

DAVID HONG CHENG RESUME

(1) Personal Data

Born April 19, 1920, I Shing, China. Died September 13, 2002. Arrived in United States in 1945, naturalized in 1956. Married to Lorraine Yang in 1949. Children: Kenneth, an oral surgeon; Gloria, a concert pianist.

(2) Education

Chinese French University of Peking. B.S., Mathematics, 1942
University of Minnesota. M.S., Structural Engineering, 1947
Columbia University. Ph.D., 1950.

(3) Career

Instructor of Civil Engineering, Rutgers University, 1949-1950
Structural Engineer, Ammann & Whitney, New York, New York, 1950-1952
Structural Engineer, The M.W. Kellogg Company, New York, New York, 1952-1955
Substitute Lecturer of Engineering, The City College of New York (CCNY),
February-June, 1955
Assistant Professor to Professor of Civil Engineering, CCNY, 1955-1966
Executive Officer, Ph.D. Programs in Engineering, CCNY, 1976-1978
Dean of Engineering, CCNY, 1979-1985

(4) Tasks Performed as Dean of Engineering

Formed an Advisory Committee for the School of Engineering. Committee members were CCNY alumni with careers in academic institutions. All members were distinguished academicians either in Engineering, or Sciences, or both. With the help of the Committee, I managed to convince the President of CCNY and the Chancellor of the City University of New York (CUNY) of the urgency of providing resources to strengthen the only public engineering school in downstate New York. They, in turn, brought my plan to the Governor who approved it. Its implementation began in 1983.

Between 1981 and 1985, I initiated the Herbert Kayser Professorship series, the Joseph Robins Student Loan Program, the Loral Microwave Lab, the Microelectronic Heat Transfer Lab (supported by IBM), the Photonic Application Lab (supported by high technology-seeking industries; now supported by the New York State Center of Excellence), the CUNY Institute of Transportation System at CCNY (supported by Federal and State Departments of Transportation), and, finally, in partnership with CUNY Graduate Center, the CUNY Center for Large-Scale Computation (supported by DARPA). Looking back, this Center was actually the incubator for global information exchange as well as a communication link among nations through internetwork technology. This has created many new industries benefiting existing industries and people worldwide.

Participated in China Exchange program. In 1981, the Chinese National Academy of Sciences invited a delegation from the City College of New York to establish exchange programs for training Ph.D. candidates from several universities in China. The delegation was headed by the Acting President, and included the Dean of Science, the Director of the Exchange Program, and others. The universities included the Graduate School of the National Academy of Sciences in Beijing, Shan Tung University in Jinan, the Nanjing Institute of Technology, the Sun-Yet-Hsien University in Canton, Northwestern University in Sian and Fudan University in Shanghai. The program is ongoing, and exchange visits are repeated every three years.

(5) Volunteer Works

Served as an officer of the Chinese Institute of Engineers, U.S.A., 1968-1974

On invitation of engineering societies in Taiwan, I organized and participated in Modern Engineering Seminars in Taipei, 1972, 1974.

Trustee, the William Paterson College Board of Trustees, 1990-1997

Trustee, the William Paterson University Board of Trustees, 1997-1999

Designed and produced the first handbook for the Board of Trustees of William Paterson University (WPU)

Suggested as a University policy that all graduates of WPU must be computer literate

Suggested that WPU always keeps pace with ever-changing future trends. In particular, it should keep pace with the emerging technologies for both administration and instruction.

Suggested that the computer sciences department not be abandoned, but reorganized and strengthened

Suggested ways of turning WPU into a Master degree offering university.

Visiting Scholar, Philosophy Department, William Paterson University

Donated \$15,000 to enhance the Chinese collection of the WPU Library, 1998

Donated \$1,000,000 to further support the WPU Library, 2001

(6) Consultancies

The M.W. Kellogg Company, on piping stress systems and piping components, 1955-1972

NASA-Langley Research Center, on sonic boom effects on structures, 1964-1966

US DOT, Office of Research and Development, on aerodynamic stability of long columns with elastic end constraints, 1982

New York City Transportation Administration, on transportation planning improvement study, 1977

American Society of Mechanical Engineers, general consulting, 1988-1989

(7) Publications

1. Three Dimensional Elasticity (Partial listing)

Ph.D. thesis, Columbia University

- a. "Nuclei of Strain and Thermal Elastic Stress in the Semi-infinite Solid," *Journal of Applied Physics*, Vol. 21, No. 9, pp 926-933, September 1950. (See also p. 477, "Theory of Elasticity by Timshenko and Goodier,"1951)

- b. *Displacement and Stresses Due to Nuclei of Strain In An Elastic Half Space*. Office of Naval Research Project, NR 064-388, July 1961.

