

ZOOBIQUITY CONFERENCE

NUTRITION AND DISEASE IN MAN AND COMPANION ANIMALS

VENUE

Charles Perkins Centre John Hopkins Drive, The University of Sydney

CONFERENCE DATE

Friday 27 February 2015

TIME 8.30am–5.30pm

ENQUIRIES

T +61 2 9351 7979 E cve.enquiries@sydney.edu.au www.cve.edu.au/ evzoobiquityconference15

CONFERENCE PARTNERS

Centre for Veterinary Education Sydney Medical School Charles Perkins Centre

ABOUT ZOOBIQUITY

Animals and humans get many of the same diseases yet human physicians and veterinarians rarely share their knowledge. Zoobiquity explores how the commonality of animals and humans can be used to diagnose, treat, and heal patients of all species. Drawing on the latest insights from both medical and veterinary science – as well as evolutionary biology and molecular genetics – Zoobiquity proposes an integrated, interdisciplinary approach to physiological, nutritional and behavioural health.

www.zoobiquity.com

PROGRAM

8.30-9AM	REGISTRATION	
9-9.05AM	INTRODUCTION AND WELCOME	Dr Hugh White
	SESSION ONE: THE ZOOBIQUITY MISSION	
9.05-9.10AM	A CAREER PERSPECTIVE ON THE ZOOBIQUITY CONCEPT	Dr James Harris
9.10-9.30AM	THE ZOOBIQUITY JOURNEY SO FAR	Prof Barbara Natterson-Horowitz
9.30-9.50AM	MATCH AND MISMATCH: AN ECOLOGICAL-EVOLUTIONARY PERSPECTIVE	Prof David Raubenheimer
	SESSION TWO: NUTRITIONAL ECOLOGY IN RELATION TO DIET, DIABETES AND OBESITY	
9.50-10.20AM	WHY IS THERE A GLOBAL EPIDEMIC OF OBESITY AND DIABETES IN HUMANS AND WHY SHOULD WE WORRY?	Prof Ian Caterson
10.20-10.30AM	WHAT APPROACHES TO WEIGHT LOSS IN HUMANS WORK? WHY?	Assoc Prof Amanda Salis
10.30-10.50AM	MORNING TEA	
10.50-11AM	PREVENTING OBESITY - IS IT POSSIBLE?	Prof Louise Baur
11-11.15AM	DIABETES IN DOGS AND CATS	Dr Linda Fleeman
11.15-11.30AM	THE PROTEIN LEVERAGE HYPOTHESIS	Prof Stephen Simpson
11.30–11.50AM	Q&A PANEL DISCUSSION	Dr Linda Fleeman, Prof Ian Caterson, Prof David Raubenheimer, Prof Stephen Simpson
	SESSION THREE: DIET, DENTITION AND DENTISTRY; AN EVOLUTIONARY PERSPECTIVE	
11.50-12.10PM	DENTAL DISEASE IN CHILDREN AND ADULTS	Dr Christina Adler
12.10-12.20PM	THE IMPACT OF PERIODONTAL DISEASE ON HUMAN HEALTH AND WELLBEING: TIME TO INTERVENE?	Prof Clive Wright
12.20-12.30PM	GIVE YOUR DOG A BONE: THE WISDOM OF FEEDING DOGS AND CATS NATURAL FOOD AND RAW MEATY BONES	Prof Richard Malik
12.30-12.40PM	FEEDING CATS AND DOGS FOR OPTIMAL DENTAL HEALTH – A CONTRARY VIEW	Dr Christine Hawke
12.40-1PM	Q&A PANEL DISCUSSION	Prof Richard Malik, Prof Clive Wright, Dr Christina Adler, Dr Christine Hawke

