



Ding-Shinn Chen, M.D., born on July 6, 1943 in Taiwan, graduated from National Taiwan University College of Medicine in 1968. After serving one year in the Army, Dr. Chen completed his clinical training in internal medicine and gastroenterology at the National Taiwan University Hospital in 1973. He joined the faculty of the Department of Internal Medicine, National Taiwan University College of Medicine as a lecturer in 1975. Since then, he has started to focus his research on viral hepatitis and liver disease, which are extremely prevalent in Taiwan. He spent some time abroad for research, 1975 in National Cancer Center Research Institute, Tokyo, Japan and 1979~80 in National Institutes of Health, Bethesda, USA. He became associate professor in 1978 and was promoted to professor of medicine in 1983. He has been Dean of National Taiwan University College of Medicine since August, 2001.

Dr. Chen was elected Member of Academia Sinica (the National Academy) in 1992, fellow of the Third World Academy of Sciences in 2001, and Foreign Associate, US National Academy of Sciences in 2005. He was the President of the Taiwan Association for the Study of the Liver in 1996~98, the President of the Gastroenterological Society of Taiwan (1997~2003) and the President of the Formosan Medical Association (2001~2004). He was the President of the International Association for the Study of the Liver (IASL, 2004~2006).

Dr. Chen is a board-certified internist and gastroenterologist. His research interests are in basic and clinical aspects of viral hepatitis and liver disease, covering from prevention to management. He has been Member of the Hepatitis Control Committee of the Taiwanese Government for more than 20 years since its beginning, and currently is the Chairman of the Committee. He has a key role in the National Hepatitis B Mass Immunization Program as well as the National Research Program for Genomic Medicine in Taiwan. He also serves as the Science and Technology Advisor to the Premier of the Taiwanese Government.

Dr. Chen has published more than 540 original articles in scientific journals and frequently serves as the reviewer of major international journals in gastroenterology/hepatology and hepatitis research. He is the Associate Editor of *Hepatology*, *Journal of Biomedical Science*, *Molecular Carcinogenesis* and serves on the Editorial Board of *Journal of Hepatology*, *Journal of Gastroenterology* as well as many other international journals.

Specialty:

Hepatology, gastroenterology

Research Interest:

Basic and clinical aspects of viral hepatitis and liver disease, from prevention to management

- 1968 Graduated from National Taiwan University College of Medicine, Taipei
- 1975 Visiting Fellow, National Cancer Center Research Institute, Tokyo
- 1978-83 Associate Professor, National Taiwan University College of Medicine, Taipei
- 1979-80 Visiting Scientist, National Institutes of Health, Bethesda
- 1982- Member, Hepatitis Control Committee, Department of Health, Taiwan; Chairman, 1997~
- 1983- Professor of Medicine, National Taiwan University College of Medicine, Taipei
- 1987-01 Founding Director, Hepatitis Research Center, National Taiwan University Hospital, Taipei
- 2001- Dean, National Taiwan University College of Medicine, Taipei
- 2004- President, the International Association for the Study of the Liver, Munich
- 2005 Foreign Associate, US National Academy of Sciences, Washington, DC
- 2005 Caring Physicians of the World, World Medical Association, France

CURRICULUM VITAE

NAME: Ding-Shinn Chen

AGE: Born July 6, 1943

SEX: Male

NATIONALITY: Taiwan

FAMILY: Married to Hsu-Mei Hsu; one son, one daughter

ADDRESS:

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National Taiwan University College
of Medicine
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Taipei 100, Taiwan

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PRESENT POSITIONS:

- Dean
National Taiwan University College of Medicine
- Professor of Medicine
Division of Gastroenterology/Hepatology
Department of Internal Medicine,
National Taiwan University College of Medicine
- Director
National Taiwan University Center for Genomic Medicine
National Taiwan University
- Program Co-director
-National Research Program for Genomic Medicine, Taiwan
National Taiwan University
- Director
Clinical Research Center at National Taiwan University College of Medicine,
Institute of Biomedical Sciences, Academia Sinica

OTHER POSITIONS:

- Adviser to the Premier, 1998-
Executive Yuan, ROC
- Chairman, 1997-
- Member, 1982-
Hepatitis Control Committee
Department of Health, Executive Yuan, ROC
- Member, 1996-
Advisory Committee for National Health Research Institutes, Taiwan (Taipei)

- Board Member, 2004-
National Health Research Institutes, Taiwan (Taipei)
- Medical Advisor, 1991-
Blood Donation Association (Taipei)
- Advisor, 1991-
Taipei Institute of Pathology (Taipei)
- Curator, 1993-
Council Meeting
Academia Sinica (Taipei)
- Member, 1996-
Central Advisory Committee
Academia Sinica (Taipei)
- Member, 1996-
Advisory Council, Institute of Biomedical Sciences
Academia Sinica (Taipei)
- Member, 1996-1999
Asian-Pacific Hepatitis B Public Health Strategy Board (London)
- Member, ASIAHEP (Hong Kong), 1996-
- Regional Advisory Member, 1996-
American Gastroenterological Association (Bethesda)
- Chairman, Program Committee, 1999-2006
Asian Pacific Association of Gastroenterology (Hong Kong)
- President, 1995-1997
Taiwan Association for the Study of the Liver (Taipei)
- Member, 1997-
Expert Review Group, Bill and Melinda Gates Children's Vaccine Program
(Seattle)
- President, 1997-2003
The Gastroenterological Society of Taiwan (Taipei)
- President, 2004 -2006
International Association for the Study of the Liver (IASL), (Stuttgart)
- President, 2001-2004
Formosan Medical Association (Taipei)
- Advisor, 2001-
Synchrotron Radiation Research Center (Hsinchu)
- Member, 2002-2006
Guidelines and Publications Committee,
Organisation Mondiale de Gastroenterologie, OMGE (Amsterdam)

- Council Member, 2004-2006
Asian-Pacific Association of Gastroenterology (Hong Kong)

EDUCATION:

Bachelor of Medicine*, 1961-1968
National Taiwan University College of Medicine

SPECIALTY:

Hepatology, Gastroenterology, Internal Medicine

MEMBERSHIPS AND CERTIFICATION:

- Formosan Medical Association
- Gastroenterological Society of Taiwan (GEST)
- Organisation Mondiale de Gastro-entérologie (OMGE)
- Asian Pacific Association of Gastroenterology
- Taiwan Association for the Study of the Liver (TASL)
- Asian Pacific Association for the Study of the Liver (APASL)
- American Association for the Study of the Liver Diseases (AASLD)
- International Association for the Study of the Liver (IASL)
- American Gastroenterological Association (AGA)
- Physician Licence of Taiwan (1968)
- Internist Licence of Taiwan (1987)
- Gastroenterologist Licence of Taiwan (1988)
- E.C.F.M.G. with a qualified English Test (1968)

HONORS:

- National Outstanding Science and Technology Award of the Republic of China, Executive Yuan, 1984
- Abbott Laboratories Research Award, Abbott Laboratories, 1986
- Outstanding Research Award in Biology and Medicine, National Science Council, 1987-1993
- Outstanding Academic Award (Medicine), Ministry of Education, 1989
- Member, Academia Sinica, since 1992
- Grand Award, Society of Chinese Bioscientists in America (SCBA), 1993
- Hou Jin-Duei Outstanding Contribution Award in Basic Science, 1994
- Outstanding Scholar Award, Foundation for the Advancement of Outstanding Scholarship, 1995-1999
- National Chair-Professor of Medicine, Ministry of Education, 1997~2003
- Fellow, The Third World Academy of Sciences, 2002
- Doctor of Philosophy (*honoris causa*), Kaohsiung Medical University, 2002
- Foreign Associate, US National Academy of Sciences, 2005
- Caring Physicians of the World, World Medical Association, 2005
- Outstanding Achievement Award, Foundation for the Advancement of Outstanding Scholarship, 2005
- Trieste Science Prize, 2006

* An equivalent to M.D. in other countries.

