



## EASL International Recognition Award Recipient 2018: Prof. Anna Lok

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It is a great honor and pleasure to introduce Dr. Anna Suk-Fong Lok for the EASL International Recognition Award. This award is conferred to an individual with a history of distinguished academic achievements and substantial contributions to the field of hepatology. Like the declaration of fine wine vintages, this honor is only conferred when there is a truly exceptional recipient. As a former mentee and someone who has known Anna for the past 25 years I can attest that she is truly deserving of this award. Anna is currently the Alice Lohrman Andrews Research Professor in Hepatology, Assistant Dean for Clinical Research, Professor of Internal Medicine and Director of Clinical Hepatology at the University of Michigan.

Anna was born and raised in Hong Kong, the second of four children. Anna cites her father's comment (when she was in 4th grade!) that she was too laid back and unmotivated to discover her true potential as the major turning point in her life. Anna excelled academically. While she was never active in sports, music or art, Anna participated in many extra-curricular activities – essay competitions, speech festivals, debates, and even inter-school TV quiz competitions – which no doubt explain why she is such a prolific author and eloquent speaker. When Anna decided upon pursuing a career in medicine her father initially encouraged her to consider nursing as this was considered a more suitable career for women at that time. But thankfully for the field of hepatology, Anna had other ideas. She enrolled in Medical School at the University of Hong Kong and was recognized as the most outstanding graduate of her year. It was during a gastroenterology rotation as a medical resident that Anna first developed an interest in hepatology.

After completing her Fellowship in Gastroenterology in Hong Kong, Anna pursued formal training in hepatology under the tutelage of Professor Dame Sheila Sherlock, one of the founders of modern hepatology. Anna spent a formative period at the Royal Free, where she learned the rigor of scientific research, the importance of mentoring and established long-lasting friendships with other hepatologists around the world. Anna began to show a talent for research early after her arrival at the Royal Free. She was at ease both in the clinic and in the lab and earned the praise and respect of Professor Dame Sheila Sherlock, which was no easy feat. At the Royal Free, Anna conducted one of the first trials establishing the clinical efficacy of interferon in chronic hepatitis B.

After her stint at the Royal Free, Anna returned to Hong Kong buoyed with energy and enthusiasm and began her independent research program in earnest. This was also an important



transition point in Anna's life from trainee to mentor and one that she embraced with utmost seriousness. Anna also mastered the art of time management and how to do more with less, two traits that have been critical to her success. Anna's research focused primarily on the natural history and management of chronic hepatitis B with a view to improving care for her patients. She was a pioneer in the field of hepatitis B. Notable achievements during this period included a series of studies describing the fluctuating course of chronic hepatitis B and transitions from one phase to another and one of the first reports on reactivation of chronic hepatitis B during cancer chemotherapy. Given her accomplishments and productivity Anna rapidly rose through the academic ranks to Reader in Medicine.

Recognizing that she reached the glass ceiling way too young, Anna took the bold move to emigrate to the United States in 1992. Anna was recruited to Tulane University in New Orleans to develop a Hepatology program and the opportunity to work with a renowned hepatopathologist, Dr. Michael Gerber. Thus, began a new chapter in Anna's academic life. There were immediate positives to the change in environment. While musing over sequence data one afternoon, Anna

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## Editorial

had a eureka moment and came up with the explanation for the pre-core mutation, a phenomenon first described by William Carman and Howard Thomas, that had puzzled hepatologists for some time. Anna demonstrated that this mutation served to enhance the stability of the secondary structure of epsilon in the pregenomic RNA, an important component of viral encapsidation. I arrived at Tulane as a first year gastroenterology fellow two months after Anna. Without any research experience, Anna encouraged me to work on a research project that was successful. I, like many of Anna's mentees, appreciate her showing us what we can accomplish with hard work and perseverance.

After Tulane, Anna was recruited to the University of Michigan where she almost single-handedly built the Hepatology Program into one of the premier programs in the United States. More success was to come. Although Anna is best known for her research in chronic hepatitis B, she has made important contributions to the field of chronic hepatitis C. Anna was an investigator and significant contributor to the success of the HALT-C trial. She developed a number of important non-invasive tests to assess severity of liver disease in chronic hepatitis C; some of which bear her name, the Lok Index and the AST to Platelet Ratio Index (APRI), the latter of which has been widely used by clinical researchers worldwide to stage disease severity and prioritize necessity for treatment. Anna along with her collaborators were the first to report the success of an all oral regimen to treat chronic hepatitis C.

As one of the World's experts in management of viral hepatitis B and C, Anna has co-authored the American Association for the Study of Liver Diseases Hepatitis B Guidelines, which are used by medical professionals not only in the United States but all over the world. She was also instrumental in developing the World Health Organization guidelines on management of chronic hepatitis B and C. So, her impact has truly been monumental internationally.

Beyond her prolific contributions, Anna is a superb clinician. She enjoys teaching and sharing clinical pearls with medical students, residents, fellows and senior physicians alike and has won multiple teaching and mentoring awards. Anna often receives many requests for consultative assistance with patient management questions from all around the world. Somehow, she always finds the time in her busy schedule to respond.

Anna has received NIH funding continuously for the past two decades – a remarkable achievement for a clinical researcher. For those who know Anna closely, her work ethic is second to none. This is most strikingly reflected in her publication record. Anna has published over 450 articles on viral hepatitis and liver disease and was recognized as a top 1% most cited researcher

from 2002–2012 by Thomson Reuters. She has received many national and international honors and awards including the Distinguished Scientist Award from the Hepatitis B Foundation, the Distinguished Women Scientist Award from the American Gastroenterological Association in 2008, the Distinguished Service Award from the American Association for the Study of Liver Disease in 2011, the Distinguished Achievement Award from the American Liver Foundation in 2015, the Beaumont Prize in Gastroenterology from the American Gastroenterological Association in 2016, a Gold Medal Award from the Canadian Association for the Study of the Liver, and most recently an honorary Doctor of Science from her alma mater the University of Hong Kong. The crowning achievement of her distinguished career was serving as President of the American Association for the Study of Liver Diseases in 2017; the 4th woman to hold that position.

Anna's real passion is mentoring. All the rewards and honors of academic pursuit would be meaningless for Anna without her mentees. Like the stereotypical Tiger mom, Anna instills the requirements for success-hard work, dedication, motivation, grit and importantly compassion and respect for patients in all her trainees. Like every mom in times of need she is there to listen to problems, provide comfort and sage advice. Upon graduation, she considers all her trainees as part of an extended "Lok Family". It is a sense of great pride and joy for Anna that many of her trainees are now well-established researchers and leaders in the field, Henry Chan, Robert Fontana, Jorge Marrero, and Michael Volk to mention a few. They have in turn started to mentor their own trainees who Anna considers "her grandchildren". Once a year, like a family Thanksgiving reunion, they gather at the Liver Meeting to catch up and reminisce about the good old days.

Anna has left an indelible mark on all those who have had the good fortune to interact with her. She can take great pride in knowing that she has played a major role in training the next generation of hepatologists and alleviating the sufferings of countless patients with liver disease globally. For this alone Anna is most deserving of this award. On behalf of the entire Lok family I would like to offer our warmest congratulations, Mom.

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