1-2PM	LUNCH	
	SESSION FOUR: THE SOCIAL ANTHROPOLOGY OF DIET, OBESITY AND DIABETES IN PEOPLE AND THEIR COMPANION ANIMALS	
2-2.25PM	THE IMPACT OF 'BIG FOOD' AND 'BIG SODA' ON HUMAN FOOD INTAKE: DO SOCIETY AND CORPORATIONS DETERMINE WHAT PEOPLE EAT	Prof Bruce Neal Dr Bridget Kelly
2.25-2.35PM	ULTRA-PROCESSED FOODS: A NEW CONCEPT IN NUTRITION GUIDANCE	Assoc Prof Timothy Gill
2.35-2.45PM	WHAT MAKES CATS AND DOGS FAT – MORE THAN LASAGNA?	Dr Linda Fleeman
2.45-2.55PM	INDUSTRY PERSPECTIVE ON PET NUTRITION	Dr Delisa Appleton
2.55-3.10PM	UNFORESEEN DIETARY DANGERS – JERKY TREATS, GRAPES, LILIES, ONIONS, GARLIC, MELAMINE AND IRRADIATED COMMERCIAL PET FOOD	Dr Mary Thompson

3.10-3.30PM	AFTERNOON TEA	
	SESSION FIVE: FUTURE PLANNING	
3.30-4.20PM	Q&A - PANEL DISCUSSION	Dr Linda Fleeman Prof Richard Malik Prof Louise Baur Prof David Raubenheimer Dr Delisa Appleton Prof Bruce Neal
4.20-4.40PM	SUM UP AND CLOSE	
	WHAT HAVE WE AS HUMANS GAINED FROM THE DAY?	Prof Louise Baur
	WHAT HAVE OUR COMPANION ANIMALS GAINED FROM THE DAY?	Prof Richard Malik
	HOW CAN A 'ZOOBIQUITY' APPROACH HELP US INFORM THE CRITICAL ISSUES WE HAVE DISCUSSED TODAY?	Prof David Raubenheimer
4.45-5.30PM	DRINKS AND CANAPES	

SPEAKERS



DR CHRISTINA ADLER BSc (Hons) PhD

Christina is a lecturer in the Faculty of Dentistry at Sydney University. Her research focuses on understanding how the oral microbial community contributes to the maintenance of health and the development of oral diseases. This involves understanding how the oral biofilm functions as a microbial ecosystem through the use of in-depth genetic sequencing techniques and multivariate-based approaches to analysis. She has been awarded an NHMRC project grant to apply genetic technologies to the significant public health problem of dental decay in childhood – the most common chronic childhood disease in Australia. To address gaps in current knowledge, Christina is determining how an individual's environment and genetic makeup drive variation in the composition of the oral microbiota to produce childhood decay.



DR DELISA APPLETON

BVSc (Hons) PhD

Delisa graduated from the University of Queensland in 1987 then worked in mixed and small animal veterinary practices and later entered the nutrition industry. She completed her PhD with Prof Jacquie Rand into the nutritional aspects of obesity and diabetes in cats. She is an Adjunct Senior Lecturer in Veterinary Science at the University of Queensland. Delisa is Senior Technical Services Veterinarian in the Professional Veterinary Affairs Department of Hill's Pet Nutrition.



PROF LOUISE BAUR MBBS BSc (Med) PhD FRACP FAHMS AM

Louise is Professor of Paediatrics & Child Health at the University of Sydney, and has a conjoint appointment in the Sydney School of a Public Health. She is a consultant paediatrician at The Children's Hospital at Westmead in Sydney, where she is Head of Weight Management Services for obese and pre-diabetic children and adolescents. Her research interests include the prevention of childhood obesity; the antecedents of obesity and the metabolic syndrome in childhood; the complications of paediatric overweight and obesity; and the effective management of obesity and related disorders in a variety of clinical settings. Louise was made a Member of the Order of Australia (AM) in 2010. She is a Director of World Vision Australia and a Member of the World Health Organization Ad hoc Working Group on Science and Evidence for Ending Childhood Obesity.



