

Editorial

Remembering Professor Kei-ichiro Maeda (1955–2018)



Our beloved and respected colleague, Dr. Kei-ichiro (Kei) Maeda, the president of SRD, passed away on February 3, 2018. It was a weekend and Dr. Maeda had been visiting his mother at a care home in Kanazawa city with his wife Dr. Hiroko Tsukamura. After he had said good-bye to his mother and promised to come again the next day, he suffered a ruptured aortic aneurysm. Because his death was so sudden, at first we members of SRD did not realize what the e-mail from the office meant. But soon we were engulfed by grief. He will be greatly missed.

Dr. Maeda was born on November 20, 1955 in Kanazawa city, a central city of the Hokuriku district facing the Sea of Japan. He stayed in his home town until he graduated from Kanazawa University Senior High School and then entered the University of Tokyo in 1975. His research career started as a graduate student in a laboratory of the university farm (currently the Animal Resource Science Center) under the supervision of Professor Yasuhiko Kano. He was engaged in research on the mechanism regulating seasonal breeding in goats. Through the graduate studies program, he met Dr. Yuji Mori and Dr. Hiroshi Nagashima, who became his lifelong friends. All three of them served at later times as an Editor-in-Chief for the Journal of Reproduction and Development.



Dr. Maeda as a Ph.D. student with his supervisors and colleagues at the farm of the University of Tokyo in the winter of 1980-1981. Back row, left to right: Dr. Maeda, Associate Professor Sawasaki; front row, left to right: Dr. Nagashima, Dr. Mori, Professor Kano, Mr. Mochimaru, Assistant Professor Matsui.

In 1985, he completed his Ph.D. and started to work as an Assistant Professor at the School of Agricultural Sciences of Nagoya University. He continued his reproductive endocrinology research with Professor Akira Yokoyama. While Dr. Maeda attained numerous scientific achievements during his time at Nagoya University, one of his research highlights was the elucidation of a comprehensive picture of the biology of kisspeptin (metastin), the most upstream operator of the pituitary–gonadal endocrine axis (see a review published in *JRD* 62(6):537–545). Given his research output, personal integrity, and good foresight, he led the global scientific community in studies on kisspeptin and neuroendocrinology. Another unforgettable achievement at Nagoya University was his establishment of an international practice course for university students. During the course, he and his students visited local farms in Thailand and Cambodia and experienced the real animal industry in Asia. He always wanted students to hold broader views on agriculture, as these would influence their future activities in companies or in academic positions.

In July 2012, he returned to the University of Tokyo as a Professor in the Laboratory of Theriogenology, Department of Veterinary Medical Sciences. He soon became the Dean of this department. He understood that his mission at the University of Tokyo was not only teaching undergraduate students, but also raising the position of the veterinary and agricultural sciences in Japan by improving the education system and promoting research activities. He believed that his efforts would give students important global viewpoints and ultimately help Japan and the world avoid future food problems. Although this could be a really tough job, he tackled it enthusiastically and optimistically with the cooperation of university professors, Japanese and local government officers, and all his other colleagues. Sadly, he passed away in the middle of his career pathway. We should all make a concerted effort to continue carrying out his will, attitudes, and dreams.

Throughout Dr. Maeda's distinguished career, he collaborated with many renowned scientists and mentored numerous young students and researchers. He worked most closely with his wife, Dr. Hiroko Tsukamura, a professor at Nagoya University. She is the person who knows Dr. Maeda the best from both a professional and a personal viewpoint. She has invited a number of friends to write a few words about Dr. Maeda. We greatly appreciate them for allowing us to reproduce their tributes below.

Atsuo Ogura, Editor-in-Chief
Hiroshi Nagashima, Co-Editor-in-Chief
(Former Editor-in-Chief)

Remembering Professor Kei-ichiro Maeda:

If there were ever a finer brew of sheer brain-power, scientific imagination, and abiding kindness than Kei Maeda—I've never met him. Kei had the mind of a wise wizard, the smile of your favorite grandfather, and an unswerving devotion to truth and friends. I had the good fortune to know Kei for many decades—to work with him and his scientific colleagues—and to learn from this gentle giant about mysteries of the brain's role in reproduction. Kei's eclectic perspective about animal diversity and comparative physiology, combined with his scientific acumen and common sense, set an extraordinarily high bar of excellence and professionalism—to which we can only aspire. My dear Kei, may the shattered fragments of your song reach a higher melody in those of us left behind.

— *Robert A Steiner, Professor, University of Washington, USA*

I first meet Kei when I was a PhD student attending the International Congress of Neuroendocrinology being held in Bordeaux, France in 1990. Then, as always, Kei was the model of a good scientist, thoughtful and unassuming but vigorous in scientific debate. That meeting in Bordeaux represented the beginning of a long series discussions that we would enjoy for the rest of Kei's career at conferences all over the world. Kei's contributions to the field of reproductive neuroendocrinology are immense. From the early days examining the mechanisms behind the suckling and glucoprivic suppression of pulsatile LH secretion through to his leading role in the kisspeptin field. Indeed, along with his long-standing collaborator Dr. Hiroko Tsukamura, Kei's laboratory provided some the very first accounts of how kisspeptin regulated LH secretion and went on to provide important insights into the molecular and cellular basis of kisspeptin signaling. Kei was also a very generous colleague. He will also be remembered for his role in leading and bringing together the very successful 2nd World Conference on Kisspeptin in Tokyo 2012. Kei's untimely passing is certainly a great loss for the field of reproductive neurobiology but his studies remain as testament to the works and career of a great Japanese scientist.

