

## IN MEMORIAM

# Yukio Fukuyama

1928-2014

Dr. Yukio Fukuyama passed away peacefully at his home on Thursday, July 17, 2014, despite having experienced a dramatic recovery from intracranial bleeding in the right putamen treated operatively in April 2012. He decided to undergo surgery after receiving a full explanation using the aid of pictures, from the Neurosurgeons, myself and a young colleague from our Department. He was 86 years old. It is with great sadness that we announce this loss, the passing of a true pioneer in the field of Pediatric Neurology. He chaired our Department of Pediatrics at the Tokyo Women's Medical University for a quarter of a century, teaching and mentoring young doctors and leading us into the 21<sup>st</sup> century. The depth and breadth of his accomplishments are a testament to his commitment to patients, their families, the University, his coworkers and advances in Pediatric Neurology worldwide. He will be sorely missed by friends and colleagues alike, thanks to his tireless efforts to advance Child Neurology, always based on his belief in "slow but steady, life is long" philosophy. As a teacher, his approach was on self-learning, as he guided the students in figuring out the answers on their own through answering his demanding questions. He placed great emphasis on meticulously obtaining a good medical history, and a careful physical examination, over the laboratory investigations. He was always striving for a better quality of life for each patient that he cared for; as he considered holistic care for patients to be of supreme importance. By leaving some mysteries of medicine unresolved when teaching, he was able to formulate stimulating questions and promote lively and informative discussions at conferences and scientific meetings. He loved chatting with young doctors and other colleagues during the long evening social activities, fuelled by a little alcohol and good comradeship. Dr Fukuyama had a mountain of literature in his home, which he managed with the help of his wife Ayako. His famous library was very impressive to the many people who visited his home. He and Ayako loved dogs. In fact, he even gave the name "Fukutin" (Fukuyama congenital muscular dystrophy gene) to one of their dogs.



Dr. Fukuyama was born in Miyazaki, Japan on 28 May, 1928. He had his medical training at the Faculty of Medicine, University of Tokyo in 1948-1952. His internship was at the University of Tokyo Hospital, Tokyo, 1952-1953 and he completed a postgraduate course at the Faculty of Medicine, University of Tokyo in 1954-1957. He obtained a PhD in 1957, and a Diploma of Medicine in 1959, both at the University of Tokyo. He completed his training at the University of Tokyo under Professor Tadao Takatsu (1910-1974), Professor Toshihiko Tokizane (1909-1973), and Professor Seturo Ebashi (1922-2006). Professors Tokizane and Ebashi helped him in the Fukuyama congenital muscular dystrophy investigation particularly in the roles of creatine kinase and electromyography.

Dr. Fukuyama was a world ranking Pediatric Neurologist. His major fields of Interest have been pediatric epileptology, pediatric neuro-muscular disorders, and clinical neurogenetics. Dr. Fukuyama presented the seminal paper on Fukuyama congenital muscular dystrophy in 1960. He titled the presentation "A peculiar form of congenital progressive muscular dystrophy".<sup>1</sup> The characteristics of the new muscular dystrophy outlined were: Early onset, usually before 9 months of age; hypotonia and weakness in early infancy; later development of muscle wasting and joint contractures; involvement is diffuse and extensive but more severe proximally; myopathic facial appearance seen in nearly all cases, pseudo-hypertrophy in half of cases. These patients were earlier thought to have cerebral palsy. Thanks to the work of Professor Ebashi, it became possible to measure serum creatine kinase. Dr. Kawazura discovered that some of these patients had high serum creatine kinase. Professor Tokizane subsequently showed that the electromyographic patterns were not neurogenic. Fukuyama congenital muscular dystrophy is seen almost exclusively in Japan, where it is now found to be the second most

common form of childhood muscular dystrophy, after Duchenne muscular dystrophy. Fukuyama congenital muscular dystrophy has an estimated incidence of 2 to 4 per 100,000 in Japanese infants. At the time of his passing, Professor Fukuyama was eagerly waiting for the assessment of the effectiveness of new treatments for the muscular dystrophy.

