



## **BIOMORA24**

**Unique biology of mole-rats  
- from husbandry to biomedical applications**

**28 Nov - 29 Nov, 2024**

**MPINB Bonn**



## Thursday, November 28, 2024

|               |  |
|---------------|--|
| 09:30 – 09:45 | <b>Welcome</b><br>Organizing Committee<br>Alison Barker, Pascal Malkemper, Paul Friedemann Pohl, Jane Reznick  |
| 09:45 - 10:45 | <b>Scientific session 1</b><br>Chair: tba<br><b>Gary Lewin, Max Delbrück Center for Molecular Medicine, Berlin</b><br><i>What is the sensory basis of underground navigation in mole-rats?</i><br><b>Short talk (selected abstract)</b><br><b>Short talk (selected abstract)</b>   |
| 10:45 - 11:15 | <b>Coffee break</b>  |
| 11:15 - 12:45 | <b>Husbandry session 1</b><br>Chair: tba<br><b>Thomas Park, University of Illinois at Chicago, USA</b><br><i>Mole-rat adaptations to living in low O<sub>2</sub> and high CO<sub>2</sub> and colony management in the lab setting</i><br><b>Short talk (selected abstract)</b><br><b>Martin Toft, QM Diagnostics, Nijmegen, Netherlands</b><br><i>Establishment of health screening for naked mole-rats</i><br><b>Short talk (selected abstract)</b> |
| 12:45 - 13:45 | <b>Lunch break</b>   |
| 13:45 - 14:45 | <b>Husbandry session 2 - Establishing African mole-rat husbandry: legal aspects, difficulties and solutions</b><br><b>Katharina Dinger, University of Cologne, Germany</b><br><i>tba</i><br><b>Nina Vogt, MPI for Brain Research, Frankfurt, Germany</b><br><i>Veterinary approaches to health and breeding in the naked mole-rat</i><br><b>Sandra Buhl, MPI for Biology of Ageing, Cologne, Germany</b><br><i>tba</i>                               |
| 14:45 - 15:45 | <b>Husbandry session 3</b><br>Chair: tba<br><b>Paul Friedemann Pohl, CECAD University of Cologne, Germany</b><br><i>The Establishment of a naked mole rat care program - we learn from our mistakes</i><br><b>Sandra Honigs, Aquazoo Löbbecke Museum, Düsseldorf, Germany</b><br><i>tba</i>  |
| 15:45 - 16:15 | <b>Coffee break</b>  |
| 16:15 - 17:00 | <b>Scientific session 2</b><br><b>Nigel Bennett University of Pretoria, South Africa</b><br><i>Socially induced infertility in highly social mole-rats: a tale of two mechanisms of reproductive suppression</i>   |
| 17:00 - 19:00 | <b>Poster session, followed by dinner and networking</b>   |



---

## Friday, November 29, 2024

---

|               |  |
|---------------|--|
| 9:00 - 10:15  | <b>Scientific session 3</b><br><b>Hynek Burda, Charles University Prague, Czech Republic</b><br><i>Research on subterranean rodents in its fifth decade: history, achievements and challenges</i><br><b>Short talk (selected abstract)</b><br><b>Short talk (selected abstract)</b>  |
| 10:15 - 10:45 | <b>Coffee break</b>  |
| 10:45 - 12:45 | <b>Scientific session 4</b><br><b>Kaori Oka, Kumamoto University, Japan</b><br><i>Unique regulation of cell death in a long-lived cancer-resistant rodent, the naked mole-rat</i><br><b>Short talk (selected abstract)</b><br><b>Radim Sumbera, University of Budweis, Czech Republic</b><br><i>News on African mole-rats diversity and phylogeny: museum material barcoding and genomic approaches</i><br><b>Short talk (selected abstract)</b><br><b>Michaela Frye</b><br><i>tba</i> |
| 12:45 - 13:45 | <b>Lunch break</b>   |
| 13:45 - 15:15 | <b>Scientific session 5</b><br><b>Jonathan Bayerl, UCSF, San Francisco, USA</b><br><i>Long live the queen – how metabolic determinants shape lifespan in eusocial super agers</i><br><b>Short talk (selected abstract)</b><br><b>Sabine Begall, University of Duisburg-Essen, Germany</b><br><i>Tensile skin properties of naked and Ansell's mole-rats</i><br><b>Short talk (selected abstract)</b>   |
| 15:15 - 15:45 | <b>Coffee break</b>  |
| 15:45 - 17:30 | <b>Scientific session 6</b><br><b>Rochelle Buffenstein, University of Illinois at Chicago, USA</b><br><i>Insights into the extraordinary longevity and cancer resistance of the naked mole-rat</i><br><b>Short talk (selected abstract)</b><br><b>Melissa Holmes, University of Toronto, Canada</b><br><i>Neuroendocrinology and plasticity of social phenotype in eusocial mammals</i><br><b>Short talk (selected abstract)</b>   |
| 17:30         | <b>Closing remarks</b>   |
|               | <b>Networking at Christmas Market Bonn</b>   |

---

