

IWDC – 2021: PRESENTER BIOGRAPHIES AND PHOTOS

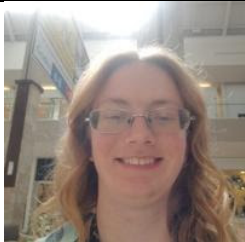
DAY 1: TUESDAY, OCTOBER, 12th

S/N	Presenter	Biography	Photo
1	Dr Fiona Hollinshead Plenary: Day 1	Dr. Fiona Hollinshead attended the University of Sydney, Faculty of Veterinary Science, Australia. She graduated in 1996 with a Bachelor of Veterinary Science (Honors) and in 2004 with a PhD in sperm sexing entitled, "Flow cytometric sorting of ram spermatozoa: Production of offspring of a pre-determined sex using in vivo and in vitro fertilization." After completion of a two-year clinical residency in Theriogenology at Cornell University, New York, she became a Diplomate of the American College of Theriogenologists and a Registered Specialist in Small Animal Reproduction with the Australasian Veterinary Boards Council in 2007. Prior to joining CSU, Dr. Hollinshead spent the previous 12 years running a busy small animal reproduction referral practice in New Zealand and had the privilege to be the primary reproductive consultant to the NZ Guide Dogs, NZ Assistance and Mobility Dogs, MPI Detector Dogs, and NZ Police Dog breeding programs. Dr. Hollinshead has also enjoyed working with a number of breeding programs at the Hamilton and Auckland Zoos, including the AI and semen preservation of a Thai fishing cat. She is a member of the Theriogenology Foundation committee and has trained many residents for both the ACT and European board specialization in small and large animal reproduction. Dr. Hollinshead has three boys (William, Harry and Oscar) who were not intended to be named after the royal family. <i>Certification</i> Professional: Diplomate American College of Theriogenologists <i>Degree</i> University of Sydney, Australia : BVSc (Hons) : 1996 University of Sydney, Australia : PhD : 2004	
2	Becky Hunt	Becky Hunt works as a Canine Science Associate specialising in dog behaviour at Guide Dogs for the Blind, UK and has worked for the charity for nearly five years. In her current role, Becky works as part of the small Canine Science team that provide evidence-based outputs to support the behaviour, health and wellbeing of dogs bred by the charity. Becky studied Animal Biology at university, graduating in 2016 and is currently undertaking a part time PhD at the University of Nottingham with a focus on the heritability of dog behaviour.	
3	Dr Leighton, Eldin	The International Working Dog Registry (IWDR) provides a world-class record-keeping service for all organizations worldwide that breed working dogs in large numbers. Dr. Leighton, along with some volunteer help from others, began development of IWDR as a part-time project in 2012, but development became a full-time focus when he officially retired in 2015. For 20 years from 1995 through 2015, Dr. Leighton held the Jane H. Booker Chair in Canine Genetics at The Seeing Eye. In that position, he was responsible for managing the canine breeding program that, per year, produced about 200 Labrador Retriever puppies, 200 German Shepherd puppies and	

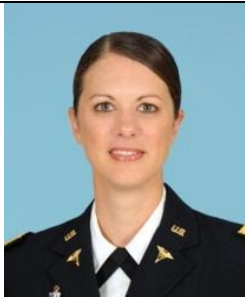
		another 150 to 200 Golden Retrievers or Lab x Golden cross-bred puppies. Dr. Leighton first became associated with IWDBA when he attended the 2001 Conference in San Antonio, Texas. In 2005, Dr. Leighton was appointed to the IWDBA Board of Directors, then was subsequently elected as the Board's first President. Dr. Leighton's experience in the dog breeding world was acquired first as the Research Geneticist working with the U.S. Army Bio-Sensor Research Division from 1973-1976, then as a consultant for The Seeing Eye from 1977 through 1994. After retiring from The Seeing Eye, Dr. Leighton started a private company, Canine Genetic Services, LLC, and through this company, he and others now provide annual maintenance and development support of IWDR for the IWDBA.	
4	Lucia Lazarowski	Dr. Lazarowski is a research scientist with the Canine Performance Sciences program and Research Assistant Professor in the Department of Anatomy, Physiology and Pharmacology at the Auburn University College of Veterinary Medicine. Her research focuses on cognitive and behavioral assessments of detection dog suitability and performance.	
5	Brenda Kennedy	Dr. Brenda Kennedy, the Director of Canine Health and Research at Canine Companions for Independence, joined that San Francisco-based organization as their national veterinarian in 2014 and was promoted to her current position as the director of canine health and research in 2016 – a role that combines her passion for research with her love of veterinary medicine. She oversees the veterinary care of all dogs in the puppy, breeding, training and graduate programs at Canine Companions. In addition, she directs research partnerships that focus on the identification of scientifically based tools to improve the health, longevity and cognitive skills of assistance dogs. Brenda completed her undergraduate and graduate degrees in the fields of biochemistry and developmental biology at Northwestern University and MIT. After graduate school, she worked in biotechnology as a research scientist in the field of genomics. She received her DVM degree from Tufts University in 1998 and worked as a veterinarian in private practice for 16 years prior to joining Canine Companions.	
6	Karen Meidenbauer	Karen ("Kari") Meidenbauer graduated with a DVM degree from the Virginia-Maryland College of Veterinary Medicine; she also holds a Master of Public Health degree from Virginia Tech. Dr. Meidenbauer grew up in Maryland, She has had a lifelong desire to pursue a career in veterinary medicine and enjoys solving difficult cases and relentlessly trying to improve her patients' quality of life. She has special interests in internal medicine, senior wellness, soft tissue surgery, and animal health surveillance..	