OTHER SERVICES:

- Editor or Associate Editor
 - Journal of Internal Medicine, Taiwan (Taipei) 1999-
 - Journal of Biomedical Science (Taipei) 1994-
 - Hepatology (Alexandria) 2001-2006
 - Molecular Carcinogenesis (Houston), 2005-
- Editorial Board Member
 - Journal of the Formosan Medical Association (Taipei) 1985-
 - Journal of Gastroenterology and Hepatology (Melbourne) 1986-
 - Viral Immunology (New York) 1996-1999
 - Journal of Hepatology (Barcelona) 2000-
 - Journal of Gastroenterology (Tokyo) 1996-
 - Hepatology Research (Tokyo) 2002-
 - Annual Review of Cancer Research in the Asia-Pacific (Singapore) 2002-
- Referee for manuscript of scientific journals
American Journal of Epidemiology, American Journal of Gastroenterology, Archives of Virology, British Journal of Cancer, Clinical Infectious Diseases, Digestive Disease and Science, European Journal of Epidemiology, Gastroenterology, Genes Chromosomes and Cancer, Gut, Hepatology, International Journal of Cancer, Journal of Hepatology, Journal of Infectious Diseases, Journal of Medical Virology, Journal of Pediatrics, Journal of Pediatric Gastroenterology and Nutrition, Journal of Virology, Lancet, Oncogene, Pediatric Research, Vaccine
- Referee
For promotion of full professor
 - University of Michigan Medical Center, Department of Medicine, Ann Arbor, Michigan, USA
 - University of Witwatersrand, Johannesburg, South Africa
- Referee
For grant application of Foundation for Research Development, Pretoria, South Africa
- Referee
For grant proposal, Research Grants Council, The Hong Kong Government
- Decision Committee Member, Ministry of Education, Taiwan
For the president of University
 - National Sun Yat-Sen University, Kaohsiung, 2002
 - National Marine University, Keelung, 2002
 - National Taichung College of Nursing, Taichung 2004
- Search Committee Member
 - President of National Taiwan University, 1992 and 2004
 - Dean of National Taiwan University College of Medicine, 1994
 - Director of Graduate Institute of Immunology, National Taiwan University College of Medicine, 1996, 1997

- Director of Graduate Institute of Clinical Medicine,
National Taiwan University College of Medicine, 1997
- Director of Graduate Institute of Epidemiology,
College of Public Health, National Taiwan University, 1997
- Director of Graduate Institute of Molecular Medicine,
National Taiwan University College of Medicine, 1998
- Chairman of the Department of Internal Medicine,
National Taiwan University College of Medicine, 1998
- Director of the Institute of Biomedical Sciences,
Academia Sinica, 2000
- Director of the Division of Human Genomic Medicine
National Health Research Institutes, Taiwan, 2000
- Dean of College of Public Health
National Taiwan University, 2001
- Dean of College of Life Sciences
National Taiwan University, 2002
- President of National Taiwan University, 2004

EXPERIENCE:

1968-1969

Military Medical Doctor of the ROC Army
Ministry of National Defense, Republic of China

1969-1972

Resident in Department of Internal Medicine
National Taiwan University Hospital

1972-1973

Chief Resident in the same Department

- In charge of the clinical practice and teaching of house staff under the supervision of the Department Chairman.
- Participating in the research in immunology laboratory, studying the clinical significance of anti-nuclear factor by means of immunofluorescence, with special interest in liver diseases.

1973-1975

1. Research Assistant in a project on hepatitis and hepatoma supported by National Science Council of the Republic of China. (Project directed by Prof. J.L. Sung).
2. Visiting Staff
Department of Internal Medicine
National Taiwan University College of Medicine

- Entered the Gastroenterology Section of the Department and interested in liver diseases, particularly viral hepatitis and hepatocellular carcinoma.
- Start to study alpha-fetoprotein and hepatitis B surface antigen (HBsAg) by radioimmunoassays.
- In 1975, spent three months in the Laboratory of Division of Virology, National Cancer Center Research Institute, Tokyo, Japan, under the supervision of Dr. Kusuya Nishioka. Participated in and learned several useful laboratory techniques for the detection of HBsAg and anti-HBs such as RPHA, IAHA, PHA, HI for subtyping, etc. Also spent sometime in Dr. Toshio Shikata's laboratory, Department of Pathology, University of Tokyo to discussion with him problems in viral hepatitis as well as hepatoma, and to get familiar with his orcein staining. During the stay in Japan, besides frequent discussion with Drs. Nishioka and Shikata, I also met several outstanding investigators in the field of viral hepatitis and hepatoma, among them Drs. Ohbayashi, Sekine, Juji, Ishii were the most impressive.

