

(March 2008)

**CURRICULUM VITAE  
MY LIEN DAO**

**ADDRESS**

**Work:**

Department of Biology, SCA 110  
Division of Cellular and Molecular Biology, and  
Microbiology  
University of South Florida  
4202 East Fowler Avenue  
Tampa, FL 33620-5150

**EDUCATION AND TRAINING**

**Secondary**

**1955-1962** Lycee Marie Curie, Saigon, Vietnam  
Degree: Baccalaureate II Degree obtained from the Ministry of Education of France (1962)

**Undergraduate**

**1962-1967** Faculty of Pharmacy, University of Saigon, Vietnam  
Degree: National Degree of Pharmacy, 1967 (Bachelor of Science in Pharmacy) (1967).  
This program was evaluated by the University of Berkley (CA) as equivalent to a M.S. degree in the U.S.

**Graduate**

**1968-1970** National Institute of Hygiene and Epidemiology, Brussels Belgium.  
Specialization in Medical Biochemistry and Public Health Laboratories  
Degree: M.S. equivalent

**1975-1978** The University of Oklahoma Health Sciences Center, Department of  
Biochemistry and Molecular Biology  
Degree: Ph.D in Biochemistry and Molecular Biology (1978)

**PhD Dissertation:** Purification of a High-Activity Form of Glucose-6-Phosphate  
Dehydrogenase and Study on its Immunochemical Reactivity. Main Advisor: Dr. B. Connor  
Johnson. This work resulted in a publication in JBC, and a Graduate Dean Research  
Prize from OUHSC.

**SPECIAL TRAINING**

1. **1972-1973:** FAO Training Center, Mysore, India, 1972-1973  
Field of Study: Analysis, Standardization and Food Quality Control in the Industry. Certificate of Achievement (1973)
2. **1986:** Harvard Medical School, Department of Continuing Education

- Course on "Microbial and Molecular Genetics Biotechnical Advances". May 19-23, 1986. Certificate of Achievement (1986)
3. **1991:** University of South Florida, Center for Teaching Enhancement. Two-Week Workshop on "Involving Students: using Active Learning Strategies in University Classes". Certificate of Achievement (1991)
  4. **1997:** University of South Florida. EXCEL Leadership Training Program (Spring 1997)
  5. University of South Florida, Center for Teaching Enhancement. Five-Day Intensive Workshop on WebCT "Improving Teaching and Learning through Web-Enhanced or Web-Delivered Courses (May 1998)
  6. **May 2007:** ASM Meeting in Toronto, Canada. Workshop on "DNA Microarrays: Experimental Design, Data Analysis and Gene Regulation"  
**October 2007:** The J. Craig Venter Institute (formerly TIGR). Workshop on "Introduction to Microarray Technology"

## **PROFESSIONAL EXPERIENCE**

**1967-1975 National Pharmacist**, Owner and Director of "Pharmacy DAO", Saigon, Vietnam  
**1967-1968 Head Clinical Laboratory**, Binh-Dan Hospital, Saigon, Vietnam  
**1968-1970 WHO Fellow**, National Institute of Hygiene and Epidemiology, University of Liege, University of Gand, and Scientific Institute Simon Stevin of Bruges, Belgium  
**1970-1971 Scientific Advisor in Biochemistry**, "Bibliothèque Royale Albert I" Bruxelles, Belgium  
**1971-1975 Head Nutrition Laboratory**, National Institute of Public Health Saigon, Vietnam  
**1979-1980 Research Associate**, Vitamins and Nutrition Research Laboratory, The Oklahoma Medical Research Foundation, Oklahoma City, Oklahoma  
**1980-1981 Associate Research Scientist**, Department of Biology, The Johns Hopkins University, Baltimore, Maryland  
**1982-1984 Research Associate**, Department of Microbiology and Immunology. The Oklahoma University Health Sciences Center, Oklahoma City, Oklahoma  
**1985-1986 Research Assistant Professor**, Department of Microbiology and Immunology, The Oklahoma University Health Sciences Center, Oklahoma City, Oklahoma  
**1986-1990 Assistant Professor**, Department of Pediatrics/St. Petersburg University of South Florida, St. Petersburg, Florida  
**1990-present Associate Professor**, Department of Biology, University of South Florida, Tampa, FL 33620  
**1995- Joint-Associate Professor**, Department of Internal Medicine, Division of Asthma and Allergies, University of South Florida, Tampa, FL 33620  
**1996-1998 Graduate Program Director**, Department of Biology, University of South Florida  
**2002-present Ad-hoc consultant for NIH, Grant review panel** National Institute of General Medical Sciences, and Center for Scientific Review