7	Jennifer L. Essler	Jennifer Essler is a Postdoctoral Fellow at the Penn Vet Working Dog Center, part of the University of Pennsylvania School of Veterinary Medicine in Philadelphia, Pennsylvania. She is currently working on a project to link working dog genotype and phenotype in order to inform working dog selection, training, and breeding. Previously at the Working Dog Center, she worked on scent detection and puppy development. Odor detection research includes investigations into the odor profiles of ovarian cancer, as well as the feasibility of utilizing detection dogs in the fight against antiquities smuggling and invasive species detection. Jennifer graduated from Georgia State University in 2011 (BA in Psychology) with an undergraduate thesis and research work with Sarah Brosnan at the Language Research Center. There she worked with capuchin monkeys in decision making tasks. She received her Master's degree in Animal Behavior from Bucknell University under the direction of Peter Judge. For her master's degree, she studied cooperation and inequity aversion in capuchin monkeys. She received her PhD in Comparative Cognition at the Messerli Research Institute at the University of Veterinary Medicine Vienna in Vienna, Austria under the direction of Friederike Range. Here she investigated how domestication affected inequity aversion and cooperation among hand-raised, pack-living wolves and dogs at the Wolf Science Center in Ernstbrunn, Austria.	
8	Emily Bray	Emily is currently a post-doctoral research associate at the Arizona Canine Cognition Center (in the School of Anthropology at the University of Arizona) and Canine Companions, where I study how early developmental, behavioral, and cognitive factors impact later life outcomes. She earned her PhD in Psychology at the University of Pennsylvania, working with Robert Seyfarth, Dorothy Cheney, and James Serpell. For my dissertation, I partnered with The Seeing Eye, Inc. to conduct a longitudinal study investigating puppy development, which involved tracking a cohort of 138 puppies from birth until completion of the program. Prior to UPenn, she earned a B.A. in Psychology and English from Duke University, where I worked at the Duke Canine Cognition Center studying inhibitory control in pet and Canine Companions® service dogs with Evan MacLean and Brian Hare.	
9	Scott Thomas	Scott Thomas became a federal employee of the TSA Canine Training and Evaluations Branch in 2005. He was the program manager of the breeding program, which produced more than 500 dogs specifically bred for detection work. This effort required the application of genetic quantitative trait selection, continual behavioral assessments, the understanding and use of exercises to control epigenetic expression, and maintenance of good canine health within the breeding colony. He oversaw two Department of Homeland Security Science and Technology Directorate research contracts to improve behavioral metrics, enhance development, identify genetic markers of success, and trans-generational epigenetic effects. Due to economic restraints, the TSA Canine Breeding and Development Center's efforts were	

		discontinued. At that point, Scott oversaw the contracting efforts for canine procurement for single-purpose detection dogs. Scott began his career in animal husbandry and training in 1983 as a dog obedience instructor and boarding kennel operator. He then spent five years as a veterinary assistant and worked in a variety of animal-related jobs including dolphin and sea lion training, exotic animal habitat design, eco-tour guide of Carolina coastal habitats, and exotic bird presentations. He served as the initial consultant to the AKC Detection Dog Task Force and started the AKC Patriotic Puppy Program. He currently serves as a consultant to Arete' Canine.	
10	Elizabeth Hare	Dr. Hare is a quantitative geneticist researching the genetics and genomics of working dog behavior and health. Her recent projects include longitudinal analyses of the health and behavior of the search-and-rescue dogs that responded to the 9/11 attacks and comprehensive behavioral phenotype analysis of detector dogs at the PennVet Working Dog Center. She has provided quantitative genetics analysis and advice for the implementation of selective breeding programs for working dog organizations. She is active in the R statistical programming community and interested in open and reproducible data management, analysis, and reporting. As a blind guide dog handler for 27 years, she volunteers with several R software organizations to work on accessibility for people with disabilities. Working as an independent consultant, she welcomes opportunities to collaborate with working dog organizations and academic research teams to provide statistical and selective breeding analysis.	
11	Katy M. Evans	Dr. Katy Evans qualified as a veterinarian from the University of Bristol in 2001. After 6 years of clinical work, she undertook a Postgraduate Studentship in Small Animal Epidemiology at the Animal Health Trust, Newmarket, and gained an MSc in Veterinary Epidemiology and Public Health from the Royal Veterinary College, London. Katy then took up a PhD Studentship in quantitative genetics at the University of Nottingham. This entailed working with Guide Dogs' health and behavioral data to investigate the potential for estimated breeding values (EBVs) for traits of interest. She gained her PhD in January 2015 and then worked as a Postdoctoral Research Fellow at the University of Nottingham developing Guide Dogs' EBVs and assisting with their implementation. Two years at the Kennel Club in London as Health Research Manager followed, with her key focus there being getting the 'Breed Health and Conservation Plans' project off the ground. Since January 2019, Katy has been the Jane H. Booker Chair in Canine Genetics at The Seeing Eye in Morristown, New Jersey.	

12	Molly Riser	Molly Riser began working with dogs in high school by helping the local animal shelter find new homes for the dogs in their care. While working with this ever changing population of shelter dogs, Molly began noticing the wide variety of temperaments and the differing backgrounds among dogs, which fostered her interest in learning about both canine behavior and canine genetics. While completing her Bachelor's degree in Animal Science, Molly held jobs in both a boarding kennel and a dog day care, where she again experienced the variation that exists in temperaments and communication styles among dogs. It became readily apparent that genetics plays an important role in determining the pathway a dog follows through its local environment and in its interactions with both dogs and people. After completing her degree in May 2017, Molly worked at a local animal hospital, which exposed her to the wide array of genetic diseases plaguing some breeds. She was inspired to learn more and became the "go to" person who could help both clients and the veterinarians understand and explain nuances of the common disease progressions identified in dogs under treatment in the practice. With her personal mixed-breed dog "Havoc", Molly enjoys competing in Agility, hampered slightly by Havoc's social anxiety and reactivity, which has also created opportunity for learning about Havoc's specific issues. In 2019 she decided to pursue a master's degree in Animal Breeding, when she joined Dr. Bruno Fragomeni's lab at UConn. Her current work focuses on learning more about the genomic underpinnings that influence behavior traits, with the goal of helping describe the genetic potential of young dogs to produce offspring endowed with the most desirable behavior attributes for working and living with humans.	
		DAY 2: WEDNESDAY, OCTOBER 13th	
13	Prof Holger Volk PLENARY	Professor Holger A. Volk DVM, PGCAP, PhD, DipECVN, FHEA, MRCVS Holger is currently Professor of Small Animal Diseases and the Head of Department of Small Animal Medicine and Surgery, University of Veterinary Medicine Hannover, and the treasurer of the European Board of Veterinary Specialization. He graduated from the University of Veterinary Medicine Hanover in 2001, where he also did his PhD in Neuropharmacology studying basic mechanisms of drug-resistant epilepsy. He then completed his specialist clinical education doing an internship and a residency in Neurology and Neurosurgery at the Royal Veterinary College (RVC). The RVC also provided him with the chance to not only excel academically and clinically, but also in his leadership skills, going through the reigns from lecturer to head of service, clinical director of the Small Animal Referral clinic and last as head of department of clinical science and services. Holger is internationally known for his work in the field of Chiari-like malformation/syringomyelia and epilepsy. He was President of the European College of Veterinary Neurology. Holger has been chairing the International Veterinary Epilepsy Task Force, which published recently seven consensus statements for canine and feline epilepsy and was a co-chair of the recent published ACVIM consensus statement about medical treatment of epilepsy. He has been a recipient of	

