

EASL International Recognition Awardee 2009

Prof. Ding-Shinn Chen



Prof. Ding-Shinn Chen (DS) was selected to be the second recipient of the EASL International Recognition Award. DS is an accomplished scientist, physician, teacher, medical administrator, public health specialist, as well as a highly respected colleague and long-time friend.

DS was born in Taiwan in 1943. His interest in medicine began in high school, when his mother became ill. While in medical school, he realized the important contribution research makes to medical knowledge and treatment. So he searched for a lab that would take an inexperienced medical student. Fortunately, someone had the wisdom to take him in. That early experience sowed the seeds for an illustrious career.

DS graduated from the National Taiwan University College of Medicine in 1968. He also spent time with

Professor Kusuya Nishioka in the National Cancer Center Research Institute in Tokyo, Japan in 1975 and with Dr. Robert H. Purcell at the National Institutes of Health in Bethesda, USA in 1979–80.

During his medicine residency training, DS was struck by the high prevalence of chronic liver disease in Taiwan. Around this time, Australia antigen was discovered and the link between Australia antigen and serum hepatitis was established. DS and his mentor, Prof. J.L. Sung, quickly confirmed that hepatitis B virus was the main cause of liver disease in Taiwan and that hepatitis B was linked to hepatocellular carcinoma (HCC). They then went on to demonstrate that maternal-infant transmission was the most common mode of spread and infection at a young age was associated with a very high rate of chronicity. DS and his colleagues

recognized that the most effective way to reduce the burden of hepatitis B is through vaccination of newborns. As soon as a hepatitis B vaccine became available, DS put on his public health hat and convinced the Taiwan government to take the lead and be the first country in the world to initiate universal vaccination of newborns. Although it seems pretty obvious now that vaccination of newborns is the most cost-effective way to prevent the sequelae of hepatitis B, there must have been many skeptics back then but this investment paid off. The prevalence of chronic HBV infection in Taiwanese children and teenagers declined from 15% to less than 1% during the last 20 years. Together with Prof. Mei-Hwei Chang, DS demonstrated that HBV vaccination was also effective in preventing HCC in children.

DS's research covers not just epidemiology and prevention of HBV infection; he has also made important contributions to our understanding of the mechanisms by which HBV causes cancer and why HCC is more common in men than in women. In a recent paper, DS and his colleagues showed that HBx protein interacts with androgen receptors and testosterone to promote carcinogenesis. DS and his colleagues were the first to alert us that HBV genotypes play an important role in disease progression and response to interferon treatment.

In addition to the vast amount of work on hepatitis B and HCC, DS has also studied hepatitis C and hepatitis D. More recently, he has focused his efforts on genomic medicine, searching for genetic factors that will explain the variable outcomes of patients with chronic HBV infection.

DS's contributions to science led to his election as a member of the US National Academy of Sciences in 2005, an honor that has been bestowed to very few overseas scientists.

DS is highly deserving of this EASL International Recognition Award not only because of his research contributions but also because of his leadership role in

the hepatology community – locally and internationally. DS was President of the Taiwan Association for the Study of the Liver in 1996–8, President of the Gastroenterological Society of Taiwan in 1997–2003 and President of the Formosan Medical Association in 2001–4. He also served as the President of the International Association for the Study of the Liver in 2004–6 and as Associate Editor of *Hepatology* in 2001–6.

DS is a wonderful mentor and teacher. His protégé just to name a few: Mei-Hwei Chang, Pei-Jer Chen, Jia-Horng Kao and their work are familiar to the hepatology community. Under his leadership, the liver unit and the hepatitis research center at the National Taiwan University blossomed and are widely regarded as some of the best in the world. In 2001 DS was appointed the Dean of the National Taiwan University College of Medicine. In 2007, he stepped down from that position so he could focus the next chapter of his career on genomic medicine.

DS credits his success to his mentor, Prof. J.L. Sung, his colleagues at the National Taiwan University, and to his supportive family. DS's wife, Hsu-Mei Hsu, is an epidemiologist and public health specialist, his son, Chih-Heng (Henry), works in the financial field, and his daughter, Yun-Ru (Ruby), is a protein biochemist.

I have known DS for more than 2 decades; he is my role model, a respected colleague, and a dear friend. I am honored and privileged to present Prof. Ding-Shinn Chen, the 2009 EASL International Recognition Awardee.

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