PROF IAN CATERSON MBBS PhD FRACP AM

lan is the Director of the Boden Institute of Obesity Nutrition Exercise and Eating Disorders, and Boden Professor of Human Nutrition at the University of Sydney. He is also Deputy Clinical Stream Director for Aged, Chronic Care & Rehabilitation in Sydney Local Health District. Ian is president-elect of the World Obesity Federation and has chaired the Expert Obesity Committee for the Australian National Preventive Health Agency. He is on the Prevention and Community Health Committee of the NHMRC of Australia.



DR LINDA FLEEMAN BVSc PhD MANZCVS

Linda Fleeman runs Animal Diabetes Australia, a clinical service at three veterinary practices in Melbourne, for diabetic dogs and cats. She graduated from the University of Queensland and completed an Internship in Small Animal Medicine at Murdoch University, a Residency in Small Animal Medicine at the University of Melbourne, and a PhD on the Management of Diabetes in Dogs at the University of Queensland. She was a Lecturer at the University of Queensland then a Senior Lecturer at the University of Sydney, before returning to private clinical practice in 2010.



ASSOC PROF TIMOTHY GILL

PhD

Tim Gill is currently Professor of Public Health Nutrition and Principal Research Fellow within the Boden Institute of Obesity, Nutrition, Exercise and Eating Disorders and the Prevention Research Collaboration at the University of Sydney. He has wide experience as an academic and within government departments and health agencies. His research interests are in the application of public health nutrition to the promotion of good health and prevention of chronic disease. His major focus is on the epidemiology of obesity and improving food environments and public guidance for the prevention and management of obesity both within Australia and the Asia-Pacific region

Professor Gill has authored several key reports on obesity for State and Federal Government departments as well as national and international agencies and has served on a number of World Health Organization expert committees on obesity and chronic disease. He has also produced many original papers and book chapters on obesity, nutrition and public health.



DR JAMES HARRIS

BSc DVM OAM

James committed to a career in veterinary medicine as a child after involvement with the Regents Park Zoological Society, London. He was evacuated to the USA in 1939 where he pursued his dream and graduated from Michigan State University, College of Veterinary Medicine in 1958. He practised in California for 40 years, is Past President of the Association of Avian Veterinarians, and was named Bustad Companion Animal Veterinarian of the Year in 1989, for work in Grief and Bereavement/ Pet Loss. In 2002, he commenced practice in Tasmania where he continues to work; is Chair of the Board of the Association of Avian Veterinarians Australasia Committee Ltd; and he continues to contribute to continuing education for veterinarians.



DR CHRISTINE HAWKE

BSc (Vet) BVSc (Hons) PhD MANZCVS (Veterinary Dentistry)

Christine studied veterinary medicine at the University of Sydney. After working in general practice in Australia and the UK, she completed her PhD in immunogenetics in 2003. After a break to start a family, Christine returned to the Faculty of Veterinary Science at the University of Sydney as a clinical lecturer, where she developed a passion for small animal dentistry. She completed her ANZCVS membership examination in Veterinary Dentistry in 2006. Christine founded Sydney Pet Dentistry, and divides her time between clinical dentistry and teaching small animal dentistry to vets, vet nurses, and undergraduate students.



DR BRIDGET KELLY

PhD MPH BSc (Nutrition)(Hons)

Bridget is an Accredited Practising Dietitian and Senior Lecturer in Public Health Nutrition at the University of Wollongong. Bridget's research interests include the development of healthy public policy to create supportive food environments for good nutrition and wellbeing. This includes reducing children's exposure to unhealthy food and beverage marketing, and increasing the availability and accessibility of healthy foods. Bridget has led significant national and international research in the fields of food marketing and front-of-pack food labelling, which have contributed to high-level policy discussions and reports.



ADJUNCT PROF RICHARD MALIK

DVSc DipVetAn MVet (ClinStud) PhD FACVSc FASM MASID

Richard studied veterinary medicine at the University of Sydney. He trained in anaesthesia and intensive care, and completed a PhD in neuropharmacology at the John Curtin School of Medical Research (ANU). He studied the development and plasticity of neuromuscular connections for his postdoctoral fellowship. He returned to teach in the Department of Veterinary Clinical Sciences, Sydney University for 16 years. He consults for the Centre for Veterinary Education whilst practising in Sydney. Richard is involved in many collaborative research projects in both pure and applied research and has a strong interest in nutrition. He is an international expert on how to feed cats for health and longevity.