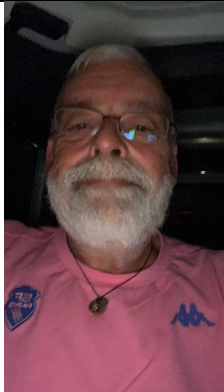
		several Jim Bee educator excellent in teaching awards, the prestigious Bourgelat Award from BSAVA and the International Canine Health Award from the Kennel Club. He has published multiple books and book chapters, >200 articles, >130 conference abstracts, and is a frequent flyer on the international conference circuit.	
14	Dr Nicola Cotton	Dr Nicola Cotton is Seeing Eye Dogs Australia's Veterinary and Reproduction Manager. She has been with Seeing Eye Dogs for 7 years, and in her current role oversees the health and reproductive activities of the Seeing Eye Dogs breeding colony, veterinary services for dogs in all parts of the program, and the on-site Puppy Centre where all Seeing Eye Dogs litters are whelped. Prior to starting at Seeing Eye Dogs, Nicola worked as a veterinarian at the Royal Society for Prevention of Cruelty to Animals, and as a emergency and critical care veterinarian, but loves now working in a field where the animals in her care are going on to work with people. Outside of work Nicola enjoys going to the beach, travelling and spending time with her dog Toby, a kelpie.	
15	Katherine M. Lytle, DVM, MPH, MS	I'm a veterinarian with a passion for animals and the varied roles they play in the lives of humans. I am fascinated by science and have a particular interest in zoonoses, infectious diseases, and the application of cutting-edge diagnostics technologies to help both people as well as their pets and livestock and have spent the last 9+ years in industry working on canine genetics.	
16	Meghan Ramos	Dr. Ramos is a Sports Medicine and Rehabilitation resident at the Penn Vet Working Dog Center. She received her VMD in 2018 from the University of Pennsylvania School of Veterinary Medicine. Following graduation, Dr. Ramos began her veterinary specialty internship while simultaneously pursuing a National Institutes of Health funded Master in Translational Research through the Institute for Translational Medicine and Therapeutics at the University of Pennsylvania Perelman School of Medicine. Dr. Ramos is ecstatic to begin her journey as a Sports Medicine and Rehabilitation resident as she is dedicated to advancing the field of canine sports medicine via scientifically valid clinical trials and advanced diagnostics that will benefit not only our elite working dogs but will impact the canine community at large.	
17	Marty G. Roach and Karen Overall	Dr. Marty G. Roache' is an Officer in the United States Military. She has spent over 17 years on active duty in the United States Army, and she has been working as a veterinarian in the Army Veterinary Corps for 12 years. She earned a Master of Science degree from the University of Texas at San Antonio, while pursuing an Animal Behavior Residency, in 2019. She currently serves as the Chief of Behavioral Medicine at the LTC Daniel E. Holland Military Working Dog Hospital, Lackland Air Force Base, Texas, U.S.	

18	Debra Lynn (Deb) Zoran	Dr. Deb Zoran is a Professor in the Department of Veterinary Small Animal Clinical Sciences at Texas A&M University and founding member of the Texas A&M Veterinary Emergency Team (VET) in 2009. She has been one of the supporting veterinarians for Texas A&M Task Force 1 since 1997 where she provided pre- and post-deployment canine examinations, first aid training for canine handlers and medics, and programmatic support of the canine program through nutritional and fitness consultations. In her role on the VET and in over 20 deployments, she has been the primary veterinary point of contact with the US&R working dogs in theater and has helped foster advanced training and understanding of working dogs within the CVM. She has also been actively engaged in working dog nutrition and clinical research into hydration and heat tolerance in working dogs, as well as working canine decontamination. In 2019, Dr. Zoran was accepted onto the FEMA Incident Support Team as one of 3 Veterinary Specialists in support of working dogs deployed to large scale disasters across the United States.	
19	Desiree Broach	Lieutenant Colonel Desiree Broach attended The University of Georgia College of Veterinary Medicine and has been Active Duty in the U.S. Army Veterinary Corps since graduating in 2008. She has served as an Officer in Charge of a Veterinary Treatment Facility in Georgia, an Instructor at Fort Sam Houston, Texas, and the Clinical Medicine Veterinarian for the 463rd Medical Detachment Veterinary Service Support at Fort Benning, Georgia. Due to her interest in Veterinary Behavior, she completed a dual residency (ACVB/ABVP) program from 2012-2016, where she completed a Master of Science in Biology and subsequently became a Diplomate of the American College of Veterinary Behaviorists in 2017. She currently lives in Germany and works as the Director of Veterinary Medical Center Europe, while also continuing to teach and consult on Veterinary Behavior cases. She is married to her husband, Eddie, has two children, Alayna and Conner, and has the perfect behavior-partner-in-crime, her dog Gabe.	
20	Dr Richard A. Vargus	Dr. (Col) Vargus initially retired in 1995 after 24 years of service in the United States Marine Corps and United States Army. Following retirement, he began an extended career in law enforcement. In 2005 he was recalled to Active duty, deploying to Iraq, Afghanistan, serving at US Central Command as the Chief of Law Enforcement. In 2012 Colonel Vargus was released from Active duty. He entered federal civilian service as the Army Canine Program Manager, and in 2018 assumed the position of Department of Defense Canine Program Manager, a position he held until his retirement in April 2020. Dr. Vargus is a graduate of the Army Command and General Staff, Air War College, George Washington University National Senior Leadership Course. He holds a master's degree in National Defense Studies and a Doctorate in Public Administration.	

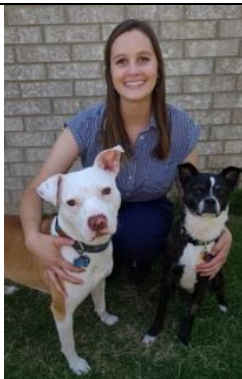
21	Dr Mia Cobb	Dr Mia Cobb is a scientist interested in the welfare of animals. She is currently exploring how the intersections of animal welfare science, human psychology, science communication, and emerging technologies can help animals and people lead happier lives. She worked in animal shelter and working dog facilities for over a decade before shifting focus to research and advance the welfare of Australia's working and sporting dogs. Mia was awarded her PhD from Monash University, which examined the human attitudes and kennel management practices related to the welfare and performance of working dogs. She believes in helping scientific research escape academic journals and founded the popular canine science platform, Do You Believe in Dog? Currently based at the University of Melbourne's Animal Welfare Science Centre, Mia has also taught science communication and worked as a researcher at the University of Sydney, Monash University, La Trobe University and Deakin University. Mia's research explores human attitudes, housing and management practices, animal behavior, stress physiology and how animal welfare relates to the sustainability of animal-based industries. Active in the exciting domains of science communication, emerging technologies (including digital technologies and intelligent systems for animal welfare), citizen science, welfare auditing, and all things dog.	
22	Brian Farr	Major Brian Farr, DVM is an active-duty Army Veterinary Corps Officer experienced in the care, training, and program management of Military Working Dogs. He is a Long-Term Health Education and Training student and Canine Sports Medicine and Rehabilitation resident at the Penn Vet Working Dog Center.	
23	Erin Perry	Dr. Erin Perry is an Associate professor at Southern Illinois University with more than 15 years of experience with working canines. Her research focuses on bringing practical solutions to the challenges encountered by working canines in the field with specific emphases on improvements to current decontamination methods. Dr. Perry works with the Federal Emergency Management Agency as a Canine Handler, Evaluator, and Instructor. Her published work includes investigations into the impacts of travel stress on working canines, a comprehensive review on canine olfaction, and several studies on working canine decontamination.	
24	Heather J. Huson,	Dr. Heather Jay Huson is an Associate Professor of Animal Genetics in the Department of Animal Science at Cornell University. Dr. Huson received her B.S. in Animal Science at Cornell University ('97) and Ph.D. in Molecular Genetics at the University of Alaska, Fairbanks ('11). A significant part of her PhD work was done at the National Institutes of Health in the Human Genome Research Institute and her post-doctoral research was with the USDA Bovine Functional Genomics Laboratory. She has a diverse background combining animal breeding,	

