



Rapid Methods in Microbiology

Objetivos:

- *Conocer las técnicas de Microbiología rápida actuales.*
- *Desarrollar ejercicios para aplicar los materiales de las principales compañías que ofrecen métodos rápidos.*
- *Hacer un panel de discusión sobre la valides de las técnicas empleadas.*

Dirigido a:

Profesionistas que se desarrollen en la Industria de Alimentos (calidad, investigación, desarrollo y áreas afines), estudiantes de Ingeniería Química, Química de Alimentos, Ingeniería Bioquímica, Gastronomía y Carreras afines. Académicos que trabajan en el área de microbiología.

Duración:

22 hrs.

Instructor:

Dr. Daniel Y. C. Fung

Con traducción Simultánea: QFB Marco Antonio León Félix

Program:

Day 1

9:30 a.m. Fung Opening Lecture
11:00 a.m. Coffee
11:30 a.m. Company A presentation
12:00 p.m. Company B presentation
12:30 p.m. Lunch Break
2:00 p.m. Group 1 works with Company A, Group 2 works with Company B.
3:00 p.m. Group 1 works with Company B, Group 2 works with Company A.
4:00 p.m. Coffee
4:30 p.m. Group discussions
5:30 p.m. Adjourn for the day

Day 2

9:30 a.m. Fung Lecture
11:00a.m. Coffee
11:30 a.m. Company C presentation
12:00 p.m. Company D presentation
12:30 p.m. Lunch Break



2:00 p.m. *Group 1 works with Company C, Group 2 works with Company D*
3:00 p.m. *Group 1 works with Company D, Group 2 works with Company C*
4:00 p.m. *Coffee*
4:30 p.m. *Read Results of Day 1. Group Discussions*
5:30 p.m. *Adjourn for the day*

Day 3

9:30 a.m. *Fung Closing lecture*
11:00 a.m. *Coffee*
11:30 p.m. *Company E presentation*
12:00 p.m. *Company F presentation*
12:30 p.m. *Lunch Break*
2:00 p.m. *Group 1 works with Company E, Group 2 works with Company F*
3:00 p.m. *Group 1 works with Company F, Group 2 works with Company E*
4:00 p.m. *Coffee*
4:30 p.m. *Read results of Day 2. Group Discussions*
5:30 p.m. *Presentation of Certifications and Farewell Party*



Dr. Daniel Y.C. Fung
e-mail. dfung@ksu.edu

TITLE: Professor of Food Science Tel: 785-532-1208
Professor of Animal Sciences and Industry Fax: 785-532-5681
Ancillary Professor of Biology E-mail: dfung@ksu.edu
Kansas State University
University Distinguished Professor, Universitat Autònoma de Barcelona, Spain
DEGREES: Ph.D. Iowa State University, Ames, Iowa. 1969
M.S.P.H. University of North Carolina at Chapel Hill, N.C. 1967
B.A. International Christian University, Tokyo, Japan 1965
Lower Six Diocesan Boy's School, Hong Kong 1961
School Cert. DBS, United Kingdom Matriculation Examination 1960
PROFESSIONAL APPOINTMENT

2006-Current University Distinguished Professor Universitat Autònoma de Barcelona
1985-Current Professor Kansas State University
1979-1987 Chair, Food Science Graduate Program Kansas State University
1981-1985 Associate Professor Kansas State University
1978-1981 Assistant Professor Kansas State University
1969-1978 Assistant Professor and Assistant The Pennsylvania State
Director for Administration University

SPECIAL ACTIVITIES

1. Graduate Education:

a) Member of the Graduate Faculty at the Pennsylvania State University (1969-78) and Kansas State University (1978-current).

b) Major Research Professor: 78 M.S. theses and 33 Ph.D. with the 100th student graduated in 2007.

c) Completed another 65 M.S. and 38 Ph.D. as a committee member.

2. Initiator and Workshop Director of the series International Workshop on Rapid Methods and Automation in Microbiology: July 1981 to June 2009. More than 4,000 scientists from 60 countries have come to the Workshop. 30th Workshop will occur June 10-18, 2010. <www.dce.k-state.edu/conf/rapidmethods>

3. Presented lectures, workshops, symposia, conferences internationally since 1973 in Argentina, Australia, Belgium, Brazil, Canada, Chile, China, Colombia, Costa Rica, Czechoslovakia, Egypt, England, Finland, France, Germany, Grand Cayman, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Mexico, New Zealand, Norway, Peru, Philippines, Poland, Puerto Rico, Singapore, Spain, Scotland, Sweden, Switzerland, Taiwan, Thailand, Turkey, USA, United Arab Emirates, and Zimbabwe.



