



## BRAIN MATTERS SEMINAR SERIES

### The past, present and future of neuroscience in southern Africa

## INVITATION



You are cordially invited to a lecture by **Dr Samantha Brooks**, Senior Lecturer in Psychiatry at the University of Cape Town, on:

### **Working Memory for Cognitive Control in Anorexia versus Addiction: A Bayesian Brain Perspective**

The seminar is the fourth in the Brain Matters Seminar Series, a joint initiative of JIAS and the DST-NRF Centre of Excellence in Human Development at the University of the Witwatersrand, with support from the Southern African Neuroscience Society and the Wits Cortex Club.

**DATE:** Thursday 26 October 2017  
**TIME:** 13h00  
**VENUE:** Johannesburg Institute for Advanced Study (JIAS), 1 Tolip Street, Westdene, JHB  
**RSVP:** Sahba.Besharati@wits.ac.za; Tanya.Calvey@wits.ac.za

**TRANSPORT FROM WITS:** Transport will be available from the Wits School of Public Health at 12 noon on Thursday 26 October. Should you need transport, please contact Sahba.Besharati@wits.ac.za or Tanya.Calvey@wits.ac.za by 15 October latest.

**PARKING AT JIAS:** Please park at the UJ Astro Hockey Club in Radnor Street, Westdene. A shuttle will take you to JIAS and back. The shuttle will run from 12h40 onwards. For directions and a map, see overleaf.

## SUMMARY

We are living in a world that is extremely stimulating and impulse-driven. It is perhaps no coincidence that we are experiencing huge crises in terms of social unrest in South Africa and across the globe, fueled by an abundance and instant availability of food, drugs, consumer goods, sex – all appetitive processes. This talk will highlight some of the neurobiological theory and evidence that explains how working memory enables cognitive control over appetitive processes such as eating and drug-taking.

From the basis of the extremes of an impulse control spectrum model, Dr Brooks will describe brain imaging data from studies in anorexia nervosa versus substance use disorder to understand the neurocognitive basis of cognitive control. Dr Brooks will touch on Bayesian Brain theory, particularly related to epistemic foraging versus jumping to conclusions, to help to explain a novel training adjunct to treatment for impulse control that Dr Brooks's team has been developing. Working memory training may harness inherent neural plasticity in brain circuits underlying impulse control.

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# PARKING FOR JIAS EVENT

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Please park at the UJ Astro Hockey Club in Radnor Street, Westdene.  
A shuttle will take you to JIAS, and return you to your vehicle after the event.  
The shuttle will start running 15 minutes before the advertised starting time.  
The parking area is secure.

## DIRECTIONS

Turn west into Fourth Avenue from Main Road, Melville (at the robot between the Melville Spar and Mays Chemist).

At the island, take the right-hand fork into Ayr Road.

Turn second right into Radnor Street, and enter the UJ Astro Hockey Club.

## GPS COORDINATES

Latitude -26 10 25.09, Longitude -27 59 57.22

