

Cryopreservation and Other Preservation Approaches for Animal Models

September 2024–May 2025



NIH National Institutes of Health
Office of Research Infrastructure Programs



Session 4: Cryopreservation and Other Long-Term Preservation of Rodent Models in Biomedical Research

October 16, 2024

1:00 p.m. – 5:00 p.m. EDT

1:00 p.m. – 1:10 p.m.

Opening Remarks

Oleg Mirochnitchenko, Ph.D., Office of Research Infrastructure Programs, National Institutes of Health

Yuksel Agca, D.V.M., Ph.D., M.S., University of Missouri



Presentations: Part 1

Moderator: Yuksel Agca, D.V.M., Ph.D., M.S., University of Missouri

1:10 p.m. – 1:35 p.m.

Robert Taft, Ph.D., The Jackson Laboratory

Challenges and Opportunities Associated with Rodent Germplasm Cryobanking

1:35 p.m. – 2:00 p.m.

Toru Takeo, Ph.D., Kumamoto University

Cryopreservation of Rodent Sperm: Efficiencies, Reproducibility, and Needs

2:00 p.m. – 2:05 p.m.

Break

Presentations: Part 2

Moderator: Thomas Saunders, Ph.D., University of Michigan

2:05 p.m. – 2:25 p.m.

Yuksel Agca, D.V.M., Ph.D., M.S., University of Missouri

Cryopreservation of Rodent Oocytes: Efficiencies, Reproducibility, and Needs

2:25 p.m. – 2:45 p.m.

Simon Tröder, Ph.D., University of Cologne

SEcuRe: Adapting Proven Approaches for Affordable and Simplified Mouse In Vitro Fertilization

2:45 p.m. – 3:05 p.m.

Willem Wolkers, Ph.D., University of Veterinary Medicine Hannover

High-Temperature Storage of Rodent Sperm

3:05 p.m. – 3:10 p.m.

Break

Presentations: Part 3

Moderator: Robert Taft, Ph.D., The Jackson Laboratory

3:10 p.m. – 3:30 p.m.

Ali Eroglu, D.V.M., Ph.D., Augusta University

Cryopreservation-Induced Epigenetic Alterations: A Neglected Aspect

3:30 p.m. – 3:50 p.m.

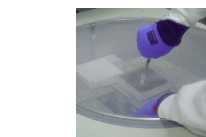
Marcello Raspa, Ph.D., European Mouse Mutant Archive

Distribution of Cryopreserved Mouse Spermatozoa in Dry Ice: A Multicentric Study

3:50 p.m. – 4:10 p.m.

Thomas Saunders, Ph.D., University of Michigan

Rodent Germplasm Cryopreservation and Assisted Reproduction: From a Transgenic Rodent Model Core Facility Perspective



4:10 p.m. – 4:15 p.m. Break

4:15 p.m. – 5:00 p.m. Group Discussion

Moderator: Yuksel Agca, D.V.M., Ph.D., M.S., University of Missouri

Panelists: All committee members and speakers

5:00 p.m. Closing Remarks

Oleg Mirochnitchenko, Ph.D., Office of Research Infrastructure Programs, NIH