Communication: Speaking Dog & Cat Why It's So Important

As pet owners, we are tasked with having to communicate—on a daily basis—with individuals that don't speak our language. Our dogs and cats are talking to us and it's up to us to learn what they're saying! Dogs and cats learn using the same basics we do—classical conditioning [learning by association] and operant conditioning [goal-directed learning]. It's important that we learn and know the fundamentals of dogs' and cats' language and how to implement the learning techniques that our pets actually understand and use to get the resultant behaviors that we're all looking for.

Dr. Curtis graduated with honors from the University of Florida College of Veterinary Medicine in 1997. She worked as a feline-only practitioner in Florida until the summer of 2000 when she began her residency in Veterinary Behavior at the University of Georgia. Concurrently, she received a Master of Science in Psychology investigating grooming behavior in the domestic cat. Completing her residency in June 2003, she joined the team at the University of Florida College of Veterinary Medicine, heading up the Clinical Behavior Service. In addition to teaching two behavior courses at the university, Dr. Curtis, a Diplomate of the American College of Veterinary Behaviorists, does house calls in Florida and South Georgia.

Dr. Curtis is a regular contributor to the annual NAVC-VMX conference, the coordinator of a daylong Behavior Symposium there. Author of a number of articles, including book chapters in *Veterinary Clinics of North America*, the 7th Edition of *Blackwell's Five-Minute Veterinary Consult* and *Decoding Your Cat*, she is a member of the Editorial Review Board for *Today's Veterinary Practice* magazine and the *Journal of Feline Medicine & Surgery* and serves on the Advisory Board for *BlueCare*. She was also a panel contributor to the 2014 AAFP & ISFM Guidelines for *Diagnosing and Solving House Soiling Behavior in Cats*. Dr. Curtis has worked with the Hemingway House cats in Key West—discussing the subject on ABC's *Nightline*

(July, 2007), and was on NBC's *Today Show* (July, 2008) talking about fears and phobias in dogs. Dr. Curtis has been recently honored with the 2018 Keuka College Alumni Association Professional Achievement Award.



General Session 2

Bernard Unti, PhD

*Senior Policy Advisor and Special Assistant
to the President & CEO of the Humane Society
of the United States*

Animal Advocacy and Scholarship in the Anthropocene

To an underappreciated and even undervalued degree, scholarship across the range of academic disciplines has helped to ground and to shape animal advocacy for decades. Many key achievements in animal protection in the United States and elsewhere since 1950 have involved substantial contributions from social science, science, and humanities scholarship. This record foretells the continuing relevance and relationship of academic work to animal advocacy in the future. In the current stage of the Anthropocene, scholarship will assume even greater importance.

Dr. Unti has represented the Humane Society of the United States (HSUS) and its affiliates in a broad range of domestic and global campaigns and initiatives. He is the author of *Protecting All Animals: A Fifty-Year History of The Humane Society of the United States* (2004) and other works on animal protection as an historical and contemporary concern. His interests include the evolution of human attitudes toward animals, the history and sociology of the animal protection movement, the development of petkeeping, animal sheltering, and the kindness-to-animals ethic, the humane education of children, and the place of animal protection within American philanthropy. Unti received a PhD in US History from American University in 2002.



General Session 3

John Fraser, PhD AIA

President and CEO of NewKnowledge

Useful Zoos

This presentation will focus on a new conceptual model for understanding the role zoos play in society. Building on more than two decades of research into how zoos operate as vectors for social change, the presentation will explore a new integrative model for understanding how and why zoos are useful cultural institutions. The presentation will explore emerging research into public perceptions of zoos, deepen understanding about how zoos contribute to society, and how they might reframe their narrative to better aligns more with zoo visitors' goals and more effectively fulfill a global conservation mission.

—
Dr. Fraser is a conservation psychologist, architect, and educator. He is President and CEO of NewKnowledge, an interdisciplinary social science think tank. His research focuses on how our experience with media and community influences learning, attitudes, and motivations for engagement with solving the problems that face society. He is Editor of *Curator: The Museum Journal*, and a founding editorial board member for *Museums & Social Issues*.

Dr. Fraser has been actively involved in multiple professional associations, including Visitor Studies Association, Association of Zoos & Aquariums, Society for Conservation Biology, and American Alliance of Museums. He is President of the American Psychological Association's Division 34, Society for Environment, Population and Conservation Psychology.

Dr. Fraser has a rich publication history, including articles on zoo visitor behavior and perceptions.



General Session 4

Larry Killmar, PhD

*Chief Zoological Officer, Sr. VP,
Animal Science and Conservation and
Zoo Director for ZooTampa*

Captive Wildlife, the Challenges and Rewards

This presentation will center on the successes within the field of species management in the modern zoological garden. It will also explore the challenges facing the industry as a whole, focusing on the stewardship of the wildlife under our care and how zoological facilities contribute to conservation initiatives locally, nationally, and worldwide. This session will also address how zoos are perceived in today's world and what issues and challenges must be overcome if they are to be relevant in the future.

Dr. Killmar oversees the daily management of nearly 1,300 animals and provides leadership for the Medical and Collection Science and Education Department staff. During his career, he has had the opportunity to participate in the reintroduction of the Arabian Oryx in Sultanate of Oman and helped to rescue and import eleven African elephants from the Kingdom of Swaziland.

Dr. Killmar was elected President of the Florida Association of Zoos and Aquariums (FAZA) in 2012, which consists of 21 accredited and certified AZA zoos and aquariums in the State of Florida. FAZA actively collaborates with the Florida Wild Commission (FWC) on conservation projects and legislative initiatives within the State. The collective AZA accredited Zoos and aquariums in Florida have a total annual economic impact in the state of more than \$1 billion.

Before joining ZooTampa, Dr. Killmar was Deputy Director of Collections for the Zoological Society of San Diego. Currently he is a member of the Conservation Breeding Specialist Group (CBSG) of IUCN and of the Pan African Association of Zoos and Aquaria and appointed to the Association of Zoos and Aquariums' Wildlife Management and Conservation Committee and presently chairs this committee.

During his career he has published several articles, last being co-authored article titled "Challenges and successes in the propagation of the Shoebill, *Balaeniceps rex*," which was published in the *International Zoo Yearbook* 48.

ISAZ2019 Student Competition List

Podium Competition:

Meggie Callahan, University of British Columbia
Perceptions of Animal Abilities: Smarts, Sensitivity, or Something Else?

Emma Cieslik, Ball State University
The Ape and I: What It Means to be a Nonhuman Primate in Modern Society

Clare L. Jensen, Purdue University
Facility Dogs in Pediatric Hospitals: The Effects on Mental Health and Burnout in Healthcare Personnel

Angela Millwood Lacinak, University of Exeter
Perceptions of Animal Emotions During Human-Animal Interactions in an Aquarium Setting

Sara Owczarczak-Garstecka, University of Liverpool
Dog Bite Safety at Work: Injury Prevention Perspective on Reported Occupational Dog Bites in the UK

Kerri Rodriguez, Purdue University
The Effects Of Assistance Dogs On Psychosocial Health and Wellbeing: A Systematic Literature Review

Caroline Spence, Queen Mary University of London
Happy Cows and Jealous Dogs: Construct Use in Attributions of Animal Mentality

Michelle Szydlowski, University of Exeter
Elephant Semantics in Nepal—When an Elephant Is ‘Not Just’ a Wild Animal

Poster Competition:

Jennifer W. Applebaum, University of Florida
Pet Attachment in the Context of Family Conflict

Yolonda Bradshaw, The Ohio State University
Faculty Perceptions of Emotional Support Animal Presence in the Classroom

Danielle M. Brown, Canisius College
Examining the Relationship and Perceived Bonds Between North American Falconers and Their Working Raptors

Clare L. Jensen, Purdue University
Development, Review, and Dissemination of a Standardized Behavior Coding Tool: The Observation of Human-Animal Interaction for Research (OHAIRE)

Emma Leigh Pasiuk, University of Saint Thomas, MN
A Systematic Review of Therapy-Animal Characteristics in Equine-Assisted Intervention

Agnieszka Potocka, SWPS University of Social Sciences and Humanities
Moral Foundations Authority and Care Play a Different Role in the Treatment of Pet, Pest, and Profit Animals. Pilot Study

Amber Ramos, University of Edinburgh & National Marine Mammal Foundation
Behavioral Techniques Used in the Diagnosis, Treatment and Management of Atrial Fibrillation in a Geriatric California Sea Lion

Molly Sumridge, Canisius College
Owner-Reported Attachment and Behavior Characteristics of New Guinea Singing Dogs Living as Companion Animals

Katrina Winsor, The New Interdisciplinary School
Assessing the Impact of Animal-Assisted Occupational Therapy on Attention in Preschoolers

Special Symposium – Monday, July 1

Humane Education

- 9:00am **Creating a Contemporary Definition for the Field and Practice of Humane Education**
Dr. Brian Ogle, Beacon College
-
- 10:30am **Using Clay Modeling vs. Cat Cadaver Dissection to Teach Human Anatomy at the Secondary School Level: Student Outcomes and Attitudes**
Dr. Emma Grigg, Center for the Human-Animal Bond, College of Veterinary Medicine, Purdue University
Contributing Authors: Noémie Guérin, Robin Gabriels, Monique Germone, and Marguerite O’Haire
-
- 11:00am **Attitudes toward Violence: Do Violent Attitudes toward Humans and Nonhuman Animals Predict Partner Violence?**
Dr. Maureen MacNamara and Dr. Peter Fawson, Appalachian State University
-
- 11:30am **Important Conversations about Human-Wildlife Conflict and Conservation**
Michelle Szydlowski, University of Exeter
-
- 12:00pm **Lunch**
-
- 12:30pm **Informing Others on the Topic of Horse Racing**
Susan Kayne, Unbridled Thoroughbred Foundation
-
- 1:15pm **Future Trends and Practices in Humane Education**
Dr. Stephanie Itle-Clark, Academy of Prosocial Learning and Erin Comaskey, doctoral candidate
-



PHOTO CREDIT: Ronnie Macdonal/Flickr Creative Commons, IMG_2011 ed

Oral Presentations

Tuesday, July 2, 10:40am–12:00pm

Concurrent Sessions: Humane Education

A Qualitative Study of Childhood Animal Cruelty

Laura Wauthier – *University of Edinburgh, Clinical Psychology*

Jo Williams – *University of Edinburgh, Clinical Psychology*

Scottish Society for the Prevention of Cruelty to Animals – SSPCA

Although a growing body of research is highlighting how human–animal interaction can increase wellbeing in childhood (through e.g. attachment, stress reduction, and exercise), the darker side of child animal interaction, childhood animal cruelty, has received less attention. This research investigated how children who were cruel to animals or deemed at risk, and who were referred to a new intervention program (Animal Guardians) run by the Scottish SPCA, spoke about their understanding of animal cruelty and factors surrounding it. Animal Guardians is a humane education program targeting children 5–12 years old who are referred for cruelty.

“They’ll Love You Anyway”: The Protective Role of the Human–Animal Bond for Marginalized Youth

Katharine Wenocur – *University of Pennsylvania, Adjunct Lecturer/School of Social Policy & Practice*

Jeffrey Jin – *University of Pennsylvania, Adjunct Lecturer/School of Social Policy & Practice*

Animals can be an insulating factor for youth who have inadequate or compromised social support systems. These youth may face stressors including homelessness, financial insecurity, social disenfranchisement based on gender identity or sexual orientation, and social rejection. These factors impact the self-awareness, identity development, and self-esteem for these youth as they struggle to reach adulthood. Companion animals and therapy animals can play a protective role against social isolation and enhance individuals’ support systems. In turn, the relationships marginalized youth share with animals can build the capacity of these youth to form healthy and meaningful relationships with humans.

Children’s Reasoning about the Moral Welfare of Companion, Farm and Wild Animals

Christine Tardif-Williams – Brock University Child and Youth Studies

Nicole Mansell – Brock University

Allison Maynard – Brock University

Mila Stewart-Stevanovic – Brock University

Sandra Bosacki – Brock University

This qualitative study addresses an important gap in the human–animal interactions literature which has, to date, focused mainly on understanding children’s moral concern for companion animals and, to a lesser extent, children’s moral concern for different types of animals (Melson, 2014). Understanding children’s concern about the welfare of a diversity of animals has important implications for educational policy. Further, the present study is important and timely given the recent influx in educational efforts to expose young children to wild and farm animals through media sources, nature activities and visits to zoos and aquariums (Kahn & Kellert, 2002; Ruckert, 2016).

Is “Storied-Mourning” an Effective Tool for Engaging Millennials from Countries Linked to Rhino Horn Consumption with the Rhino Poaching Crisis?

Professor Samantha Hurn – University of Exeter Exeter Anthrozoology as Symbiotic Ethics (EASE) working group

Dr Kate Marx – Exeter Anthrozoology as Symbiotic Ethics (EASE) working group

Dr Fenella Eason – Exeter Anthrozoology as Symbiotic Ethics (EASE) working group

Dr Andrew Mitchell – Exeter Anthrozoology as Symbiotic Ethics (EASE) working group

Dr Alexander Badman-King – Exeter Anthrozoology as Symbiotic Ethics (EASE) working group

South Africa’s population of Southern White Rhinoceros (*Ceratotherium simum simum*) has declined so dramatically as a result of poaching, that in 2012 the South African government declared a state of crisis. Rhino horn is a sought-after commodity across much of Asia and the Middle East. Long associated with traditional medicine, its reinvention as a status symbol and recreational drug means young people now represent a growing segment of the market. This paper details the findings of a research project which developed a strategy for raising awareness of the impacts of rhino poaching amongst international students who hail from countries where rhino horn consumption has been documented or is a traditional practice.

Tuesday, July 2, 10:40am–12:00pm *continued*

Concurrent Sessions: AAT/AAI #1

The Multiplicity of the Medical Detection Dog

Katrina Holland – University College London (UK) Anthropology

From hunting to bomb detection, humans have harnessed the dog's sense of smell in diverse contexts. Recently, the potential of dogs to detect the odour of human disease has roused growing interest among dog trainers, scientists and clinicians. Medical detection dogs are trained to screen samples of human biological substances (e.g. urine) and communicate the presence of a cancerous odour to their handler via a taught alert response (i.e. "sit"). This paper examines how the products of such work (i.e. the trained dog and the associated scientific knowledge) are shaped by the trainers' perception of the dog as a multiple animal.

Examining the Effect of an Animal-Assisted Intervention on Patient Distress in Outpatient Cystoscopy

Sandra B. Barker – Virginia Commonwealth University School of Medicine Center for Human–Animal Interaction

Sarah C. Krzastek – Virginia Commonwealth University/Department of Urology

Rebecca A. Vokes – Virginia Commonwealth University/Center for Human–Animal Interaction

Christine M. Schubert – Air Force Institute of Technology/Department of Statistics

Lauren Folgosa-Cooley – Virginia Commonwealth University/Department of Urology

Lance J. Hampton – Virginia Commonwealth University/Department of Urology

Animal-assisted interventions (AAI) have been shown to improve patient outcomes in some healthcare settings. Flexible cystoscopy, while minimally invasive, is associated with pain, fear, and anxiety reported by patients (Mirheydar et al., 2015). Few interventions have been found to improve these adverse effects associated with cystoscopy (Cano-Garcia et al., 2015; Cornel et al., 2008). The purpose of this study was to extend existing research on AAI in outpatient settings to investigate the effectiveness of AAI in reducing patient distress associated with outpatient cystoscopy.

Facility Dogs in Pediatric Hospitals: The Effects on Mental Health and Burnout in Healthcare Personnel

Clare L. Jensen – Center for the Human–Animal Bond, College of Veterinary Medicine, Purdue University, West Lafayette, Indiana Comparative Pathobiology

Kerri E. Rodriguez – Center for the Human–Animal Bond, College of Veterinary Medicine, Purdue University, West Lafayette, Indiana

Marguerite E. O’Haire – Center for the Human–Animal Bond, College of Veterinary Medicine, Purdue University, West Lafayette, Indiana

Preliminary research suggests that facility dogs in hospitals may provide significant benefits to patients, including reduced fear, anxiety, and perceived pain. An equally important, but often overlooked, population in contact with facility dogs is the hospital personnel. Personnel in pediatric hospitals, including child life specialists and administrative staff, often experience depression and burnout due to their roles caring for ill children and distressed families. Research on the effects of facility dogs on this population has been minimal to date. The objective of this study was to explore effects of facility dogs on pediatric hospital personnel’s mental health and job-related burnout.

