

Terje Sagvolden (1945-2011)



Trieste 2007
EBBS meeting

We were stunned to learn of the sudden and untimely death of our friend and colleague Terje Sagvolden on the evening of 12th January 2011. It was a normal day in the lab forging plans, seeing to editorial queries, drafting a text late into the evening followed by a cross country ski run. The shock sits deep in the community of basic and clinical behavioural neurobiology of which he was so actively a part. His warmth and guiding influence will be deeply missed.

Terje was Professor in the Department of Physiology, University of Oslo, at the University of Tromsø and adjunct Professor at the University of Maryland. He was Editor-in-Chief for the open-access BMC journal *Behavioral and Brain Functions* and President of the Norwegian Neuroscience Society. He became a committee member for the European Brain and Behaviour Society (EBBS) from 1986 to 1989 and then served as secretary from 1990 to 1995. From 2004 to 2005, he was Group Leader of the Centre for Advanced Study at the Norwegian Academy of Science and Letters (CAS). Active in helping the Society of Neuroscientists of Africa (SONA) develop over the last two decades he was an official internal advisor 1999-2004. The European Network of Hyperactivity Disorders (Eunethydis) was born out of his EBBS workshop in Oslo in 1987, and has since 1990 under the aegis of Joe Sergeant with Terje's active support grown from strength to strength.

Terje's guiding fascination lay with understanding the way the brain functioned in learning and memory. This interest developed out of an early encounter with Freud's work in his school days. But, he rejected this approach as much as that of electrophysiological recording from neurons, as performed in Oslo by Per Andersen. Although it must be said that Andersen's rigour, philosophy and outreach impressed Terje deeply, as the influence of a far-sighted mentor. Nonetheless, two years after graduation, Terje left the early Lømo and Bliss era of LTP in Oslo for the behaviouristic approach to how "billions of neurons" work. This was in the laboratory of Charles Catania at the University of Maryland (Baltimore: 1974-1976), who provided the other most important influence on the development of his ideas and how to design and run experiments. Terje viewed these behaviouristic techniques for studying the role and action of reinforcement as crucial for the chance to compare processes across species, and, in humans, across cultures (witness his work over many years with spontaneously hypertensive rats (SHR) and children, and with children in northern Europe and southern Africa).

Terje bridged perfectly the disciplines of Psychology and the Neurosciences that he earnestly wished would integrate more and learn from each other. This 'integrative approach' came into being in 1979 with a PhD and the first paper demonstrating hyperactivity in the SHR. Over the following years the SHR model for Attention-Deficit/Hyperactivity Disorder (ADHD) was validated and the techniques translated to the studies of children at home and abroad (reviews 2000, 2005). Studies of the role of toxic chemicals were initiated. In the early stages he was ably assisted by May-Britt and Edvard Moser, now pursuing influential hippocampus studies in Trondheim, and more recently by Heidi Aase and Espen Johansen, currently involved in extensive human and animal studies based in and near Oslo, respectively. The research group has been essentially concerned with the study of behavioural and brain changes associated with ADHD. The outcome of much of this interest in impulsivity and attention-related problems has been to emphasize the importance of the delay-of-reinforcement gradient. With local and international cooperation these features have been shown, at one extreme, to depend on dopaminergic activity and glutamatergic control (with Vivienne Russell) and, at the other extreme, to pertain to children of very different cultural backgrounds (with Anneke Meyer). Most recently this line of work has extended to the proposal for a strain of rat that models the inattentive sub-syndrome of ADHD, and putative genetic contributions to the intra-individual variability of behaviour, one of the more likely candidates for an endophenotype of ADHD (with Steve Faraone).

As an EBBS member from the earliest days, I have observed Terje's involvement and concern in its affairs. Always willing to engage in discussion as a committee member he was a popular choice for secretary. As such, a firm but gentle hand helped guide what I would call the first generation change at a time when Neuroscience Societies were rapidly evolving. A great interest in continuing developments remained evident as we dined and swapped opinions (and nostalgic memories) at the recent Trieste and Amsterdam meetings. Terje was in fact used to offering a helping hand, as I learned in Winchester as we inspected Arthur's Round Table together, and he spoke of his work with the organization of the same name.

In summary, I would like to applaud Terje's organizational flair that brought so many of us together at the Oslo 1987 meeting and again for the CAS year (2004-5) – both events were undeniably responsible for bringing researchers from 3-4 continents together, fostering research cooperations (that have given insight into reinforcement mechanisms and ADHD) and making them all friends with each other! Privately, Terje had a truly warm-hearted personality; publicly he was a rigorous and insightful researcher, and stubborn energetic organiser – who had such a disarming chuckle and smile when one's paths crossed: we shall miss you. To his sons Geir and Espen and their children I extend my deepest sympathy and sorrow.

Bob Oades