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EDUCATION

National Taiwan University,
Taipei, Taiwan, B.S., 1979,
Department of Agronomy

University of California, Berkeley,
CA. Ph.D., 1986, Department of
Genetics

Cornell University, Ithaca, NY,
American Cancer Society
Postdoctoral Fellow, 1990,
Department of Plant Biology

SOCIAL ACTIVITIES

Chair, Board of Directors
Northern America Luke Christian
Medical Mission

EMPLOYMENT & POSITIONS

CEO & Vice Chair, Stanford-Taiwan ALDH2 Deficiency Research
(STAR) Consortium (2015-present)

Visiting Professor (2015-Present), Taipei Medical University,
Taipei, Taiwan

Visiting Professor (2016-Present), Fu-Jen Catholic University,
Taipei, Taiwan

SPARK Adviser of Translational Research Program, (2015-
present), National Taiwan University, College of Medicine,
Taipei, Taiwan

SPARK Adviser of Translational Research Program, (2011-
present), Stanford University School of Medicine, Stanford, CA,
U.S.A.

Co-founder, Aviv Therapeutics, Menlo Park, CA, U.S.A. (2016-)

Co-founder, Consultant, ALDEA Pharmaceuticals, (2011-2015),
Redwood City, CA, U.S.A

Senior Research Scientist (1993-present), Dept. of Chemical and
Systems Biology, Stanford University, School of Medicine,
Stanford, CA, U.S.A.

Molecular Biology Specialist (1992-1993), University of
California, San Francisco, Dept. of Neuroscience, San Francisco,
CA, U.S.A.

Senior Scientist (1990-1992), Sogetal Biotech Inc. Hayward, CA,
U.S.A.

P E R S O N A L S T A T E M E N T

Dr. Che-Hong Chen, a molecular biologist and geneticist, has been working with Dr. Daria Mochly-Rosen at Stanford University for the past 24 years. Dr. Chen's early research includes the characterization of the first intra-cellular receptor for protein kinase C and its protein-protein interaction with other signaling molecules. Dr. Chen's past research interests focused on the role of ethanol-mediated cardioprotection against ischemia-reperfusion injuries. These studies led to his discovery of the important detoxifying function of aldehyde dehydrogenase (ALDH) in the heart. More recently, Dr. Chen has been studying the ALDH gene family and its association with human diseases. By high-throughput screening of small molecule libraries, Dr. Chen pioneered the discovery of a class of novel enzyme activators and inhibitors of aldehyde dehydrogenase. Together with Dr. Mochly-Rosen, Dr. Chen co-founded ALDEA Pharmaceuticals in 2011 and Aviv Therapeutics in 2016 to translate these small molecular ALDH modulators for clinical applications. The ALDH program is currently under development by Foresee Pharmaceuticals based in Taiwan. Dr. Chen's goals are to further understand and to bring these ALDH modulators into therapeutics for human diseases that are associated with reactive and toxic aldehydes. One of the mutations in the ALDH gene family is the common East Asian-specific point mutation of ALDH2 which is present in nearly 560 million people or 8% of the world population and causes the well-known Asian Alcohol Flushing Syndrome. The ALDH2 mutation leads to a deficiency in the capacity of aldehyde detoxification and is associated with high risks of acetaldehyde-induced cancers and other diseases. Using an ALDH2 deficient mouse model, Che-Hong is currently identifying new molecular and pathological targets that are susceptible to toxic and reactive aldehydes. Dr. Chen is an internationally recognized leader in basic and clinical research of aldehyde toxicity and genetic deficiency of ALDH2 and G6PD. He is also an expert in translational research for drug discovery and development and is often invited to speak in the U.S. and other countries including Japan, Brazil, Greece, China and Taiwan. Since 2015, Dr. Chen has initiated and served as the Chief Executive Officer and Vice President of the Stanford-Taiwan ALDH2 Deficiency Research (STAR) Consortium. The STAR consortium is devoted to the promotion of multidisciplinary international collaboration of basic and clinical research on ALDH2 deficiency and its related diseases. The mission of the consortium also includes public health education and public awareness of ALDH2 deficiency and acetaldehyde toxicity for the East Asian populations.

P U B L I C A T I O N S

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42. CHEN CH, Joshi AU, Mochly-Rosen D, The Role of Mitochondrial Aldehyde Dehydrogenase 2 (ALDH2) in Neuropathology and Neurodegeneration (In Press)

ISSUED PATENTS

1. United States Patent No. 7,560,241
Methods for identifying agents that modulate ALDH2 activity

2. United States Patent No. 9,102,651, AU 2008226947, CA 2,679,882, CN 101669030
Mitochondrial Aldehyde Dehydrogenase-2 Modulators and Methods of Use Thereof
3. United States Patent No. 8,124,389
Crystal Structure of Aldehyde Dehydrogenase and Methods of Use Thereof
4. United States Patent No. 8,389,522
Modulators of Aldehyde Dehydrogenase and Methods of Use Thereof
5. United States Patent No. 8,772,295
Modulators of Aldehyde Dehydrogenase and Methods of Use Thereof
6. United States Patent No. 8,354,435
Modulators of Aldehyde Dehydrogenase Activity and Methods of Use Thereof
7. United States Patent No. 8,906,942, EP 2337563B1, STAN-633TW
Modulators of Aldehyde Dehydrogenase Activity and Methods of Use Thereof
8. United States Patent No. 9,273,025
Mitochondrial Aldehyde Dehydrogenase-2 Modulators and Methods of Use thereof
9. United States Patent No. 9,345,693
Modulators of Aldehyde Dehydrogenase Activity and Methods of Use Thereof
10. United States Patent No. 9,315,484
Mitochondrial Aldehyde Dehydrogenase-2 Modulators and Methods of Use Thereof
11. United States Patent No. 9,370,506
Modulators of Aldehyde Dehydrogenase and Methods of Use Thereof
12. United States Patent Application No. 9,545,393
Methods and Compositions for Treating Pain
13. United States Patent Filing No. 14/774,071 (Allowed, Jan. 2017)
Mitochondrial Aldehyde Dehydrogenase-2 Modulators and Methods of Use Thereof