SOCIETY ACTIVITIES:

1. Attend annual meetings of American Society of Microbiology regularly, since 1966, member for 42 years.
2. Attend annual meetings of Institute of Food Technologist regularly, since 1967, member for 41 years.
3. Attend annual International Association of Food Protection meetings since 1972, member for 37 years.
4. Appointed Editorial Board member of *J. of Environmental Health*, 1981.
5. Appointed *J. of Food Science* editorial board member, 1986.
6. Appointed Chairman of Membership Committee of the American Academy of Microbiology, 1988.
7. Group III representative of ASM, 1992-1996. (Worked with 5,000 microbiologists per year).
8. Chair, IFT International Division, 1993-94; Chair, IFT International Relations Committee, 1993-1994.
9. Executive Committee Member of IFT, 1995-98 of this 29,000 member organization.
10. President, Chinese-American Microbiology Society, 1998-1999.
11. Editor, *J. of Rapid Methods and Automation in Microbiology*, 1992-2007. Senior Associate Editor, 2009.

GRANTS AND AWARDS:

1. Recipient of **FACULTY SERVICE AWARD** given by the National University Continuing Education Association, April, 1983.
2. **PROFESSIONAL ACHIEVEMENT AWARD**, Chinese American Food Society, 1985.
3. Co-Director of a \$259,938 grant from U. S. D. A. for graduate fellowships. 1984-1988.
4. **FELLOW** of American Academy of Microbiology, 1985.
5. Senior Researcher of the Food Safety Consortium, 1989-Present. (\$100,000/year, total ca. \$2 million)
6. **OUTSTANDING FOOD SCIENTIST AWARD**, Phi Tau Sigma, 1992.
7. **DISTINGUISHED FACULTY AWARD**, Gamma Sigma Delta, 1993.
8. **OUTSTANDING SCIENTIST AWARD**, Sigma Xi, 1993.
9. **DISTINGUISHED SERVICE TO AGRICULTURE AWARD** (\$1,000), Gamma Sigma Delta, 1993.
10. **FELLOW** of Institute of Food Technologists, 1995.
11. **DISTINGUISHED SERVICE AWARD**, Chinese American Food Society, 1997.
12. **IFT INTERNATIONAL AWARD** (\$3,000 and plaque), Orlando, FL, 1997.
13. **FELLOW** of International Academy of Food Science and Technology, 1998.
14. **CITATION OF EXCELLENCE AND MEDALLION RECIPIENT** for 20 years of International Rapid Methods and Automation in Microbiology Workshops from US FDA, 2000.
15. **WAKSMAN OUTSTANDING EDUCATOR AWARD**, Society for Industrial Microbiology, 2001.
16. **NATIONAL ACADEMY OF SCIENCES COMMITTEE** on indicators of fecal contamination in water, 2003.
17. **WORLD HEALTH ORGANIZATION/EPA COMMITTEE** on transmission of zoonoses in water, 2003.



18. *Distinguished Service Award. IFT. Food Microbiology Division. 2004.*
19. *KSU College of Agriculture. Excellence in Graduate Teaching Award. 2005.*
20. *Exceptional Achievement and Founder of KSU International Workshop on Rapid Methods and Automation in Microbiology, (1980-2005) Award. Given by Director, Center for Food Safety & Appl. Nutr. FDA, 2005.*
21. *Citation of Excellence and Medallion Recipient for conducting 25 years of KSU International Workshop. Vice Provost, KSU Continuing Education Division and a panel of Distinguished Scientists. June 2005*
22. *Carl R. Fellers Award for a distinguished career in Food Science. IFT, June 2006. (\$3,000 and plaque).*
23. *University Distinguished Professor. Autonomous University of Barcelona, Spain. Nov 2006.*
24. *KSU Professorial Performance Award, 2007*
25. *Inaugural Outstanding Educator in Food Safety Award given at Intl Association for Food Protection, 2007*
26. *Distinguished Service Award as Past President, Secretary, and Treasurer, 2000-2009. Chinese American Microbiology Society, 2009.*

PUBLICATIONS AND COMMUNICATIONS:

1. *Journal Articles. More than 800 refereed journal articles published in J. Food Science, J. Food Protection, Appl. and Environ. Microbiol., J. of Rapid Methods and Automation, Canadian J. of Microbiology, etc. and abstracts and presentations in international meetings, conferences, proceedings and symposia.*
2. *Books.*
 - a) *Fung, D. Y.C. 2008. Handbook and Laboratory Manuals of Rapid Methods and Automation in Microbiology. Kansas State University, Manhattan, KS. 900 pp.*
 3. *Erickson, L.E. and D.Y.C. Fung. 1988. Handbook on Anaerobic Fermentations. Marcel Dekker. 850 pp.*
 4. *Fung, D.Y.C. and R.E. Matthews. 1991. Instrumental Methods for Quality Assurance in Foods. Marcel Dekker, NY. 310 pp.*
 5. *Bourgeois, C.M., J.Y. Levau, and D.Y.C. Fung editors. (English) 1995. Microbiological Control for Foods and Agricultural Products. VCH, NY. 542 pp.*
 6. *Science Communicator for IFT, appeared on National and International TV, radio, newspapers, periodical, popular press concerning food safety, public health, ethnic foods, rapid methods, etc.*

PATENTS:

- a. *United States Patent 5,187,070. Assay for motile facultative anaerobic pathogens. Fung et al.*
- b. *United States Patent 5,405,773. Assay for motile facultative anaerobic pathogens. Fung et al.*
- c. *United States Patent 5,486,567. Enzymatic methods for accelerating fermentation of comestible products. Fung.*