## **TEACHING EXPERIENCE**

**1970-1972 Lecturer in Biochemistry**, Department of Chemical Engineering  
Polytechnical College, Saigon, Vietnam  
**1973-1975 Lecturer in Biochemistry and Nutrition**, National Institute of Public Health, Saigon, Vietnam  
**1975-1978 Teaching Assistant**, Department of Biochemistry and Molecular Biology, The

University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma  
**1984-1985 Research Assistant Professor**, Medical Microbiology Laboratory for Dental Students.  
The University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma  
**1986-1990 Assistant Professor**, Molecular Biotechnology for Postdoctoral Fellows, Department of Pediatrics/St. Petersburg, The University of South Florida, St. Petersburg  
**1990-present Associate Professor**, Department of Biology, The University of South Florida, Tampa,

### **Undergraduate courses**

General Microbiology (3,000 level)  
Undergraduate Microbiology Seminar (4,000 level)  
Principle of Immunology (4,000 level)

### **Graduate Courses**

Principles of Immunology (5,000 level)  
Molecular Biology Techniques (6,000 level)  
Graduate Microbiology Seminar (6,000 level)  
Advanced Immunology (6,000 level)  
Principles of Modern Biotechnology (6,000 level)  
Principles of Genomics and Proteomics (5,000 level)  
Cellular Microbiology (5,000 level)

### **Mentoring of graduate and Undergraduate Students**

#### **Previous graduate students**

##### **5 Ph.D.**

Carlos Chavez (Main Advisor)  
Marianne Leveronne (Co-Main Advisor with Dr. Lim, BiologyUSF)  
Leonardo Puerta, Ph.D (Co-Main Advisor with Dr Lockey, Internal Medicine, USF)  
Todd Meyer (Co-Main Advisor with Dr. Melissa Rogers)  
Thomas K.Han (main Advisor)

##### **20 M.S. with thesis**

##### **4 M.S. non-thesis**

#### **Current graduate students**

Peguy Gaboton (Ph.D.)  
Katherine Prosen (Ph.D.)

#### **Current undergraduate students**

Lauren Pitluck (Honor's student, pre-Dental)  
Arjun Rammohandras (Honor's student, pre-Medical)  
Nam Huynh (Pre-medical student)  
Trevor Williams (Pre-Graduate student)

### **ACADEMIC HONORS**

#### **Fellowships**

**1968-1970 World Health Organization** Fellowship for studies in Belgium Biochemistry  
**1972-1973 Fellowship of the Food and Agriculture** Organization of the United Nations for studies in  
India. Food Quality Control in the Industry

**Awards**

**1978 Graduate Dean Research Prize.** The University of Oklahoma Health Sciences Center

**1979 Nomination for a Prize in Nutrition** by The American Institute of Nutrition

**1991, 1994, and 2002** USF President's Council Faculty Research Awards

**1994 Teaching Award:** Teaching Incentive Program Award for Outstanding Teaching

**2000-2001** Mentor of Outstanding MS thesis by Sean Yoder

**2007 Role Model Mentor of the Year.** McNair Scholars program Graduate School, USF

**PATENT**

January 2, 2007

US Patent 7157242 - Method for Staining Fungi and Protozoa

**COMMITTEES**

Curriculum Committee (5 terms)

