GUEST EDITORIAL



Special Issue in Honour of Michael B Robinson

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Foreword

I am pleased to introduce this Special Issue of Neurochemical Research that is dedicated to honouring the career of Professor Michael Robinson, who has enjoyed a sustained and highly productive career in neurochemistry since the early 1980s.

Mike grew up in New Hampshire in the northeast corner of the USA, and his college education was undertaken nearby in chemistry at Bates College (Lewiston, Maine). He then travelled half-way across the USA to pursue his PhD (1981–1985) at the University of Minnesota (Minneapolis and St Paul) in what was a huge geographical shift with a change of landscapes from the Atlantic coast

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¹ Florey Institute of Neuroscience & Mental Health, University of Melbourne, Parkville, VIC, Australia to the farmlands of the mid-west. Here he worked in the Department of Biochemistry with James Koerner, who achieved notable recognition for his early contributions to the neuropharmacology of L-glutamate. During his doctoral research Mike used electrophysiological methods to study excitatory transmission *ex vivo* in hippocampal slices. However, he took a notable detour with his first adventure in neurochemistry and published a paper on the binding of [³H]-2-amino-4-phosphonobutyrate to rat brain synaptic membranes (Robinson et al. Biochemistry 24:2401–2405, 1985). He maintained his interest in conformationally constrained L-glutamate analogues and collaborated with Koerner even during his first faculty appointment at the University of Pennsylvania, Philadelphia.

Mike undertook a period of very productive postdoctoral research in the laboratory of Joseph Coyle at the Johns Hopkins School of Medicine (1985–1988; Baltimore, Maryland). He built upon his skill-set related to glutamatergic neurotransmission by working on various aspects of the neurochemistry of N-acetyl-L-aspartyl-L-glutamate. Here he also co-authored publications in Coyle's team with Randy Blakely who became a much honoured guru in transporter neurobiology and a lifetime friend. His association with Joseph Coyle meant that he is a member of the scientific family tree of distinguished scientists who had worked with Julius Axelrod (Nobel Prize 1970), and which features links to several prominent neurochemists.

After moving to Philadelphia for his appointment as an Assistant Professor of Paediatrics and Pharmacology (1988) at the University of Pennsylvania, School of Medicine, he co-authored his first paper on neurotransmitter transporters (Blakely et al. Proc Natl Acad Sci USA 85:9846-9850, 1988) with Susan Amara who became a treasured colleague. Additionally, Mike held continuous appointments at both the Children's Hospital and Children's Seashore House where he played roles in strategic planning and coordinating research, and additionally more broadly in the University of Pennsylvania, where he also lectured on diverse topics in health sciences. He has held Professorships since 2004, during which time he has trained, mentored and supervised numerous numbers of undergrads, research students and postdoctoral fellows. Mike has directed a post-doctoral training program in Neurodevelopmental Disabilities at the University of Pennsylvania, School of Medicine, for almost two decades with funding from the National Institute of Health. The research in his laboratory has also been continuously funded by grants for 30 years. During this time, he has been very active in a number of areas of neurochemical research, particularly on the regulation of transporters for L-glutamate and their interfaces with energetics, astrocyte biology and neuropathologies. He has an impressive list of publications (~ 150) with a high number of citations (> 10,000), which along with speaking invitations, various awards and honours confirm that his research has made a lasting impact internationally on the field.

Mike has also made substantial contributions to several professional societies, including the International Society for Neurochemistry (ISN, Councillor 2015–2019), and as a member of multiple peer-review editorial boards of journals of neuroscience and pharmacology. In particular in his involvement for some 20 years with Neurochemistry International, including as an innovative Chief Editor (2011–2017),

he grew its quality and standing. Mike has been seminally involved with a series of highly successful meetings (Mexico, Australia, France and Canada) focusing on membrane transporters and their roles in brain function and disease – he not only played a key role in their establishment as satellites of ISN Biennial Meetings, but also contributed as a member of the Organizing Committees of these Brain in Flux events.

This Special Issue includes a range of diverse and interesting contributions, appropriately reflecting Mike's broad interests through his career and the respect he receives from colleagues and collaborators. There is a notable original publication addressing diverse aspects of transporter trafficking induced by amphetamines in noradrenergic neurons (Underhill, Colt & Amara). The quality reviews contained herein include one focusing on astrocyte diversity, their roles and new medicines for neurodegenerative disorders (Westergard & Rothstein), and another addressing roles in in cancer biology of the neutral amino acid exchanger, ASCT2 (Ryan, Vandenberg & colleagues).

Professor Michael Robinson enjoys a well-deserved national and international reputation for outstanding research and the novel findings that have emerged from his research group, which reflects his diverse skills as a team leader. He clearly represents a wonderful role model for young scientists. These achievements have occurred whilst Mike and his supportive wife, Mellen Biggs, have together maintained an empathic family life. Together they continue to regularly enjoy the delights of rural New Hampshire with family and friends. Finally, on behalf of colleagues in the neurochemical community and contributors to this special issue, we congratulate Mike on his wondrous research achievements and his contributions to neurochemistry.

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Guest Editor

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