



Chinese Scientists Zhen-Yi Wang and Zhu Chen Awarded 7th Szent-Györgyi Prize for Progress in Cancer Research

Acute Promyelocytic Leukemia: from Highly Fatal to Highly Curable



BETHESDA, Maryland (January 24, 2012) - The National Foundation for Cancer Research announced today that Dr. Zhen-Yi Wang and Dr. Zhu Chen have been awarded the 7th annual Szent-Györgyi Prize for Progress in Cancer Research for their innovative research that led to the successful development of a new therapeutic approach to acute promyelocytic leukemia (APL).

By combining traditional Chinese medicine with Western medicine, Drs. Wang and Chen have provided dramatic improvement in the five-year disease-free survival rate of APL patients – from approximately 25 percent to 95 percent – making this therapy a standard of care for APL treatment throughout the world, and turning one of the most fatal diseases into a highly curable one.

“I am so glad to see that the efforts we have devoted to research on leukemia these last several decades have led to solid clinical benefits to APL patients around world,” said Dr. Wang. “This award will inspire us as we continue our efforts to find more effective therapies to treat cancers.”

“This is a great honor for Dr. Wang and me; it is quite humbling to know that our respected colleagues from many scientific disciplines have selected us for this prestigious award,” said Dr. Chen, who also serves as China’s Minister of Health. “Scientists across the globe are working every day to cure cancer. I hope our work may continue to inspire others.”

A clinical researcher at the Ruijin Hospital in Shanghai in the early 1980s, Dr. Zhen-Yi Wang performed the first successful therapy on APL patients using all-trans retinoic acid (ATRA), which significantly increased the survival rate of patients with APL. Dr. Zhu Chen, a former student of Wang, made major contributions to the identification of the molecular mechanisms of both ATRA and arsenic trioxide in APL. He also demonstrated in clinical trials that arsenic trioxide, a compound used as a traditional Chinese medicine for over 2,400 years, is effective against APL. Since the 1990s, Drs. Wang and Chen have worked together to conduct clinical trials combining ATRA and arsenic trioxide to treat APL patients, with great success.

“Drs. Wang and Chen have quite literally changed the face of medicine for patients suffering from APL. Their combined work has saved countless lives and will continue to save many more lives around the world both today and in future generations,” said Dr. Beatrice Mintz, Fox Chase Cancer Center, Chair of the 7th Selection Committee of *Szent-Györgyi Prize* and winner of the 6th Annual Albert Szent-

Gyorgyi Prize. “Terminal differentiation of cancer cells has been an important focus in my research, and I am very happy about the successful clinical application of this principle by Drs. Wang and Chen. I cannot imagine a better testament to the outcomes of investing in cancer research than what these two distinguished scientists have achieved.”

“In keeping with the spirit of nonconformity for which NFCR founder Albert Szent-Györgyi is known, the selection of Drs. Wang and Chen has a significant meaning for those who work in the trenches of cancer research each day,” said Sujuan Ba, Ph.D., co-chair of the Szent-Györgyi Prize Selection Committee and chief operating officer of NFCR. “True scientific discovery comes from innovative ideas and dedicated research. These two scientists are inspirational, as they both have devoted their lives to this work that will impact the world for generations to come.”

About the National Foundation for Cancer Research

The National Foundation for Cancer Research (NFCR) is a leading charity dedicated to funding cancer research and public education relating to cancer prevention, earlier diagnosis, better treatments and, ultimately, cures for cancer. NFCR promotes and facilitates collaboration among scientists to accelerate the pace of discovery from bench to bedside.

Since 1973, NFCR has provided over \$288 million in direct support of discovery-oriented cancer research focused on understanding how and why cells become cancerous, and on public education relating to cancer prevention, detection, and treatment. NFCR scientists are discovering cancer’s molecular mysteries and translating these discoveries into therapies that hold the hope for curing cancer. NFCR is about *Research for a Cure*—cures for *all* types of cancer. For more information, please visit www.NFCR.org.