		veterinary technician experience, and molecular genetics across livestock, companion animals, and wildlife species. Her research aims at improving animal health and performance by investigating the genetic regulation of economically important traits. In addition, she explores population structure and admixture to better understand selection, breed development, and conservation. She focuses primarily on working dogs and dairy cattle genetics and selection.	
25	Jayne McGhie	Dr Jayne McGhie graduated from the University of Queensland with a bachelor's in veterinary science in 1994. She completed her residency in small animal surgery at Murdoch University, becoming a Diplomate of the American College of Veterinary Surgeons in 2014. Jayne worked as a clinical academic and specialist SA surgeon at the University of Queensland for 7 years, with her primary research focus looking at gastric dilatation and volvulus prevention and canine degenerative myelopathy in working shepherd dogs. Jayne is now a full time PhD student investigating heat stress prevention in operational protection and detection dogs.	
		DAY 3: THURSDAY, OCTOBER, 14th	
26	Dr Cynthia Otto PLENARY	Dr. Otto, a tenured Professor of Working Dog Sciences and Sports Medicine at the University of Pennsylvania, School of Veterinary Medicine is board certified in veterinary emergency medicine/critical care and canine sports medicine/rehabilitation. As executive director and founder of the Penn Vet Working Dog Center (www.vet.upenn.edu/WDC), she oversees fitness and medical care of the program's detection dogs, provides rehabilitation and conditioning for police and other working dogs and conducts vital research on and by detection dogs. With over 120 peer reviewed articles, reviews, and book chapters, she is an internationally recognized expert in both emergency medicine and working dog science. She was Pennsylvania's 2002 "Veterinarian of the Year", received Ohio State's Alumni Recognition Award (2006) and Distinguished Alumnus Award (2008), AVMA's Bustad Companion Animal Veterinarian of the Year (2018), Mark Bloomberg Award (2019) and Asa Mays DVM, Excellence in Canine Health Research award (2021).	
27	Esther Schalke	Esther Schalke is a Doctor in Veterinary Medicine, graduated from the University of Hanover, Germany in 1996. She got her PhD in 2000, is a board-certified specialist in animal behavior and a Diplomate of the ECVBM-CA. She worked as a postdoctoral research fellow at the Institute of Animal Welfare and Behavior, University of Veterinary Medicine Hanover from 1997-2012. Her research subject was aggressive behavior in dogs and learning behavior. In 2009 she founded the Lupologic GmbH: center of applied ethology and veterinary behavior medicine. She published numerous publications about aggressive behavior in dogs.	

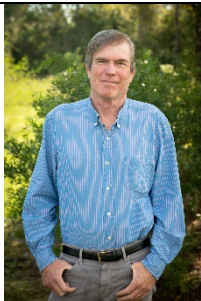
28	Nele ten Hagen,	Nele is PhD student at The University of Veterinary Medicine, Hannover, Germany under Dr. A.D.M.E. Osterhaus, PhD, DVM. She is involved in studies of dogs detecting SARS-CoV-2. Because of their outstanding sense of smell, dogs could be an essential asset in mass screening testing strategies. Previous research demonstrated dogs' ability to detect SARS-CoV-2- infections but has not investigated whether dogs can distinguish between SARS-CoV-2 and other viral infections. To address this question, a study was performed with swab from individuals and samples from cell culture, each infected with one of 15 viruses causing acute respiratory symptoms. Twelve were dogs trained to detect SARS-CoV-2 positive samples.	
29	Robert Dougherty Jr	Bob is a certified United States Police Canine Association Level 1 Patrol Dog and Detector Trainer, as well as a National Patrol and Detector Judge. A police officer for 31 years, Bob assumed the duty of trainer for the department after the death of his third police dog. Before this, he had handled three patrol/detection dogs for 28 years. While still employed as a full-time police officer he volunteered at the PVWDC where the law enforcement program was started in 2014 and continues to grow today. Bob assumed the full-time Law Enforcement K9 Training Coordinator position at the PVWDC in January 2017. Open to learning all training methodologies and philosophies from various sources (police, sport, and civilian trainers), Bob's personal moral code is to never be cruel in the training of dogs in general as well as patience specifically in training police working dogs. Bob's approach is one that first looks at each dog as individualistic, focuses on establishing a solid foundation of training those basic skills necessary for young dogs to be successful in a career which will demand operational applications outside the training environment, and removing the conflict which can occur between a dog and handler/trainer due to harsh and or premature physical pressure before a dog understands what is expected of him or her. Bob believes that trainers need to be passionate about what they do, actively involved and not just sitting back evaluating from afar, and continuously seek new knowledge and skills for the dog and not for their own personal egos.	
30	Nathaniel Hall	Assistant Professor of Companion Animal Science and Director of the Canine Olfaction Research and Education Laboratory, Texas Tech University, Lubbock, TX. Nathaniel Hall earned his PhD from the University of Florida in 2015. While there he did research working with fruit bats, dogs, and wolves. He continued his studies as a Post Doctoral Scholar at Arizona State University in the Canine Science Collaboratory. My lab broadly studies dogs' sense of smell. We explore the capabilities of the dog's nose and how training influences olfactory perception.	

