


OBITUARY

Kazuhiro Ikenaka (1952–2018)

Akio Wanaka*, Andrew J. Lawrence†, Yukio Yoneda‡, Bernard Zalc§, Alfreda Stadlin¶, Juana Maria Pasquini** and Philip M. Beart† 

*Department of Anatomy and Neuroscience, Faculty of Medicine, Nara Medical University, Kashihara City, Nara, Japan

†Florey Institute of Neuroscience and Mental Health, Parkville, Victoria, Australia

‡Section of Prophylactic Pharmacology, Kanazawa University Venture Business Laboratory, Kanazawa, Ishikawa, Japan

§Sorbonne University, Inserm, CNRS, Institut du Cerveau et de la Moelle Épinière, GH Pitié-Salpêtrière, Paris, France

¶College of Medicine, Ajman University, Ajman, United Arab Emirates

**Department of Biological Chemistry, Institute of Chemistry and Biological Physicochemistry (IQUIFIB), School of Pharmacy and Biochemistry, University of Buenos Aires and National Research Council (CONICET), Buenos Aires, Argentina



Kazuhiro Ikenaka, affectionately known as Kaz to friends and colleagues, an internationally renowned neuroscientist and substantial contributor to professional societies, died on October 27th, 2018. Kaz was at this time the President of the International Society for Neurochemistry (ISN) and he

passed away after a long fight against cancer. He was posthumously awarded the Order of the Sacred Treasure, Golden Rays, for his dedicated service to Japanese Society. Kaz was an outstanding leader, mentor and friend, and our deepest sympathies are extended to his wife Yumiko, his sons Yoshinori and Kensuke, and family.

Kaz was born December 19th, 1952, in Sakai, Osaka, Japan. He graduated in chemistry from the Faculty of Science, Osaka University (1975), and completed both his Master of Science (organic chemistry, 1977) and his PhD (biochemistry, 1980) at the same university. He served as Instructor at the Institute for Protein Research, Osaka University from 1980 to 90 during which time he undertook postdoctoral research in Masayori Inoue's laboratory at the State University of New York at Stony Brook (USA). Subsequently he was promoted to Associate Professor at the Institute for Protein Chemistry at Osaka University (1991–92) where working with Katsuhiko Mikoshiba he had his first introduction to brain science. Another graduate of Osaka University, Yukio Yoneda, later confessed that although older, Kaz was always one step ahead in the science of neurochemistry, working hard and enjoying life as well.

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Address correspondence and reprint requests to Philip M. Beart, Florey Institute of Neuroscience and Mental Health, University of Melbourne, Parkville, Vic. 3052, Australia. E-mail: philip.beart@florey.edu.au

Kaz's career rapidly advanced and he accepted a professorial appointment at the National Institute for Physiological Sciences in Okazaki (1992), where he became Vice-director (2007) and Director of the Institute for Integrative Bioscience (2013).

Although his contributions to neuroscience were remarkably diverse as shown by the publication of more than 250 articles over 40 years, he established an impressive international reputation for his outstanding work in myelin neurobiology. Here, he made wide-ranging and significant contributions pertinent to the cellular and molecular mechanisms underpinning oligodendrocyte biology and demyelinating diseases of the central nervous system, including multiple sclerosis and leukoencephalopathies. Early in his career Kaz's work focused on the structural function of proteolipid protein in central nervous system myelin. He also developed a theory that a specific splicing of this protein may play a role in the proliferation of oligodendrocyte precursor cells. Kaz also initiated several approaches aimed at identifying the embryonic origin of oligodendrocyte lineage (the myelin forming cell in the central nervous system) in the spinal cord. More recently he investigated the role of glycosylation of myelin proteins. He was among the first to systematically knock-out myelin constituents to demonstrate the relative contribution of each one in the stability of myelin sheath. Additionally, Kaz was a key contributor to the international community that met regularly from 1991 onwards to further the exchange of ideas in the burgeoning field of myelin function and disease – these were both Gordon Conferences and satellites at ISN Biennial Meetings. Indeed, Bernard Zalc, a long-term collaborator after meeting Kaz through Professor Mikoshiba, credits his input as an enduring member of the Scientific Advisory Board of these satellite myelin meetings as contributing to their continued success. Kaz personally led the organization of the 3rd such satellite meeting in Okazaki, Japan, coincident with the 1995 ISN Biennial Meeting.