Dr. Fukuyama has contributed greatly to the development of Pediatric Neurology in Asia. He was the main founder of the Asian & Oceanian Child Neurology Association (AOCNA) in the early eighties. The AOCNA now has more than 500 members, and is the main professional body representing the Paediatric Neurologists in the region. Dr Fukuyama also took personal interest in nurturing of the many aspiring Pediatric Neurologists in the region. Dr. Malinee Thambyayah, one of the senior Paediatric Neurologists in Malaysia, said that she was one of his many Asian “overseas mentees” who “picked up so many personal and professional pearls from him”. She added: “Many of us in Malaysia, Philippines, Hong Kong, Singapore; even to Turkey and Australia were grateful to his nurturing, long-term friendship and professional net-working. He wanted us to be proud of AOCNA heritage amidst the International Child Neurology Association (ICNA) community.” “His picture with me hangs proudly in my Clinic. He never forgot to post hand-written New Year cards. After every meeting or encounter, he would promptly sent photos upon return to Japan. He would sent manually typed out letters after every AOCCN for critical analysis, faxed if I was tardy to respond. He would promptly wrote wise replies if I wrote to him for advice on difficult cases. Some of the Japanese work ethics began to rub into me over the years but it was tough to emulate his immense patience, humility, fairness and doggedness. His spirit of knowledge quest, drive and excellence will always live on.”

Dr. Fukuyama held honorary memberships in the following academic societies: Honorary Chairman, Board of Trustees, Japanese Society of Child Neurology (since 1993) and Honorary President, Asian & Oceanian Child Neurology Association (since 1992). He was also an Honorary Member of the following societies: American Academy of Neurology (since 1990), American Neurological Association (since 1986), Canadian Child Neurology Society (since 1985), Child Neurology Society (US) (since 1986), European Paediatric Neurology Society (since 2005), International Child Neurology Association (since 2010), Japan Epilepsy Society (since 1998), Japan Pediatric Society (since 1999), Japanese Society of Neurology (since 2000), Japanese Society of Clinical Neurophysiology (since 1995), Japanese Society of Human Genetics (since 1999), Japan Teratology Society (since 1998) and the Philippine Child Neurology Society (since 2008).

Dr. Fukuyama received the following awards: Kimura Taro Prize, Japanese Epilepsy Association (1989); Frank Ford Lectureship Award, International Child Neurology Association (1992); Achievement Award, Japan Epilepsy Research Foundation (1993); Bronze Medal, *Societa Italiana di Neuropediatria* (1996); Duchenne-Erb Prize, *Deutsche Gesellschaft für Muskelkranke* (1999); Achievement Award, Japanese Society of Human Genetics (1999); Achievement Grand Award, Japan Medical Association (1999); Lifetime Achievement Award, World Federation of Neurology (2002); International Henri Gastaut Prize, French Chapter of the ILAE (2003); The William G. Lennox Award, American Epilepsy Society (2004); Ambassador For Epilepsy Award, ILAE/IBE (2007); The Asahi Award 2007, The Asahi Shimbun Cultural Foundation (2008); Achievement Grand Award, 2008, Japan Pediatric Society (2008); Special Recognition Award, Japanese Society of Child Neurology (2008); The Order of the Sacred Treasure, Gold Rays with Neck Ribbon, The Cabinet Office, Japanese Government (2008) and The First Japan Epilepsy Society Outstanding Achievement Award (2010).

Makiko Osawa MD PhD

*President, Japan Epilepsy Society*

*Chairperson, Infantile Seizure Society*

*Professor Emeritus, Chairperson of Alumni Association, Department of Pediatrics, Tokyo Women's Medical University*

*8-1 Kawada-cho, Shinjuku-ku, Tokyo 162-8666, Japan*

## REFERENCE

1. Fukuyama Y, Fukuyama Y, Kawazura M, Haruna H. A peculiar form of congenital progressive muscular dystrophy. *PediatrUniversitatis Tokyo*1960; 4:5-8.