31	Edgar O. Aviles-Rosa,	Postdoctoral Research Fellow, Texas Tech University Canine Olfaction Research and Education Lab. He was involved in a research project involving detection dogs trained to find explosives. Two explosive detection dogs were deployed to search a suspicious bag and failed to detect 13 kg of explosive within. The aim of this research was to further evaluate this incident. The project result indicated that explosive detection dogs may not generalize to a target odor at a significantly higher quantity relative to the one used in training, highlighting the importance of conducting such training.	
32	Brian Farr	MAJ Brian Farr, DVM is an active-duty Army Veterinary Corps Officer experienced in the care, training, and program management of Military Working Dogs. He is a Long-Term Health Education and Training student and Canine Sports Medicine and Rehabilitation resident at the Penn Vet Working Dog Center.	
33	Dominique Grandjean	Dominique Grandjean (DVM, PhD, HDR, Dipl ECVSMR) is a Professor at the national veterinary school of Alfort (France), where he works as Head of the small animals and equine clinical sciences department, and of the canine breeding and sport medicine unit. As a faculty in Alfort he has been focussing most of his work on dog's nutrition and working dogs' performance for the last 30 years, with a special attention to oxidative stress prevention and consequences. He is also a colonel veterinarian for the Paris Fire Brigade (military unit, 9500 firefighters), in charge, among other tasks, of the canine search and rescue teams, of the management of dangerous animals, and of biological hazards. Dominique is also national and regional technical advisor of the civilian security for both cynotechnics and biological hazards, and advisor for civilian security working dogs (Ministry of the Interior). He is Head of the Nosaïs COVID-19 detection dogs program since march 2020. Dominique is among the group of international specialists who founded in 2018 the European College of Veterinary Sport Medicine and Rehabilitation.	
34	Kat Janczur	Kat has a master's degrees in psychology and Applied Animal Behaviour and a diploma in Companion Animal Behavior and Training. She started professionally working with dogs in 2009 at an animal shelter. Since then she has worked for Scent Imprint for dogs (training detection dogs, teaching instructor courses and creating development plans for puppies) in Holland, whilst also running K9 Behavior Consultancy. After she moved to the UK she worked for Dogs Trust as a head coach and las a Coach Trainer. In 2019 she worked on a Free Running Explosive Detection Dogs (FREDD) project at Dog Detectives. At the end of 2019 she started training one of the very first Japanese knotweed detection dogs and her company Canine Detection Solutions now has two operational Japanese knotweed detection dogs and a third dog in training. Since spring 2021 Kat is involved in research on Japanese knotweed.	

35	Linzi Williamson	Dr. Linzi Williamson is a Postdoctoral Fellow at the University of Saskatchewan and has been conducting research with Dr. Colleen Dell since 2018 examining the effects of Service Dogs on Veterans with PTSD who problematically use substances. In March 2020, Linzi was awarded 3-years of funding to continue researching the role of Service Dogs in the lives of Canadian Veterans. Dr. Williamson has co-authored several conference presentations, posters, and peer-reviewed manuscripts resulting from her research and was a 2019 recipient of the Paul Fox Memorial Educational Fund through AUDEAMUS, Inc. When she isn't focusing on research, Linzi is training her beloved Australian Cattle Dog, Steve Irwin, with the support of her colleagues. Her training approach prioritizes the human-animal bond and positive reinforcement techniques.	
36	Astrid Concha,	Dr. Concha is a Postdoctoral research associate at the US Army Research Office. And Texas Tech University. She has 20 years of experience that encompasses working in veterinary clinical animal behavior, working as a dog trainer, and working as a researcher. She has a master's in animal behavior (Spain) and earned her PhD in animal behavior and welfare from the University of Lincoln (UK) focused on olfactory detection performance in dogs. She has worked with Medical Detection Dogs (UK) and has worked with Police and Military Working Dogs across the world. Her primary research area is the study of canine detection and patrol performance and developing novel technologies to measure alert responses in detection dogs. Dr. Concha is currently working with Military Working Dogs to identify cognitive, sensory, and morphological markers associated with key performance metrics in dual-purpose DoD Military Working Dogs at Lackland Air Force Base (USA).	
37	Ben Carey	Ben is a member of the One-Health office at the University of Saskatchewan working under Dr. Colleen Dell. We research Working dogs such as Service dogs and Therapy dogs, and their relationships with people. Ben's background is biology, and he has been fascinated by canine evolution for years, focusing much of his undergraduate learning on the evolution from wolves into dogs and how humans and dogs have coevolved to form an incredibly symbiotic relationship. He applies this passion about the human-animal bond into his current research work, focusing on how the lives of hospital patients, veterans, and others, are enhanced, or changed by interacting with dogs. This work examines how dogs affect the people that need them, while also making sure the dogs are happy with their jobs.	
38	Margot Perez	After having accomplished in 2011 a Master in neuroscience, cognition and ethology at the University of Toulouse (France), I did my PhD in the Laboratory of Experimental and Comparative Ethology, University Paris 13 in Villetaneuse (France). During my PhD, I have carried out research into animal behavior, focusing on the effect of the chemical characteristics of odorant molecules and of the olfactory experience on odor	

		perception and learning in ants. Since 2017, she holds a researcher position in the National Forensic Police Department in Ecully (France) where I investigate the factors influencing the dogs' performances in human scent identification line-up..	
39	Mark Gabriele	Mark Gabriele's lab at James Madison University is interested in understanding the mechanisms underlying circuit assembly in developing sensory systems. Of particular interest is how inputs of multisensory origin converge at the level of the midbrain and segregate into distinct processing streams. Ongoing projects explore the plasticity involved in shaping discrete multimodal maps during early critical periods. Knowledge gained from such pursuits will further our understanding of a variety of neurodevelopmental conditions, including autism spectrum and sensory processing disorders.	
40	Mallory DeChant	Dr. DeChant is a PhD graduate student pursuing her doctorate in Companion Animal Science with an emphasis in canine olfaction at Texas Tech University. Mallory is a native to Arizona and graduated with her Bachelor of Science from The University of Findlay majoring in Animal Science and Biology. She graduated with her Master of Science from Southern Illinois University in Animal Science with an emphasis in canine physiology. Her thesis was on the impact of physical, climate, and psychological stressors associated with search scenarios on thermoregulation and salivary cortisol in human remains detection canines. Mallory's goals after completion of a post doctorate fellowship are to join the academic field and pursue teaching and research in canine olfaction. In her spare time Mallory enjoys spending time with her handsome Arabian horse, Tango, who has retired from endurance racing. She also enjoys traveling with her family and friends and going on hikes with her adorable Boston Terrier Mix, Rubeus.	
41	Dr Claire Guest and Prof James Logan	Dr Claire Guest BSc (Hons) MSc Hon DSc. DHP BCAh FRSA Dr Claire Guest obtained a BSc in Psychology in 1986, followed by an MSc in Psychology by research. Claire was Director of Operations and Research at Hearing Dogs for Deaf People until 2004. Claire directed one of the first programs in the world to train dogs to identify cancer by odor and published the first robust proof of principle study in the BMJ in September 2004. Claire became Co-Founder of Medical Detection Dogs (MDD) alongside Dr John Church in 2008 and is now the Chief Executive and Chief Scientific Officer. In the following years Medical Detection Dogs has focused on establishing a strong evidence base and to further train dogs to detect other life-threatening diseases such as malaria, Parkinson's, pseudomonas and assistance dogs. In 2011 Claire was awarded an Honorary Doctor of Science in recognition of an outstanding contribution to the development of new approaches for the detection of life-threatening diseases. In January 2015 she was awarded a British Citizen Award for health and in 2016 received the CBI National First Women award for Science and Technology. Claire is also a frequent peer reviewed author in scientific journals and has co-authored	