1975-1978

1. Instructor in Medicine
Department of Internal Medicine
National Taiwan Universtiy College of Medicine
2. Staff Physician
Department of Internal Medicine
National Taiwan Universtiy Hospital
3. Research Associate
In charge of laboratory supervision for projects on hepatitis and hepatoma supported by National Science Council ROC in collaboration with Prof. J.L. Sung, also in charge of analysis and presentation of the data.
 - Using more sensitive and advanced laboratory techniques, the following subjects concerning viral hepatitis and hepatoma were studied and most of the results were published or presented in academic meetings.
 - 1) Prevalence of hepatitis B virus infection in liver diseases.
 - 2) Epidemiologic study of hepatitis B virus infection.
 - 3) Intrafamilial infection of hepatitis B virus.
 - 4) Studies on the subtypes of HBsAg in the carriers.
 - 5) Coexistence of cirrhosis and the prevalence of HBsAg in patients with hepatoma.
 - 6) Tissue localization of HBsAg by orcein stain (in collaboration with Department of Pathology of NTU College of Medicine) and by immunofluorescence in liver diseases.
 - 7) HBsAg in body fluids of the carriers.
 - 8) Peritoneoscopic diagnosis of liver diseases, particularly hepatitis and hepatoma.

- Lectures on immunologic aspects of gastrointestinal and hepatobiliary disorders were given to 6th-year medical students. Bedside teaching of medical students, interns and residents.
- Frequently invited to give lectures or discussion on hepatic diseases in professional meetings held by official or private organizations.

1978-1979

1. Associate Professor of Medicine
Department of Internal Medicine
National Taiwan University College of Medicine
 2. Staff Physician
Department of Internal Medicine
National Taiwan University Hospital
 3. Research associate of the projects on hepatitis and hepatoma supported by National Science Council in collaboration with Prof. J.L. Sung.
- Continue and extend the above-mentioned studies
 - The research subjects were:
 - 1) Tissue localization of hepatitis core antigen by means of immunofluorescence.
 - 2) The hepatitis B e antigen and antibody in liver diseases.
 - 3) Try to set up complement fixation test and immune adherence hemagglutination test for anti-HBc.
 - 4) Studies on anti-HAV and anti-HBc by radioimmunoassay.
 - 5) Relationship of HBsAg and serum alpha-fetoprotein in non-malignant liver diseases in Taiwan.
 - 6) Ultrasonographic diagnosis of hepatobiliary disorders.
 - Teaching activities similar to those in 1975-1978.
 - Frequently consulted by official and private organizations or medical schools for the problem of hepatitis and hepatoma.

1979-1980

1. Visiting Scientist
Hepatitis Viruses Section
Laboratory of Infectious Diseases
National Institute of Allergy and Infectious Diseases
National Institutes of Health
Bethesda, Maryland
U.S.A.
- NIH visiting program sponsored by Dr. Robert H. Purcell, Head of Hepatitis Viruses Section, NIAID, NIH. Participated in and learned research methodology of molecular biology in studying the relationship between human hepatoma and hepatitis B virus.

The main subject was studying the hepatitis B virus DNA sequences in human livers with hepatocellular carcinoma from patients in Taiwan. The research was in collaboration with Drs. Robert H. Purcell of NIH, John L. Gerin and Bill Hoyer of Georgetown University, Washington, DC.

- During the stay in USA, I met many outstanding research investigators in hepatology, such as Prof. Hans Popper, Drs. Stephen Feinstone, Vincent McAuliffe, John Ticehurst, Jay H. Hoofnagle, Harvey Alter, Paul V. Holland, J. Wai-Kuo Shih, and John Gerin. I also met Drs. Mario Rizzetto and Ferruccio Bonino from Turin, Italy and worked with them in the same laboratory of Division of Molecular Virology and Immunology, Georgetown University.

