

METADATA WORKING GROUP

 CENTER FOR
Zoonomics
BASED AT ZOO NEW ENGLAND



MEETING AGENDA



APRIL 29TH, 2025

Center for Zoonomics Overview

Group Introductions

Working Group Overview

Open Discussion

Next Steps and Future Meetings





HOW DID THE CENTER FOR ZOOONOMICS COME TO EXIST?



Collaboration with Broad Institute of MIT & Harvard

Dr. Eric Baitchman (Zoo New England) and Dr. Elinor Karlsson (Broad Institute) began investigating potential genetic causes of heart disease in both meerkats and gorillas managed in human care.



Recognized a Need for United Endeavor

Identified several barriers blocking efficient, population-wide research:

- Inconsistent metadata entry
- Lack of communication network between zoos and health genetics communities
- Redundant approval processes for sample use



CENTER FOR **Zoonomics** BASED AT ZOO NEW ENGLAND



Founded in 2021

Aim to address barriers to performing genetic health studies on animal populations under the care of AZA-accredited zoos



Collaborative Research Initiative

Based at Zoo New England in partnership with the Broad Institute of MIT and Harvard and representatives from various AZA facilities and human medicine

Planning Workshop in 2021 at the Broad



COLLABORATORS

Eric Baitchman, Zoo New England

Alexander Brick, Broad Institute of MIT & Harvard

Marietta Danforth, Great Ape Heart Project at Detroit Zoo

Gina Ferrie, Disney's Animal Kingdom

Robert Fleischer, Smithsonian National Zoo and Conservation Biology Institute

Michael Garner, Northwest ZooPath

Diane Genereux, Broad Institute of MIT & Harvard

Rachel Johnston, Zoo New England; Broad Institute of MIT & Harvard

Elinor Karlsson, Broad Institute of MIT & Harvard; University of Massachusetts Medical School

Klaus-Peter Koepfli, Smithsonian-Mason School of Conservation

Kerstin Lindblad-Toh, Broad Institute of MIT and Harvard; Uppsala University

John Linehan, Zoo New England

Leslie Lyons, University of Missouri

Tomas Marques-Bonet, Institut de Biologia Evolutiva

Kate Megquier, Broad Institute of MIT & Harvard

Sarah Morton, Boston Children's Hospital; Broad Institute of MIT & Harvard; Harvard Medical School

Hayley Murphy, Detroit Zoo

Daniel Neafsey, Harvard T.H. Chan School of Public Health; Broad Institute of MIT & Harvard

Andrea Putnam, San Diego Zoo Wildlife Alliance

Oliver Ryder, San Diego Zoo Wildlife Alliance

Christine Seidman, Harvard Medical School; Broad Institute of MIT & Harvard

Cynthia Steiner, San Diego Zoo Wildlife Alliance

John Skyes, Bronx Zoo

Siv Tang, Zoo New England

Karen Terio, University of Illinois College of Veterinary Medicine

Kathy Traylor-Holzer, IUCN SSC Conservation Planning Specialist Group (CPSG)

Michelle White, Broad Institute of MIT & Harvard

Aryn Wilder, San Diego Zoo Wildlife Alliance

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INTEGRATE MEDICAL AND CONSERVATION GENOMICS TO
IMPROVE HUMAN, ANIMAL, AND ECOSYSTEM HEALTH.**



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Conservation and health genetics: Identify and tackle the recurrent barriers that stymie conservation and animal health genetics research of zoo animal populations



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Conservation and health genetics: Identify and tackle the recurrent barriers that stymie conservation and animal health genetics research of zoo animal populations



Health Genetics Expertise: Support communication and collaboration between the genetics and zoo communities



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-  **Conservation and health genetics:** Identify and tackle the recurrent barriers that stymie conservation and animal health genetics research of zoo animal populations
-  **Health Genetics Expertise:** Support communication and collaboration between the genetics and zoo communities
-  **Engagement in the AZA Community:** Support zoos with the infrastructure needed to enhance their involvement in health and genomics research that promotes healthy animal populations and ecosystems, while driving forward AZA's vision of advancing animal wellbeing, public engagement, and the conservation of wildlife and wild places



CENTER FOR ZOONOMICS TEAM



Dr. Eric Baitchman, DVM, DAZCM
Co-Founder and Veterinary Advisor
Vice President of Animal Health and Conservation
Zoo New England



Dr. Elinor Karlsson, PhD
Co-Founder and Genomics Advisor
Director of Vertebrate Genomics , Broad Institute of MIT & Harvard
UMass Chan Medical School



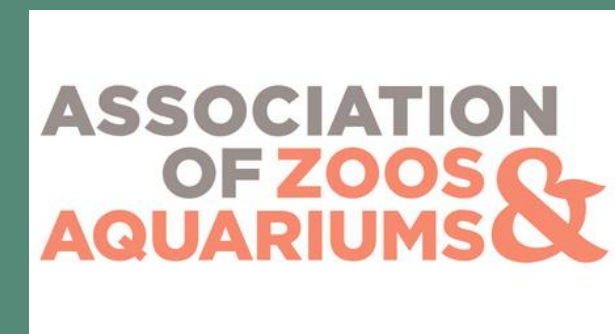
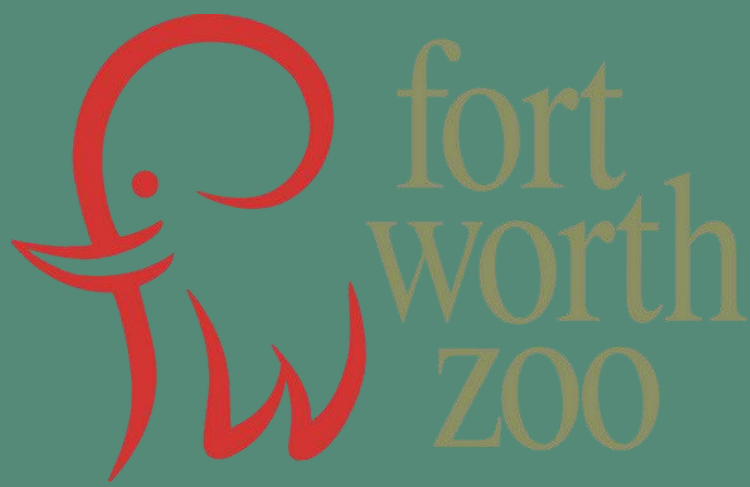
Dr. Rachel Johnston, PhD
Conservation Genomics Scientist
Director of Conservation Genomics
Zoo New England



Danica Wolfe
Project Coordinator
Zoo New England



Dr. Tahlia Perry, PhD
Postdoctoral Researcher
Zoo New England



GROUP INTRODUCTIONS

- Name
- Role
- Institution





GROUP STRUCTURE AND HOUSEKEEPING



ACTIVE PARTICIPATION

Everyone should feel comfortable sharing their ideas and perspectives



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Allow time and space for each participant to fully express their thoughts



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MEETING NOTES

A designated notetaker will capture key points during each meeting and share them with Danica, who will then distribute to the group within one week



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EMBRACE DISAGREEMENT

It's okay to disagree about ideas or processes--let's collaborate and consider all viewpoints

NEXT STEPS



✉ zoonomics@zoonewengland.org

🌐 zoonomics.org



Agenda for upcoming meetings will be emailed out with each meeting invite

Meetings will be held once a month (virtually)

We will be adjusting the plan to whole group meetings rather than subcommittees (for now)

**Proposed next date is Tuesday, May 27th,
12-2pm EST**