Preconference Symposium
42nd Annual Conference of the IETS
Louisville, Kentucky

Biomaterials Repositories: The Science and Business of Biobanking
Dedicated to Naida Loskutoff for her tireless efforts and significant contribution to the advancement of reproductive sciences in companion animals, non-domestic and endangered species

Saturday, January 23, 2016
Galt House Hotel (Jones)

Program Co-Chairs:
Nucharin Songsasen and Gabriela Mastromonaco

08:30–08:45 Opening and Welcome
Nucharin Songsasen and Gabriela Mastromonaco

08:45–09:30 Keynote Speaker
Cryobiology principles and species conservation: Benefits for coral reefs
Mary Hagedorn, Smithsonian Conservation Biology Institute, Hawaii Institute of Marine Biology, Hawaii, USA

Session 1: Emerging Techniques for Germplasm Cryopreservation
Session chair: Ann Van Soom, Ghent University, Ghent, Belgium

09:30–09:55 Dry-state preservation of mammalian sperm
Takehito Kaneko, Graduate School of Medicine, Kyoto University, Kyoto, Japan

09:55–10:20 Cryopreservation of mouse oocytes and embryos by vitrification and laser-induced ultra-rapid warming
Peter Mazur, College of Arts and Sciences, University of Tennessee, Knoxville, USA

10:20–10:45 Micromanipulation of equine blastocysts to allow vitrification
Katrin Hinrichs, College of Veterinary Medicine and Biomedical Sciences, Texas A&M University, College Station, USA

10:45–11:05 Break

Session 2: Biobanking in Practice
Session chair: Jason Herrick, National Foundation for Fertility Research, Colorado, USA

11:05–11:30 Oocyte banking
Zsolt Peter Nagy, Reproductive Biology Associates, My Egg Bank, Atlanta, USA

11:30–11:55 Establishing a biobank to support biomedical research at a veterinary hospital
Marta Castelhano, Cornell Veterinary Biobank, Cornell University, Ithaca, USA

11:55–12:20 Implementing the use of biobanks: Lessons learned from the endangered black-footed ferret
Rachel Santymire, Davee Center for Epidemiology and Endocrinology, Lincoln Park Zoo, Chicago, USA

12:20–13:30 Lunch (on your own)
13:30–14:15  **Keynote Speaker**
Biobanking rare breeds: Challenges and implementation
*Phillip H. Purdy, USDA-ARS National Animal Germplasm Program, Fort Collins, USA*

**Session 3: Unique Challenges to Cryopreservation**
*Session chair: William Swanson, Cincinnati Zoo and Botanical Garden, Cincinnati, USA*

14:15–14:40  Repository development for germplasm of aquatic species
*Terrence Tiersch, Aquatic Germplasm and Genetic Resources Center, Louisiana State University Agricultural Center, Baton Rouge, USA*

14:40–15:05  Cryopreservation and associated technologies for threatened amphibians and reptiles
*John Clulow, School of Environmental and Life Sciences, University of Newcastle, New South Wales, Australia*

15:05–15:30  Sperm cryopreservation in wild ungulates
*Budhan Pukazhenthi, Smithsonian Conservation Biology Institute, Front Royal, USA*

15:30–15:50  Break

**Session 4: Management of Biospecimens**
*Session chair: Gabriela Mastromonaco, Toronto Zoo, Toronto, Canada*

15:50–16:15  Implications of the Nagoya Protocol
*Pierre Comizzoli, Smithsonian Conservation Biology Institute, Office of the Under-Secretary for Science, Washington, DC*

16:15–17:15  **Roundtable Discussion**
Future of biobanking: What should we become?
*Z. Nagy, M. Castelhano, P. Purdy, B. Pukazhenthi, and P. Comizzoli*

17:15–17:30  Closing