1980-1983

1. Associate Professor of Medicine
Department of Internal Medicine
National Taiwan University College of Medicine
 2. Staff Physician
Department of Internal Medicine
National Taiwan University Hospital
 3. Principle investigator of hepatitis A studies supported by the
National Science Council
 4. Research associate of the projects on hepatitis and hepatoma supported by the
National Science Council in collaboration with Prof. J.L. Sung
 5. Member, Hepatitis Control Committee
National Health Administration of the Republic of China
- Continue and extend the afore-mentioned studies
 - Research subjects
 - 1) Tissue localization of hepatitis virus markers (HBsAg, HBcAg and delta antigen) in diseases of the liver.
 - 2) Studies on post-transfusion hepatitis.
 - 3) Study the IgM, IgG class antibody to hepatitis A virus.
 - 4) Clinical studies on non-A, non-B hepatitis.
 - 5) Magnifying peritoneoscopy in the diagnosis of liver diseases.
 - 6) Studies on the delta agent in chronic liver diseases in Taiwan.
 - 7) Hepatitis B virus genome in hepatocellular carcinoma.
 - 8) Endogenous HBV DNA polymerase in liver diseases.
 - 9) Early detection of hepatocellular carcinoma.
 - 10) Passive and active immunization for the prevention of hepatitis B.
 - Teaching activities similar to those in 1978-1979.

- Lectures on recent advances in hepatology were given to the graduate students of the Graduate Institute of Clinical Medicine, National Taiwan University College of Medicine.

1983-1985

1. Professor of Medicine
Department of Internal Medicine
National Taiwan University College of Medicine
 2. Staff Physician
Department of Internal Medicine
National Taiwan University Hospital
 3. Principal and associate investigator of projects on hepatitis and hepatocellular carcinoma
 4. Member
Hepatitis Control Committee
Executive Yuan, Republic of China
 5. Senior Investigator
Science and Technology Advisor Group, Executive Yuan, Republic of China
- Research subjects
 - 1) Prospective study of post-transfusion hepatitis.
 - 2) Epidemiology of hepatitis B virus infection in Taiwan, with special emphasis on the impact of hepatitis B immunization on liver diseases.
 - 3) IgM anti-HBc in liver diseases and perinatal hepatitis B virus infection.
 - 4) Immunological studies on chronic hepatitis B virus infection.
 - 5) Hepatitis B viral DNA in liver diseases.
 - 6) Mechanisms of perinatal hepatitis B virus infection.
 - 7) Immunoprophylaxis of hepatitis B with small doses of hepatitis B vaccine and/or hepatitis B immunoglobulin.
 - 8) Studies on the routes of horizontal hepatitis B infection in Taiwan.
 - 9) Hepadna virus infection in squirrels and ducks.
 - 10) Clinicopathological studies on small hepatocellular carcinoma.
 - 11) Natural course of small hepatocellular carcinoma.
 - 12) Prospective study on the development of hepatocellular carcinoma in the high-risk populations.
 - 13) Non-surgical treatments of hepatocellular carcinoma.
 - 14) Upper gastrointestinal lesions in patients with psoriasis vulgaris.
 - 15) Medical treatment of chronic duodenal ulcer.

- Teaching activities similar to previous period.

1985-1988

1. Director

- Graduate Institute of Clinical Medicine
National Taiwan University College of Medicine
- Department of Clinical Research
National Taiwan University Hospital

2. Professor of Medicine

- Department of Internal Medicine
National Taiwan University College of Medicine

3. Staff Physician

- Department of Internal Medicine
National Taiwan University Hospital

4. Principal and associate investigator of projects on hepatitis and hepatocellular carcinoma

5. Member

- Hepatitis Control Committee
Executive Yuan, Republic of China

6. Senior Investigator

- Science and Technology Advisor Group, Executive Yuan, Republic of China

• Research subjects

- 1) Epidemiology of hepatitis A virus infection.
- 2) Epidemiology of hepatitis B virus infection in Taiwan, with special emphasis on the impact of hepatitis B immunization on liver diseases.
- 3) Outcome of patients with chronic hepatitis in Taiwan.
- 4) Prospective studies on the development of hepatocellular carcinoma in the high-risk populations.
- 5) Natural course of small hepatocellular carcinoma.
- 6) Non-surgical treatment of hepatocellular carcinoma.
- 7) Clinicopathological studies on acute viral hepatitis.
- 8) Agent infection in Taiwan.
- 9) Clinical trial on the treatment on chronic active hepatitis.
- 10) HBV DNA in liver diseases.
- 11) Monoclonal antibody against human hepatocellular carcinoma.

