

# VU Social Hormones Lab

The VU Social Hormones Lab is a research network at the Department of Social and Organisational Psychology. The goal of this lab is to stimulate research on hormones and social behaviour by facilitating collaborations and pooling resources. The group focuses on the sometimes complex relationship between hormone levels and social behaviour and cognition. Each member of the group has a research interest that he or she believes will be better understood by taking into account hormonal activity (see the Table below for the research focus of each member).

## Cortisol and testosterone

The two hormones that are most studied by the VU Social Hormones Lab are *cortisol* and *testosterone* (some of us also work with progesterone and estrogen). The group mainly studies cortisol and testosterone due to two reasons. The first reason is that both hormones have been frequently related to social and organizational psychological processes in which the Department is interested. For example, the release of cortisol is stimulated when exposed to various forms of psychosocial stressors, and testosterone has been linked frequently to social status and competition. The second reason is that both cortisol and testosterone can be assessed from small quantities of saliva (at a relative low cost). This is a great advantage when studying complex social processes in response to experimental manipulations, since taking a blood sample may alter participants physiologically and psychologically too much, thus potentially nullifying the effect of any subtle experimental manipulation. More recently, the group is now also using hair samples to assess hormonal levels. This new method is one of the best methods to determine average hormonal levels over a period of months.

## Current Members of the Social Hormones Lab

<i>Member</i>	<i>Research interest hormones</i>
Paul van Lange	Football aggression
Leander van der Meij	Leadership, Aggression, Stress
Thomas Pollet	Napoleon complex (height), mate choice, reproduction
Francesca Righetti	Sacrifice in relationships
Richard Ronay	Power and status, decision making, overconfidence, empathy, trust
Josh Tybur	Ovulatory cycle shifts in female psychology
Mark van Vugt	Dominance, status, leadership and followership

## Contact

If students or researchers need advice to set up a hormonal study or if they want to collaborate with the VU Social Hormones Lab, please send an email to: [L.van.der.Meij@vu.nl](mailto:L.van.der.Meij@vu.nl) (Leander van der Meij)

## Publications

1. van der Meij, L. , Almela, M., Fawcett, T.W., Buunk, A.P. & Salvador, A. (2012). Men with elevated testosterone levels show more affiliative behaviors during contact with women. *Proceedings of the Royal Society of London. Series B, Biological Sciences*, 279(1726), 202-208.
2. van der Meij, L., Almela, M., Hidalgo, V., Villada, C., IJzerman, H., Lange, P.A.M. van & Salvador, A. (2012). Testosterone and Cortisol Release among Spanish Soccer Fans Watching the 2010 World Cup Final. *PLoS ONE*, 7(4).
3. Pollet, T.V., Meij, L. van der, Cobey, K.D. & Buunk, A.P. (2011). Testosterone levels and their associations with lifetime number of opposite sex partners and remarriage in a large sample of American elderly men and women. *Hormones and Behavior*, 60(1), 72-77.
4. Ronay, R., Greenaway, K., Anicich, E.M., Galinsky, A.D. The path to glory is paved with hierarchy: When hierarchical differentiation increases group effectiveness. 2012, *Psychological Science*.
5. Ronay, R., & Carney, D.R. Testosterone's negative relationship with empathic accuracy and perceived leadership ability, 2013, *Social Psychological and Personality Science*.
6. Spisak, B., Dekker, P., Kruger, M., & Van Vugt, M. (2012). Warriors and peacekeepers: Testing a biosocial implicit leadership hypothesis of intergroup relations using masculine and feminine faces. *PLOS One* (7)1: e30399. doi:10.1371/journal.pone.0030399
7. Van Honk, J., Montoya, E., Bos, P., Van Vugt, M., & Terburg, D. (2012). New evidence on testosterone and cooperation. *Nature*, 485, E4-5. doi:10.1038/nature11136.