

[European College of Neuropsychopharmacology](#) (ECNP)

10 June 2019

Inga Neumann's exceptional research contributions to the understanding of neuropeptides recognised by the 2019 ECNP Neuropsychopharmacology Award

The European College of Neuropsychopharmacology (ECNP) is pleased to announce Inga Neumann as the recipient of the 2019 ECNP Neuropsychopharmacology Award in recognition of her outstanding achievements in advancing knowledge of brain neuropeptide systems and their involvement in behavioural and physiological functions. The ECNP Neuropsychopharmacology Award is presented annually and recognises distinguished research in applied and translational neuroscience.

Inga D. Neumann is full professor of Neurobiology and Animal Physiology, as well as chair of the Department of Behavioural and Molecular Neurobiology, and dean of the Faculty of Biology and Preclinical Medicine, at the University of Regensburg in Germany.

Her ground-breaking research into neuropeptides has made fundamental contributions to the characterisation of patterns of oxytocin (OT) and vasopressin (VP) release and their behavioural and physiological consequences, helping to pave the way for human studies applying OT intranasally. As a result, OT research is now passing the translational stage towards clinical trials with intranasal OT application for treatment of several human diseases, such as anxiety- and stress-related disorders, specifically social anxiety disorder, schizophrenia, autism and drug-use disorders.

Over many years of research into the stimuli and mechanisms of OT release within distinct brain regions, she has succeeded in revealing the physiological (e.g., birth, suckling, mating, various stressors, social contact, social memory) and neuropharmacological stimuli which trigger neuropeptide release within the brain. In doing so, she has answered significant questions regarding the physiological and specifically behavioural significance of such centrally released neuropeptides and discovered distinct anxiolytic, anti-stress, and various prosocial effects (including social memory, social preference behaviour, maternal care, maternal aggression, intermale and interfemale aggression) not just of OT, but also of VP, CRF, prolactin, neuropeptide Y and neuropeptide S.

Importantly, with her interest in neuropeptide-driven behavioural and physiological adaptations during the peripartum period, she demonstrated that the high activity of the brain OT, VP and prolactin systems in late pregnancy and lactation is a critical prerequisite for behavioural and neuroendocrine adaptations during female reproduction, such as the attenuation of anxiety and fear responses, and low responsiveness of neuroendocrine stress systems. This work allowed her to identify the small set of neurons from the supraoptic nucleus responsible for the lack of social fear in lactating mice. The innovative use of animal models for studying the underlying neuropeptidergic mechanisms linked to psychopathologies such as aggression, anxiety and social fear has also led her to establish the first specific model of social fear and social anxiety disorders.

Her lab continues to be one of the world's leading centres for research on neuropeptides and their effects on the brain, opening the way for new safe and sophisticated pharmacological treatment options in humans.

Inga Neumann has more than 200 original publications and invited reviews, with a total of more than 20,000 citations, and is one of the most influential neurobiologists in Europe. A committed promoter of neuroscience education at highest level, she has served as the director of first Elite Master Programme in Germany in Experimental and Clinical Neuroscience, chair of the research initiative Aggression and Violence in Culture and Nature, director of the graduate school 'Neurobiology of Emotion Dysfunctions' supported by the German Research Council (DFG), and director and founder of the Regensburg Centre of Neuroscience (RCN).

In announcing the award, ECNP Award Committee chair Andreas Meyer-Lindenberg, Germany, said, "Inga Neumann is an outstanding translational neuroscientist. Her work on neuropeptides and oxytocin release has made seminal contributions to our understanding not only of the behavioural and physiological consequences of these processes, but their molecular and neuronal underpinnings, with very significant and exciting real-world implications in the clinic. She is an excellent recipient of the 2019 Neuropsychopharmacology Award in pre-clinical research."

Inga Neumann will receive the award during the 32nd ECNP Congress on 7-10 September 2019 in Copenhagen, Denmark, where she will deliver the ECNP Neuropsychopharmacology Award plenary lecture.

The ECNP Neuropsychopharmacology Award recognises innovative and distinguished research achievements in applied and translational neuroscience. The award is granted each year, alternating between basic science and clinical research. The award is accompanied by a prize of €10,000, which the winner may share with junior collaborators.

###

ECNP is an independent scientific association whose mission is to advance the science of the brain, promote better treatment and enhance brain health. The annual ECNP Congress attracts some 5,000 scientists and clinicians from across the world to discuss the latest advances in brain research in Europe's largest meeting on brain science. More information about ECNP, its aims and activities, can be found at www.ecnp.eu.

More information on the ECNP Neuropsychopharmacology Award can be found at: www.ecnp.eu/ena-award.

Contact:

Tom Parkhill
ECNP Press Officer
Tel. +39 349 238 8191 (mobile)
E-mail: tom@parkhill.it