Dog Bite Safety at Work: An Injury Prevention Perspective on Reported Occupational Dog Bites in the UK

Sara Owczarczak-Garstecka – University of Liverpool Department of Epidemiology and Population Health/ Institute for Risk and Uncertainty

Rob Christley – University of Liverpool/ / Department of Epidemiology and Population Health, Institute of Infection and Global Health

Francine Watkins – University of Liverpool/ Department of Public Health and Policy, Institute of Psychology, Health and Society

*Huadong Yang – University of Liverpool/ University of Liverpool Management School
Beverley Bishop – Health and Safety Executive UK*

Carri Westgarth – University of Liverpool/ Department of Epidemiology and Population Health, Institute of Infection and Global Health and Institute for Risk and Uncertainty

Dog bites affect the health and well-being of the victims and impact upon the organisations whose employees are injured. Work incidents can be prevented and their impact reduced through measures like education, but also specific workplace safety policies or environmental redesign. However, as bites in the specific context of work have not been previously explored, little is known about the types of remedial measures currently used by the employers. Therefore, this study aimed to understand: 1) The occupational and demographic characteristics of bite victims; 2) Circumstances in which they were bitten; and 3) The remedial actions listed by the employers.

Tuesday, July 2, 10:40am–12:00pm *continued*

SYMPOSIUM: How Do Shifting Perspectives of Nonhuman Animals Show up in Law & Policy?

Special Student Panel Discussion

Moderated by Kristin L. Stewart, JD, PhD – Anthrozoology, Canisius College

About the Session

How does the observed societal shift in perceptions of multiple species show up in our laws and policies? In this session, a panel of select graduate students share key insights from their examination of current topics and controversies in animal law today. From the indiscriminate use of cyanide bombs to get rid of wildlife on public lands to the criminalization of animal activism, custody battles over beloved pets swept away in natural disasters, and the potential of cell-based meat to disrupt the animal agriculture industry's long-held power to control the laws that govern it, panelists explore these topics, amongst others, and reveal how current laws and policies reflect, resist, or refuse society's shifting perspectives of nonhuman animals.

Graduate students in the anthrozoology master's degree program at Canisius College explore human–nonhuman interactions in a variety of contexts through rigorous coursework designed to blend knowledge from the natural sciences, the social sciences, and the humanities. Using doctrinal research methods and conceptual analyses, students from the fall 2018 Animals, Public Policy, and the Law class examined contemporary topics of particular relevance to the field of anthrozoology, which culminated in a final paper.

Paper Summaries

Turbulence for the Troublemakers: The Rise and Fall of Ag-Gag Laws

Anna Balsler

Animal rights groups are considered a major domestic terror threat in the US, despite the fact that no one has suffered physical injury or death as a result of animal activism. Corporations are focused on the economic future of their “animal enterprises,” and their influence moves state and federal laws to criminalize animal activism. In this paper I explore current laws and political efforts that aim to silence animal activists, including “ag-gag” laws, which one-by-one are being introduced by industry at the state level, passed by (some) legislatures, and subsequently overturned by courts. I also examine why the courts are overturning the laws, how much it has to do with animal suffering, and whether it actually reflects the current will of society.

Agricultural Exceptionalism in the Western Rangelands: Winners & Losers in Wild Horse Law and Policy

Rebecca Carden

A substantial number of livestock animals are grazing on the western rangelands where wild horses have lived for more than 500 years. The rising competition over resources has resulted in a number of violent altercations between cattlemen, wild horse advocates, and government agencies. This continuing conflict has resulted in amendments to The Wild Free-Roaming Horses and Burros Act, numerous lawsuits, and public outcry (from

both ranchers and advocates), which are helping to reshape public policy in favor of the wild horse population. However, the cattle industry wields considerable political power. In this paper, I examine the conflict, particularly concerning the exceptionalist tradition that benefits industry on the ranges and in the legal system generally. Though advocacy groups have had some victories, there is a need for an honest accounting of the apparent preference that the livestock industry enjoys on the western rangelands.

When Does a Pet Become a Pest? Making Sense of the Convoluted Laws and Policies Surrounding Rats

Eva Cross

Historically, the relationship between humans and rats has been strained at best, violent at worst. However, people are starting to recognize the charming characteristics of domesticated rats that make them fulfilling companion animals. When a rat-hoarding tenant in the Catskills of New York abandoned her mischief of pet rats and left them to breed in her empty apartment in 2018, the landlord called in an exterminator. Were the companion animals dogs or cats, they may well have been rescued and rehomed. As sentient beings, rats should be provided the same care and consideration. This paper examines the state laws that allowed the mass slaughter of innocent, domestic rats and argues that rats should be granted the distinction and protection of “sentient property” under the law.

Is Kosher Slaughter Kosher? Kosher & Cruelty at the Intersection of Animal Law and Jewish Religious Law

Julia Johnson

The tensions between federal law and religious law continue throughout the US in the controversy between kosher slaughter (Jewish religious food law) and the humane slaughtering of animals under the Humane Methods of Slaughter Act. This paper explores the history of the term kosher in Jewish texts and current interpretations regarding animal products (primarily protein). It also examines the resistance from orthodox Jews to reinterpret the term kosher within traditional scriptural texts and modern-day practices. The methods of killing animals for food remain controversial within orthodox communities and typically revolve around the procedures of stunning and shackling during the slaughter procedure. Moreover, this paper considers kosher slaughter and how religious law aligns with modern animal science to adhere to tsa’ar ba’alei chayim while upholding First Amendment protections of religious freedom.





Weathering the Storm Together: The Need to Strengthen Laws in Recognition of Pet-Keeping Effects on All Stages of Natural Disasters and Emergency Planning

Britton Pietz

After Hurricane Katrina, lawmakers and emergency planners awoke to the importance of pets in natural disasters. In this paper I examine how law and policy considers and accounts for companion animals in times of natural disasters and emergency management planning. I argue that the law needs to catch up to society’s clear view: Whether considering the economics, ethics, or politics of the matter, all agree that it is good and right to protect pets in disaster; it is one of few non-divisive issues today. I propose that lawmakers capitalize on this collaborative opportunity and create nationwide legislation, best practices, and emergency management systems for rescuing, sheltering, and reuniting pets and their owners in emergencies.

Laws and Regulations Regarding Genetic Engineering of Animals in the United States and the European Union

John Reilly

Genetic modification of animals has been undertaken in a number of countries, primarily for food production and biomedical research. In this paper I examine the legislative and regulatory actions of the United States and European Union governments regarding the development, use, and welfare of genetically engineered animals by private industry. Neither government has taken a position on the genetic engineering of animals and their existing policies do not differentiate between genetically engineered plants and animals. Both have limited their roles to providing procedural guidance on obtaining approval for engineered animals intended to be used as food. The US, in particular, has failed to address animal welfare issues concerning genetic engineering. Nevertheless, courts in both the US and the EU have allowed the patenting and private ownership of new animal genetic lines. Indeed, both governments have demonstrated a willingness to obstruct the modification of organisms as a means of protecting existing agriculture and aquaculture businesses.

Who Can Be of Service: Dogs, Capuchin Monkeys, and the Law

Gabrielle Stannard

Fake service animals, monkeys as helpers, and peacocks on planes; each of these have the potential to twist a civil conversation about animals helping humans into a hot argument full of indignation and righteous finger pointing. Service animal issues are complex, fraught with emotion, and—especially with regard to the law—largely misunderstood. In this paper I explore our ideas about and the various (often inconsistent) laws related to the nonhuman animals who serve us. I argue that better understanding the issues surrounding service animals requires that we consider with compassion each of the stakeholders' perspectives—especially nonhuman animals'—and that better understanding should lead us to enact legislation that better honors both nonhuman animals and the humans they assist.

The Killing Fields: An Analysis of the Mismanagement of Government Agencies Established to Protect Wildlife

Nicholas Wassam

In 2016 federal agents placed cyanide bombs on public lands in Idaho to stop coyotes preying on local livestock. Using this and other objectionable methods, the USDA's Department of Wildlife Services recently killed no less than six million wild animals in the span of two years. And not just wild animals—the Idaho cyanide bomb poisoned a boy and killed his pet dog. Outrage and lawsuits followed. In this paper I consider the mismanagement of various agencies charged with protecting our natural resources, including the outdated, unscientific methods used, which are driven by economics rather than wildlife protection or public health. I also explore the public debate surrounding these issues, the current laws and policies that ought to guide and hold these agencies accountable, and what is at the root of these agencies' mismanagement. I argue that society's values and priorities are clear in this case, and they are clearly frustrated by laws and policies that allow federal agents to “mange” wildlife conflict by turning public lands into killing fields for the sole economic benefit of agricultural industry.

No Man's Land: Unoccupied Critical Habitat Designated under the Endangered Species Act for the Dusky Gopher Frog

Melissa Weber

The dusky gopher frog is listed as an endangered species under the Endangered Species Act of 1973, which requires that the United States Fish and Wildlife Service designate critical habitat it considers essential for the survival of the species. The completion of that designation subsequently sparked litigation that was eventually appealed to the US Supreme Court. This paper uses that litigation as a context to explore the critical habitat designation requirements for endangered species under the Endangered Species Act, how these requirements are translated and applied by United States Fish and Wildlife Service, and the conflicts and issues that can arise as a result of these requirements. The latter includes a trend of voluminous litigation, debate over effectiveness of the ESA, and conflict between private landowners and conservation efforts.

Tuesday, July 2: 10:40am–12:00pm *continued*

SYMPOSIUM: The Importance of Perception of Emotional Support and Service Animals, Handlers with Disabilities, and the Sources That Influence These Attitudes

Panel Discussion

Jennifer Coleman, PhD – *Rush University Medical Center, Road Home Program for Veterans*

Cara Miller, PhD – *Clinical Psychologist at Gallaudet University*

Paul Ogden – *California State University, Fresno*

Sarah Birman – *Canine Companions for Independence*

This symposium will begin with an overview of disabilities as defined by the ADA, along with definitions, laws, and regulations regarding service animals (SAs) and emotional support animals (ESAs). Presenters will then discuss the literature regarding the lay public's perceptions of such animals (e.g., Coleman et al., in prep) and handlers, both with and without disabilities (e.g., Coleman et al., 2015). For example, the literature suggests that individuals with disabilities face stigma and are often negatively perceived by others (e.g., Nowicki & Sandieson, 2002; Wilson & Scior, 2014), while attitudes toward animals and people paired with animals are generally very favorable (Schneider & Harley, 2006; Wells & Perrine, 2001). Theoretical framework will be provided to better understand the effect and importance of attitudes in influencing behaviors (e.g., the Theory of Planned Behavior; Ajzen, 1991). Identity status for invisible versus visible disabilities will be discussed, as well as how an ESA or SA's presence may impact handler identity both positively and negatively. To further examine impact of attitudes and public perceptions, the presentation will incorporate research assessing D/deaf and hard of hearing individuals' perceptions of hearing dog partnerships and related cultural attitudes toward perceived utility and social desirability of such partnerships in comparison with assistive technology (Miller, 2011). The presentation will integrate further research on social capital and companion animals (Wood, Giles-Corti, & Bulsara, 2005), particularly in the context of varying disability communities and ongoing controversies surrounding fraudulent SA and ESA claims and access. Presenters will also discuss how various factors (e.g., the media, lack of knowledge, unclear laws and regulations) influence people's perceptions of SAs, ESAs, and individuals with disabilities. This presentation will conclude with review of current and ongoing standard-making and regulatory efforts among various industries, including those concerned with animal welfare, standards of behavior, and professional competencies.

Tuesday, July 2: 1:40pm–3:00pm

SPECIAL WORKSHOP: Why Dogs Bite People

Terry Marie Curtis DVM, MS, DACVB – *College of Veterinary Medicine, University of Florida*

The #1 cause for aggression directed at humans is FEAR—NOT DOMINANCE! Numerous considerations are involved in the diagnosis and treatment of human-directed behavior in dogs such as the human–animal bond, public safety, and euthanasia. Any dog may bite, whether they have done so previously or not. Learning what dogs are “saying” long before they feel the need to “yell” is a large part of the treatment of human-directed aggression in dogs. It is important to ensure the outcome for the dog so that it doesn’t feel the need to—with aggression.



Bonnet is saying “Don’t touch my biscuit.”

PHOTO CREDIT: Jan Tik/Flickr Creative Commons

Tuesday, July 2: 1:40pm–3:00pm *continued*

Concurrent Sessions: Educating about Animals

Toward a Common Methodology for the Quantification of a “Caring for Animals” Schema.

Stephen Albone – *Society for the Protection of Animals Abroad Education*

A principal challenge in evaluating the effectiveness of humane education interventions is that the intended outcomes are often prosocial behaviours that are difficult to observe directly. For example, an expected outcome of many animal welfare education programmes is that they promote compassionate behaviours towards animals, but observing these behaviours post-intervention is often impractical. One solution to this difficulty is to instead focus on a learner’s predisposition to exhibit the intended behaviours. If we hypothesise that much of our behaviour is driven unconsciously by internal schemata it raises the question of what a “caring for animals” schema looks like.

Animals in Education: A Systematic, Defensible Moral Framework for Using Wildlife to Teach

Bryan H. Nichols – *Florida Atlantic University, Department of Teaching & Learning*

Wildlife is an important draw in ecotourism and science education, but our relationship with wildlife is changing in unprecedented ways. New and immersive media representations, habitat loss and urbanization, and new insights into animal intelligence are changing public perceptions of wild animals. Many educators and organizations that work with captive or free living wild animals are confronting difficult moral decisions about existing and future programs, but few of us are taught how to make such decisions. This presentation will introduce a practical ethics framework and tools to help.

Evaluating the Need for Humane Education to Improve Canine Welfare: Comparing Baseline Attitude Scores for Dog-Owning vs Non-Dog-Owning Children

Katharine Anderson – *Dogs Trust, UK Canine Behaviour and Research Department*

Anna Baatz – *Education Department, Dogs Trust*

Melissa Upjohn – *Canine Behaviour and Research Department, Dogs Trust*

Maria Kyle – *Education Department, Dogs Trust*

Hollie Sevenoaks – *Education Department, Dogs Trust*

Knowledge and attitudes informs our interactions, choices and behaviour and are therefore important components of human–animal relationships. Pet ownership is suggested to enhance positive attitude and empathy development towards animals in childhood, however inappropriate child-dog interactions are potentially associated with poor knowledge and/or attitudes.

Targeted animal welfare education programmes may contribute to improving attitudes towards animals, however few studies assess baseline attitudes to identify this need. This study therefore aims to test baseline attitudes in dog-owning and non-dog owning children to determine whether attitudes vary with pet ownership, identifying the need for education in different demographic groups.

“Rabbit Rescuers”: An Animal Welfare Education Intervention for 5- to 7-year-olds

Prof Jo Williams – University of Edinburgh, Clinical and Health Psychology

Dr Monja Knoll – University of Edinburgh, Clinical and Health Psychology

Mayra Padilla – University of Edinburgh, Clinical and Health Psychology

Sylvia Zumaglino – University of Edinburgh, Clinical and Health Psychology

Amy Finney – University of Edinburgh, Clinical and Health Psychology

Scottish SPCA

Animal cruelty in childhood is of growing concern in the UK, and companion animals are particularly vulnerable to both intentional and non-intentional cruelty and neglect. Rabbits are a very popular companion animal and also highly vulnerable to cruelty. While the evidence-base for animal cruelty prevention education interventions is increasing, there is a dearth of interventions designed for very young children. The study aimed to evaluate the effectiveness of the newly designed Scottish SPCA intervention “Rabbit Rescuers.” “Rabbit Rescuers” is a one-week educational intervention focusing on rabbit welfare and care designed for 5- to 7-year-olds and delivered within schools.