Kaz's career reflects his commitment to his discipline and he served on the Editorial Boards of various journals of neuroscience, including *Developmental Neuroscience* (1994–2018, Associate Editor), *GLIA* (2001–18), *Neuron Glia Biology* (2003–12, Associate Editor 2006–12), *Journal of Neuroscience Research* (2005–18, Associate Editor), *ASN Neuro* (2009–2018, Senior Editor), *Neurochemical Research* (2011–2018, Chief Editor 2008–11) and *Brain and Behaviour* (2011–18). Additionally, he was a loyal, active member of the Japanese Society for Neurochemistry (JSN; Councillor and Vice President 2005–12), the Asian-Pacific Society for Neurochemistry (APSN; Councillor 2004–12, President 2006–10) and ISN (Treasurer 2013–17, President 2017–18). Kaz's interest in APSN was aroused in 2002 at the Program Committee Meeting for the ISN-APSN 2003

conference when APSN President Alfreda Stadlin (2001–6) convinced him of the desperate need to nurture neurochemistry in the Asia-Pacific region and to rally support from neurochemists in Japan. He joined APSN Council in 2003 and chaired the Program Committee Meeting for 6th APSN Meeting (2004) in Hong Kong. Indeed it was the commencement of their very strong friendship because of APSN and its growth. Kaz subsequently played an especially important role in the organization of APSN, not only as President, but also in inspiring future Presidents, including Andrew Lawrence (2010–14) and Akio Wanaka (2018–22). He changed the working model for APSN Council, bringing together JSN and APSN, such that Andrew Lawrence noted he was readily able to combine Asian and Western cultural considerations. Kaz truly respected the opinion of others, but was always willing to put forward his own opinion, skills that Andrew observed first hand when working with him as Program Chair for the Paris 2015 ISN Meeting. Akio Wanaka, current APSN President, commenced his involvement with APSN on the Program Committee for the 2006 APSN Meeting – Kaz incisively recognized Akio's potential and via this interface Akio developed a strong commitment to both APSN and ISN activities. Kaz was clearly a great mentor of up and coming neurochemists. He served ISN with great commitment, playing a major role in the success of the ISN Advanced School of Neurochemistry in Okazaki (1995) and subtly revealed his organizational skills as Program Chair for the ISN Biennial Meeting in Buenos Aires (2001). He was a most dutiful ISN Treasurer being careful to keep ISN meeting budgets as low as possible and his taste for perfection ensured accurate reporting. His ultimate goal, the experience of a highly successful ISN Biennial Meeting in Montreal (2019), was alas cut short by his untimely death. However, it is clear that Kaz completed so many goals together with his colleagues, friends and his family.

Kaz Ikenaka was an inspiration to all and Akio Wanaka describes him as a man of logic as a researcher and at the same time a man of hot blood. He enjoyed discussion over beer, wine or Japanese sake. He loved to encourage young researchers, especially in developing countries, and was a great mentor in JSN, APSN and ISN. Kaz was a great man, a visionary ISN President and will be missed dearly by family, friends, colleagues and the ISN community. His survival whilst enduring cancer revealed him as a true fighter. May his spirit rest in peace.

Disclosure

Andrew Lawrence is an ISN Councillor and Philip Beart is ISN Historian and a former editor of the *Journal of Neurochemistry*. Kazuhiro Ikenaka provided the ISN with the photo during his presidency.