		numerous publications on the detection of diseases by canines. In 2016 she wrote “Daisy’s Gift”, published by Virgin books, about the formation of the charity and her remarkable dog ‘Daisy’, who indicated her own breast cancer. Claire regularly presents at conferences around the world, and frequently appears on national and international television and radio to discuss and promote the pioneering work and research of MDD. Professor James Logan is a Professor at the London School of Hygiene and Tropical Medicine (LSHTM) and co-founder and CEO of Arctech Innovation, a spin-out company of LSHTM. Arctech Innovation is a unique, world-leading innovation center for breakthrough research, evaluation and commercialization of new tools to control insects, and novel products for the surveillance, control and diagnosis of diseases such as malaria and COVID-19. Academically, James leads a large, international research portfolio, investigating new ways to detect and control diseases, including COVID-19, malaria, Zika, dengue, trachoma and Lyme disease. His work also aims to identify and understand chemical signals given off by the human body during infection and use these as biomarkers of diseases for the development of non-invasive diagnostics. Most recently, James co-led a study, in collaboration with Medical Detection Dogs and Durham University with funding from the UK government, to investigate novel, non-invasive diagnostics for COVID-19 based on volatile biomarkers. The results showed that bio-detection dogs can be trained to detect the odor of COVID-19 infection with up to 94% accuracy. James regularly advises the UK government and other international organizations on aspects of disease control. Additionally, he presents a wide variety of science television programs for the BBC and Channel 4.	
42	Kenneth G. Furton	Dr. Kenneth G. Furton is a Professor of Chemistry, Provost, Executive Vice President and COO of Florida International University. He is a leading scholar in forensic chemistry, specializing in canine olfaction. Dr. Furton is the founder of the International Forensic Research Institute and served as the dean of the College of Arts and Sciences for 7 years where he helped raise \$50 M in private gifts and dramatically increase grant awards totaling more than \$300 M. As Provost he has led the development and implementation of FIU's bold strategic plan BeyondPossible2020 resulting in significant increases in student success and research preeminence measures. Dr. Furton has over 20 years of canine research experience and developed the IFRI canine certification program, which has evaluated more than 1,000 canine teams. He has chaired the Scientific Working Group on Dog and Orthogonal Detector Guidelines (SWGDOG) since its inception in 2004 and is currently the chair of the Organization for Scientific Area Committees (OSAC) Dogs and Sensor subcommittee and he chairs the Dog and Sensors Consensus Body of the Academy Standards Board. Dr. Furton is the author or co-author of more than 800 publications and presentations, including 15 patents	

		and 2 books. He is a fellow of the American Academy of Forensic Sciences and a fellow of the National Academy of Inventors. He has given hundreds of invited talks nationally and internationally and has testified as an expert witness in dozens of state and federal trials.	
43	Paul Mundell	Appointed to Chief Executive Officer of Canine Companions for Independence in 2014, Paul Mundell has a long-standing record of capable and effective leadership within the organization. As National Director of Canine Programs and Corporate Secretary for 17 years, Paul oversaw and managed the entire canine program, from the puppy raising program to the breeding department, at the multi-regional and national levels. During this time, Paul increased the number of graduate teams by 80% and increased canine success rate by 65%. In addition to his work within the program, Paul forged strategic relationships with world-class research institutions that assist in the development of the canine program, by means of maximizing the health and working performance of Canine Companions dogs. These relationships include: Duke University Canine Cognition Center, Eukanuba Dog Foods, The Buck Institute, Emory University, Georgia Tech and Texas A&M University. In addition to these relationships, Paul formed joint ventures with foundations and corporations, which provided over \$7 million towards unrestricted and project related funding along with in-kind donations. Most recently under Paul's leadership, Canine Companions furnishes dogs for a study conducted by the Department of Veterans Affairs; this study aims to determine the potential benefits of canine support for veterans with post-traumatic stress disorder (PTSD). Paul also has a long standing history consulting to agencies, both domestic and international: Dognition, member of the Expert Advisory Panel; Marine Corps Warfighting Laboratory, where he assisted in a project to develop specialized search dogs; International Narcotics and Law Enforcement Office, where he provided guidance to Kazakh Border Guard Service and allied Central Asian States about the development of an effective working dog program. Paul is active in the local community and international community, as he has been a volunteer puppy raiser and breeder caretaker for Canine Companions, is the new North American President of Assistance Dogs International, and Vice-President of International Working Dog Breeding Association. Paul Mundell leads by example. Not only do his interests in scientific research guide Canine Companions towards excellence, growth, and innovation, but also his philosophic orientation towards the Platonic method facilitates an inclusive work environment where all members of the Canine Companions staff feel involved and valued. Paul Mundell has played an integral role elevating the standards by which Canine Companions' mission, to enhance the lives of people with disabilities by providing highly trained assistance dogs and ongoing support to ensure quality partnerships, is enacted.	