Tuesday, July 2, 1:40pm–3:00pm *continued*

Concurrent Sessions: Contemporary Issues in Anthrozoology

Digital Archival Collections As Data: Applying Digital Humanities Tools for Qualitative and Quantitative Human–Animal Studies Research

Gwynn Thayer – *NC State University Libraries, Special Collections Research Center*
Alyssa S. Robinson – *NC State University Libraries, Special Collections Research Center*

Using materials digitized through NCSU Libraries' Animal Turn project, a grant funded by the Council on Library and Information Resources' Digitizing Hidden Collections initiative, this presentation will show ways in which digital humanities can be brought to bear on anthrozoology research using archival materials. The digitized materials included in this study span from 1866-2011, relate to issues in human–animal studies, and address topics concerning the history of humane education, animals in entertainment, and animal protective legislation. When we reframe archival collections as repositories of data, we find that both qualitative and quantitative research methods can be applied to archival research.

Analysis of Human–Animal Interaction in Animal-Assisted Intervention

Angela Fournier – *Bemidji State University, Department of Psychology*
Thomas Berry – *Christopher Newport University, Department of Psychology*
Elizabeth Letson – *Eagle Vista Ranch & Wellness Center*
Jennifer Laitala – *Eagle Vista Ranch & Wellness Center*

Within the field of psychology, human–animal interaction (HAI) is often studied in the context of clinical treatment. Investigations of animal-assisted interventions (AAI) have studied various outcomes, including diagnostic status, psychosocial skills, and psychological well-being (e.g., self-esteem, self-efficacy). Research is needed to examine the kinds of interactions that occur during AAI and their specific outcomes. This study examined AAI within the Pet Partner certification model, describing human and animal practitioners and detailing the interactions occurring in AAI sessions.

Do Animals Engage Greater Social Attention in Autism? An Eye Tracking Analysis

Georgitta J. Valiyamattam – *Andhra University, India Department of Psychology*

Harish Katti – *Indian Institute of Science (IISc), Bengaluru, India*

Vinay Chaganti – *Kumaraguru College of Technology*

Marguerite O'Haire – *Purdue University*

Virender Sachdeva – *LV Prasad Eye Institute, India*

Visual atypicalities in Autism are a well documented phenomenon, beginning as early as 2–6 months of age and manifesting in a significantly decreased attention to the eyes, direct gaze, and socially salient information. Early emerging neurobiological deficits in perceiving social stimuli as rewarding or its active avoidance due to the anxiety it entails, have been widely purported as potential reasons for this atypicality. Parallel research evidence also points to the significant benefits of animal presence for reducing social anxiety and enhancing social interaction in children with autism. While atypicality in social attention in autism spectrum disorder (ASD) has been widely substantiated, whether this atypicality persists equally across species types or is confined to humans has not been a key focus of research insofar.

—

SYMPOSIUM: Service Dogs in the Public Eye

Panel Discussion

Peggy Moran, *1Pet 1Vet, Inc. NFP*

Cari Stevenson, *Kankakee Community College*

Robert Perez, *1Pet 1Vet, Inc. NFP*

In addition to assisting people with individual tasks, service dogs often facilitate positive connections within communities; however, service dogs may also attract unwanted attention. In this session, we will address various perspectives of engagement within public settings and discuss results of our recent study examining public behavior. In a preliminary questionnaire involving over 200 people, participants indicated they perceived dogs wearing a vest were service dogs, and they also reported that they knew not to interfere with a working service dog. From this, we hypothesized that people would demonstrate fewer intrusive behaviors when a service dog was wearing a vest.

Although results from the preliminary questionnaire suggested people perceive dogs wearing a vest to be a working service dog and understand they should not interfere with a working dog, the results from the observation revealed that the presence of the vest had no impact on public behavior. The people observed in the study demonstrated the same level of engagement, and showed the same number of intrusive behaviors, regardless of the presence of the vest. Further analysis revealed that people demonstrated more negative behaviors when the handler was male and the dog was perceived as a threatening breed.

Tuesday, July 2, 3:20pm–5:00pm

Concurrent Sessions: Differences between Us

Perceptions of Animal Abilities: Smarts, Sensitivity, Or Something Else?

Meggie Callahan – *University of British Columbia, Institute for Resources, Environment, and Sustainability*

Terre Satterfield – *University of British Columbia, Institute of Resources, Environment, and Sustainability*

Jiaying Zhao – *University of British Columbia, Department of Psychology*

Scientific inquiry, and, indeed even the popular media, is increasingly focused on demonstrating the facets of intelligence in a wide range of different species of wildlife (1). However research regarding the more anthropomorphic traits of animals such as emotions and motivations is notably sparser and is often discouraged (2, 3). This is impacted in part by the perception that the public is over-anthropomorphizing animals and under-ascribing intelligence based traits.

This work evaluates human preferences for wildlife with a large-scale survey and explores the perceived capability of animals for a wide range of abilities both intellectual in nature, and those more easily anthropomorphized.

Happy Cows and Jealous Dogs: Construct Use in Attributions of Animal Mentality

Caroline Spence – *Queen Mary University of London, School of Biological and Chemical Science*

Magda Osman – *Queen Mary University of London*

Alan McElligott – *University of Roehampton*

The mental capacities attributed to animals by non-scientists has implications for human and animal welfare alike on the basis that i) animals emotional and cognitive capacities are linked to their perceived moral worth and subsequent treatment, and ii) misinterpretation of animal cognition/behaviour is a likely factor in many negative human-animal interactions e.g. dog bites. However, little is known about public beliefs regarding the mental capacities of animals. We therefore investigated: i) peoples use of mental constructs (e.g. “consciousness,” “problem-solving”) in relation to animals, and ii) variation in mental construct use according to factors such as experience or knowledge.

Does Identifying with Animals Imply Bringing Animals up to Par with Humans (Or Not)?:

Investigating the Dimensions of Animal Identification

Catherine Amiot – *University of Quebec in Montreal, Psychology*

Ksenia Sukhanova – *Department of Psychology, University of Quebec in Montreal*

Brok Bastian – *School of Psychology, The University of Melbourne*

While feeling psychologically connected to other animals can imply perceiving animals and humans as similar and wanting to act on behalf of animals, it may also involve recognizing our own animality. Building on prior work applying the notion of social

identification to the realm of human–animal relations (Amiot & Bastian, 2017; Tajfel & Turner, 1986), the current studies aim to test the consequences associated with different modes (i.e., dimensions) of identification with animals, namely: human–animal similarity, solidarity with animals, and animal pride. The consequences investigated are relevant both to humans (e.g., outgroup defensiveness) and animals (support for their rights).

The Ape and I: What It Means to Be a Nonhuman Primate in Modern Society

Emma Cieslik – *Ball State University, Department of Anthropology*

Nonhuman primates have a unique relationship with humans, specifically related to how they are often used by humans as a platform by which they come to know and value themselves. My research investigates the effect of apes on humans, specifically related to the growth of the Great Apes Movement and the passage of legislation in Spain in 2008 giving nonhuman primates the rights equal to that of a human. What are the implications of these rights for apes and why should humans define them? Also, how does this relate to animal welfare and the rights that we give to marginalized peoples?

From Representation To Appropriation: The Use of Live Animals as Objects in the Art World

Sofia Torres – *i2ADS – Research Institute in Art, Design and Society; Faculty of Fine Arts – University of Porto*

Domingos Loureiro – *i2ADS – Research Institute in Art, Design and Society; Faculty of Fine Arts – University of Porto*

Animals have always been present in art—from simple representations in caves, as symbols in coats of arms, metaphors in fables, as symbols of nobility or companion animals—we find until Modernism the animal represented pictorially or sculptured within several fields of the fine arts. However, from the so-called postmodernity we find a new phenomenon, where the animals to be included in works, are not merely represented, but are incorporated—that is, the animal—dead or alive—becomes the work itself. As main results, due to the specificity and complexity of contemporary artistic practices, this presentation intends more than answers, to generate questions and to propose a reflection about the artistic ethical limits about the use of living animals in works, about the empathy between author/animal as material, and between the role of the public/spectator before the visualization of an animal as an artistic object, and finalizing with the question whether animals can or cannot be part of an artistic object, working in an integrative relationship between man and animal.

Tuesday, July 2, 3:20pm–5:00pm *continued*

Concurrent Sessions: AAT/AAI #2

The Effects of Assistance Dogs on Psychosocial Health and Wellbeing: A Systematic Literature Review

Kerri Rodriguez – Purdue University, Comparative Pathobiology

Jamie Greer – Vassar College

Jane K. Yacilla – Purdue University

Alan Beck – Purdue University

Marguerite O'Haire – Purdue University

Beyond the functional tasks or work that an assistance dog is trained for, there is growing literature describing the benefits of assistance dogs on the psychosocial health and well-being of their handlers. A prior review identified 12 studies evaluating the psychosocial effects of assistance dogs on individuals with physical disabilities, producing promising results that were notably limited by methodologically weak studies (Winkle et al. 2012). Our objective was to build on this review by systematically identifying, summarizing, and methodologically evaluating studies quantifying the psychosocial effects of assistance dogs for individuals with physical disabilities.

Animal-Assisted Therapy (AAT) and Eating Disorders: Preliminary Research Findings and Practice Applications

Patricia Flaherty Fischette – SoulPaws Recovery Project, Inc.

Annie Petersen – Association for Human–Animal Bond Studies

We will review the pioneer research exploring Animal-Assisted Therapy (AAT) and eating disorders. Eating disorders can be conceptualized as a cluster of vulnerabilities related to affect, attachment, and difficulties in self-regulatory functions (Petrucci, 2014). There has been no research exploring AAT and the mental health disorder with the highest mortality rates and diagnostic vulnerabilities related to attachment and affect regulation, that is, eating disorders. We will also learn about the only outpatient animal-assisted therapeutic practice for individuals struggling with eating disorders, SoulPaws.

Animal-Assisted Activity Improves Social Interaction Behaviors in Psychiatrically Hospitalized Youth with Autism Spectrum Disorder

Marguerite E. O’Haire – Center for the Human–Animal Bond, College of Veterinary Medicine, Purdue University, West Lafayette, Indiana Comparative Pathobiology

Monique M. Germone – University of Colorado, School of Medicine, Denver, Colorado; Children’s Hospital Colorado, Aurora, Colorado

Kerri E. Rodriguez – Center for the Human–Animal Bond, College of Veterinary Medicine, Purdue University, West Lafayette, Indiana

Clare L. Jensen – Center for the Human–Animal Bond, College of Veterinary Medicine, Purdue University, West Lafayette, Indiana

Robin L. Gabriels – University of Colorado, School of Medicine, Denver, Colorado; Children’s Hospital Colorado, Aurora, Colorado

Noémie A. Guérin – Center for the Human–Animal Bond, College of Veterinary Medicine, Purdue University, West Lafayette, Indiana

Autism spectrum disorder (ASD) is a pervasive developmental disorder with symptoms including communication difficulties, lack of engagement, and inappropriate social behaviors. As a complementary form of treatment, there is growing evidence that animal-assisted activities (AAA) may improve social and communication behaviors among individuals with ASD. However, preliminary studies are largely limited by caregiver- or self-report and lack in objective, unbiased measurement. The objective of this pilot study was to use direct behavior observation to evaluate the effects of a canine-facilitated activity for psychiatrically hospitalized youth with ASD.

The Influence of Interaction with Companion Dogs on Mood and Anxiety Following Stress-Exposure

Molly K. Crossman – Yale University, Psychology

Alan E. Kazdin – Yale University, Department of Psychology

Angela Matijczak – Yale University, Department of Psychology

Hailey E. Dias – Yale University, Department of Psychology

Laurie R. Santos – Yale University, Department of Psychology

A growing body of evidence documents the benefits of interactions with therapy dogs on psychological distress. The prevalence and long-term nature of companion animal ownership suggest that interactions between people and their own companion animals also have considerable potential to reduce distress on a large scale. However, the effects of these interactions are not yet well-established. This study evaluated whether interactions between people and their companion animals convey similar benefits as interactions between participants and therapy animals in animal-assisted activities.

Tuesday, July 2, 3:20pm–5:00pm *continued*

***SYMPOSIUM: Taking Anthrozoology Public:
Reaching a Broader Audience for Your Research***

Panel Discussion

Hal Herzog – *Western Carolina University*

Karin Bruliard – *Washington Post*

Anthony Podberscek – *University of Sydney*

Carri Westgarth – *University of Liverpool*

Mikel Delgado – *University of California at Davis*

Researchers typically communicate the results of their studies to the research community via publications in peer-reviewed journals and presentations at academic conferences. In recent years public interest in human–animal relationships has grown exponentially. This trend is partially due to the availability of opportunities for investigators to reach much larger audiences. These include newspapers and magazines, broadcast media, trade books, blogs, and social media. In this panel, five individuals experienced with a variety of media will offer tips and discuss issues and opportunities associated with communicating research findings to the public. Anthrozoologists are uniquely positioned to educate the public about recent discoveries related to our relationships with animals. The focus of this panel will be on tips, questions, and concerns associated with “taking anthrozoology public.”

Wednesday, July 3, 10:40am–12:00pm

Concurrent Sessions: Companion Animals in Society

**Geography, Demography and Patterns of Pet-Keeping:
The Case of Dogs**

Hal Herzog – *Western Carolina University, Psychology*

Andrew Rowan – *WellBeing International*

Evolutionary accounts of pet-keeping range from interspecific nest parasitism and misplaced parental instincts to the idea that caring for pets helps develop child-care skills in young girls. However, these explanations do not account for the diversity of patterns of pet-keeping seen across and within cultures. In this presentation, we argue that national differences in rates of dog ownership demonstrate the powerful impact of culture on our preferences for companion animals. We also suggest a path by which cultural attitudes towards dogs can shift over time from antipathy to tolerance to acceptance as family members.

Why Do Cats Do That: Purring, Tripping Out on Catnip, and Eating Grass

Benjamin L. Hart – *University of California, Davis, School of Veterinary Medicine
Department of Anatomy, Physiology & Cell Biology*

Lynette Arnason Hart – *UC Davis School of Veterinary Medicine*

Most people who have a feline companion are aware of some behaviors that are unique to cats and for which there are no well-known explanations. Cats seem to be experts in purring and in tripping out on catnip. Eating non-nutritious grass or other plants is another poorly understood behavior and one they share with dogs. Purring seems to endear people to their cats, and catnip responding is fun to watch, as is their munching on plants—we may even give them their own grass garden.

Use of Dog Restraints in Vehicles in the US, UK, and Australia

Susan Hazel – *University of Adelaide, School of Animal & Veterinary Sciences*

Tamara Montrose – *Hartpury University Centre*

Lori Kogan – *Colorado State University*

James Oxley – *Independent researcher*

While dogs routinely travel in motor vehicles, there is a lack of evidence on if, how, and why people choose to restrain their dogs. A lack of restraint is likely to be associated with an increased risk of serious injury or death in the case of an accident, and in some cases may even precipitate an accident. The aim of the present study was to determine the frequency in which dog restraints are used in the US, UK, and Australia and the factors associated with whether or not a dog is restrained.

Wednesday, July 3, 10:40am–12:00pm *continued*

Concurrent Sessions: Companion Animals in Society *continued*

Relinquished and Stray Dogs and Cats Entering and Leaving Danish Shelters – A Retrospective Study from 2004 to 2017

Peter Sandøe – University of Copenhagen, Department of Veterinary and Animal Sciences & Department of Food and Resource Economics

Janne Jensen – University of Copenhagen, Department of Veterinary and Animal Sciences

Søren Saxmose Nielsen – University of Copenhagen, Department of Veterinary and Animal Sciences

This study of dogs and socialized cats entering and leaving Danish shelters is the first such study undertaken in a northern-European country. Based on our findings and the literature, we aim to answer two questions: i) How do the numbers of dogs and cats taken in by shelters compare with the size of the Danish dog and cat populations, and to what extent can rehoming from shelters serve as a means of supplying dogs and cats in Denmark? ii) What explains changes in the numbers of animals taken in, and the outcomes for dogs and cats, over the years studied?