About the Szent-Györgyi Prize for Progress in Cancer Research

The annual *Szent-Györgyi Prize for Progress in Cancer Research* was established by the National Foundation for Cancer Research to recognize outstanding scientific achievements in the war against cancer and to honor pioneering scientists who have made extraordinary contributions in cancer research. The focus of the Prize is on the critically important role that basic science plays in cancer research and in its application to cancer therapies. The Prize, which includes a \$25,000 honorarium, will be presented to Dr. Wang and Dr. Chen at an award ceremony March 6, 2012 at The Westin Times Square in New York City.

The 7th Annual Szent-Györgyi Prize Selection Committee was Chaired by Beatrice Mintz, Ph.D., and Co-Chaired by Sujuan Ba, Ph.D. The other selection committee members included leaders in cancer research and drug development from academic institutes and biotech and pharmaceutical industries: Lewis C. Cantley, Ph.D., Beth Israel Deaconess Medical Center and Harvard Medical School; Webster K. Cavenee, Ph.D., Ludwig Institute for Cancer Research; Carlo M. Croce, M.D., The Ohio State University; Harold F. Dvorak, M.D., Beth Israel Deaconess Medical Center and Harvard Medical School; Stanley Fields, Ph.D., Howard Hughes Medical Institute and University of Washington; Richard B. Gaynor, M.D., Eli Lilly and Company; Paul Mischel, M.D., University of California, Los Angeles; Richard O’Reilly, M.D., Memorial Sloan Kettering Cancer Center; Scott D. Patterson, Ph.D., Amgen, Inc.; Gregg L. Semenza, M.D., Ph.D., Johns Hopkins University School of Medicine; Peter K. Vogt, Ph.D., The Scripps Research Institute; Zena Werb, Ph.D., University of California, San Francisco.

About Dr. Zhen-Yi Wang

Dr. Wang is currently a professor at the Medical School of Shanghai Jiao Tong University and is recognized as one of the experts in thrombosis and haemostasis in China. He serves as honorary director of the Shanghai Institute of Haematology, and also served as former honorary editor-in-chief of The *Chinese Journal of Hematology*, former council member of International Society for Heart Research and International Society on Thrombosis and Haemostasis (ISTH). He is an elected Academician of the Chinese Academy of Engineering, and is a foreign associate of The French Academy of Science. Dr. Wang also once served as the advisor for Chen when he studied for his Master's degree.

Dr. Wang received his Medical Doctorate from Aurora University in 1948. He has published, as editor-in-chief, 5 books, and, as editor and translator, for *Hemorrhage Diseases*, as well as 14 monographs. He is the author of more than 320 scientific papers.

About Dr. Zhu Chen

Dr. Chen currently serves as Minister of Health for the Peoples Republic of China where he was appointed in 2007. He is the only non-party member to hold that post since the 1970s. Sent off for "re-education" during the Cultural Revolution Dr. Chen learned medicine by himself for 2 years and was figuratively a "barefoot doctor" practicing many of the traditional Chinese therapies. Recognized for his medical work by the local countryside people, Dr. Chen was selected to attend medical school at Shangrao Health School. He later achieved his Master's degree from the Shanghai Second Medical University and his Doctorate from the University of Paris VII.

Dr. Chen was a Vice-President of the Chinese Academy of Sciences since 2000 to 2007. He holds a professorship at the School of Medicine of the Shanghai Jiao Tong University in Shanghai. Chen was elected Academician of the Chinese Academy of Sciences and is a foreign associate of the United States National Academy of Sciences, the US Institute of Medicine, the French Academy of Sciences, and a member of the Third World Academy of Sciences. He is a Member of the European Academy of Arts, Sciences and Humanities and has been awarded the State Scientific and Technological Awards by the Chinese government and the "Prix de l'Qise" by "La Ligue Nationale contre le Cancer" of France, the first non-French winner.