Advisory Committee (3 terms)\*

Graduate Admission Committee (2 terms)\*

Search Committees (20 faculty positions, one Department Chair position, and one Instructor position)

Chair of Search Committee for Molecular Microbiology Faculty position\*

\*Current

**MEMBERSHIPS**

**1982-** Society of Sigma XI American Society for Biochemistry and Molecular Biology

**1988-** Society of Experimental Biology and Medicine

**1990-** American Society for Microbiology

**2006-** Golden Key International (Honorary Member)

**2007-** Florida Center of Excellence for Biomolecular Identification and Targeted Therapeutics

**INVITED SEMINAR PRESENTATION**

**1979 FASEB** Meeting in Dallas by the American Institute of Nutrition as a Nominee for a Research Prize in Nutrition

**1994 International Congress of Odontologists in Carthage**, Columbia (Presentation of two Lectures). Certificate of Appreciation

**2007 Invited honorary guest speaker at the Oklahoma University health Sciences Center**, Oklahoma City, Oklahoma (August 2007). Topic: *Streptococcus mutans* Candidate Caries Vaccine Antigens and Prospects of Genetic Immunization

**RESEARCH GRANTS**

Organization	Number	Function	Title	Amount	Period

<b>Previous Grants</b>					
NIH/NIDR	ROI DE0 7836	PI	Surface Protein Antigens of Cariogenic Streptococci	231,492	9/1/84-8/31/88
NIH	Biomed I Res.Support Grant Program	PI	Nutritional Regulation of G6PD	8,000	4/1/87-3/31/88
NIH/NIDR	ROI DE0 7836		Cariogenic Streptococci, Molecular Biology of Adherence	239,529	9/1/88-8/31/94
Showa/ACH		PI	Nutritional Regulation of Lymphoproliferative Disease	10,000	1/1/89-12/31/89
USF	President's Council Faculty Award Program	PI	Influence of Energy Intake on the Expression of Oncogenes and Tumor Suppressor Genes in Mice of the MRL/lpr,lpr Strain	5,000	1991-1992
NIH/USF BRSG	Small Instrumentation Grant Program	PI		5,000	1991
NIH/USF BRSG	Small Instrumentation Program			9,000	1992
USF	Faculty Research Development Award Program	PI	Regulation of <i>Streptococcus mutans</i> Surface Antigens by Proteases	5,000	1994-1995
USF	Faculty Research Development Award program	Co-PI with Dr Lawrence	Use of Starfish as a Model to Study Growth Factors		1994-1995
USF	Faculty Research Development Award program		Analysis of <i>Streptococcus mutans</i> Collagenolytic Enzymes	7,500	1996-1997
EPA		Co-PI with Joan B. Rose & Debra Friedman	Feasibility of a Cultural Method for the Detection of <i>Cryptosporidium parvum</i> in Environmental Samples	50,000	1995-1996
USF	Research and Creative Scholarship Grant Program	PI	Development of a Method of Identification of <i>Microsporidium</i> , an Emerging Opportunistic Infectious Parasite in humans	7,500	1999-2000

<b>Organization</b>	<b>Number</b>	<b>Function</b>	<b>Title</b>	<b>Amount</b>	<b>Period</b>
Florida fish and wild Life Conservation Commission/Florida Marine Research Institute			Vitro studies of the Effects of Brevetoxins on Manatee Cells	30,000	2000-2001
USF	Research and Creative Scholarship		Development of a DNA Vaccine Against a M	7,500	2002-2003