MD

PROF BARBARA NATTERSON-HOROWITZ

Barbara is a professor at University of California, Los Angeles (UCLA) in the Department of Cardiology and the Department of Ecology and Evolutionary Biology. She specializes in cardiac imaging but her academic passion is the evolutionary connection between human and animal bodies and minds. Her medical rounds sometimes include veterinarians at the Los Angeles Zoo where her patients include gorillas, lions, wallabies, and humans. She also works closely with veterinarians in discussions of human health at the Ronald Reagan UCLA Medical Center. She has co-authored the book, *Zoobiquity: The Astonishing Connection Between Human and Animal Health*, advocating a 'One Health' approach to medicine and founded the Zoobiquity Conferences to bring veterinarians and physicians together for 'species-spanning' debates and collaborations.



PROF BRUCE NEAL

MBChB PhD FRCP FAHA

Bruce is Professor of Medicine at the University of Sydney and Senior Director for Food Policy at The George Institute for Global Health. He is Chair of the Australian Division of World Action on Salt and Health. Bruce directs a broad-based program of epidemiological and public health research at the Institute. He has a longstanding interest in the dietary determinants of disease and the potential for changes in the food supply to deliver health gains. He advocates strongly with government and industry for improved food quality. He also leads the *FoodSwitch* program that uses smartphone and internet technology to drive more transparent product labelling.



PROF DAVID RAUBENHEIMER

BSc (Hons) MSc DPhil

David is the Leonard P. Ullman Chair of Nutritional Ecology, and Nutrition Theme Leader at the Charles Perkins Centre, University of Sydney. His expertise in nutritional ecology focuses on how the behavioural and physiological interactions of animals with their environment influence health and wellbeing. He has extensive experience in applying this approach to wild animals, production animals, companion animals, and humans. David holds concurrent appointments in the Faculty of Veterinary Sciences and the School of Biological Sciences at the University of Sydney, and is Adjunct Professor in the New Zealand Institute for Advanced Study. He has published one book and over 200 scientific papers.



ASSOC PROF AMANDA SALIS BSc (Hons) PhD

Amanda is an NHMRC Senior Research Fellow at the University of Sydney's Boden Institute of Obesity, Nutrition, Exercise & Eating Disorders at the Charles Perkins Centre. She completed her PhD in Geneva and her research interests include the hypothalamic control of appetite, body weight and body composition. Her research aims to help people attain and maintain optimum body composition and metabolic health throughout life (with potential applications for obese domestic animals). Her translational research spans studies with transgenic mice to randomized controlled trials in humans. Her current NHMRC project grants exceed \$2.4 million.



PROF STEPHEN SIMPSON

FAA FRS

Stephen is Academic Director of the Charles Perkins Centre and Australian Research Council Laureate Fellow in the School of Biological Sciences at the University of Sydney.

Together with colleague David Raubenheimer, Stephen developed an integrative modelling framework for nutrition (the Geometric Framework), which was devised and tested using insects, but has since been applied to a wide range of organisms from slime moulds to humans, and problems, from aquaculture and conservation biology to the dietary causes of human obesity and ageing. He is a Fellow of the Royal Society and his awards include NSW Scientist of the Year, 2009 and the Eureka Prize for Scientific Research, 2008.



DR MARY THOMPSON

BVSc (Hons) DACVIM MANZCVS (Assoc)

Mary graduated from the University of Sydney in 1995 and worked in companion animal practice in Sydney, before completing an internship at Washington State University and a residency in small animal internal medicine at Purdue University. She is board certified in internal medicine, having gained Diplomate status with the American College of Veterinary Internal Medicine in 2001. Mary has been on faculty at the University of Queensland since 2005. Her major research interest is recurrent urinary tract infection and antimicrobial resistance in dogs and cats, as well as a keen interest in nutritional toxicities in companion animals. Mary is active in the Australian and New Zealand College of Veterinary Scientists and is President of the Small Animal Medicine Chapter and Vice-president of the Feline Chapter.