Reasons for Owner-Relinquishment of Dogs and Cats to a Danish Animal Shelter 1996–2017

Janne Barner Hanquist Jensen – University of Copenhagen Department of Veterinary and Animal Sciences

Peter Sandøe – University of Copenhagen, Department of Veterinary and Animal Sciences, and Department of Food and Resource Economics

Søren Saxmose Nielsen – University of Copenhagen, Department of Veterinary and Animal Sciences

Every year, a large number of surplus pets are relinquished to animal shelters. This can result in problems, including distress in the animals and the owner, and may stretch limited resources. To lower the number of surplus pets we need to know the reasons for relinquishment. The objective of this study was to identify the reasons for relinquishment of dogs and cats relinquished to a large Danish shelter, and to investigate whether these are related to the animal (e.g. behavioral problems), or the owner (e.g. illness), and developments over time.

Concurrent Sessions: Perceptions on Zoos

Listening to the Zoo

Tom Rice – *Uni of Exeter*

Alex Badman-King – *Uni of Exeter*

Samantha Hurn – *Uni of Exeter*

Adam Reed – *St Andrews*

Zoos are often conceptualized as places of spectacle, where other-than-human animals are exhibited to the visiting public. This qualitative study set out to move beyond scopic regimes and to explore the particularities of sound as a medium for human-animal interactions in the zoo setting, focusing on the perspectives of staff from two UK zoos. This research project involved semi-structured interviews with 31 members of staff from two zoos in the South West of the UK. The interviews revealed that sound is a highly important aspect of zoo space for the research participants. Active listening is fundamental to the day-to-day care of zoo animals, and to communication between keepers and numerous zoo species. Interviewees were also conscious of the need to create and manage positive sonic environments the animals in their charge. Importantly, interviewees recognized that many of the animals in the zoo actively attended and responded to the zoo through sound, and that they held their own particular sonic perspective. Animal sounds were also regarded as vital to the atmosphere and identity of the zoo, and to the rhythm of the institutional day. These findings suggest that sound, hearing and listening are important in a variety of ways to zoo staff in their perceptions of, attitudes towards and interactions with, zoo animals. Further research is required to uncover the full significance of zoo sound for staff, visitors and zoo animals themselves.

Perceptions of Animal Emotions during Human–Animal Interactions in an Aquarium Setting

Angela Millwood Lacinak – *University of Exeter Anthrozoology*

Animal welfare is of increasing concern in zoological facilities (Vasconcellos et al., 2016). What's more, the turn to recognize individuals rather than collections is gaining traction from within zoos and aquariums, the public and academia. This study provides a look into how professional animal care staff and college-level students perceive the emotional well-being of two individuals: Lulu, a ring-tailed lemur (*Lemur catta*) and Cleatus, an Atlantic goliath grouper (*Epinephelus itajara*), in residence at The Florida Aquarium in Tampa.

Species Conservation versus Animal Welfare: The Problem with Zoo Elephants

Beth Daly – *University of Windsor*

Most zoological parks and aquariums (“zoos”) actively engage in scientific research, which has led to their dramatic evolution. Over centuries, zoos have evolved from elite, private menageries symbolizing wealth and power, to public entertainment centers providing entertainment, to educational institutions dedicated to conservation (Olive & Jansen, 2017). Elephants have been perpetual zoo residents, from the first known menagerie in Egypt in 3500 BCE (Atwood et al., 2010) to current zoos. They have also been the focus of extensive zoological research, and given their looming status as endangered, the commitment of zoos toward conservation appears an ideal complement towards a solution.

Tamed in One Another: Mapping Human–Animal Communications between Maali the Elephant and Her Zoo Keepers

Aaron Philip M. Dela Cruz – *Ateneo De Manila University/ University of the Philippines - Diliman Filipino (Ateneo) / Anthropology (UP - Diliman, M.A. Anthropology)*

This paper expands our notion of what counts as language by mapping the ways humans and animals communicate at the Manila Zoo, specifically between Maali, the elephant, and her zookeepers. It presents Maali as a semiotician, capable of symbolic thought that is textured by her various emotions. It also brushes upon the consequences of treating human–animal communication as illegitimate by citing the plight of the Orang Rimba residing in the Sumatran Rainforest. Extending language capacity to animals grounded on empathy encourages people to re-visualize animals as minded and capable of emotional communication, which would hopefully invite them to participate in conservation.

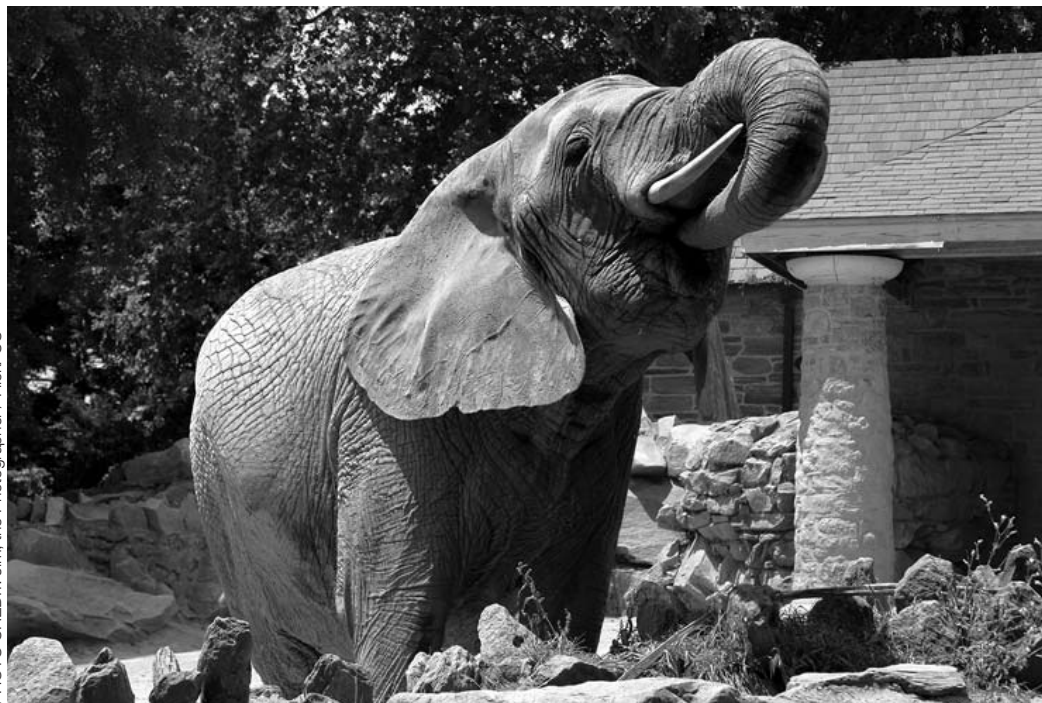


PHOTO CREDIT: Jim, the Photographer / Flickr CC

SYMPOSIUM: Placing Animals in the Public Eye: Art and Activism as Frames of Reference

Katherine C. Grier – *Department of History, University of Delaware*

Bernard Unti – *Humane Society of the United States*

During this special symposium, popular visual messaging will be explored with the feminist maternalist ethic and the case for animals in the early twentieth century. In 1875, George Augustus Holmes, a member of the Royal Academy of Art who specialized in paintings of women and children interacting with domestic animals, exhibited what became his best-known work, an oil painting entitled “Can’t You Talk?”. This painting became an iconic image for three distinct, albeit overlapping, audiences in both England and the US: the humane movement; popular audiences who valued sentimental pictures; and the turn-of-the-century “picture study movement,” which adopted it for moralistic art appreciation textbooks.

In addition, this symposium will examine three women who forged their own paths to humane advocacy in the early twentieth century, seeking to place animals in the public eye through personal, principled and ambitious initiatives. Ethel Beebe reimagined nursery rhymes for children in an attempt to displace Mother Goose with more humane content. Minnie Maddern Fiske used her celebrity to challenge Theodore Roosevelt’s safari hunting and associated gender models. Emmarel Freshel formed the most radical of American animal organizations of the era, the Millenium Guild, in an attempt to reframe animal issues from a feminist maternalist perspective. Individually and together, they sustained animal advocacy in an era of waning influence and visibility, and nurtured values and ideas that would reemerge more powerfully in the modern era.

Wednesday, July 3, 4:10am–6:10pm

Waltham/NICHD-Sponsored Presentations:

Interactions with a Therapy Dog Buffer the Adverse Effects of Stress on Prosocial Behavior: An Experimental Study of Young Adults

Dr Kristen C Jacobson – *University of Chicago, Psychiatry and Behavioral Neuroscience*

There is growing evidence that human–animal interactions (HAI) can reduce subjective and biological markers of stress (e.g., Barker et al., 2005; Beetz et al., 2011; Crossman et al., 2015). However, few experimental studies have systematically tested whether HAI has positive outcomes on physiology and behavior regardless of one’s stress level (i.e. the main effects hypothesis), or whether HAI only has enhanced positive effects on individuals experiencing elevated stress levels (i.e. the buffering hypothesis).

Veterans and Shelter Dogs: A Longitudinal Study Examining the Impact of a Dog-Walk Intervention on Psychological and Physiological Stress Measures

Cheryl Krause-Parello *PhD, RN, FAAN* – *Florida Atlantic University College of Nursing - Canines Providing Assistance to Wounded Warriors (C-P.A.W.W)*

Erika Friedmann, *PhD* – *University of Maryland, School of Nursing*

Kelly Blanchard, *MSW* – *Canines Providing Assistance to Wounded Warriors (C-P.A.W.W)*

Megan Payton, *BA* – *Canines Providing Assistance to Wounded Warriors (C-P.A.W.W)*

Nancy R. Gee, *PhD* – *HAI Research Manager - WALTHAM Centre for Pet Nutrition Professor of Psychology - State University of New York, Fredonia*

Veterans battling posttraumatic stress have reached an all-time high in military history. Posttraumatic stress symptoms include suicidal ideation, depression, anxiety, substance use, chronic pain, and social isolation, among others. To date there have been few studies that examined the stress effects of interacting with dogs specifically in the veteran population. The study funded by the ISAZ/Waltham Collaborative Research Award is both timely and relevant because it directly addressed the need to investigate an innovative intervention for veterans. This project evaluated the effect of walking with a shelter dog on psychological and physiological stress measures in veterans.

Pet Ownership Patterns and Health Outcomes in Community-Living Older Adults

Erika Friedmann – *University of Maryland School of Nursing*

Nancy R. Gee – *SUNY Fredonia and WALTHAM Centre for Pet Nutrition*

Eleanor Simonsick – *National Institute on Aging*

Stephanie Studenski – *National Institute on Aging*

Barbara Resnick – *University of Maryland*

Increased mortality risk and morbidity, decreased cognitive and physical function, and increased psychological symptoms typically accompany aging. The aging population’s health needs will continue to increase as the proportion of the population aged 50 years

and older increases over the next several decades. Pet ownership (PO) has been linked to better health outcomes in older adults, particularly those with chronic health conditions. However, much of the evidence is weak with little known about PO patterns as people age or the contribution of PO to successful aging in community living older adults. This study examines PO patterns among healthy community living older adults and the relationship of PO to cognitive, physical function, and psychological status.

Randomized Controlled Trial Examining Effects of Varying Levels of Human–Canine Interaction and Risk Status on College Students’ Executive Function

Patricia Pendry – Washington State University, Human Development

Alexa M Carr – Washington State University

Jaymie L Vandagriff – Washington State University

Stephanie Kuzara – Washington State University

Nancy R Gee – State University of New York, Fredonia

There has been an increase in the prevalence of mental health disorders in college students, which compromise students’ academic success. The increasing rates of academic stress exposure and lack of stress management skills are thought to play a role. One approach to stress management that has seen a notable increase is the use of Animal Visitation Programs (AVPs) on college campuses despite limited knowledge about their impact on students’ academic success and mental health.

The Impact of Pet Ownership on Learning Outcomes (Cognition, Education, and Language Development) of Children and Adolescents: A UK Population Study

Rebecca Purewal – University of Liverpool, Epidemiology and Population Health

Carri Westgarth – University of Liverpool

Nancy Gee – SUNY Fredonia

Carol Joinson – University of Bristol

Katarzyna Kordas – University at Buffalo

Kerstin Meints – University of Lincoln

Very few high quality studies have been carried out looking at the effects of pet ownership on learning ability in childhood and adolescence. Theoretical justification and experimental study with animals suggest animal interaction is associated with improved cognitive function, but this relationship should be investigated in large, well-designed studies. We examine the association between pet ownership and cognition (attention, impulsivity and memory), educational attainment (SAT scores and GCSE) and early language development in children.

Wednesday, July 3, 4:10am–6:10pm

Concurrent Sessions: Contemporary Companion Animal Issues

And They're Off:

A Critical Examination of the Horse Racing Film Subgenre

Kayleigh Murdock – Florida State University Communication

Horse racing, the “Sport of Kings,” has been a popular sport for centuries, and the sport has been depicted on film continuously since the medium’s emergence. Depictions of horses in these films have changed in dramatic ways since the genre’s advent in the late 19th and early 20th centuries. However, there are ideologically concerning elements of the representations of racehorses on screen. Namely, these films tend to brush over the harsh realities of horse racing as it exists today, which has the impact to influence audiences’ understandings of the sport to the ultimate detriment of the horses involved.

“A Very Photogenic Cat”:

Sociological Aspects of Sharing Cat Photos Online

Jessica Austin – University of Colorado Boulder, Department of Sociology

Leslie Irvine – University of Colorado Boulder, Department of Sociology

In 2013, Arluke and Rolfe explored societal norms surrounding human–feline relationships through early twentieth-century photography, finding that vernacular photos portrayed cats as participants in meaningful relationships with humans. The current study explores Arluke and Rolfe’s question, “How were domestic cats and their connections to humans represented in early-twentieth-century photography?” (p. 12) in a modern context through content analysis of Reddit. Through examining the photos that cat guardians share online, as well as the language they use, we aim to create an understanding of how human-feline relationships constitute understanding sociological topics such as identity, family, and gender.

Photos and post titles were collected from the r/cats subreddit. Value coding was used to examine attitudes toward cats in post titles and pattern coding was used to develop overarching themes. A similar approach was used for analyzing photos: each image was assigned one or more codes describing the cat, humans, and other relevant details. Overarching themes were then generated to describe the dataset overall and compare findings to those of Arluke and Rolfe. Through meaningful, intentional interactions, cats are widely seen as subjects possessing selfhood, who fulfill familial and social functions in many of the same ways as humans. Demonstrations of significant relationships between cats and humans occur thousands of times per day in the virtual social space in many of the same ways uncovered in early photographic records. As society continues to re-negotiate the norms surrounding family and friends, these relationships merit more than passing consideration.

Cultural Debates to Political Movement: A Shift of Dog Meat Issues in Korea

Seola Joo – Research Institute for Veterinary Science, College of Veterinary Medicine, Seoul National University

Myung-Sun Chun – Research Institute for Veterinary Science, College of Veterinary Medicine, Seoul National University

Pet or Food? The duality of dog's position in Korea has been existing for a long time. There have been a number of debates about eating dog meat based on perspectives of global standard, cultural relativism, hygiene problem, nutritional controversies, and animal welfare. To explore the changes in dog meat issues, we analyzed news articles on this topic over the past 20 years. We assumed the three significant events as turning points: the 2002 World Cup, the Animal Protection Act Amendment (2007), and the dog slaughter ban at the Moran dog meat market (2016).

Do People Interact with Dogs Differently when Dogs Are Dressed?

Mariko Yamamoto – Teikyo University of Science, Department of Animal Sciences

Kaori Komiya – Teikyo University of Science

Yuko Shimamori – Teikyo University of Science

Rintaro Yamaguchi – Teikyo University of Science

Nodoka Onodera – Teikyo University of Science

Japanese people are more likely to dress their pet dogs than are people in western countries. This is the same for therapy dogs, albeit it is more for preventing shedding and allergic reactions rather than for fashion. However, the dressing of therapy dogs can cover the soft and warm body parts of dogs, thereby limiting their benefits. This study examined the petting behavior and mood of people who interacted with dogs wearing and not wearing clothes.

