

1. Institution

Department of Anatomy, Physiology and Biochemistry, Faculty of Veterinary Medicine and Animal Sciences, SLU, Uppsala, Sweden

2. Principal investigator and contact person

Associate Professor Anders Johannisson (Anders.Johannisson@afb.slu.se)

3. Key personnel

Anders Johannisson	Anders.Johannisson@afb.slu.se	Flow cytometry and related techniques
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4. Research profile

In close collaboration with scientists at the Dept of Clinical Sciences, SLU, I work with developing and applying techniques for analysis of properties of spermatozoa and their environment. Several different species are under study, e.g. Cattle, Pigs, Horses and Swamp Buffaloes.

5. Key technologies and tools

Flow cytometry, both standard flow cytometry and multiplex measurement of soluble analytes. Fluorometry. Equipment: Multiplex flow cytometer Bioplex 100, Analysing Cytometer LSR, Sorting Cytometer FACStarPLUS.

6. Selected publications (max. 5)

Sperm capacitation in the porcine oviduct. Paisan Tienthai, Anders Johannisson and Heriberto Rodriguez-Martinez. *Anim Reprod Sci* 80, 131-146, 2004.

Boar spermatozoa in the oviduct. Heriberto Rodríguez-Martínez, Fernando Saravia, Margareta Wallgren, Paisan Tienthai, Anders Johannisson, Juan M. Vázquez, Emilio Martínez, Jordi Roca, Libia Sanz and Juan J. Calvete. *Theriogenology* 63, 514-535, 2005.

In vitro capacitation of bull spermatozoa by oviductal fluid and its components. Ann-Sofi Bergqvist, Joan Ballester, Anders Johannisson, Marta Hernandez, Nils Lundeheim and Heriberto Rodriguez-Martinez. *Zygote* 14, 259-273, 2006.

Heparin and dermatan sulphate induced capacitation of frozen-thawed bull spermatozoa measured by merocyanine-540. Ann-Sofi Bergqvist, Joan Ballester, Anders Johannisson, Nils Lundeheim and Heriberto Rodriguez-Martinez. *Zygote* 15, 225-232, 2007.