

Summary of the CRU symposium “Male reproduction”, September 13, 2018

The symposium “Male reproduction”, arranged by CRU in collaboration with the Department of Ecology and Genetics, Uppsala University, took place September 13 and gathered around 36 participants.

After a brief introduction to CRU by Theodora Kunovac Kallak, Tommaso Pizzari presented information on “Sexual selection on male reproductive traits in polyandrous societies”. He talked about the impact of polyandry and monogamy on sexual selection especially on males in different populations. Simone Immler talked about the importance of paternal effects, and about epigenetic effects on sperm and offspring fitness traits, and offspring gene expression. Rhonda Snook talked about how sexual selection alters reproductive protein networks. She also talked about the rapid evolution of postcopulatory sexual selection and the ejaculate focusing on seminal proteins using proteomics. Hanne Løvlie presented her group’s work on competition between males and male’s personalities in fowl, and how this can affect mating opportunities. Kristian Almstrup talked about the effects of environmental chemicals on sperm function and quality, and collectively on male fertility. At the end Jane Morrell talked about different methods of sperm selection used in animal reproduction research and the effectiveness and feasibility of those methods in selection for high quality sperm.

Program:

13:00- 13:15 Introduction to CRU

13:15-13:45 **Sexual selection on male reproductive traits in polyandrous societies**, *Professor Tommaso Pizzari*, Department of Zoology, University of Oxford, UK

13:45-14:15 **The sperm factor: paternal impact beyond genes**, *Associate professor Simone Immler*, School of Biological Sciences, University of East Anglia, Norwich, UK

14:15-14:45 **Experimental evolution alters reproductive protein networks**, *Associate professor Rhonda Snook*, Department of Zoology, Stockholm University

14:45-15:00 Fika/coffee break

15:00-15:30 **Male-male competition and personality in the fowl**, *Associate professor Hanne Løvlie*, Linköping University

15:30-16:00 **Adverse effects of environmental chemicals on human fertility and sperm cell function**, *Senior scientist Kristian Almstrup*, Department of Growth and Reproduction, Copenhagen University Hospital, Denmark

16:00-16:30 **Biomimetic sperm selection for assisted reproduction - fact or fantasy?**, *Professor Jane Morrell*, Department of Clinical Sciences, Swedish University of Agricultural Sciences

16:30-16:45 Summary and good-bye