	Grant Program		Bioterrorism Agents		
DOD/USF Center for Biological Defense. SBCCOM		Co-PI with John Mc Devitt	Electronic Taste Chip, A Novel Method of Detection of Bioterrorism Agents	125,000	12/29/2002-07/30/2004
CDB/USF Center for Biological Defense RDCOM		Co-PI with John Mc Devitt	Electronic Taste Chip, A Novel Method of Detection of Bi Bioterrorism Agents	100,000	10/1/2003- 0/2004
NIH/NIDCR	R21DE014926	PI	Efficacy of DNA versus Protein Vaccine	290,000	7/15/03- 5/14/07
NIH/NIDCR	R21DE015127	PI	Cloning and Analysis of <i>Streptococcus mutans</i> Putative Collagenase	290,000	8/1/03- 5/31/07
<b>CURRENT GRANT</b>					
USF Research Foundation			Immunology and Microbiology of Psoriasis Arthritis	14,000	2008-2009
USF, CMMB			Detection of microsporidia in biological samples and water sample	10,000	2008-2009
<b>PENDING GRANT</b>					
NIH/NIDCR	1-R0 DE019474-01		Analysis of <i>Streptococcus mutans</i> collagenases	661,500	7/1/09-6/30/12
USF	Established Researcher grant		Analysis of <i>Streptococcus mutans</i> deoxyribose aldolase	5,000	/2009-4/30/2010

## PUBLICATIONS

**Dao, M.L.**, Watson, J.J., Delaney, R., and Johnson, B.C. 1979. Purification of a Ne High-Activity Form of Glucose-6-Phosphate Dehydrogenase from Rat Liver and the Effect of Enzyme . Inactivation on its Immunochemical Reactivity. *J. Biol. Chem.* 19, 9441.

**Dao, M.L.**, Johnson, B.C., and Hartman, P.E. 1982. Preparation of a Monoclonal Antibody to Glucose-6-Phosphate Dehydrogenase from Rat Liver and Study on its Immunoreactivity with Native and Inactivated Enzyme. *Proc. Natl. Acad. Sci. USA.* 70, 2860

**Dao, M.L.**, Johnson, B.C., and DeLuca, C. 1984. Cross-reacting Material to Monoclonal Anti-G6PD in the Absence of Catalytic Activity. *Biochemical and Biophysical Research Communication*, 118, 854,1984

**Dao, M.L.**, and Ferretti, J.J. Cloning of Streptococcal Genes with *Streptococcus-Escherichia coli* Shuttle vector pSA3. In *Recent Advances in Streptococci and Streptococcal Diseases*, IXth Lancefield International Symposium

**Dao, M.L.**, and Ferretti, J.J. 1985. *Streptococcus-Escherichia Coli* Shuttle Vector PSA3 and its Use in the Cloning of Streptococcal Genes. *Applied and Environmental Microbiology* 49, 115.

**Dao, M.L.** 1985. An Improved Method of Antigen Detection on Nitrocellulose: In Situ Staining of Alkaline Phosphatase Conjugated Antibody. *Journal of Immunological Methods* 82, 225.

**Dao, M.L.**, Chavez, C., Hirachi, Y., and Ferretti, J.J. 1989. Molecular Cloning of the *Streptococcus mutans* Gene Specifying Antigen A. *Infection and Immunity* 57: 3372-3376.

Ferretti, J.J., Russell, R.B., and **Dao, M.L.** 1989. Sequence Analysis of the Wall-Associated Protein Precursor of *Streptococcus mutans* Antigen A. *Molecular Microbiology* 3: 469-478.

Kubo, C., Johnson, B.C., Misra, H.P., **Dao, M.L.**, and Good, R.A. 1987. Nutrition, Longevity, and Hepatic Enzyme Activities in Mice. *Nutrition Reports International*, 35, 1185-1194.

**Dao, M.L.**, Shao, R., Risley, J., and Good, R.A. 1989. Influence of Chronic Energy Intake Restriction on Intestinal Alkaline Phosphatase in C3H/Bi Mice and Autoimmune-Prone MRL/lpr,lpr Mice. *Journal of Nutrition* 119, 2017-2022.

Shao, R., **Dao, M.L.**, Day, N.K., and Good, R.A. 1990. Influence of Chronic Energy Intake Restriction on Mammary Tumor Development in Adult C3H/Bi Mice. *Proc. Soc. Exptl. Biol. Med.*

Ogura, M., Ogura, H., Ikehara, S., **Dao, M.L.** and Good, R.A. 1989. Decrease by Chronic Energy Intake Restriction of Cellular Proliferation in the Intestinal Epithelium and Lymphoid Organs in Autoimmunity-Prone Mice. *Proc. Natl. Acad. Sci. USA*, 86:5918-5922.