12) Duck hepatitis B virus: epidemiology, pathology and molecular biology.

1988-1991

1. Director

- Graduate Institute of Clinical Medicine
National Taiwan University College of Medicine

- Department of Clinical Research
National Taiwan University Hospital

- Hepatitis Research Center
National Taiwan University Hospital

- Clinical Research Center at National Taiwan University College of Medicine,
Institute of Biomedical Sciences, Academia Sinica

2. Professor of Medicine

Department of Internal Medicine
National Taiwan University College of Medicine

3. Staff Physician

Department of Internal Medicine
National Taiwan University Hospital

4. Principal and associate investigator of projects on hepatitis and hepatocellular carcinoma

5. Member

Hepatitis Control Committee,
Executive Yuan, Republic of China

6. Senior Investigator

Science and Technology Advisor Group, Executive Yuan, Republic of China

• Research subjects

- 1) Epidemiology of hepatitis A virus infection.
- 2) Epidemiology of hepatitis B virus infection in Taiwan, with special emphasis on the impact of hepatitis B immunization on liver diseases.
- 3) Outcome and treatment of patients with chronic type B hepatitis.
- 4) Prospective studies on the development of hepatocellular carcinoma in the high-risk subjects.
- 5) Natural course of hepatocellular carcinoma.
- 6) Molecular studies of hepatitis B virus and hepatitis-B-associated liver diseases.
- 7) Efficacy, cost effectiveness, and impact of the national hepatitis B vaccination program.
- 8) Epidemiology, clinicopathologic and molecular studies of the delta agent (HDV).

- 9) Studies on duck hepatitis B virus.
- 10) Screening of herbal drugs with antiviral activities against hepatitis B virus.
- 11) Identification of non-A, non-B hepatitis agent by molecular approaches

1991-1996

1. Director
 - Hepatitis Research Center
National Taiwan University Hospital
 - Clinical Research Center at National Taiwan University College of Medicine,
Institute of Biomedical Sciences, Academia Sinica
2. Professor of Medicine
 - Department of Internal Medicine
National Taiwan University College of Medicine
3. Staff Physician
 - Department of Internal Medicine
National Taiwan University Hospital
4. Principal and associate investigator of projects on hepatitis and hepatocellular carcinoma
5. Member
 - Hepatitis Control Committee,
Executive Yuan, Republic of China
6. Senior Investigator
 - Science and Technology Advisor Group, Executive Yuan, Republic of China
- Research subjects
 - 1) Epidemiology of hepatitis A, B, C, D and E virus infections.
 - 2) Molecular studies of hepatitis B virus and hepatitis-B-associated liver diseases.
 - 3) Efficacy, cost effectiveness, and impact of the national hepatitis B vaccination program.
 - 4) Studies on duck hepatitis B virus.
 - 5) Screening of herbal drugs with antiviral activities against hepatitis B virus.
 - 6) Molecular biology and the biology of hepatitis C.
 - 7) Epidemiology, clinicopathologic and molecular studies of the hepatitis delta virus.
 - 8) Prospective studies on posttransfusion hepatitis.

- 9) Outcome and treatment of patients with chronic type B and type C hepatitis.
- 10) Prospective studies on the development of hepatocellular carcinoma in the high-risk subjects.
- 11) Natural course and treatment of hepatocellular carcinoma.
- 12) Immunopathogenesis of chronic type B and type C hepatitis.
- 13) Clinical trial of hepatitis A vaccines.
- 14) Clinical trial of treatment of acute and chronic type C hepatitis.
- 15) Clinical trial of treatment of small hepatocellular carcinoma.

