



**Prince Mahidol Award Foundation**  
**Faculty of Medicine Siriraj Hospital and Ministry of Foreign Affairs**

**Press Conference**  
**Announcement of the Prince Mahidol Award 2019**

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On 21 November 2019, **Professor Dr. Prasit Watanapa**, Dean of the Faculty of Medicine, Siriraj Hospital, Mahidol University, in the capacity of Vice President of the Prince Mahidol Award Foundation; **Ms. Busadee Santipitaks**, Director-General of the Department of Information, Ministry of Foreign Affairs of the Kingdom of Thailand, in the capacity of the Chairman of the Sub-Committee on Public Relations of the Prince Mahidol Award Foundation; and **Professor Vicharn Panich**, Chairman of the International Award Committee of the Prince Mahidol Award Foundation, held a joint press conference to announce the 28<sup>th</sup> Prince Mahidol Award for 2019 at the Prince Mahidol Memorial Room, 2<sup>nd</sup> Floor, Syamindra Building, Siriraj Hospital.

This year, the Prince Mahidol Award in the field of Medicine is awarded to Professor Dr. Ralf F.W. Bartenschlager.

The Prince Mahidol Award in the field of Public Health is awarded to Professor David Mabey (*Please find the attachment*).

There were 66 nominations from 35 countries. The Scientific Advisory Committee screened all candidates from the year 2017 – 2019 and subsequently submitted a short list of candidates to the International Award Committee who made a recommendation to the Board of Trustees. H.R.H. Princess Maha Chakri Sirindhorn presided over the meeting of the Board of Trustees held on 1 November 2019 during which the final decision on the Prince Mahidol Award 2019 was made.

In the past 27 years, the Prince Mahidol Award has been conferred to 83 individuals, groups of individuals, and institutions. Among them, 4 were Award recipients of Thai nationality, namely (1) Professor Dr. Prasong Tuchinda (2) Dr. Suchitra Nimmannitya who received the Prince Mahidol Award in the field of Medicine in 1996, and (3) Dr. Wiwat Rojanapithayakorn and (4) Mr. Mechai Viravaidya who received the Prince Mahidol Award in the field of Public Health in 2009.

Among the Awardees of the Prince Mahidol Award, 5 subsequently received the Nobel Prize:

(1) Professor Barry J. Marshall from Australia was conferred the Prince Mahidol Award in the field of Public Health in 2001 for the discovery of the new bacterium identified as *Helicobacter pylori* that caused severe gastritis and its sensitivity to particular antibacterial drugs. He received the Nobel Prize in the field of Medicine in 2005 for the same discovery.

(2) Professor Harald zur Hausen from Germany was conferred the Prince Mahidol Award in the field of Medicine in 2005 for the discovery of the human papilloma virus HPV16 and HPV18 from the cancer tissue and elucidated how the viruses turn normal cells into cancer cells. He received the Nobel Prize in the field of Medicine in 2008 for the same discovery.

(3) Professor Dr. Satoshi Omura was conferred the Prince Mahidol Award in the field of Medicine in 1997. He is known for the discovery and development of various pharmaceuticals originally occurring in microorganisms. His research group isolated a strain of *Streptomyces Avermitilis* that produce the anti-parasitical compound avermectin which contributed to the development of the drug ivermectin that is currently used against river blindness, lymphatic filariasis, and other parasitic infections. He received the Nobel Prize in the field of Medicine in 2015 for the same discovery.

(4) Professor Tu You You, a member of the China Cooperative Research Group on Qinghaosu and its Derivatives as Antimalarials, was conferred the Prince Mahidol Award in the field of Medicine in 2003 in an organisational category for the discovery of Qinghaosu as a new drug for treatment of the *P.falciparum* malaria. She received the Nobel Prize in the field of Medicine in 2015 for the same discovery.

(5) Sir Gregory Paul Winter was conferred the Prince Mahidol Award in the field of Medicine in 2016. He was a pioneer in the field of antibody engineering and modification technology. He invented techniques to humanise antibodies for therapeutic uses, which later led to the creation of cutting-edge therapeutic drugs. He received the Nobel Prize in the field of Chemistry in 2018 for the same discovery.

The Prince Mahidol Award Foundation under the Royal Patronage was established on 1 January 1992 in commemoration of the centenary of the birth of His Royal Highness Prince Mahidol of Songkla. The Foundation is under the Royal Patronage, with Her Royal Highness Princess Maha Chakri Sirindhorn as President. The Foundation annually confers two Prince Mahidol Awards upon individual(s) or institution(s), who have demonstrated outstanding and exemplary contributions to the advancement of the world's medical and public health services. Each Award consists of a medal, a certificate, and a prize to the sum of US \$100,000.