— *Allan Herbison, Professor, University of Otago, New Zealand*

Kei-ichiro Maeda, my colleague my friend:

Professor Kei-ichiro Maeda was well known to be an excellent scientist, administrator and *sensi*. I first met him at a conference in France when he was a shy young scientist and then again at several international meetings. Eventually, we began a long and productive research collaboration that was first funded by a joint JSPS-NSF in neuroendocrinology and led to more than 10 international exchanges between Nagoya University and the University of Michigan. The many visiting faculty, postdoctoral fellows and graduate students gained cultural as well as scientific experiences. Our joint work resulted in 28 publications, chapters and presentations at meetings. Those are the facts. As a colleague, the planning, conducting, evaluating and publication of our research efforts are now vague. What I remember most clearly is the easy and close friendship that Kei and I developed. His many facial expressions are etched in my memory- good idea, concern, disbelief, why, disagreement, try again, boring... . The one I most valued was under his mask of a serious professor- a keen sense of humor. We had many discussions that were interrupted by uncontrollable laughter often to the amazement and amusement of students, especially in his laboratory. The construction of a new meaningless Japanese word, "yobmota" was one of our nonsense achievements (from "Atomboy" spelled backwards on a restaurant glass door) that we used as a secret word for anything in correspondence. As our friendship grew, he brought me into his personal life as I did him to mine to share the joys and sorrows of colleagues, friends and families in both countries. Finally, when I think of Kei, I always sense the inseparable Hiroko Tsukamura in his aura- student, colleague, professor, and love. As my friend as well, she will always remember the special relationship that I had with Kei-ichiro Maeda, my colleague, my friend.

— *Douglas L. Foster, Professor Emeritus, University of Michigan, USA*

Dr. Kei-Ichiro Maeda was an exceptional scientist who made several important contributions to our understanding of reproductive neuroendocrine function in both laboratory and agricultural species. His work was characterized by a unique combination of attention to classical animal models for different reproductive conditions (e.g., stress, nutrition, puberty) with cutting-edge technologies such as transgenic rats and epigenetic approaches. Much of this work was conducted with his long-time collaborator and partner Dr. Hiroko Tsukamura. Their research teams not only performed outstanding research, but have also been very strong supporters of trainees at all levels, encouraging them to participate fully in the scientific process and to speak up at meetings. Kei's contributions to the field

of neuroendocrinology extended to extensive service to the research community. He was a tireless organizer of scientific meetings that allowed investigators in his various areas of interest to come together to share their findings. The consistent high quality of his in research, mentoring and service marks him as a truly unique individual. Beyond the lab, spending time with Kei and Hiroko was truly a delight. Anyone following them into a restaurant was sure of the best food and the best company. A framed placemat from a memorable meal at a Kyoto Ryokan in 2006 is on the wall over my sideboard, and I'm sure the dishes within the sideboard are jealous that they will never hold such delicious food. You know a friendship is true when relatively few days together in a lifetime can form such wonderful and vivid memories. Kei is missed by us all.

—*Suzanne M Moenter, Professor, University of Michigan, USA*

Memories of Maeda-kun:

Professor Kei-ichiro Maeda and I were classmates in the same high school in Kanazawa, our hometown, about 45 years ago. I called him Maeda-kun. He was a very smart guy, and the captain of the school tennis club. After graduation, he went to Tokyo and I went to Kyoto. After that, I—and perhaps he—completely forgot about each other. We accidentally met in an annual meeting of SRD about 20 years after graduation. I did not know he had become an endocrinologist, and he did not know that I had become an oocyte scientist in the same field of Animal Reproduction at different universities. He led the SRD in the right direction, and I very much valued his encouragement in regard to young members. He kindly chaired my talk in the WCRB in Okinawa in 2017. We enjoyed the meeting very much, but sadly, it was our last joint work. After being elected, I will now take over his work at SRD. I feel some kind of fate in passing on this memory of our friendship.

—*Takashi Miyano, Professor, Kobe University, Japan*

A brief comment on the career of Kei-ichiro Maeda:

Although I never collaborated with Kei, I followed closely his work, which spans more than 3 decades and, since 1987, was conducted in close collaboration with his wife, Hiroko. In contrast to many of us, who tend to focus our laboratories on a single experimental animal model, Kei utilized rodents, ungulates and primates for his studies. This strategy, coupled with his very broad interests in the neuroendocrine axis governing gonadal function and the factors (such as nutrition, season, lactation and stress) that modulate the axis, gave him a broad comparative perspective of the biology underlying the control of fertility by the mammalian brain. Kei's work is also to be noted for its collaborative nature: the power of this approach being exemplified by the 2010 multi-author publication in the *Journal of Neuroscience* (vol 30: 3124-3132), which was one of the earliest studies providing evidence for the KNDy hypothesis for GnRH pulse generation. As an editor, I recall working with Kei on two reviews that he and his colleagues were writing for journals/books that I was involved with. Kei was able to articulate his views in compelling fashion and with conviction; yet at the same time he was open to alternative ideas and other suggestions. This experience, together with talking to him at the occasional conference led me to believe that he must have been a gracious man. Certainly, he will be greatly missed by the international neuroendocrine community, but I expect that Hiroko will continue their work and thus allow Kei's important contributions to neuroendocrinology to stay fresh in our memories.

—*Tony M. Plant, Emeritus Professor, University of Pittsburgh, USA*