1996-2001

1. Director
 - Hepatitis Research Center
National Taiwan University Hospital
 - Clinical Research Center at National Taiwan University College of Medicine
Institute of Biomedical Sciences, Academia Sinica
2. Professor of Medicine
 - Department of Internal Medicine
National Taiwan University College of Medicine
3. Chief
 - Division of Gastroenterology/Hepatology
Department of Internal Medicine
National Taiwan University Hospital
4. Adjunct Professor
 - Graduate Institute of Clinical Medicine
National Taiwan University College of Medicine
5. Principal and associate investigator of projects on hepatitis and hepatocellular carcinoma
6. Member and Chairman
 - Hepatitis Control Committee, Department of Health,
Executive Yuan, Republic of China
7. Advisor to the Premier
 - Science and Technology Advisor Group, Executive Yuan, Republic of China
- Research subjects
 - 1) Molecular epidemiology of hepatitis A, B, C, D, GBV-C, TT and SEN virus infection.
 - 2) Evaluation and impact of the national hepatitis B vaccination program.
 - 3) Molecular biology and the biology of hepatitis B and C.

- 4) Molecular studies of the hepatitis delta virus.
- 5) Structure biology of hepatitis viral proteins.
- 6) Prospective studies on posttransfusion hepatitis.
- 7) Treatment of patients with chronic type B and type C hepatitis: with emphasis on combination therapies.
- 8) DNA-based therapeutic vaccines for the treatment of chronic hepatitis B.
- 9) Genetic basis and genetic therapy of hepatocellular carcinoma.
- 10) Genomic study of HBV and HCV.
- 11) Animal models of human hepatitis B and hepatocellular carcinoma, with emphasis on therapy. (woodchucks and mouse model)

2001-

1. Dean
National Taiwan University College of Medicine
 2. Director
Clinical Research Center at National Taiwan University College of Medicine,
Institute of Biomedical Sciences, Academia Sinica
 3. Professor of Medicine
Division of Gastroenterology/Hepatology, Department of Internal Medicine,
National Taiwan University College of Medicine
 4. Adjunct Professor
Graduate Institute of Clinical Medicine
National Taiwan University College of Medicine
 5. Program Director or Co-director
-National Research Programs for Genomic Medicine, Taiwan
-National Special Program for SARS Research, Taiwan (2003-2005)
- Research subjects similar to those in 1996-2001

PUBLICATIONS

Original articles:

1. Chang SS, Hsu SF, Chen DS: Different immunologic behaviors of two strains of mice as revealed by hemolytic plaque technique and Methotrexate treatment. *J Formosan Med Assoc* 66:508-516, 1967.
2. Sung JL, Liaw YF, Lin WSJ, Chen DS: α -Fetoprotein in liver diseases in Taiwan. *J Formosan Med Assoc* 73:178-183, 1974.
3. Chen DS, Deng JS, Lu YC: A clinical study of anti-nuclear factors. *J Formosan Med Assoc* 73:685-691, 1974.
4. Chen DS, Sung JL: A study of serum immunoglobulins in liver diseases. *J Formosan Med Assoc* 75:205-213, 1976.
5. Sung JL, Chen DS : Geographic distribution of the subtypes of hepatitis B surface antigen in Chinese. *Gastroenterol Jpn* 12:58-63, 1977.
6. Chen DS , Sung JL: Serum α -fetoprotein in hepatocellular carcinoma. *Cancer* 40:779-783, 1977.
7. Chen DS, Sung JL: Hepatitis B virus infection on Taiwan (letter). *N Engl J Med* 297:668-669, 1977.
8. Chen DS, Sung JL: Hepatitis B surface antigen and α -fetoprotein in patients with hepatocellular carcinoma. *Gastroenterology* 74:163-164, 1978.
9. Wang TH, Lai MY, Lin RT, Wu CH, Chen DS, Wang CY, Hsieh SC, Yang TH, Yu JY, Sung JL: Clinical experience with the small caliber upper GI panendoscope GIF-P2 (Olympus). *J Formosan Med Assoc* 77:44-55, 1978.
10. Chen DS, Sung JL: Studies on the subtypes of hepatitis B surface antigen in Taiwan - Demonstration of vertical and intrafamilial transmission of hepatitis B virus. *J Formosan Med Assoc* 77:263-271, 1978.
11. Lai MY, Yu JY, Wang TH, Yang TH, Wang CY, Chen DS, Sung JL, Hsu CJ, Chen JS, Chen WY: Clinical significance of the amylase creatinine clearance ratio. *J Formosan Med Assoc* 77:272-280. 1978.
12. Chen WY, Chuang CY, Chen DS, Wang TH, Yen TS, Hsieh BS, Lin M: HBsAg, HBsAb, immunoglobulins and C3 in primary nephrotic syndrome. *J Formosan Med Assoc* 77:378-385, 1978.
13. Lin WSJ, Yu TS, How SW, Chen DS, Sung JL, Wang TH: Demonstration of hepatitis B surface antigen by orcein staining in paraffin section. *J Formosan Med Assoc* 77:606-615, 1978.
14. Sung JL, Chen DS: Clustering of different subtypes of hepatitis B surface antigen in families of patients with chronic liver diseases. *Am J Gastro-enterol* 69:559-564, 1978.
15. Chen DS, Sung JL: Cellular localization of hepatitis B surface antigen in the non-cirrhotic liver with hepatocellular carcinoma. *Ital J Gastroenterol* 10:81-84, 1978.
16. Chen DS, Sung JL: Hepatitis B virus infection and chronic liver disease in Taiwan. *Acta Hepato-Gastroenterol* 25:423-430, 1978.
17. Chen DS, Sung JL, Lai MY: A seroepidemiologic study of hepatitis B virus infection in Taiwan. *J Formosan Med Assoc* 77:908-918, 1978.
18. Chen DS, Sung JL: Relationship of hepatitis B surface antigen and serum α -fetoprotein in non-malignant diseases of the liver. *Cancer* 44:984-992, 1979.
19. Chen WY, Lin WSJ, Tsai TJ, Yen TS, Hsieh BS, Cheng JT, Chen DS: A study on orcein staining of hepatitis B surface antigen in primary glomerulonephritis. *J Formosan Med Assoc* 78:355-361, 1979.
20. Lai MY, Sung JL, Lin WSJ, How SW, Yu JY, Wang TH, Chen DS: Biochemical and morphological study of the liver injury induced by drugs and chemicals. *J Formosan Med Assoc* 78:525-548, 1979.
21. Lee CS, Chang KJ, Chen DS, Lin TY: Lack of leukocyte migration inhibition by hepatitis B surface antigen in

- hepatocellular carcinoma patients. *Chinese J Microbiol* 12:86-94, 1979.
22. Sung JL, Chen DS: Maternal transmission of hepatitis B surface antigen in patients with hepatocellular carcinoma in Taiwan. *Scand J Gastroenterol* 15:321-324, 1980.
 23. Sung JL, Chen DS, Yu JY, Wang TH, Lai MY, Wang CY, Lai MS: Hepatitis A virus infection in Taiwan, a hospital-based study. *Trop Geogr Med* 32:324-328, 1980.
 24. Sheu JC, Yu JY, Sung JL, Chen DS, Wang TH, Wang CY: Gray scale ultrasonography in the diagnosis of abdominal diseases. *J Formosan Med Assoc* 80:207-224, 1981.
 25. Chen DS, Sung JL, Lai MY: HBeAg and anti-HBe in chronic hepatitis B virus infection (Correspondence). *Gastroenterology* 80:880-881, 1981.
 26. Chen DS: Hepatitis B antigen-antibody systems in liver diseases in Taiwan. *Chinese J Microbiol Immunol* 14:107-109, 1981.
 27. Chen DS: The hepatitis viruses. *J Formosan Med Assoc* 80:551-552, 1981.
 28. Chen DS, Lai MY, Sung JL: Hepatitis B e antigen and antibody in chronic liver diseases and hepatocellular carcinoma. *Hepato-Gastroenterology* 28:228-291, 1981.
 29. Lai LW, Hsu LC, Liu WT, Chen DS, Chen JY, Yang CS: HBV associated DNA polymerase activity in plasmas from HBsAg carriers in Taiwan - A preliminary report. *J Formosan Med Assoc* 81:1023-1026, 1982.
 30. Chen DS, Hoyer BH, Nelson J, Purcell RH, Gerin JL: Detection and properties of hepatitis B viral DNA in liver tissue from patients with hepatocellular carcinoma. *Hepatology* 2:42S-46S, 1982.
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Chapters:

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