PROF EMERITUS CLIVE WRIGHT MDS PhD FICD MRACDS (DPH)

Clive studied dentistry at University of Otago and completed an MDS and PhD. He was Professor of Preventive and Community Dentistry, and Head of the School of Dental Science, at the University of Melbourne. He left to commence private dental practice in New Zealand. Later, he was the Director, Health Promotion and Research, Dental Health Services Victoria and then Chief Advisor (Oral Health), Ministry of Health, New Zealand. He was Chief Dental Officer for NSW from 1995 to February 2012. Clive has chaired many Government reviews including the recent National Oral Health Promotion Planning Committee (2012-2013) tasked with developing Australia's first Commonwealth led approach to oral health promotion. He is now Clinical Professor, University of Sydney and Associate Director (Oral Health) at the Centre for Education and Research on Ageing at Concord Hospital.

COURSE REGISTRATION



ZOOBIQUITY

Animals and humans get many of the same diseases yet human physicians and veterinarians rarely share their knowledge. Zoobiquity explores how the commonality of animals and humans can be used to diagnose, treat, and heal patients of all species. Drawing on the latest insights from both medical and veterinary science – as well as evolutionary biology and molecular genetics – Zoobiquity proposes an integrated, interdisciplinary approach to physiological, nutritional and behavioural health.

Zoobiquity was founded by Dr Barbara Natterson-Horowitz, a human cardiologist from UCLA. She came up with the idea after she was asked to see a sub-human primate at the Los Angeles Zoo. She quickly realised the benefits of studying comparative medicine and has written a book on the subject and run three very successful Zoobiquity conferences in the United States.

The Centre for Veterinary Education, the Sydney Medical School and the Charles Perkins Centre from the University of Sydney are thrilled to be hosting the first Australian Zoobiquity Conference in Sydney in 2015, the first such conference to be held outside North America. **The theme is nutrition and disease in man and companion animals.** Given that our companion animals share every aspect of our modern lifestyle, it is not surprising that, along with humans, our dogs and cats are suffering an obesity epidemic. What may not be obvious is our companion animals have encountered changes to their diet like our own – an increased intake of highly refined, calorie dense, nutritionally questionable foods.

Our multidisciplinary program will go back to basics. What is the epidemiology of adiposity in Australia? What are the macronutrients we need for good nutritional health? What drives the desire for these macronutrients? How much salt do we need, how much water should we drink, and how much exercise should we get commensurate with our lifestyle? Dogs are obligate carnivores – should we forget the packaged food and return their diet in part to raw meaty bones? How does diet impact periodontal disease and how does periodontal disease impact health?

We have an outstanding line up of speakers who include zoologists, nutritional ecologists, microbiologists, molecular biologists, veterinary dentists, dietitians and human and veterinary physicians. We expect an invaluable crosspollination of ideas as well as discussion and controversy. An unlikely debate may ensue with industry representatives from pet food companies.

We hope you will come to contribute and be part of a special day that aims to change how we think.

REGISTER ONLINE

www.cve.edu.au/evzoobiquityconference15

SEND US YOUR APPLICATION

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Post: Centre for Veterinary Education Veterinary Science Conference Centre Level 2, B22 Regimental Drive The University of Sydney NSW 2006

PERSONAL DETAILS

First Name:		
Surname:		
Practice Name:		
Address:		
Suburb:		
State:	Postcode:	
Tel:		
Email:		
Special Dietary Requirements:		

COST

Zoobiquity Conference, 27 February 2015

- □ Standard \$240
- □ Student* \$120
- □ The University of Sydney Staff \$165

PAYMENT

Cheque	Please make cheque payable to the Centre for Veterinary Education	
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*Student registrations are required to show proof