The Grumpy Cat Phenomenon and the Commodification of Companion Animals

Gaylene Fasenko – New Mexico State University, Department of Animal and Range Sciences

Theresa Bianco – Concordia University

The past decade has seen the internet taken by storm by family pets with their own social media accounts. Some have gained celebrity status, amassing large numbers of followers and earning them the status of social media influencer. Grumpy Cat, for instance, has over 8 million followers, book and merchandise deals, and her own emoji (Grumpmoji). How can we account for the commodification of companion animals in this manner? This paper seeks to answer this question by examining the issue through the lens of social psychology, focusing on theories of fandom, persuasion, and social connection.

Oral Presentations:

The Very Public Presence of Carriage Horses in New York City: A Cultural Analysis and Identification of Key Stakeholders

Elizabeth Clancy – *New York University Population Health*

Carriage horses are part of a longstanding industry in New York City (NYC), transitioning from the primary mode of transportation in the 19th century to currently serving primarily tourists. Concern over the welfare of horses living/working in NYC spans more than two centuries, and in 2012 a bill was introduced seeking to replace horse-drawn carriages with electric cars. Modified bills filed in 2016 and 2017 with the mayor's support proposed reducing the number of carriage horses and confining them primarily to Central Park. These proposals have prompted disagreements among stakeholders about how this industry should move forward.

Wednesday, July 3, 4:10am–6:10pm

Symposiums:

Dogs in First Nations:

A Decolonising Framework to Explore Human-Dog Relationships and Inform Dog Population Management

Adriana Pisano Beaumont & Janice Hannah – *International Fund for Animal Welfare*

After the forced relocation of Canadian indigenous peoples, the lives of dogs in First Nations and Inuit communities became entangled with those of their human counterparts against the backdrop of loss of Traditional identity and cultural erosion. It is a parallel crisis in which these populations of free-roaming dogs suffer a foreshortened life, punctuated by poor welfare including starvation, neglect and culling which, in turn, impacts the psychological wellbeing of the entire community.

An exploration of attitudes towards dogs in these communities revealed insights about attachment, the changing role of dogs in modern on-reserve families and how owned and un-owned dogs are viewed. There is currently a knowledge gap in understanding the complex entanglements between humans and free-roaming dogs in First Nations. Trauma research points to a variety of ways that poor animal welfare and culls can also vicariously inflict harm on the broader human and canine community. Notwithstanding, the killing and removing of dogs continues to be a component of animal control in many communities, despite widespread condemnation. In both cases, the suffering is shared and the trauma amplified. Gaining insight into the relationships between dogs and humans in each community helps to empower their participation in humane, meaningful and sustainable dog management solutions.

Animal-themed Tattoo Narratives: Insights into Ontological Perspectives and Multispecies Families

Kristine Hill – *University of Exeter*

By examining the narratives associated with animal-themed tattoos, this study explores how humans relate to other animals. The research follows two main themes, namely representations of entire species and tattoos dedicated to a non-human person. Participants use anthropomorphic language to describe non-human animals, and embrace ideas akin to animistic and/or totemistic belief systems (Sahlins, 2014). In the narratives accompanying tattoos dedicated to a companion animal, participants described a variety of relationship dynamics that were distinct from human–human bonds, but which supports the notion that “new kinship studies” (Schneider, 1984; Charles, 2014) can be extended to include non-humans.

The visual elements ranged from abstract designs to lifelike portraits, but the stories behind the tattoos enriched their meaning. Participants used anthropomorphic language to describe non-human animals, and expressed ideas similar to those expressed through animistic and/or totemistic belief systems. Unprompted, participants talked more about the subject than the tattoo itself, and described a variety of relationship dynamics that were distinct from human–human bonds. Companion animals were generally not considered surrogate children or siblings, but the closeness and special value placed upon the relationship was evident, supporting the notion that they should be considered family.

Thursday, July 4, 9:00am–10:40am

Concurrent Sessions: AAT/AAI #3

The Impact of Care Recipients’ Pets on the Role of Family Caregiver

Jessica Bibbo – *Benjamin Rose Institute on Aging Center for Research and Education*
Christine Proulx – *Department of Human Development and Family Science, University of Missouri*

Individuals who require assistance with their own self-care most likely need assistance with pet care. However, the influence of a care recipients’ pet on family (i.e., informal) caregivers has been largely overlooked. Role theory was used to model the impact of a care recipient’s pet (i.e., number of pet care tasks/activities performed, and perceived costs of pet ownership) on caregiving burden, satisfaction, and mastery. The moderating roles of the perceived bond between the care recipient and their pet, the caregiver’s closeness to the pet, and mutuality in the caregiver–care recipient relationship were then examined.

Exploring Handlers' Well-Being in an on-Campus Canine-Assisted Intervention

Camille X. Rousseau – *University of British Columbia, Department of Education*

Zakary A. Draper – *University of British Columbia, Department of Psychology*

John-Tyler Binfet, PhD – *University of British Columbia, Department of Education*

Christine Y. Tardif-Williams – *Brock University, Department of Child and Youth Studies*

Freya L. L. Green – *University of British Columbia, Department of Education*

The field of canine-assisted interventions (CAIs) is burgeoning and although the impact of CAIs on client well-being (e.g., Barker et al., 2016; Crossman et al., 2015; Ward-Griffin et al., 2018) and even on therapy dogs themselves (e.g., Glenk, 2017; Hatch, 2007) has been studied, little empirical attention has been paid to handlers—the very individuals at the heart of CAIs. The goal of CAIs is to enhance the well-being or reduce the ill-being of clients and the aim of this preliminary study was to survey handlers in an on-campus stress-reduction program to understand and identify a profile of their well-being.

Paws & Breathe: Animal-Assisted Stress Reduction

Joanne K. Singleton, PhD, RN, FNP-BC – *Pace University College of Health Professions*

Across universities, students, faculty, and staff are reporting high levels of stress. Stress presents serious risks for the health, with both short and long-term physiological and psychological effects. There is a call to action for evidence-based practices to address this epidemic of stress. Health promotion and disease prevention practices aimed at stress reduction include two non-pharmacologic interventions, diaphragmatic breathing and animal assisted interventions (AAI). The evidence supports both, individually, as having stress reduction benefits. Paws & Breathe™ (pending) combines an AAI with diaphragmatic breathing for a unique approach to stress identification and management for those who participate individually or in a group session.

Reducing Stress in Law Enforcement Personnel through a Canine-Assisted Intervention: Findings from a Feasibility Study

John-Tyler Binfet, PhD – *University of British Columbia Faculty of Education*

Zakary Draper – *Department of Psychology, University of British Columbia*

Freya Green – *Faculty of Education, University of British Columbia*

Seven therapy dogs and handlers visited an urban police precinct for weekly 90-minute sessions for eight weeks. Given the busy setting and complex clientele supported in this study, only experienced handlers (85% female, Mage =46.6 years, SD = 13.3, Mean prior canine therapy experience = 5.17 years, SD = 4.47) were selected for participation. A visual analogue scale (5 = high and 1 = low stress) was used to assess participants pre-to-post differences in stress. Two hundred and fifty-one visits were documented with male and female participants not reporting significantly different levels of stress at T1 according to a Wilcoxon rank sum test ($W = 6040$, $p = .80$). A paired Wilcoxon signed-rank test indicated a significant effect of the intervention ($V = 52$, $p < .001$) with mean stress decreasing from 3.33 at T1 to 1.95 at T2. For cases where the participants indicated it was their first session, the same test revealed a smaller, but nevertheless significant effect ($V = 27.5$, $p < .001$), with mean stress decreasing from 3.21 to 2.12.

SYMPOSIUM: A Comprehensive Review of Therapy Animal Standards, Procedures, and Registration Information Represented in the Existing Animal-Assisted Interventions Literature

Taylor Johnson PhD – *Pet Partners*

Animal-assisted interventions (AAI) are increasing in notoriety both within the realm of scholar-practitioners and within the general public. As these interventions become more well-known and empirically investigated, so does the call for enhanced standardization and professionalization of AAI. While researchers have started to develop an appreciation for the impact of AAI, little attention has been paid to the registration processes and subsequent standards and procedures for the therapy animals that are represented in the existing literature. This paper comprehensively reviews such information, highlighting a call for further consideration of these issues in future investigations.

This paper will systematically review AAI studies that were published between 1998–2018. Studies related to animal assisted therapies and activities are considered. Descriptive information about the kinds of therapy animals in each of these publications are tracked, noting mention of the therapy animals' type, training, registration process, and mention of the registering bodies' standards of practice. Quantitative, qualitative, and case study designs are all included to ensure that a comprehensive appreciation for these issues.

SYMPOSIUM: Conversing for Consensus: Emotional Support Animals

Aviva Vincent – *Mandel School for Applied Social Science, Case Western Reserve University*

Janet Hoy-Gerlach – *University of Toledo*

Human interactions with animals are increasingly recognized for empirical support for mental and physical health benefits. There is a range of terms used to recognize the animals that serve in deliberate therapeutic capacities and engage in activities to support human well-being. Yet, there is transnational confusion and misuse of terminology regarding the designation and role of the animal. Through a robust review of the international literature, a lexicon of language to describe the various forms of human–animal interaction is established, as well as the ethical responsibilities for those engaged in professions of human services and animal welfare.

The emergent practice of denoting and supporting ESAs has tremendous relevance for human and animal service profession internationally. Within the US, ESA refers to companion animals, without any special training, that are denoted in writing by a licensed mental health professional to be a therapeutic necessity for someone living with a mental health condition that meets the legal definition of a disability. Outside the US, the phrase “ESA” often refers to animals that have special training (e.g., assistance/service animals) to assist people living with mental illness. Dominant themes in the literature include: housing/public space, fraudulent claims, animal care, and welfare.

Thursday, July 4, 11:00am–12:20pm

Concurrent Sessions: Perceptions of Wildlife

**Moral Outrage from around the World:
Examining the Responses to the Deaths of Marius the Giraffe and
Cecil the Lion**

Jamie Feinstein – *Canisius College, Anthrozoology*

Through social media and the press, the American public has shown moments of moral outrage directed towards animal practices engaged by other cultures and in other countries, while at the same time ignoring their own related practices. The deaths of Cecil the lion and Marius the giraffe provide a case study for examining the dichotomy between different cultures' reactions to the same animal welfare concern.

**Elephant Semantics in Nepal – When an Elephant Is “Not Just” a
Wild Animal**

Michelle Szydowski – *University of Exeter, Social Sciences and International Studies*

International travellers often find that problems with “language” go beyond just the translation of words. Visitors to Nepal expect to see elephants, but what they find is four distinct “castes” of elephants, all of which are viewed in vastly different ways. This paper examines the tensions that arise when a group of conservation volunteers from the US encounter these castes of elephants, and must decide how to balance their desire for elephant interaction with the ethics of elephant use.

**What Drives Illegal Hunting with Dogs?: Traditional Practice
in Contemporary South Africa**

Jaime Chambers – *Washington State University, Anthropology*

Illegal hunting with dogs in rural South Africa occupies a juncture where issues of land use, conservation, and livelihood rush to a head. Hunting with dogs has a long cultural history, tethered to tradition and subsistence, however, today it is tightly regulated, considered legitimate only with permits and official oversight. Hunting continues outside the law, fueling conflict between rural communities, game reserves, and landowners. Academic literature and mainstream media alike paint a multidimensional picture of the phenomenon. Some sources portray disenfranchised people practicing a culturally significant livelihood strategy; others claim “taxi hunters” commodify dogs and wildlife, severed from traditional context.

Concurrent Sessions: Shifting Perceptions

Scavenger or Working Partner – Effects for Dogs in the Public Eye

Christoph Jung – *Petwatch*

Daniela Pörtl – *Burgenlandklinikum, Leipzig University*

Over 350 dog breeds are described all over the world. In the public eye, dogs are mostly seen as specimen of a breed or as mongrels of breeds. However, we do not really know very much about the origin of dog breeding. Some scholars spread the idea that dog breeds would be a new phenomenon in history of humankind. Village dogs would have been the original dogs, not living together with people but scavenging on human waste.

Certified Hogwash: Consumer and Retailer Perceptions of Higher Welfare Meat, Eggs, and Dairy

Daisy A. Freund – *American Society for the Prevention of Cruelty to Animals, Farm Animal Welfare*

The lack of a consistent approval process for animal welfare claims in the US has allowed for misleading labeling of meat, eggs, and dairy. This is particularly problematic as concerned consumers increasingly seek out alternatives to intensively farmed animal products. Some labels such as “natural” or unverified “humane” claims have no impact on animal welfare and may be diluting the demand for higher welfare products, offering consumers a false assurance, and not meeting consumers’ expectations despite higher prices. The ASPCA commissioned two surveys to understand consumers’ and retailers’ levels of demand for and confusion about farm animal welfare related food labels.

Memory Representations for Food in Omnivores, Vegetarians, and Restricted Eaters

Valerie Sims – *University of Central Florida, Psychology*

Matthew Chin – *University of Central Florida, Psychology*

Daphne Whitmer – *University of Central Florida, Psychology*

Vegetarianism is a continuum, with 37% of Americans reporting a vegetarian or semi-vegetarian diet on occasion. Few studies have investigated semi-vegetarians. Vegetarians easily direct their attention to pictures of meat and omnivores attribute fewer psychological characteristics to animals. This study examined the semantic organization of food words and whether this organization was related to chosen diet. A secondary question was whether identification of a stimulus as something to be eaten personally requires two steps: Identification of potential food and then a personal decision about consumption. This would allow us to understand the controlled nature of vegetarianism.

Thursday, July 4, 11:00am–12:20pm

Concurrent Sessions: Shifting Perceptions continued

**I Won't Be Afraid As Long As You Stand by Me:
Do Dog Owners Evaluate Critical Life Events Less Stressful?**

Birgit Ursula Stetina – *Sigmund Freud University, Vienna Clinical Psychology*

Lisa Emmett – *Sigmund Freud University, Clinical Psychology*

Christine Krouzecky – *Sigmund Freud University, Clinical Psychology*

Studies show evidence that animals have healthy effects on humans like reducing stress (Virués-Ortega & Buela-Casal, 2006), but the underlying theoretical principles are still heavily discussed. Rarely models of health promotion like the sense of coherence (SOC) by Antonovsky (Bengel et al., 2001) are considered relevant parameters. In addition, it is unclear if owning a dog effects the subjective evaluation of critical life events (CLE), which is associated with the SOC (McSherry & Holm, 1994). Therefore, the goal of the study was to examine if dog-ownership has an impact on the subjective evaluation of CLE focusing on SOC.

***SYMPOSIUM: My Dog Needs a Letter! Multidisciplinary
Implications of Certifying Emotional Support Animals***

Amy Ames – *Rochester Center for Behavioral Medicine*

Betz King – *King & Associates*

Amy Johnson – *Department of Psychology, Oakland University*

Theresa Deporter – *Oakland Veterinary Referral Service, Department of Animal Behavior*

Emotional Support Animals are in the news regularly, and clients are increasingly asking for letters designating their personal pet (often a dog) as an emotional support dog (ESD). A cross-disciplinary panel of experts in mental health and animal welfare addresses the associated challenges and offers suggestions for executing a comprehensive ESD evaluation. In featuring the unique combined perspectives of animal behaviorists and psychiatric professionals, this panel encourages collaborative thinking between disciplines while providing a fun look into a growing policy issue.

Concurrent Sessions: Undergraduate Research Highlights

Are More Involved Pet Owners Better Prepared for Disasters?

Maria Asad – *Beacon College Anthrozoology*

While pet ownership is frequently cited as a risk factor for evacuation failure in hurricanes, emergency preparedness remains an under-studied dimension of pet owners' disaster behaviors. Specific pet management practices have been tied to evacuation outcomes in specific disasters (Heath 2001) and deserve further empirical investigation. I hypothesize that the routine standard of care provided by pet owners predicts their compliance with recommended emergency preparedness measures.

The Human Perception towards Dolphins in Captivity

Alexander Sweet – *Beacon College, Anthrozoology*

Chrissy Case – *Beacon College*

Brian Ogle – *Beacon College*

This study explored the perception, not opinion, of individuals towards dolphin captivity. As perception is a key factor in many topics related to human–animal interactions, especially wildlife and environmental conservation. This poster reviewed how individuals believe dolphin captivity is a major issue, but enjoyed seeing dolphins in captivity even with biased opinions.

