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Presentation title: The association between HPA-axis functioning during mid-adolescence and psychopathy during late adolescence

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The aim of the present study is to investigate the association between HPA-axis functioning in mid-adolescence and psychopathy in late adolescence. Psychopathy is linked with severe and chronic patterns of antisocial behaviors that feature persistent and severe aggression. Low physiological arousal is a well-studied biological correlate to psychopathy. A core biological indicator of physiological arousal is the hypothalamic-pituitary-adrenal (HPA) axis, but until now, findings of a link between HPA-axis functioning and psychopathy are inconsistent. It has been hypothesized that blunted cortisol reactivity to stressor tasks might be associated to psychopathy primarily in clinical samples. This present study will examine the link between HPA-axis functioning and psychopathy in a community sample of male and female twins born between 1990 and 1995 (n=1228) retrieved from the Risk for Antisocial Behavior (RFAB) sample at the University of Southern California. At the age of 11 to 15 years, youth completed stressor tasks during an approximately 5-hour lab session. Samples of salivary cortisol were collected prior to, during, and after the stressor tasks as an index of HPA-axis reactivity. At the age of 19 to 20 years psychopathy was measured in the youths using the Triarchic Psychopathy Measure (TriPM). Multiple regression analysis will be used to analyze the possible link between HPA-axis functioning and psychopathy while controlling for potential covariates (e.g., puberty, body mass index, medication, gender). Results will show whether HPA-axis functioning is predictive of psychopathy in a normative adolescent sample. The importance of biological indicators of physiological arousal or stress reactivity is particularly notable for the possibility of early detection of risk factors for psychopathy that could lead to better intervention.