

EASL Recognition Awardee 2009

## Prof. Daniel Shouval



It is a great pleasure and honour to be invited to present Daniel Shouval with an EASL Recognition award here in Copenhagen.

One may wonder why I have been given such a privilege and when I asked myself this question I came up with the following explanations. I feel the main reason is that Daniel Shouval and I have developed a close friendship over the years since we first met in 1981 when he was a fellow with David Shafritz at the Albert Einstein College of Medicine, New York, attending as I was at the Triennial Meeting on Viral Hepatitis and Liver Diseases (ISVHLD) in New York. While I and a group of Germans were discussing the topics of the meeting I realised that somebody close to us was listening and following the conversation and more importantly, could speak German better than I can –

that person was Daniel Shouval. I was to learn that the reason for this was that Daniel too had family living in Germany and therefore we had some things in common.

Even though Daniel Shouval was born in Israel in 1942, Daniel's parents were originally from Germany and Austria. His mother was born in Berlin while his father was from Vienna. Daniel's father did a significant part of his medical training and education in Heidelberg and later practised medicine in the city of Mannheim on the river Rhine. His parents immigrated to Palestine in 1932, exactly ten years before Daniel was born in Jerusalem. Daniel is married to Rivka Shouval and they have two sons, also working in Medicine and two granddaughters.

The other important country where German is spoken that is missing apart from Austria and Germany

in his background is Switzerland. Daniel filled this gap by attending the Medical School of the University of Basel, Switzerland from 1963 to 1965. He then continued and finished his education at the Hadassah – Hebrew University Medical School in Jerusalem. Before starting his research career, he was trained as an intern and thereafter as a resident in the Department of Pathology and in Internal Medicine in the 70s. After that, he attended a British Council course on the liver at the Royal Free Hospital under the leadership of the late Dame Sheila Sherlock in 1978 before he moved to the Liver Research Center at the Albert Einstein College of Medicine in New York under the direction of Prof. David A. Shafritz from 1979 to 1981. After returning from the United States, he became Director of the Liver Unit of the Hadassah University Hospital, Jerusalem in 1984 – a position he still holds today. His time as a visiting Associate Professor at Harvard Medical School and his sabbatical as a Professor of Hepatology at the University of Paris and at the Paul Brousse Center for Hepato-Biliary Surgery and Liver Transplantation in Villejuif, France with Professors Henry Bismuth and Didier Samuel have to be mentioned as well. Furthermore, he served as Dean of the Hebrew University of Jerusalem, Faculty of Medicine from 2002 to 2005. Since 2005 he has resumed his position as a Director of Hepatology.

Daniel Shouval is a very distinguished member of the European Association for the Study of the Liver as well as of the International Liver Society.

Concerning his association with EASL one has to mention that he was the Secretary of EASL and of the annual meeting which was held in Geneva in 1997. The meeting initially was planned to take place in Jerusalem – his home town. He thereafter served as the Chairman of the Educational Committee of EASL from 1998 to 2002. He has been a member of the EASL Guidelines Committee for chronic hepatitis B and he has served as an associate editor for various journals. In addition, he is a long-standing advisor for the Viral Hepatitis Prevention Board and the World Health Organisation (WHO).

The research focus of Daniel Shouval has been on the prevention and therapy of viral hepatitis, in particular hepatitis A and B, including hepatocarcinogenesis. His outstanding scientific contributions can be classified according to the following topics:

1. Integration of HBV-DNA into the host genome and its relevance for the development of HCC in animal models and man. In collaboration with David Shafritz, he published very significant papers between 1979 and 1981. They were published in *Hepatology*, *Gastroenterology* and the *Journal of Hepatology*, as well as all the major general journals like *Nature*, *New England Journal of Medicine* and *PNAS* etc.

2. Following that he concentrated on therapeutic approaches to treat hepatitis B-associated hepatocellular carcinoma with monoclonal antibodies conjugated to chemotherapeutic agents.
3. He was involved further in the development of a mammalian cell line derived Pre-S1/Pre-S2/S hepatitis B vaccine. He developed a vaccine in collaboration with the biotech industry from his home country and evaluated the vaccine in non-responder mice and in human non-responders as well as in immunosuppressed patients.
4. Daniel Shouval is a true translational researcher, translational medicine being “en vogue” these days. He introduced universal vaccination against hepatitis B in Israel in 1992, and later he introduced universal vaccination against hepatitis A also in Israel which was the first universal vaccination programme against hepatitis A worldwide.
5. He also dealt with occupational exposure to hepatitis B and hepatitis C, establishing an EASL endorsed European consensus group.
6. He is also a world expert on hepatitis A, in particular on its prevention in the developing world.
7. Above all, I value highly his contribution to the phenomenon of adoptive transfer of immunity to hepatitis B and its clinical consequences. Daniel Shouval’s group developed the concept of adaptive immunity in various mouse models and set the stage for the proof of principle in human bone marrow and stem cell transplantation. His concepts derived from clinical observations as well as animal models which were confirmed in Hong Kong-based studies on the pathogenesis, prevention and treatment of reactivation of hepatitis B after bone marrow and stem cell transplantation.

Nowadays, reactivation of hepatitis B following bone marrow transplantation and chemotherapy for the treatment of solid tumours is a major clinical challenge going far beyond hepatology. Therefore, his work is well known to members of other fields of medicine like haematology and oncology.

Daniel Shouval’s list of publications is long, with far more than 200 original papers and a number of book chapters. Daniel Shouval is a regular chairman and an invited speaker at all the major hepatology congresses around the world. He is a true global player. He also helped to establish hepatology as an important distinguished academic discipline which, as I think, as no other discipline has proven the benefits from translational medicine showing in so many areas that basic research in particular in cell and molecular biology as well as immunology and virology can contribute so much to the prevention, diagnosis and therapy of diseases. Daniel Shouval has been a significant contributor in many of these areas like vaccination against hepatitis

A and hepatitis B, the association of hepatitis B with hepatocellular carcinoma and adoptive transfer of immunity to hepatitis B and reactivation of the disease following immunosuppression.

Daniel Shouval has proved to be also a highly successful scientific mentor. Under his leadership at Hadassah many clinical hepatologists as well as clinical scientists started and/or developed their academic careers until they in turn became independent hepatologists or investigators at Hadassah or elsewhere in the world.

Daniel Shouval, raised in Israel in west Asia, with strong personal ties in Europe, in particular Germany and Austria, who received his scientific education in America, is an outstanding international representative of academic hepatology, and thus an ideal recipient of the Recognition Award of the European Association

for the Study of the Liver, being presented at The International Liver Meeting in Copenhagen, on April 24th, 2009. This award will be added to the already long list of honours and awards that have hallmarked Prof. Shouval's academic career to date. I am sure it will not be the last....

Dani, I would like to offer my most sincere appreciation and congratulations not only to you, but also to your family and the Liver Unit at Hadassah Medical School in Jerusalem.

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