2. Engineering (Partial listing)

- a. *A Matrix Method of Piping Analysis and the Use of Digital Computers*. The M.W. Kellogg Company, 1961.
- b. "In-Plane Bending of Curved Circular Tubes," *Journal of Engineering for Engineering for Industry*, 1968, pp.666-70.
- c. "Generalized Loop Forces and Displacements in Redundant Structures," *Proceedings of the Fourth U.S. National Congress of Applied Mechanics*, 1963, pp.507-10.

3. Sonic Boom Effects on Structures (Partial listing)

- a. "Sonic Boom Effects on Beam Loosely Bound to Their Supports," *Journal of Aircraft* , 4.6, 1967, pp. 494-98
- b. "Sonic Boom Effects of Structures – A Simplified Approach", *Transactions of the New York Academy of Sciences, Series II*, 30.3, 1968, pp. 457-78.
- c. "Transient Response of Structural Elements to Traveling Pressure Waves of Arbitrary Shape," *International Journal of Mechanical Sciences*, 8, 1966, pp. 607-18.

4. Aerodynamic stability of long columns with end constraints, 1982

5. Books on Philosophy

1. *On Lao Tzu*, Wadsworth Publishing Company, California, 2000
2. *A New Interpretation of Lao Tzu's Thoughts* (in Chinese), Global Publishing Company, New Jersey, 2000

6. Articles on Philosophy (Partial listing)

1. "Lao Tzu – The World Renowned but Misunderstood Philosopher in History" (in Chinese). *Yen Huan Spring and Autumn Annals – Extra Edition* 8. Beijing, 2001.
2. "Lao Tzu – The World Renowned but Misunderstood Philosopher in History" (a translation in English), 2001.

(8) Honors

William Richmond Peters, Jr., Fellow, Columbia University, 1947-1948

Tau Beta Pi (Engineering Honor Society) Outstanding Teacher Award, 1972

125th Anniversary medal, The City College of New York, 1973

Achievement Award for Engineering Education, Chinese Institute of Engineers, 1984

Honorary Doctor of Humane Letters, the William Paterson College of New Jersey,
1997

David and Lorraine Cheng
Updated 03/21/02

LORRAINE CHENG

(1) Education

Chemistry – Aurora College for Women, China
B.S., Nutrition, Cornell University
M.S., Nutrition, Cornell University
(Thesis: The Effect of Certain Amino Acids on the Utilization of B-Alanine by Yeast.)

(2) Membership

New York Academy of Sciences
American Chemical Society
Drug Information Association

(3) Experience

1979 – 1994 Director, Scientific Literature Dept./Manager, Scientific Information Services Dept.

Manage a department consisting of 10 multidisciplinary professionals and 9 support personnel. Professional functions include indexing and abstracting articles on Roche products; retrieval and analysis of scientific and technical information relevant to research, development, manufacturing, marketing and licensing of drugs and chemical for the entire corporation; preparation of critical analyses and reviews in selected research areas; participation in research project groups and project management teams; and responding to regulatory and external issues by providing information required in situations such as congressional hearings, FDA approvals, and defense of patent challenges and product litigations. Responsible for budget administration and resource allocation, monitoring staff performance and following up with appropriate actions, ensuring quality of departmental products (searches, reports, manuscripts, bulletins, bibliographies, in-house databases, translations, etc.), initiating new services, and coordinating intra- and interdepartmental projects.

Research, evaluate, recommend, and implement new computer technology for both scientific information processing and office automation.

Serve as secretary of the Vitamin Research Coordinating Committee and the Oncology Research Project Group. Other research committees served include: Corporate Literature Database Systems Evaluation Project Team, Nutley China Committee, Molecular Oncology Research Project Group, Carbohydrate-Lipid Research Project Group, Nutrition Research Project Group, Metabolism Research Project Group, and Smoking and Health Research Committee.

- 1974 – 1979 Assistant Director
Scientific Literature Department
Hoffman-La Roche, Inc.
Nutley, NJ
- 1969 – 1974 Senior Information Scientist
Hoffman-La Roche, Inc.
Nutley, NJ
- 1963 – 1969 Literature Scientist
Hoffman-La Roche, Inc.
Nutley, NJ
- 1962 – 1963 Literature Scientist
Schering Corp.
Bloomfield, NJ
- 1956 – 1962 Research Biochemist
Department of Radiobiochemistry
Chas. Pfizer & Co., Inc.
Maywood, NJ

Research involved studies on the modes of action of drugs (tetracyclines in particular) using radioisotope techniques. Responsible for the supervision and coordination of several research projects in the laboratory. These involved the screening of new synthetic penicillins with penicillinase; studies on antibiotic synergism *in vitro*; and screening on potential anti-atherosclerosis compounds.

(4) Publications

Snell, J.F. and Cheng, Lorraine
Studies in Metabolic Spectra. II. Application of Metabolic Spectra to the Investigation of the Mode of Action of Oxytetracycline.
Antibiotics Annual 1957-1958, pp. 538-545, Medical Encyclopedia, Inc., New York, N. Y., 1958.