Personality, Job Satisfaction, and Human–Animal Bonds of Zookeepers

Serena Partlow – *Beacon College, Anthrozoology*

Chrissy Case – *Beacon College*

Zookeepers employed by an accredited facility were asked to participate in an electronic survey. An exploration of various personality traits in zookeepers were examined using a validated Job Satisfaction Scale (Macdonald & MacIntyre, 1997) as well as the Big Five Inventory (Rammstedt & John, 2007). In addition, the extent of the self-reported bonds with the animals under their care was examined. A correlation between self-reported traits as well as their preferred taxa was examined to determine which factors most influence job satisfaction in zookeepers.

Success

FOR STUDENTS WHO LEARN DIFFERENTLY



BACHELOR OF SCIENCE IN

ANTHROZOOLOGY

Beacon is one of only two colleges in the country to offer an undergraduate major in Anthrozoology

PROGRAM HIGHLIGHTS

Combines scientific study and exploration with theoretical applications

Hands-on field experiences and professional internships

Featuring career-focused study tracks in:

- Captive Wildlife Care
- Domestic Animal Care
- Wildlife Conservation

DISCOVER BEACON

70%

4-YEAR ON-TIME GRADUATION RATE
(US AVERAGE: 37.8%)

Source: National Center for Educational Statistics

83.5%

EMPLOYED OR ATTENDING
GRADUATE SCHOOL

100%

PARTICIPATE IN HANDS-ON,
PROFESSIONAL EXPERIENCES

To learn more about this and other Beacon programs, contact **855-220-5376** or

BeaconCollege.edu



ONE HOUR FROM ORLANDO, FLORIDA

Poster Abstracts *by lead author*

Pet Attachment in the Context of Family Conflict

Jennifer W. Applebaum¹, Barbara A. Zsembik²

¹University of Florida Sociology and Criminology & Law

²University of Florida, Dept. of Sociology and Criminology & Law

A growing body of research has been devoted to the idea that companion animals have a positive impact on their owner's health, providing benefits ranging from motivation for exercise to acting as both a stress reducer and social support. The claim that pets are beneficial to us is generally accepted in our culture, which is exemplified by the prevalence of therapy animals in cancer wards, hospice care, and prison rehabilitation programs. In spite of this widespread perception, little research has examined the role of the pet in adverse or tumultuous family circumstances.

The BRIA Unmet Pet Care Needs Scale: The Development of a Tool for Adults and Their Family Caregivers

Jessica Bibbo¹, Sandy Branson², David M. Bass¹

¹Benjamin Rose Institute on Aging Center for Research and Education

²Cizik School of Nursing, The University of Texas Health Science Center at Houston

The relationship with a pet can be particularly significant for older adults living with chronic conditions. While a pet can provide support and motivation for self-care, the pet's daily care needs can be difficult or unfeasible for these populations. Interventions supporting adults and their family caregivers to successfully manage chronic conditions often focus on discussing and planning medical care and other important issues, resulting in better quality of life and preventing crises. Unfortunately, these interventions regularly overlook the topic of pet care. The Benjamin Rose Institute on Aging Unmet Pet Care Needs (BRIA UPCN) was developed to address this need.

Faculty Perceptions of Emotional Support Animal Presence in the Classroom

Yolonda Bradshaw¹, Kelly George², Brittany Fischer², Jade Werner², Nicole Lorig², Kimberly Cole²

¹The Ohio State University Center for Human-Animal Interactions Research and Education

²The Ohio State University

As mental health practices improve, the use of emotional support animals has become widespread. University students encounter several stressors including academics, personal situations, and family matters. The use of an emotional support animal may mitigate some of the challenges university students experience, however having them in the classroom setting can be controversial. Our research aims to conduct examine faculty attitudes regarding students bringing support animals into the learning environment and policies that can be developed to ensure classrooms remain productive.

Feasibility Pilot of Animal-Assisted Activity in Critically Ill Older Adults: A Small Randomized Controlled Trial

Sandra Branson¹, Lisa Boss², Shannan Hamlin³, Nikhil S. Padhye²

¹Cizik School of Nursing Research

²Cizik School of Nursing

³Houston Methodist Hospital

Critically ill patients face serious, life-threatening health problems, and the added unpredictability, uncontrollability, and unfamiliarity of the intensive care unit (ICU) environment creates significant stress that can affect older patients' ability to cope with disease, treatment, and recovery. In this feasibility pilot study, Branson and colleagues assess the feasibility and pilot trends of a non-pharmacological intervention, animal-assisted activity (AAA), for improving biobehavioral stress response, measured by self-reported stress and anxiety, and salivary cortisol, C-reactive protein, and interleukin-1 in ICU patients ≥ 60 years old.

Relationship Affect for Volunteer Canine Owners and Their Therapy Dog in Occupational Therapy Settings for Soldiers with Traumatic Brain Injuries

Moriah Brotherton

University of Exeter Department of Sociology, Philosophy and Anthropology

Canine Assisted Therapy is as an effective method for the alleviation of distressing symptoms (Barker and Wolen 2008; Marcus 2013; O'Haire 2015). However, there is a lack of research focusing specifically at the effect on the dog owners who provide dogs for therapeutic interventions. This research focused on owners who provide therapy canines used in occupational therapy for service members (United States Army). The study found a stated increase in bonding with their dog, an array of motivating factors for participation, and a promising report of an increase in quality of life.

Examining the Relationship and Perceived Bonds Between North American Falconers and Their Working Raptors

Danielle M. Brown¹, Dr. Christy Hoffman²

¹*Canisius College Anthrozoology*

²*Canisius College*

Falconry is a centuries-old hunting sport in which humans and birds of prey work together to take game, however, very little data exist on the unique relationship that develops between falconers and their non-domesticated raptors. Unlike many companion animals' relationships with their owners, raptors flown in falconry have multiple opportunities to leave their human handlers but commonly stay. This study offers insight into the human-avian bond between falconers and captive raptors in North America. Specifically, we examined the bond falconers feel towards their raptors and falconers' reports of raptor behaviors that may provide insights into how birds view their handlers.

Companion Animals and Parent Stress in Families of Children with Autism Spectrum Disorder

Gretchen K. Carlisle, Rebecca A. Johnson, Timothy Brosi

University of Missouri, Research Center for Human-Animal Interaction

Companion animals (CA) in families of children with Autism Spectrum Disorder (ASD) have been associated with benefits for the children including: unconditional love and companionship for children, and stress relief for parents. The goal of this study was to explore companion animal ownership patterns in families of children with ASD. In addition to this, we examined the relationships between children with ASD and their family CA, parents' beliefs about the benefits and burdens of CA in their families, as well as parent stress.

Preliminary descriptive findings revealed: Parent age (Mean=44.9 years), Gender (90% female), Child age (Mean=12.8 years), Child Gender (78% male), CA ownership (82%). Of the CA, 34% were dogs and 23% cats. Parents (52%) believed their children were a major source of stress in their lives. Five percent of parents indicated that a CA would be in danger in their household. Parents (25%) also reported that their children were irritated by their pet. Benefits of CA ownership included increased parental exercise, social interaction and relaxation. Parents (58%) reported that their children were attached to their CA.

Perceptions of Puppy Trainers Regarding Societal Facilitators and Barriers to Service Dog Training in Public Spaces

Virginia K. Corrigan DVM MPH DABVP, Chelsea Bond, Samantha Buteux

Virginia Tech Virginia-Maryland College of Veterinary Medicine

Recent research has delved into public perception of service dogs, emotional support dogs, and therapy dogs by the general public. This work elucidated significant public misconceptions regarding rules and regulations around assistance dogs; however, service dog access to public spaces was viewed favorably. Little is known regarding the perceptions of public experiences of those integrally involved with training dogs for service work.

The Influence of Attachment Anxiety and Avoidance on Pet Well-Being

Anthony Coy¹, Alicia Maggio², Tristen Hynard²

¹University of South Florida Sarasota-Manatee, College of Science and Mathematics, Psychology

²University of South Florida Sarasota-Manatee

Previous research shows the many benefits in human–animal interactions (specifically pets and animal companions) for the human. However, far less psychological research has examined outcomes for the animal. In contrast to interactions with other people, the human–animal relationship is unique in regards to the dependence of the animal on the person, ultimately affect the level of care the animal receives. Attachment is a construct that influences relationships of all types throughout life. Indeed, attachment avoidance and anxiety has been found to influence the decision to adopt a pet and pet preference. We examine the influence of attachment on animal well-being.

When Does a Pet Become a Pest? Making Sense of the Convolved Laws and Policies Surrounding Rats

Eva G. Cross

Canisius College Anthrozoology

The relationship between humans and rats has been strained at best and violent at worst. Although rats are growing in popularity as companion animals, the laws are not keeping pace. When a rat-hoarding tenant in New York abandoned her mischief of pet rats and left them to breed in her empty apartment in 2018, the landlord called in an exterminator. This paper examines the laws and policies that allowed these domestic rats to be exterminated rather than rescued, as would be the case for other species of companion animals, and argues that rats should be considered “sentient property” in the eyes of the law.

Personality and Demographic Variables as Predictors of Scores on the Cat Care and Needs Scale (CCANS)

Mikel M. Delgado¹, Gretchen M. Reevy²

¹University of California at Davis Medicine and Epidemiology, School of Veterinary Medicine

²Department of Psychology, California State University, East Bay, Hayward, CA, USA

The current study investigated personality and demographic correlates/predictors of the recently developed Cat Care and Needs Scale (CCANS; Delgado & Reevy, 2018), a measure of self-reported cat care. Previous research has identified the Big Five personality traits, conscientiousness and neuroticism, and some demographic variables, such as gender and age, as predictors of attachment to pets, a concept related to the care of animals (Reevy & Delgado, 2014). We studied relationships between neuroticism, conscientiousness, demographic variables, and cat care and compared how these relationships are similar to relationships between these same predictors and pet attachment.

Perception of Animal Food Words by Native Spanish Speakers

Gabriela Flores-Cruz¹, Melodie Spiegel¹, Valerie Sims¹, Matthew Chin¹, Paulina Maxim², Carlos Vasquez¹

¹University of Central Florida, Department of Psychology

²Georgia Institute of Technology, Department of Psychology

With an increasing number of individuals identifying as some form of vegetarian, there is need for further insight into the implicit mental representations of food. Further, research on how these representations vary by cultural or linguistic community is scarce. This study focuses on the relationship between food- and animal-related words in a bilingual, Spanish-speaking population via a lexical decision task.

A $2_{(\text{Sex})} \times 2_{(\text{Animal/Food})} \times 5_{(\text{Animal word})}$ mixed ANOVA yielded an Animal Word x Sex interaction ($F_{(4,104)} = 2.52, p = 0.045$) and an Animal Word x Sex x Animal/Food Interaction ($F_{(4,104)} = 3.40, p = 0.012$). Males were faster when animal words were paired with food. Additionally, the Spanish word for chicken as a food was verified equally quickly when paired with both food and animal, whereas reaction times for chicken as animal paired with food were much slower. The word animal primed both words for chicken, whereas food did not. Analysis of word relatedness can be used to understand the perception of animals as food. Languages that use different words for food animals vs. living animals may inherently change human categorization of animals. Further, the category for food seems to be more regulated by language specifics than the category of animal. Changing views on animal use may be facilitated by specific language choices for different linguistic communities.

Assessing Anxiety in Veterinary Students Studying for Exams before and after Being in the Presence or Absence of Comfort Dogs

Patrick Flynn

Canisius College Anthrozoology

Elevated anxiety has been shown to have numerous, deleterious effects on university students, as evaluated both by survey and physiologic measures. Among them are lower student expectations of exam outcomes, decreased academic performance, and even an increase in depression. University campuses commonly invite comfort dogs to campus with the hope that the dogs will help reduce student anxiety. Several studies of such programs have concluded they positively impact students, though none have evaluated veterinary students specifically. To assess the effects of therapy dogs on veterinary student anxiety, we performed a randomized controlled trial.

Using Clay Modeling vs. Cat Cadaver Dissection to Teach Human Anatomy at the Secondary School Level: Student Outcomes and Attitudes

Emma K Grigg¹, Lynette A. Hart²

¹University of California, Davis Department of Population Health and Reproduction (Vet Med)

²University of California, Davis

Increasing public concern for the use of animal dissection in education is driving development and testing of alternatives to animal use, such as 3D models or computer simulations. Clay modeling has proven successful in achieving comparable or superior learning at the undergraduate level, but has not been tested at the secondary school level. This three-year study tested the effectiveness and appeal of clay models vs. traditional cat cadaver dissection in teaching human anatomy to high school students, in a course, which had traditionally used cat dissection.

Student performance on a content knowledge assessment increased following the lab for both the control and treatment groups. However, the improvement was significantly greater for students using the model, vs. dissection, to learn about human muscle anatomy. The use of clay models produced better short-term learning outcomes when compared with cat dissection, although this difference in improvement was not retained in student final exam scores. No significant differences were found in student perceptions of enjoyment or usefulness between the two exercises. Students consistently expressed a strong desire to choose which approach (dissection vs. alternative) they used in the classroom.

Owners Practicing Human-Canine Tactile Interventions with Fearful or Anxious Dogs: A Pilot Study Using TTouch or Pet-Centered Meditation

Lynette Arnason Hart¹, Ashley Tringali², Emily Parker², Neil Willits³, Lara Sirovica², and Elisabeth Gruskin²

¹University of California, Davis, School of Veterinary Medicine Dept of Population Health and Reproduction

²University of California, Davis, School of Veterinary Medicine

³University of California, Davis, Department of Statistics

Dogs' fear and anxiety present problems for dogs and their owners that can be challenging to resolve. This pilot study investigated two human-canine tactile interventions, Tellington Touch (TTouch: specialized massage) and Petitations (pet-centered meditations) intended to reduce the dogs' fear and/or anxiety. An inclusion criterion was that participants had a fearful and/or anxious dog reported to be non-aggressive. Participants were expected to attend one training workshop where they learned the techniques for their group. Participants were assigned to: 1) a TTouch Group (massage based); 2) a Petitations group (meditation focused on the dog); or 3), the control group, where the owner was instructed to be observant of the dog's behavior. All were instructed on relevant techniques at the introductory group workshops where they also filled out a baseline survey. After four weeks, they were provided another survey and a structured phone interview.

Moral Foundations and Authoritarianism Predict Attitudes toward Animal Welfare

Christopher Holden¹, Hal Herzog²

¹Department of Psychology Appalachian State University

²Western Carolina University Psychology

Moral foundations theory holds that differences in political and moral views reflect variations in the importance individuals place on five intuitive and partially innate ethical dimensions: harm, fairness, in-group loyalty, obedience to authority, and purity. For example, political liberals tend to emphasize fairness and the avoidance of harm while conservatives tend to value loyalty, obedience, and purity. We examined the degree to which these values were associated with attitudes toward the treatment of other species. In addition, we examined the relationship between beliefs about animal welfare and right-wing authoritarianism, social dominance, and sensitivity to disgust.

Development, Review, and Dissemination of a Standardized Behavior Coding Tool: The Observation of Human–Animal Interaction for Research (OHAIRE)

Clare L. Jensen¹, Noémie A. Guérin¹, Robin L. Gabriels², Monique M. Germone², and Marguerite E. O’Haire¹

¹Center for the Human–Animal Bond, College of Veterinary Medicine, Purdue University, West Lafayette, Indiana

²University of Colorado, School of Medicine, Denver, Colorado; Children’s Hospital Colorado, Aurora, Colorado

The field of human–animal interaction (HAI) has experienced exponential growth, focusing on quantified therapeutic outcomes and mechanisms. However, the lack of a standardized, validated observational measure of HAI presents a roadblock to future growth. To fill this gap, The Observation of Human–Animal Interaction for Research (OHAIRE) coding tool was developed. This poster aims to 1) provide an overview of the OHAIRE coding tool’s value as a standardized and validated measure, 2) summarize previous research using the tool, and 3) describe accessibility and dissemination of the tool through a newly developed online platform.

