

Obituary

On April 18, 2017 Jaak Panksepp passed away in his home in Bowling Green. Jaak was a member of the editorial board of *Acta Neuropsychiatrica*, but for many he is known as the neuroscientist who coined the term “affective neuroscience”.

Jaak Panksepp was born June 5, 1943, in Tartu, Estonia, and left the country in 1944 with his parents. After several years as displaced persons, the family moved to the United States. Jaak grew up in Delaware and in Lakewood, N.J., received a bachelor’s degree in psychology from the University of Pittsburgh and a master’s degree and doctorate (in 1969) from the University of Massachusetts. Panksepp became a faculty member of the Bowling Green State University and made many of his seminal discoveries there. At his death, he was a BGSU distinguished research professor emeritus and held the Baily Endowed Chair in animal well-being science at the Washington State University.

Jaak Panksepp will be remembered for his groundbreaking research into the neurobiological nature of emotions. Amongst his many notable works, he was the author of *Affective Neuroscience: The Foundations of Human and Animal Emotions* (Oxford University Press 1998) that made him known beyond the relatively small circle of admirers who were well aware of his concept of emotions and believed in his research program, as made explicit in the opening words of the paper “Toward a general psychobiological theory of emotions”:

“Emotions seem to arise ultimately from hard-wired neural circuits in the visceral- limbic brain that facilitate diverse and adaptive behavioral and physiological responses to major classes of environmental challenges. Presumably these circuits developed early in mammalian brain evolution, and the underlying control mechanisms remain similar in humans and “lower” mammals. This would suggest that theoretically guided studies of the animal brain can reveal how primitive emotions are organized in the human brain.”

The work of Jaak Panksepp on these hard-wired circuits is going to leave a lasting legacy. Reading this conceptual *Behavioral & Brain Sciences* paper of 1982 (Vol 5, pp 407-422) and the *Affective Neuroscience* volume, there is no way to escape thinking that he was (well, has been) much ahead of his time, laying fundamental groundwork for further exploration and discovery within the neurosciences. After having conducted many behavioural and brain-stimulation experiments and been the co-editor (with J.P. Morgane) of the treatise “Handbook of Hypothalamus” of four thick volumes (1979-1981), he demonstrated how important are social aspects of behaviour in all mammals, those that had been either rather ignored in animal research (as mother-infant relationships) or still remain to receive due attention (as social play).

Publication of the *Affective Neuroscience* book made Jaak famous and took him to an unaccountable number of lectures around the world. Even wider audiences heard of Jaak when he tickled the rat pups to successfully produce the 50-kHz ultrasonic vocalizations. It had been known earlier that 50-kHz USV-s associate with approach behaviour, but it took the boldness of Jaak to name this phenomenon an expression of positive affect, draw clear evolutionary links to human behaviour, and launch on this basis a novel approach towards understanding of brain pathology in mental illness and creating entirely novel treatments.

With his passion in research, great curiosity, broad knowledge in brain and behavioural sciences and scientific courage in crossing man-made trans-disciplinary boundaries, Jaak made an iconic model for a future neuroscientist.

Jaanus Harro
 Division of Neuropsychopharmacology,
 Department of Psychology,
 University of Tartu, Ravila 14A Chemicum,
 50411 Tartu, Estonia