44	Walt Burghardt	Dr Burghardt was awarded his BA and MA in Psychology from Florida Atlantic University in 1974, his DVM in 1980 from the University of Florida, and his PhD in Biopsychology from the University of Maryland College Park in 1988. He is a Diplomate of the American College of Veterinary Behaviorists. Dr Burghardt has over 10 years' experience in basic behavioral research and over 35 years' experience in both private veterinary practice and a referral veterinary behavioral practice. Since 1995, he has been the Chief of Behavioral Medicine and Military Working Dog Studies for the LTC Daniel E Holland Military Working Dog Hospital at Lackland Air Force Base, Texas. He is responsible for the behavioral care of over 1,500 military working dogs around the world, educating Army veterinarians in applied behavioral medicine and for the implementation of a program of applied research and development regarding military working dogs. Dr Burghardt is also an Adjunct Professor in Biology at the University of Texas San Antonio and Director of the LTC Daniel E Holland MWD Hospital Behavior Residency Training Program. He is a retired Colonel in the US Air Force Reserve.	
45	Karen Overall	Dr. Karen L. Overall has BA, MA and VMD degrees from the University of Pennsylvania and a PhD degree from the University of Wisconsin-Madison. She did her residency training in veterinary behavioural medicine at the University of Pennsylvania and is a Diplomate of the American College of Veterinary Behaviourists (DACVB). Dr. Overall is a Professor of Behavioural Medicine at Atlantic Veterinary College, UPEI and lectures at veterinary schools world-wide. Dr. Overall the author of hundreds of scholarly publications, textbook chapters, commentaries, et cetera and the texts Clinical Behavioural Medicine for Small Animals (1997; Elsevier) and Manual of Clinical Behavioural Medicine for Dogs and Cats (2013; Elsevier) and of the DVD, Humane Behavioural Care for Dogs: Problem Prevention and Treatment (2013; Elsevier). She is the editor-in-chief for Journal of Veterinary Behaviour: Clinical Applications and Research (Elsevier). In addition to having given hundreds of lectures to various associations world-wide, Dr. Overall frequently consults for welfare groups, governments, the entire range of working dog organizations and pharmaceutical companies. Dr. Overall has been named the North American Veterinary Conference (NAVC) Small Animal Speaker of the Year and was named one of the The Bark's 100 Best and Brightest - Bark Magazine's list of the 100 most influential people in the dog world over the past 25 years. Dr. Overall's research focuses on neurobehavioural genetics of dogs, the development of normal and abnormal behaviours especially with respect to early experience, assessment of behaviour, with an emphasis on working dogs, truly humane routine behavioural care and psychopharmacology.	

46	Jane Russenberger	Jane is the Director of Breeding and Genetics at Guiding Eyes for the Blind in Yorktown Heights, New York. Guiding Eyes is dedicated to enriching the lives of blind and visually impaired men and women by providing them with the freedom to travel safely, thereby assuring greater independence, dignity and new horizons of opportunity. Jane is also a part of the IWDR development and support team. Jane has been responsible for the Guiding Eyes canine breeding program producing 500 Labrador and German Shepherd puppies annually. During the past 33 years she has scored aspects of behavior on thousands of dogs from 2 to 15 months of age and fine tuned behavior testing and scoring schemes to improve the consistency and quality of the behavior data. The accumulated data have been used to genetically improve our dogs by calculating estimated breeding values (EBVs) which identify the genetically best young dogs for breeding. Insights gained from studying behavior been incorporated into the Guiding Eyes STEP program which is a puppy rearing approach designed to optimize the genetic potential resulting in confident, relaxed adults who are ready for guide dog training and eventual placement as guide dogs.	
47	David Deglau	David Deglau holds a Masters in Chemical & Biomolecular Engineering from Johns Hopkins University. He currently is a Senior Scientist and Project manager at the Johns Hopkins University Applied Physics Lab. In his position he leads efforts focused on system control and integration; test, evaluation, and prototype development of chemical detection systems. Specifically applying engineering principles to evaluating and improving odor detection canines through operational assessments, training aid development, training, and early development.	
48	Alena C. Heyer	Alena began working with canines at the age of 16 when she got her German Shepherd, Baily. She competed in Schutzhund and achieved her dog handler's license and passed the German equivalent of the Canine Good Citizen test. For four years, she volunteered and assisted in training others and their dogs in agility, protection work, tracking, and obedience classes 3-4 times a week at a club in Germany. She has been working with dogs for more than 9 years and continues to grow more passionate about training. Alena moved to the United States, permanently, after a year as an Au Pair. She got a job as Dog Trainer at Petco and became certified soon after. In 2017 Alena joined the PVWDC team as an intern and could not get enough, so in June of 2018, she became one of their full-time trainers. In the past three years, Alena has trained many search and rescue canines and law enforcement canines that have gone on to certify and are currently in service. Police forces, prisons, and FEMA task forces are just a few examples of organizations that Alena's training dogs have gone on to work in. She continues exploring the application of force-free methods during the learning phase in law enforcement training. Alena says, "I have been working with dogs for more than 9 years and continue to grow more passionate about training and working alongside others who share my same love for dogs. Working at	

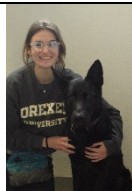
		Penn Vet has been incredibly rewarding, and seeing the difference a Penn Vet Working Dog can make in law enforcement and the medical field has only reinforced my desire to continue helping dogs realize their full potential.” Alena married her husband, Chris, who also happens to be a dog trainer. They have three dogs of their own and occasionally foster a working dog through Penn Vet Working Dog Center. In her free time, Alena enjoys hiking, beach trips, and activities with her dogs.	
--	--	--	--

IWDC – 2021: PRESENTER BIOGRAPHIES AND PHOTOS			
NETWORKING – BREAKOUT SESSIONS			
S/N	Presenter	Biography	Photo
1	Eldin Leighton and Jane Russenberger	The International Working Dog Registry (IWDR) provides a world-class record-keeping service for all organizations worldwide that breed working dogs in large numbers. Dr. Leighton, along with some volunteer help from others, began development of IWDR as a part-time project in 2012, but development became a full-time focus when he officially retired in 2015. For 20 years from 1995 through 2015, Dr. Leighton held the Jane H. Booker Chair in Canine Genetics at The Seeing Eye. In that position, he was responsible for managing the canine breeding program that, per year, produced about 200 Labrador Retriever puppies, 200 German Shepherd puppies and another 150 to 200 Golden Retrievers or Lab x Golden cross-bred puppies. Dr. Leighton first became associated with IWDBA when he attended the 2001 Conference in San Antonio, Texas. In 2005, Dr. Leighton was appointed to the IWDBA Board of Directors, then was subsequently elected as the Board’s first President. Dr. Leighton’s experience in the dog breeding world was acquired first as the Research Geneticist working with the U.S. Army Bio-Sensor Research Division from 1973-1976, then as a consultant for The Seeing Eye from 1977 through 1994. After retiring from The Seeing Eye, Dr. Leighton started a private company, Canine Genetic Services, LLC, and through this company, he and others now provide annual maintenance and development support of IWDR for the IWDBA.	
2	Bess Pierce and Kelly Mann	Colonel (Dr.) Bess Pierce is a Professor of Veterinary Medicine at Lincoln Memorial University College of Veterinary Medicine in Harrogate, Tennessee, where she teaches small animal internal medicine, sports medicine and One Health subjects. She is also an Adjunct Associate Professor, Canine Performance Sciences and Rehabilitation, at Penn Vet School of Veterinary Medicine, Penn Vet Working Dog Center. Dr. Pierce has served more than 29 years in the US Army Veterinary Corps both in the active duty and reserve components, with worldwide assignments including California, two tours in Japan, six years in Germany and nearly ten years at the Military Working Dog Center in San Antonio, Texas. She is currently assigned as the senior veterinarian at the DoD Military Working Dog Veterinary Service at Joint Base San Antonio – Lackland, Texas. Dr. Pierce graduated from Auburn University College of Veterinary Medicine and is board certified by the	