Population Analysis of Free Ranging Dogs in Japan-Urban and Remote Areas Compared

Miki Kakinuma¹, Katsuya Furukawa², Hinako Ogasawara³, and Izuru Nose³

¹Nippon Veterinary and Life Science University Comparative Developmental Psychology

²Nagato Environmental Health Office

³Nippon Veterinary and Life Science University

Much information is needed for free ranging dogs (FRD) which consists of 70–80% of dog population. Unlike family or working dogs, they are not restricted by human but are dependent on human. In Japan, the law strictly forbidden any un owned dogs to be around, but there are some FRDs living in groups. Since Japan belongs to temperate humid climate zone with forest ratio of 70%, dogs can live without strong bonding with human, like other FRD on the Earth. We have categorized FRD under custody of local health office to see the characteristics of these dogs.

“Ugly” As the New Breed Standard: Have We Failed Our Dogs?

Diane Karagienakos

University of Exeter, UK Anthrozoölogy (Discipline: Sociology, Anthropology and Philosophy)

The annual World's Ugliest Dog Contest rewards traits often consistent with aggressive breeding practices. Contest winners in 2018 and 2017 were both purebreds. In addition to “ugliness,” numerous dogs suffer genetic disorders due to excessive and/or irresponsible breeding. The contest is well-intended, as it advocates for the adoption of homeless dogs, yet it is curiously silent on the topic of breeding. This presentation offers an overview of dog keeping, discussions of the culture of dog breeding and the recent increased popularity of animal rescue, and insight into how these come together on one stage every year.

Australian Pet Owners' Use, Experiences and Views of Online Pet Health Information

Lori Kogan¹, Susan Hazel², and James A. Oxley³

¹Colorado State University, Department of Clinical Sciences

²School of Animal & Veterinary Sciences and Animal Welfare Science, University of Adelaide

³Independent Researcher, UK

The internet is an easily accessible and widely used resource for a vast array of health information—both human and animal. Despite its popularity, there is limited research on pet owners' use, experiences and views of the internet for pet health information. A recent survey of Australian veterinarians highlighted the fact that many question pet owners' understanding of the pet health material they read online (Kogan et al., In press). As a follow-up, this study was designed to better understand Australian pet owners' use of the internet for online pet health information.

The Influence of AAT on the Stress Level of Nursing Staff

Kristyna Machová

Czech University of Life Sciences Prague Department of Ethology and Companion Animal Science

Patient care brings many stressful situations for staff. Compensating with responsibility, night shifts and nervousness of patients and their family members has an impact on the well-being of these people. Because AAT has an impact on stress reduction in different groups, it would be beneficial if this effect was demonstrated to healthcare professionals. Animals often go to the hospital to visit patients, and if their presence affects employees, hospital could benefit even more from their presence, because well-tuned staff also have an impact on patients. The aim of this study is to find out if the presence of a dog in a healthcare facility affects the stress level of health care professionals.

Exploring the Formation, Maintenance, and Termination of Visitor–Animal Bonds

Selenia Murillo

Independent Researcher

Individuals may become more conservation minded because of their attachment to zoo animals and make behavioral changes that benefit wildlife. Individuals who adopt zoo animals may have unique experiences that make them more conservation-minded and more attached to zoo animals than individuals who do not. Studying these two groups may provide insight into how animal attachment influences conservation behaviors and how zoos can foster the development of animal attachment bonds.

Evaluation of Animal Welfare in Animal-Assisted Education (AAE) Program with Horse at a Tokyo Elementary School

Xitong Niu¹, Miki Kakinuma², Izuru Nose², Kotomi Orita³, and Nao Nishida⁴

¹Nippon Veterinary and Animal Science University Comparative Developmental Psychology

²Nippon Veterinary and Animal Science University

³Harmony Center

⁴Mitaka City Office

In recent year, animal-assisted education (AAE) with horse are increasingly introduced in Japan. Some theoretical and empirical literature have suggested that EAA have active functions: interest in learning/motivation and improvement in attention concentration. But in this process, children attitudes toward the welfare of animal are rarely evaluated, although this may influence in the effectiveness of animal-assisted education.

The Presence of a Dog Improved the Impression of an Opponent in a Social Dilemma Game

Izuru Nose¹, Mikiya Hayashi², Kaori Masamoto³, Mami Irimajiri⁴, Asami Tsuchida⁵, and Miki Kakinuma¹

¹Nippon Veterinary and Life Science University Faculty of Veterinary Medicine

²Faculty of Psychology, Meisei University

³Faculty of Human Sciences, Matsuyama Shinonome College

⁴Faculty of Veterinary Medicine, Nippon Veterinary and Life Science University, Animal Behavior Clinic, Synergy Animal General Hospital

⁵Faculty of Agriculture, Tokyo University of Agriculture

One effect that is expected from animal-assisted intervention (AAI) is the activation of social interactions among participants. Previous studies have reported that positive social interactions increase as a result of interventions using dogs. However, few studies have examined this effect in a controlled environment. In this study, a social dilemma game was used as the task for examining social interactions under experimental setting.

The Relationship between Owner Executive Function and Canine Impulsivity

Mariana Olsen

Montana State University Psychology

In humans, parental self-regulation can impact subsequent child behavior and self-regulation. Specifically, maternal executive function is an important predictor of harsh parenting practices and child conduct problems. Arhant et al. (2010) has provided evidence for possible parallels in the owner–dog relationship, showing that use of harsh punishment practices and lack of consistency in training and discipline are associated with higher disobedience, impulsivity, and aggression in dogs. I previously proposed that owner executive function might influence canine executive function through the use (or nonuse) of harsh disciplinary techniques (Olsen, 2018). The current study tests this prediction using a structural equation path model in which the influence of owner executive function on dog executive function is mediated by use of harsh punishment and consistency.

News Coverage of Dog-on-Dog Aggression in the UK

James Oxley¹, Keith Squibb², Susan Hazel³, Tamara Montrose⁴

¹Independent Researcher

²Hartpury University, Animal Welfare Research and Knowledge Exchange Arena

³University of Adelaide, School of Animal & Veterinary Science

⁴Hartpury University, Animal Welfare Research and Knowledge Exchange Arena

To date, the majority of dog aggression research has focused on human-directed dog aggression, bites and fatalities. Few studies have investigated the occurrence of dog-on-dog aggression. In severe incidents, such as where a dog bites another dog, this could result in injury to the dog/person, expensive veterinary treatment, legal consequences for the owner and potentially the deterioration of the owner–dog relationship leading to rehoming or euthanasia. The aim of this study was to investigate dog-on-dog aggression reported by the news media in the UK.

Evaluation of the Acceptability of an Animal Welfare Educational Intervention for 5- to 7-Year-Olds

Mayra Padilla, Prof Jo Williams, Dr Monja Knoll, Sylvia Zumaglino, Amy Finney, and Scottish SPCA

University of Edinburgh Clinical and Health Psychology

Scottish SPCA

Children's bond with animals might influence their social, cognitive and emotional development. Since pets are dependent on human care, they can also benefit from children's empathetic and compassionate treatment. There are only a small number of evaluation studies of animal welfare education interventions at present, and there is a need for more programmes to prevent animal cruelty. The aim of the study is to evaluate the level of satisfaction with 'Rabbit Rescuers' among children, as an indicator of acceptability and potential for it to become part of a larger animal welfare education programme delivered by the Scottish SPCA.

Applying Protection Motivation Theory to Pet Owners' Hurricane Response

Jason A. Parker MS, Valerie Sims PhD, and Daphne Whitmer MA

University of Central Florida, Human Factors and Cognitive Psychology

The frequency of companion-based pet keeping has steadily increased throughout the past 20 years. As of 2018, 68% of American households include at least one companion animal (APPA, 2018). Recent research suggests that due to the logistical complexity associated with companion animals, owners of companion animals may have increased risk propensity (i.e., increased risk taking with potential danger) with evacuation decisions during natural hazard events. Protection Motivation Theory (PMT) may provide a framework by which to evaluate the abovementioned claim by investigating pet owners and non-pet owners' perceived susceptibility, self-efficacy, and evacuation behaviors related to the natural hazard event.

A Systematic Review of Therapy-Animal Characteristics in Equine-Assisted Intervention

Emma Leigh Pasiuk¹ and Angela K. Fournier²

¹University of Saint Thomas, MN Graduate School of Professional Psychology

²Bemidji State University, MN

As the utility of equine-assisted intervention (EAI) continues to grow and the field of animal-assisted therapy evolves, examination of the animals involved is imperative. The current systematic review explores the E in EAI by examining the animal's breed, age, place of origin, training, and certification. The current standards for therapy animals tend to be geared toward dogs, yet continue to be generalized to other animals (e.g. hamsters, cats, rats, llamas, horses). The safety and effectiveness of EAI depends heavily on our equine therapeutic partners and this research helps clarify who the equines are.

Impact of Human–Animal Interactions: Assessing Physiological Changes of Saliva Cortisol in Donkeys Involved in Animal-Assisted Therapy

Lisa Phelps, and Artemiou E, Hutchison P, Machado M, Pereira-Mauldin M, Carter J, Phelps L, Bates H, Archibald M, Woodworth L, Bergfelt D.

Ross University School of Veterinary Medicine

An increased interest in evaluating human–animal interactions and their benefits exists. Our study recognizes the role of donkeys as pets and companion animals beyond general use in agriculture and recreation. Several stressors are associated with the acquisition of domesticated or free-ranging donkeys, and can impact their well-being. An increase in cortisol is not always associated with negative events; However historically, it has been used as a hormonal indicator evaluating noxious mental and physical stimuli. Considering the positive outcomes involving physiological effects associated with human–animal relationships, a better understanding of changes in donkey cortisol levels can provide much needed physiological data.

Moral Foundations Authority and Care Play a Different Role in the Treatment of Pet, Pest, and Profit Animals. Pilot Study

Agnieszka Potocka

SWPS University of Social Sciences and Humanities Psychology

This poster presents the results of pilot study concerning the relationship between beliefs in animal mind, moral foundations (Graham et al, 2011) and attitudes toward treatment three categories of animals (pet, pest, profit). The studies draws on the three-element model of attitudes towards animal use by Knight and Barnett (2008). During the study, I also investigated differences in beliefs in animal mind, and affect in separated categories of animals.

Behavioral Techniques Used in the Diagnosis, Treatment and Management of Atrial Fibrillation in a Geriatric California Sea Lion

Amber Ramos

University of Edinburgh & National Marine Mammal Foundation School of Health and Social Sciences: Clinical Psychology

Due to scientific advancements in animal health and welfare, many species living in zoos and aquariums are surviving well beyond the average lifespan of their counterparts in the wild. While the increasing commonality of geriatric animals living under human care serves as a testament to improvements in veterinary care and behavioral management, some new challenges may arise as these populations age. As care has advanced, detection of age-associated problems has increased, with some individuals exhibiting novel, age-related ailments that may be absent in younger populations. This poster reviews the behavioral techniques developed to care for a geriatric sea lion with atrial fibrillation.

Observation of Live Fish Elevates Mood and Improves Relaxation, but Does Not Improve Math Task Performance

Taylor Reed¹, April Whiting², Nancy R. Gee², Erika Friedmann³, Donna Snellgrove⁴, and Katherine Sloman⁵

¹*SUNY, Fredonia Psychology*

²*SUNY, Fredonia*

³*University of Maryland, Baltimore*

⁴*WALTHAM Centre for Pet Nutrition*

⁵*University of the West Scotland*

Fish and other aquatic species are popular privately-kept pets, classroom pets, and resident animals in offices and assisted living facilities, but little is known about the effects of fish on human arousal, mood states and cognition. We use two perspectives to predict outcomes in this study: 1) biophilia, which suggests that interaction with the natural environment and living organisms induces relaxation, and 2) the biopsychosocial model which describes health outcomes as deriving from three contributing factors; biological, psychological and social. We developed our hypotheses and methodology from these theories and available research results.

Olfactory Discrimination of Putative Stress and Anxiety Volatiles by Domestic Dogs

Catherine Reeve¹, Simon Gadbois², and Kelly Forrester²

¹Queen's University Belfast Psychology

²Dalhousie University

For those people suffering with PTSD, owning a companion dog has been shown to confer psychosocial and emotional benefits, with some owners suggesting that their dog can “sense their mental anguish.” A growing body of research suggests that dogs can detect olfactory cues associated with physiological change, but this ability has yet to be examined with regard to dogs’ ability to detect odour cues associated with stress and anxiety. Therefore, the current study examined dogs’ ability to discriminate between stressed/anxious and non-stressed/anxious odour cues from human breath and sweat samples.

Human–Animal Bonding in Animal-Assisted Interventions in Counseling

Ariann Evans Robino¹, Virginia Buechner-Maxwell²

¹Virginia Tech, CENTAUR Affiliate Counselor Education

²Virginia-Maryland College of Veterinary Medicine, Department of Large Animal Sciences, CENTAUR Director

Animal-assisted interventionists incorporating an animal into clinical practice must harness the human–animal bond for therapeutic benefit. Therapists have a duty to understand the complex relational processes occurring in this modality (Stewart, Chang, Parker, & Grubbs, 2016). This paper describes the results of a preliminary study exploring the bonding and attachment processes in animal-assisted interventions in counseling (AAI-C).

Children’s Emotional Responses during Animal-Assisted Therapy (AAT) Sessions

Renata Roma¹, Marie Odile Monier Chelin²

¹Brock University Child and Youth Studies

²Universidade de Sao Paulo

While human communication encompasses a set of complex signs, animal communication involves mostly bodily signals which might be easier to interpret. According to Grandin, Fine, and Bowers (2010), this helps to explain why interactions with dogs may benefit people with Autism Spectrum Disorder (ASD). Animal-Assisted Therapy (AAT) has been shown to be useful for people with ASD, although it remains unclear why this is the case. In this quantitative study we compared the latency and frequency of emotional responses among children with ASD toward dogs and humans during AAT sessions, and explored if children preferred lateral or frontal approaches.

Detailed Analysis of Cat–Human Interaction: Pilot Study

*Kathryn Satoski, Adriana Mata Guidi, Jason A Parker MS, Valerie Sims PhD, and
Matthew Chin PhD*

University of Central Florida, Department of Psychology

Previous research indicates low levels and short durations of human-cat interactions in the home (Mertens, 1991). However, the social support roles, attachment, and prevalence of cats as companion animals suggests further examination of these interactions is important (Stammbach & Turner, 1999). During interaction, behavioral content of both the cat and human have suggested bidirectional positive effects (Gourkow, Hamon & Phillips, 2014). Unlike previous studies, the present study controlled for cat variation and examined the content of human–cat interaction from the human perspective via physical engagement and language use and related these variables to participant perception of pets.

The Effects of Zoos on the Public’s Understanding of Conservation

Jarett Ronald Serafin and Kimberly Kovath, VMD

Delaware Valley University, Animal Biotechnology and Conservation

Zoos in our modern age have claimed that they are a vital tool in informing the public on animal and conservation issues. The Association of Zoos & Aquariums boasts on their website that “AZA-accredited zoos and aquariums play a vital role in educating over 180 million visitors, including 51 million students, each year, about wild animals, their habitats, their related conservation issues...” While claiming to have an impact on visitors, the extent to this impact is still largely unknown. This project aims to evaluate the question of what are zoos effects on the public’s awareness and concern on conservation issues?

Expertise Differences in Linguistic Markers Describing Animals

Valerie K. Sims¹, Matthew Chin¹, Heather C. Lum², Mary C. Richards¹

¹University of Central Florida, Department of Psychology

²Penn State Erie, The Behrend College

Research has shown that experts in a variety of cognitive and social fields can collect information in only few seconds or "thin slices" and that they use different language to describe their knowledge. Given that humans often apply schemas about humans to animals, it is possible that experience with animals allows for information about animals to be gathered quickly, and whether experts are able to use a different lexicon to describe this knowledge. This study examines these two questions.