Engelman R.W., Day N.K., Chen R.F., Tomita Y., Bauer-Sardina I., **Dao M.L.**, and Good R.A.1990. Calorie Consumption Level Influences Development of C3H/Ou Breast Adenocarcinoma With Indifference To calorie Source. *Proc. Soc. Exptl. Biol. Med.* 193: 23-3.

Qian H., and **M.L. Dao.** 1993. Inactivation of the *Streptococcus mutans* Wall-Associated

Protein A Gene (*wapA*) results in a Decrease in Sucrose-Dependent Adherence and Aggregation. *Infection and Immunity* 61: 5021-5028

Cooper R.D., Watson, J.E, and **M.L.Dao**. (1993). Decreased Expression of Protein Kinase C alpha, beta, and epsilon on Soleus Muscle of Zucker Obese (fa/fa) Rats *Endocrinology* 133:2241-2247

Jackson J.R., **M.L. Dao**, and D.V. Lim (1994). Cell-Associated Collagenolytic Activity by Group B *Streptococcus*. *Infection and Immunity* 62:5647-5651

Jackson, J.R., **M.L.Dao**, and D.V. Lim (1995). Modified FALGPA Assay for Cell-Associated Collagenolytic Activity. *J. Microbiological Method* 21:209-215

Puerta L., L. Carabello, E. Fernandez-Caldas, A. Avjioglu, D.G. Marsh, R.F. Lockey, and **M.L. Dao**. (1996). Nucleotide Sequence Analysis of a Complementary DNA Coding for a *Blomia tropicalis* Allergen. *J. Allergy and Clinical Immunology* 98:932-937

Jackson R.J., D.V. Lim, and **M.L. Dao** (1997). Identification and Analysis of a Collagenolytic Activity in *Streptococcus mutans*. *Current Microbiology* 34:49-54

Yoder S., C. Cao, K.E. Ugen, and **M.L. Dao** (2000). High Level Expression of a Truncated Wall-Associated Protein A From the Dental Cariogenic *Streptococcus mutans*. *Cell and DNA Science*

Han T.K., S. Yoder, C. Cao, K.E Ugen, and **M.L. Dao** (2001). Expression of *Streptococcus mutans* Wall-Associated Protein A Gene in Chinese Hamster Ovary Cells: Prospect for a Dental Caries DNA Vaccine. *DNA and Cell Biology*, 20:595-601

Han T.K., M. Derby, D.F. Martin, S.D. Wright, and **M.L. Dao** (2003). Effects of Brevetoxins on Murine Myeloma SP2/O Cells: Aberrant Cellular Division. *International Journal of Toxicology*, 22(2):73-80.

Han T.K., Zhu Z., **M.L. Dao** (2004). Identification, Molecular Cloning, and Sequence Analysis of a Deoxyribose aldolase in *Streptococcus mutans* GS-5. *Current Microbiology*, 48(3):230-236

Han T.K., **M.L. Dao** (2005). Differential immunogenicity of a DNA vaccine containing the *Streptococcus mutans* cell-associated protein A gene versus that containing a truncated derivative antigen A lacking in the hydrophobic carboxyterminal region. *DNA Cell Biol.* 24(9):574-82

Han T.K., Zhang C., **M.L. Dao** (2006). Identification and characterization of collagen-binding activity in *Streptococcus mutans* wall-associated protein: A possible implication in dental root caries and endocarditis. *Biochem. Biophys. Res Commun* 243:787-792

Han T.K., **M.L. Dao** (2007) Enhancement of salivary IgA response to a DNA vaccine against *Streptococcus mutans* wall-associated protein A in mice by plasmid based adjuvants. J. Medical Microbiol, May;56(Pt 5):675-80.

## REFERENCES

Dr. James Garey  
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