		American Board of Veterinary Practitioners, the American College of Veterinary Internal Medicine and the American College of Veterinary Sports Medicine and Rehabilitation. She has a passion for four-footed canine heroes and their human partners, and a particular interest in athletic conditioning and injury prevention, along with comparative exercise physiology. She enjoys spending time with her veterinarian husband and 3 dogs, traveling, hiking, kayaking and teaching yoga. Dr. Kelly Mann is the Director of the Office of Defense Engagement at Colorado State University, a Board member of the International Working Dog Breeding Association and the Technical Director at Mantel Technologies in Fort Collins, CO. He leads Mantel Technologies' canine research programs and serves as the military liaison for the Veterinary Committee on Trauma, a university representative to the Department of Defense Working Dog Research Forum, and a module leader for Veterinary Trauma and Stabilization Course development. He has decades of service and leadership experience in clinical veterinary medicine and veterinary research, especially with programs and projects directly applicable to US and allied military working dogs. Dr. Mann received his Bachelor of Science in 1986 from Georgia College, graduated from the University of Georgia, College of Veterinary Medicine in 1990 and completed a Master of Science in Veterinary Parasitology. He joined the US Army Veterinary Corps in 1992 and retired at the rank of Colonel in 2013. During his military career, Dr. Mann was the Director of the LTC Daniel E. Holland Military Working Dog Hospital and served in specialized training and leadership positions focused on military working dog medical care in Department of Defense, NATO and allied programs. He received a MS in Radiological Health Sciences from CSU, is a Diplomate of the American College of Veterinary Radiology and earned a Master of Strategic Studies from the US Army War College. Dr. Mann is a member of the Order of Military Medical Merit and recipient of the Army Surgeon General's "A" Proficiency Designator, the highest recognition for professional excellence in the Army Medical Department. Dr. Mann has a passion for all working dogs and the people they serve. His career vision is to support world-class research at the highest level in his profession, tempered by compassion for the animals and people involved, and guided by ethical consideration for the health and welfare of each animal.	
3	Sheila Goffe and Stacey West	As Vice President, Government Relations for the American Kennel Club, Sheila Goffe leads the AKC's efforts in public policy arena, including working to protect the rights of all dog owners and promote responsible dog ownership. She oversees AKC legislative policy strategy and AKC outreach at the federal, state and local levels. She also serves as AKC staff lead for the AKC Detection	

		Dog Task Force, Service Dog Pass, and other key programs. Sheila joined AKC 2006. Prior to working for the American Kennel Club, she was a Senior Legislative Analyst/Editor and Deputy Director of Editorial Product Development for <i>Congressional Quarterly</i> in Washington, DC. Previous experience included federal legislative staffing and advocacy, work as an editor and analyst for <i>The Economist Intelligence Unit</i>, and serving as an adjunct in Political Science/Comparative Politics at the State University of New York/Stony Brook. Sheila has completed Ph.D. coursework and research in American Politics/Public Policy, earned a Masters of Philosophy in American Politics and a MA in International Political Economy and Development at Fordham University. Stacey West serves as Subject Matter Expert for AKC's Detection Dog Task Force, as well as Program Manager for the Patriotic Puppy Program. He is also the President of Anchored Canine Inc., where he is responsible for all aspects of the development and operation of a canine breeding and training program to produce detection and sporting dogs to meet our country's increasing demands. Stacey has specific experience developing proposals for Federal, State and Local government agencies with certain working canine needs. Prior to joining the Patriotic Puppy Program, Stacey held several roles with K2 Solutions including Operations Manager, Canines Research and Development Program Manager, and IDD Deployment Project Manager. He was deployed to Camp Leatherneck, Helmond Province, Afghanistan in support of Operation Enduring Freedom as K2's Field Service Representative. Stacey is also an AKC Licensed Retriever Field Trial Judge and a Key Opinion Leader with Eukanuba Dog Food. Stacey has a Bachelor of Science in Fisheries and Wildlife Science from North Carolina State University and a Master of Science in Zoology from Clemson University.	 
4	Hans Ebbers and Esther Schalke	Hans Ebbers • since 1980 police officer • from 1989-2017 member at the special forces (SEK) • from 1992-2017 trainer at the special forces for self-defense and tactics • 1998 development of special tactics for police dog handler • from 2000-2017 dog handler for special forces • since 2007 police dog trainer • since 2008 judge for police dogs and responsible for training and further education for all police dogs in special forces in North Rhine Westfalia • from 2013-2017 training dogs for concealed detection of explosives on persons • since 2007 Seminars/advanced training for police, customs and military in Germany, Austria, Switzerland, Australia and New Zealand and Sweden • since 2007 dog trainer for special forces (Attack dogs, Tracking and Explosives)	 

		• dog handler and judge in IPO sport • from 2013-2019 associate of the Lupologic GmbH ; later Kynoscience UG • since 2014 chamber certified dog trainer (Lower Saxony) • since 2017 police department of Muenster	
--	--	--	--

IWDC – 2021: POSTER PRESENTATIONS			
1	Amanda Collins	Amanda Collins is a third-year biomedical engineering student at Drexel University. She has completed two internships at the Penn Vet Working Dog Center and continues to work at the Center as a research assistant.	
2	Bridget Ringenwald	Bridget Ringenwald is a second year veterinary student at the University of Pennsylvania School of Veterinary Medicine. She graduated from Villanova University in May of 2020 with a B.S. in Biology and Honors with a concentration in Medical Humanities.	
3	Dakota Discepolo	Dakota Discepolo is student in the Department of Animal Science, Food, and Nutrition majoring in Animal Science with a specialization in Pre-Veterinary Medicine and Science at Southern Illinois University Carbondale . She is an Undergraduate Research Assistant through ILSAMP and the McNair Scholars program. Dakota is currently working on the effects of cleansing agents on canine skin, as well as assisting with working canine decontamination and heat stress research. Her current project is to help understand what cleansers used during decontamination procedures may be most effective and safest on the canine's skin. During deployment, working canines may come into contact with various contaminants which could be harmful to both canine and handler. Decontamination procedures need to be implemented after each search, but it is unknown what effects multiple days of exposure to cleansing agents has on the skin of the canine. This work can help handlers make decisions on how to better decontaminate their canines during deployment.	
4	Joshua Bailey	Joshua Bailey is a graduate student at Southern Illinois University studying Canine Science.	