A $2_{(\text{Expertise})} \times 12_{(\text{Animal})}$ ANOVA was calculated for each linguistic marker. Experts and Novices did not differ in the number of words written, but there was a significant Expertise x Animal interaction ($F_{(11,253)} = 2.71, p = 0.003$) such that experts showed greater variance as a function of animal. Linguistic analyses showed that Novices used fewer analytic terms, more words describing anger, more words describing sadness, and more he/she pronouns. There were significant main effects of Animal for use of anger words, anxiety words, positive emotion terms, he/she pronouns, social terms, and tone. Animal experts are more likely to use scientific terms in their description of animals and show less anthropomorphic speech. Additionally, they vary their responses as a function of animal. In contrast, novices were more likely to apply a more generic animal schema to all animals. Human attributions for animal behavior take place after very brief investigations and rely on past knowledge. Linguistic markers can be used to identify expertise.

Perceived Suitability of Using a Big Five Personality Inventory with Pets

Briana Sobel, Dr. Matthew Chin, and Dr. Valerie Sims

University of Central Florida, Department of Psychology

For owners to better understand their pets, it could be useful to describe their personalities anthropomorphically. Research shows the way humans view their pets as companions is anthropomorphic in nature (Paul et al, 2014). A previous study using a Big Five inventory describing dogs found consistency and correspondence to scores for humans (Gosling, Kwan, & John, 2003). In this study, items from the International Personality Item Pool (IPIP) Big Five Personality Inventory were rated for their suitability when applied to pets. For example, the item, "Get stressed out easily" was rated as suitable when used to describe a pet.

“Black Dog Syndrome” Revisited – Subjective Feelings of Relationships and Support

*Birgit Ursula Stetina, Lisa Emmett, and Christine Krouzecky
Sigmund Freud University Vienna Clinical Psychology*

Recent studies have shown inconsistent results regarding the phenomenon “Black Dog Syndrome” (BDS), which implies the discrimination of black dogs because of their coat color. While some studies suggest that BDS does not exist (Hoffman, 2016) other authors underline its relevance even in fictional scenarios (Lum et al., 2013). The aim of the present study was to examine if the coat color has an impact on the subjective strength of the human–dog-relationships, on the assessment of critical life events and especially on the sense of coherence (SOC).

Owner-Reported Attachment and Behavior Characteristics of New Guinea Singing Dogs Living As Companion Animals

*Molly Sumridge and Dr. Christy Hoffman
Canisius College Anthrozoology*

Domestic dogs are terrific companions in a variety of contexts. However, not all dogs have followed the same trajectory regarding domestication. In fact, little is known about how some dogs, including New Guinea singing dogs (NGSDs), fare as companion animals. The majority of NGSDs in the United States and Canada live as companion animals, yet observational studies of NGSDs have been limited to those living in zoos and in the wild. This presentation explores behavioral traits of NGSDs kept as companion animals and evaluates their relationships with their owners.

Japanese Citizens’ Attitude toward Aquariums

Ayane Tani¹, Yusuke Ueno²

¹Hiroshima University Graduate School of Integrated Arts and Sciences

²Former Graduate Student, Graduate school of Integrated Arts and Science, Hiroshima University

While the role of aquariums is to educate visitors and protect animals, they must also attract visitors to maintain activity and financial support. The contents of aquariums reflect the needs and preferences of typical visitors. To attract a wider audience, it is necessary to understand the thoughts and attitudes of those who do not visit aquariums frequently. However, nationwide surveys of Japanese people’s images of aquariums have not been conducted. Therefore, we administered a survey of Japanese citizens, including potential aquarium visitors, to clarify the public’s thoughts on aquariums.

Development of a Protocol to Assess Welfare of Unowned Cats by Necropsy

Ida Sofie Thuesen¹, Peter Sandøe², Jørgen Steen Agerholm³, and Søren Saxmose Nielsen¹

¹*The University of Copenhagen – Department of Veterinary and Animal Sciences*

²*The University of Copenhagen – Department of Veterinary and Animal Sciences, Department of Food and Resource Economics*

³*The University of Copenhagen – Department of Veterinary Clinical Sciences*

Populations of unowned, and often unsocialized, cats are widespread in many countries, where they are often viewed as pests. Still, some people and groups care about their welfare. Assessments of the welfare of cats in these populations are best conducted post mortem, because, with their fear of humans and aggressive behavior when handled, the animals are difficult to examine clinically. Systematic post mortem assessment of welfare has been attempted with poultry (Sherwin et al., 2010) but not cats. We present the development of a protocol to assess the welfare of cats by means of necropsy.

Safe Havens for Pets:

A Retrospective Review of Petsafe at Purdue 2004–2017

Georgitta J. Valiyamattam¹, Janice Kritchevsky², and Alan M. Beck²

¹*Andhra University, India Department of Psychology*

²*Purdue University*

Petsafe—a non-profit community service initiative of the Purdue College of Veterinary Medicine has been functioning since 1995 as a safe haven for pets of individuals and families in crisis. A retrospective review of Petsafe activities from 1995–2003 had endorsed it as a successful program, cared for by student volunteers in the veterinary college under faculty supervision. As a safe haven, Petsafe was instrumental in offering shelter and essential health services to 112 animals in the 1995–2003 time period. Against this backdrop we attempted a similar and comparative examination of Petsafe activities over the fourteen year period from 2004 to 2017.

Feasibility of Therapy Dogs Intervention for Children with Dental Anxiety and Fear

Aviva Vincent¹, Masahiro Heima², Jordan Sterman¹, Katharine Bussert¹, Sarah Easton², Sunghyun Kim²

¹*Case Western Reserve University Mandel School of Applied Social Science*

²*Case Western Reserve University/School of Dental Medicine*

This pilot study evaluated the feasibility of a therapy dog intervention for anxious and fearful child patients, 8–12 years of age, in the pediatric dental clinic. A pilot study ($n=18$) of a certified therapy dog intervention was conducted using the framework of Bowen's model for feasibility of new healthcare interventions, which evaluates acceptability, adaptation, and expansion, was used as framework for study design.

Assessing the Impact of Animal-Assisted Occupational Therapy on Attention in Preschoolers

*Katrina Winsor, Jay Silverstein, and Arth Naik
The New Interdisciplinary School*

Animal-assisted therapy has become increasingly popular as an adjunct to treatment across a variety of populations and disciplines. However, there is minimal empirical documentation of AAT in the literature and there are often methodological flaws and confounds that impair accurate assessment. The purpose of this project was to control for independent and dependent variables in assessing AAT implementation and outcome in an applied setting. The hypothesis was that the presence of a specially-trained canine in the occupational therapy room would increase the impact of the therapeutic activity by increasing motivation and improve attention to therapist-directed activities during an activity.

The Influence of Human Interaction on Guinea Pigs: Behavioural and Thermographic Changes Observed during Animal-Assisted Therapy

Sandra Wirth^{1,2}, Jakob Zinsstag³, Karin Hediger⁴

¹University of Zurich, Switzerland Faculty of Veterinary Medicine

²One Health Group, Swiss Tropical and Public Health Institute, Basel, Switzerland; Faculty of Veterinary Medicine, Vetsuisse, Zurich, Switzerland

³One Health Group, Swiss Tropical and Public Health Institute, Basel, Switzerland; University of Basel, Switzerland

⁴REHAB Basel, Center for paraplegia and craniocerebral injury trauma patients, Basel, Switzerland; University of Basel, Switzerland

Numerous positive effects of animal-assisted therapy (AAT) on human patients have been shown but almost no research investigates the effect of human contact on guinea pig welfare. The presented study examines effects of human contact on guinea pigs involved in AAT. This will increase knowledge in order to carry out AAT in a long-term, ethical and “one health” manner. The results of the pilot study (Gut et al., 2018) show that AAT causes little stress and may possibly even act as enrichment under carefully controlled conditions. The findings indicate that possibility for retreat is of great importance for reducing stress.

Author Index

SURNAME,	PAGE(S)	SURNAME,	PAGE(S)	SURNAME,	PAGE(S)
Agerholm, J.	78	Callahan, M.	13, 22, 38	Flynn, P.	65
Albone, S.	12, 34	Carden, R.	28	Folgosa-Cooley, L.	26
Ames, A.	15, 58	Carr, A.	49	Forrester, K.	74
Amiot, C.	13, 38	Carter, J.	72	Fournier, A.	13, 36, 72
Anderson, K.	12, 34	Case, C.	59	Fraser, J.	11, 14, 20
Applebaum, J.	22, 61	Chaganti, V.	37	Freund, D.	15, 57
Archibald, M.	72	Chambers, J.	15, 56	Friedmann, E.	3, 14, 48, 73
Artemiou, E.	72	Chelini, M.	74	Gabriels, R.	23, 41, 67
Asad, M.	15, 59	Chin, M.	57, 65, 75, 76	Gadbois, S.	74
Baatz, A.	34	Christley, R.	27	Gee, N.	3, 48, 49, 73
Badman-King, A.	25, 45	Chun, M.	51	George, K.	62
Balser, A.	28	Cieslik, E.	13, 22, 39	Germone, M.	23, 41, 67
Barker, S.	12, 26	Clancy, E.	14, 52	Green, F.	54
Bass, D.	61	Cole, K.	62	Greer, J.	40
Bastian, B.	38	Coleman, J.	32	Grier, K.	47
Bates, H.	72	Comaskey, E.	23	Grigg, E.	23, 66
Beaumont, A.	14, 52	Corrigan, V.	63	Gruskin, E.	66
Beck, A.	40, 78	Coy, A.	64	Guérin, N.	23, 41, 67
Bergfelt, D.	72	Cross, E.	29, 64	Guidi, A.	75
Berry, T.	36	Crossman, M.	3, 41	Hamlin, S.	62
Bianco, T.	51	Curtis, T.	10, 12, 18, 33	Hampton, L.	26
Bibbo, J.	15, 53, 61	Daly, B.	14, 46	Hannah, J.	52
Binfet, J.	15, 54	Dela Cruz, A.	14, 46	Hart, B.	14, 43
Birman	32	Delgado, M.	42, 64	Hart, L.	43, 66
Bishop, B.	27	Deporter, T.	58	Hayashi, M.	70
Blanchard, K.	48	Dias, H.	41	Hazel, S.	14, 43, 68, 71
Bosacki, S.	25	Draper, Z.	54	Hediger, K.	79
Boss, L.	62	Easton, S.	78	Heima, M.	78
Bradshaw, Y.	22, 62	Emmett, L.	58, 77	Herzog, H.	13, 14, 42, 43, 67
Branson, S.	61, 62	Fasenko, G.	14, 51	Hill, K.	14, 53
Brotherton, M.	62	Fawson, P.	23	Hoffman, C.	63, 77
Brown, D.	22, 63	Feinstein, J.	15, 56	Holden, C.	67
Bruliard, K.	42	Filipino, D.	46	Holland, K.	12, 26
Buechner-Maxwell, V.	74	Finney, A.	35, 71	Hoy-Gerlach, J.	55
Bussert, K.	78	Fischer, B.	62	Hutchison, P.	72
Buteux, S.	63	Flaherty Fischette, P.	40	Irimajiri, M.	70

SURNAME,	PAGE(S)	SURNAME,	PAGE(S)	SURNAME,	PAGE(S)
Ittle-Clark, S.	23	Machová, K.	69	Payton, M.	48
Jacobson, K.	3, 8, 14, 48	MacNamara, M.	23	Pendry, P.	14, 49
Jensen, C.	22, 27, 41, 67	Maggio, A.	64	Pereira-Mauldin, M.	72
Jensen, J.	14, 44	Mansell, N.	25	Perez, R.	37
Jin, J.	24	Masamoto, K.	70	Petersen, A.	40
Johnson, A.	58	Matijczak, A.	41	██████████	29
Johnson, J.	29	Maynard, A.	25	Phelps, L.	72
Johnson, R.	63	McElligott, A.	38	Pietz, B.	30
Johnson, T.	55	Meints, K.	49	Podberscek, A.	3, 42
Joinson, C.	49	Miller, C.	32	Pörtl, D.	57
Joo, S.	14, 51	Montrose, T.	43, 71	Potocka, A.	22, 72
Jung, C.	15, 57	Moran, P.	13, 37	Proulx, C.	53
Kakinuma, M.	68, 69, 70	Murdock, K.	14, 50	Purewal, R.	14, 49
Karagienakos, D.	68	Murillo, S.	69	Ramos, A.	22, 73
Katsuya, F.	68	Naik, A.	79	Reed, A.	45
Katti, H.	37	Nichols, B.	12, 34	Reed, T.	73
Kayne, S.	23	Nielsen, S.	44, 78	Reeve, C.	74
Kazdin, A.	41	Nishida, N.	69	Reevy, G.	64
Killmar, L.	11, 14, 21	Niu, X.	69	Reilly, J.	30
Kim, S.	78	Nose, I.	68, 69, 70	Resnick, B.	48
King, B.	58	O'Haire, M.	3, 13, 23, 27, 37, 40, 41, 67	Rice, T.	14, 45
Knoll, M.	35, 71	Ogasawara, H.	68	Robino, A.	74
Kogan, L.	43, 68	Ogden, P.	32	Robinson, A.	36
Komiya, K.	51	Ogle, B.	7, 8, 23, 59	Rodriguez, K.	22, 27, 40, 41
Kordas, K.	49	Olsen, M.	70	Roma, R.	74
Kovath, K.	75	Onodera, N.	51	Rousseau, C.	15, 54
Krause-Parello, C.	3, 14, 48	Orita, K.	69	Rowan, A.	43
Kritchevsky, J.	78	Osman, M.	38	Sachdeva, V.	37
Krouzecky, C.	58, 77	Owczarczak-Garstecka, S.	12, 22, 27	Sandøe, P.	14, 44, 78
Krzastek, S.	26	Oxley, J.	43, 68, 71	Santos, L.	41
Kuzara, S.	49	Padhye, N.	62	Satoski, K.	75
Kyle, M.	34	Padilla, M.	35, 71	Satterfield, T.	38
Lacinak, A.	14, 22, 45	Parker, E.	66	Schubert, C.	26
Laitala, E.	36	Parker, J.	71, 75	Serafin, J.	75
Letson, E.	36	Partlow, S.	15, 59	Sevenoaks, H.	34
Lorig, N.	62	Pasiuk, E.	22, 72	Shimamori, Y.	51
Loureiro, D.	39			Silverstein, J.	79
Machado, M.	72			Simonsick, E.	48

Index

SURNAME,	PAGE(S)	SURNAME,	PAGE(S)	SURNAME,	PAGE(S)
Sims, V.	57, 65, 71, 75, 76	Szydlowski, M.	15, 22, 23, 56	Weber, M.	31
Singleton, J.	15, 54	Tani, A.	77	Wenocur, K.	12, 24
Sirovica, L.	66	Tardif-Williams, C.	12, 25, 54	Werner, J.	62
Sloman, K.	73	Thayer, G.	13, 36	Westgarth, C.	3, 8, 27, 42, 49
Snellgrove, D.	73	Thuesen, I.	78	Whiting, A.	73
Sobel, B.	76	Torres, S.	13, 39	Whitmer, D.	57, 71
Spence, C.	13, 22, 38	Tringali, A.	66	Williams, J.	12, 24, 35, 71
Squibb, K.	71	Hynard, T	64	Willits, N.	66
Stannard, G.	31	Tsuchida, A.	70	Winsor, K.	22, 79
Sterman, J.	78	Ueno, Y.	77	Wirth, S.	79,
Stetina, B.	15, 58, 77	Unti, B.	10, 13, 14, 19, 47	Woodworth, L.	72
Stevenson, C.	37	Upjohn, M.	34	Yamaguchi, R.	51
Stewart, K.	28	Valiyamattam, G.	13, 37, 78	Yamamoto, M.	3, 14, 51
Stewart-Stevanovic, M.	25	Vandagriff, J.	49	Yang, H.	27
Studenski, S.	48	Vincent, A.	15, 55, 78	Yatcilla, J.	40
Sukhanova, K.	38	Vokes, R.	26	Zhao, J.	38
Sumridge, M.	22, 77	Wassam, N.	31	Zinsstag, J.	79
Sweet, A.	15, 59	Watkins, F.	27	Zsembik, B.	61
		Wauthier, L.	12, 24	Zumaglini, S.	35, 71

Notes:



international society
for anthrozoology

www.isaz.net