This research investigates how the hormone testosterone influences different forms of narcissistic behavior linked to status-seeking. Narcissism is not just about excessive self-love; it includes several traits with distinct social strategies. Some narcissists confidently promote themselves to gain admiration and leadership (agentic narcissism), while others react defensively by competing aggressively or devaluing others when their status is threatened (antagonistic narcissism).

Testosterone, known for its role in physical development and dominance, also shapes social behaviors. It helps individuals respond to social challenges by encouraging actions that improve their rank within social groups. For example, testosterone levels can rise after winning a competition, reinforcing future dominance-seeking behavior. However, how testosterone interacts with different narcissistic traits in various social contexts is not well understood.

Our study will test two key ideas. First, agentic narcissism will be positively connected with increased testosterone after receiving positive feedback about intelligence, reflecting self-promotion. Second, antagonistic narcissism will be positively connected with increased testosterone after experiencing an ego threat in a competitive game, reflecting status defense. We will conduct two experiments with male participants. In the first, participants take an intelligence test and receive either positive or average feedback. We expect higher testosterone for those with higher agentic narcissism after positive feedback. In the second, participants compete in a reaction-time game and receive either ego-threatening or neutral feedback. We predict increased testosterone for those who have higher antagonistic narcissism after ego threat.

Our studies aim to reveal the biological roots of how different narcissism domains drive social status-seeking behaviors. Understanding these processes may help explain why some people defend their status aggressively while others confidently seek admiration, offering insights into personality, hormones, and social behavior.