Snell, J.F. and Cheng, Lorraine

Studies in Metabolic Spectra. III. The Accumulation of D-Glutamic Acid in Oxytetracycline-treated E. coli.
Antib. & Chemot. 9: 156-159, 1959.

Cheng, Lorraine and Snell, J.F.
Studies in Metabolic Spectra. VI. An Evaluation of the Synergistic Action Between PA 114 A and B In Vitro.
Antib. & Chemot. 10: 671-674, 1960.

Snell, J.F. and Cheng, Lorraine
Studies on Mode of Action of Tetracyclines II.
In Developments in Industrial Microbiology, Vol. 2.
Plenum Press, Inc., New York, pp. 107-132, 1961.

Cheng, Lorraine and Snell, J.F.
Studies in Metabolic Spectra. IV. Effects of Tetracyclines, some of their Derivatives, and Chloramphenicol on Accumulation of Glutamic Acid in Escherichia coli
J. Bacteriol. 83: 711-719, 1962.

Sullivan, A.C., Cheng, Lorraine and Hamilton, J.G.
Agents for the Treatment of Obesity.
Annu. Rep. Med. Chem. 11: 200-208, 1976.
(Review, 96 references).

Hamilton, J.G., Cheng, Lorraine and Sullivan, A.C.
Disorders of Lipid Metabolism: Etiology and Therapy.
Annu. Rep. Med. Chem. 11: 180-189, 1976.
(Review 115 references).

Sullivan, A.C., Cheng, Lorraine and Hamilton, J.G.
Recent Advances in the Etiology and Treatment of Disorders of Lipid Metabolism.
Annu. Rep. Med. Chem. 12: 191-200, 1977.
(Review, 131 references).

Sullivan, A.C. and Cheng, Lorraine
Appetite Regulation and Its Modulation by Drugs.
Nutrition Foundations Monograph, Nutrition and Drug Interrelationships.
Academic Press, pp. 21-82, 1978.
(Review, 379 references).

Cheng, Lorraine
Urinary Tract Calculi in Man and Laboratory Animals: Incidence, Composition and Etiology.
J. Environ. Pathol. Toxicol. 4: 317-349, 1980.

(Review, 288 references).

Cheng, Lorraine

Pheochromocytoma in Rats: Incidence, Etiology, Morphology and Functional Activity.

J. Environ. Pathol. Toxicol. 4: 219-228, 1980.

(Review, 50 references).

Levander, O.A. and Cheng, Lorraine (eds.)

Micronutrient Interactions: Vitamins, Minerals and Hazardous Elements.

Ann. N.Y. Acad. Sci. 355: 1980.

Sullivan, A.C. Baruth, H.W. and Cheng, Lorraine

Recent advances in the Design and Development of Antiobesity Agents.

Ann. Rep. Med. Chem. 15 : 172-182, 1980

Sullivan, A.C., Triscari, J. and Cheng, Lorraine

Appetite Regulation by Drugs and Endogenous Substances.

In: M. Winick (ed.), Nutrition and Drugs. (Curr. Concepts in Nutrition, Vol. 12)

A Wiley-Interscience Publ., John Wiley & Sons, N.Y., pp. 139-167, 1983.

(Review, 235 references).

Sullivan, A.C. Nauss-Karol, C. and Cheng, Lorraine

Pharmacological Treatment, I.

In: M.R.C. Greenwood (ed.), Obesity. (Contemporary Issues in Clinical Nutrition,

Vol. 4). Churchill Livingstone, New York, pp. 123-137, 1983.

(Review, 120 references).

Sullivan, A.C., Nauss-Karol, C. and Cheng, Lorraine

Pharmacological Treatment, II.

In: M.R.C. Greenwood (ed.), Obesity. (Contemporary Issues in Clinical Nutrition,

Vol. 4). Churchill Livingstone, New York, pp. 139-158, 1983.

(Review, 161 references).

Farrar, J. J., Benjamin, W.R., Cheng, Lorraine and Pawson, B.A.

Interleukin 2.

Ann. Rep. Med. Chem. 19: 191-200, 1984.

(Review, 79 references).

Cheng, Lorraine, Cohen, M., and Bhagavan, H.N.

Vitamin C and the Elderly.

In: R.R. Watson (ed.), CRC Handbook of Nutrition in the Aged.

CRC Press, Inc., Boca Raton, Fla., pp. 157-185, 1985.

(Review, 251 references).

Cohen, M., Cheng, Lorraine, and Bhagavan, H.N.

Vitamin C and the Elderly – An update.

In: R.R. Watson (ed.), CRC Handbook of Nutrition in the Aged. 2nd Edition.
CRC Press, Inc., Boca Raton, Fla., pp. 203-262, 1994.

(Review, 503 references).