Her Royal Highness Princess Maha Chakri Sirindhorn as the representative of His Majesty the King will preside over the Presentation Ceremony of the Prince Mahidol Award 2019 at the Chakri Throne hall on 30 January 2020 at 17.30 hours. Prior to the Ceremony, Siriraj Hospital, as a founder of the Prince Mahidol Award, will invite the 2019 Prince Mahidol Award Laureates to give lectures based on their achievements on 29 January 2020.

**Prince Mahidol Award Laureate 2019  
in the Field of Medicine**



**Professor Dr. Ralf F.W. Bartenschlager**

Head of the Department for Infectious Diseases, Molecular Virology  
University of Heidelberg  
Head of the Division of Virus-Associated Carcinogenesis,  
German Cancer Research Center,  
Germany

**Professor Dr. Ralf F.W. Bartenschlager** received his Ph.D. in Molecular Biology from the University of Heidelberg in 1990. He was appointed as Professor of Molecular Virology at the Institute for Virology, University of Mainz, in 2000, and moved to University of Heidelberg in 2002. He is currently Head of the Department of Infectious Diseases Molecular Virology at University of Heidelberg and Head of the Division of Virus-Associated Carcinogenesis at the German Cancer Research Center, Germany.

Professor Bartenschlager's most prominent work is on the life cycle of hepatitis C virus (HCV) that provides basis for the development of effective and safe specific antivirals. At present, over 71 million people worldwide suffer from chronic HCV infection and approximately 400,000 people die each year. HCV infection also leads to liver cirrhosis and hepatocellular carcinoma.

For a decade after the discovery of HCV in 1989, scientists had failed to replicate it in cell culture. Professor Bartenschlager and his colleague identified a method to replicate HCV in cell culture and make "replicons" (fragments of the virus's RNA). This made possible the rapid screen for thousands of candidates of antivirals. He also identified the viral nonstructural protein 3 (NS3) as viral protease that is now a central target structure for antivirals. His studies resulted in the invention of the new generation of anti-HCV drugs called the DAA (Direct Acting Antiviral) with a 95% success rate in curing HCV infection with minimal side effects.

However, the concern is the high expense of full treatment. With the prospect of ending HCV epidemics, supports have been offered for low-income countries resulting in the increasing number of patients who receive DAA-based treatment for HCV from 1 million to 1.5 million between 2015 and 2016. In Thailand, the National Health Security Office has bargained the drug price down over 70% and put it into the National Drug List so all Thais can access to the drug.

Professor Bartenschlager has published his research of more than 300 articles in renowned journals. He was a recipient of many awards including Robert Koch Award (2015), Lasker-DeBakey Award (2016), and Hector Prize (2017) and his tireless effort has led to the discovery of a cure for hepatitis C, and saved millions of lives worldwide.

**Prince Mahidol Award Laureate 2019  
in the Field of Public Health**



**Professor David Mabey**

Professor of Communicable Diseases,  
Clinical Research Department,  
London School of Hygiene & Tropical Medicine  
United Kingdom

**Professor David Mabey** received his Bachelor and Doctorate of Medicine degrees from Oxford University, United Kingdom. In 1994, he was appointed Professor of Communicable Diseases at the London School of Hygiene & Tropical Medicine. He is currently Professor of Communicable Diseases, Clinical Research Department at the London School of Hygiene & Tropical Medicine, United Kingdom

Professor Mabey has studied trachoma, the most common eye infection leading to blindness worldwide for more than 30 years. Trachoma is caused by the bacterium *Chlamydia trachomatis*. It is responsible for the blindness or visual impairment of about 1.9 million people globally annually. Infection spreads through personal contact and by flies that have been in contact with discharge from the eyes or nose of an infected person, particularly in developing countries with inadequate hygiene, crowded households, and inadequate access to water and sanitation.

Since early 1980s, Professor Mabey and his colleagues conducted a field work in Gambia and Tanzania and discovered that trachoma blindness is caused by the host immune response to the bacterial infection. In 1993, it was discovered that a single dose of azithromycin was effective for treatment of trachoma. He later set up a multicentre study to demonstrate that annual treatments given to whole communities was effective in reducing transmission of trachoma, and the elimination of disease can be achieved by a mass treatment of azithromycin in endemic communities.

The research of Professor Mabey prompted the World Health Organization (WHO) to establish a global eradication program using SAFE strategy - (S) control through surgery, (A) mass treatment with antibiotic, (F) face washing, and (E) environmental and sanitation improvements. More than 700 million doses of azithromycin were provided to people in 40 countries between 1999 - 2017. Until now, 13 countries have reportedly achieved the goals of eradicating trachoma. The WHO projections suggest that trachoma will be eradicated as a public health problem and cause of blindness in all countries by 2025.

Professor Mabey has published his research of more than 200 articles in renowned journals. He was a recipient of many awards in the area of tropical health and was appointed the Commander of the British Empire (CBE) in 2014 by Her Majesty Queen Elizabeth II for services to health development in Asia and Africa. With his continuing endeavour to control and eradicate trachoma blindness that has improved the livelihood of millions of people throughout the world.