



## Faculty of Business, Law and Social Sciences

### Proposed Title:

Exploring the Biological Foundations of Leadership Perceptions

### School:

Birmingham City Business School & Health Science

### Proposed Supervisory Team:

Prof. Alexandros Psychogios  
 Dr. Loukia Tsaprouni  
 Prof. Maxine Lintern

### Abstract:

The majority of studies developed to investigate leadership perceptions have approached the phenomenon from a (social)psychological perspective. There are far less studies attempting to explore biological differences regarding our perceptions of leadership. Yet, we do know that individual differences in accepting leaders do exist. Hence, the question arises whether there are any specific biological factors that also govern these.

A preliminary experiment is setup to verify the previously found association between testosterone and leader preference, using saliva samples of participants. Due to some existing related research we focus on examining a possible interaction between testosterone and cortisol and its impact on leadership preference. The experimental task is setup to induce stress (i.e. increase of endogenous cortisol) as well as competition between participants (i.e. increase of endogenous testosterone). Doing so allows us not only to validate previous cross-sectional findings, but also test whether an increase in these two hormones modifies individuals' perception and preference of leaders.

Results impact our understanding of the biological nature of temperament and its influence on human perception.

### Research Environment:

This project will be under the responsibility of two research centres:

- (1) The Interdisciplinary Centre of Applied Brain Science for Business & Society (iCABBS) of the Faculty of Business Law and Social Sciences is a recently established research centre that aims to develop new insights and create links in understanding between the brain science and the application to real people. It is targeting at generating skills and disseminating knowledge so that people, institutions and societies adopt and utilise a more contemporary and scientific view of human behaviour. The centre will link Leadership as a social science phenomenon to the biology of humans targeting at exploring what influences leadership perceptions.

(2) The Centre for Life and Sport Sciences of the Faculty of Health Education and Life Sciences has an established track record in life science research. With expertise in biomedical sciences research and a state of the art infrastructure the centre will support all biochemical studies (from all hormone /cytokine tests to linking those findings with gene variation).

**Applicant Requirements:** This is an excellent opportunity to work in an emerging area of multidisciplinary research, gain a PhD and not only understand but also develop leadership skills in preparation for a high-impact research career. Applicants must have a minimum of UK 2.1 honours degree (or equivalent) in a relevant subject area. A relevant Masters qualification in a biological sciences discipline is desirable. This project will require strong analytical skills, and previous quantitative research experience would be an advantage.

**Contact: Name, e-mail and telephone number:**

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