

# 21st Annual



## International Workshop XXI

### Rapid Methods and Automation in Microbiology

*A Symposium and Workshop  
Shaping the New Millennium  
1980-2001*

*July 6-13, 2001 Mini-Symposium/Workshop  
Kansas State University Manhattan, Kansas*

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Division of Continuing Education  
241 College Court Building  
Manhattan, KS 66506-6006



Rapid Methods and  
Automation in Microbiology XXI  
Shaping the New Millennium  
July 6-13, 2001





# Rapid Methods and Automation in Microbiology XXI

## Workshop Purpose

Rapid methods and automation is a dynamic area in applied microbiology dealing with the study of improved methods in the isolation, early detection, characterization, and enumeration of microorganisms and their products in clinical, food, industrial, and environmental samples. This workshop, "Rapid Methods and Automation in Microbiology," will focus on the practical application of conventional and new commercial systems of rapid identification of microorganisms from medical specimens, foods, water, and the environment. Workshop participants will receive eight days of intensive theoretical and hands-on training in microbiological automation under the direction of **Dr. Daniel Y.C. Fung**, an internationally known authority in the field.

A 2-day mini-symposium will be offered as an integral part of the workshop. Workshop participants must attend both the symposium and the workshop. Some individuals may opt to attend the mini-symposium only.

## Designed for

- Microbiologists
- Food Scientists
- Medical Technologists
- Consultants
- Quality Assurance and Control Managers
- Laboratory Directors
- Researchers

## Workshop Director



**Dr. Daniel Y.C. Fung** is Professor of Food Science in the Department of Animal Sciences and Industry at **Kansas State University**. He has gained an international reputation as a lecturer on rapid methods and automation in microbiology at symposia in Sweden, Germany, Great Britain, France, Czechoslovakia, Canada, Israel, Italy, Republic of China, Singapore, Finland, Iceland, Brazil, Thailand, Colombia, Poland, Hungary, Zimbabwe, Chile, Argentina, Hong Kong, the Philippines and the United States. He has about 600 publications in journals, books, and proceedings, and is the recipient of the **1997 International Award** given by Institute of Food Technologists because of the uniqueness of this workshop series. He is editor of *Journal of Rapid Methods and Automation in Microbiology*, a Fellow of the American Academy of Microbiology (AAM), Institute of Food Technologists, and International Academy of Food Science and Technology. He presented an invited lecture at Pasteur Institute in Paris during the 100th year commemoration of Pasteur's death in 1995. He conducted the XX Gala Anniversary Celebration of this workshop in July 2000 and designed a gold medallion for the historic event.

## Visiting Professors



**Dr. Millicent C. Goldschmidt**, is Professor of the Dental Branch, Dental Science Institute, at the University of Texas Health Science Center in Houston, has authored more than 200 publications. Her particular expertise in microbiological instrumentation led her to be recognized as an **Outstanding Woman in Science** in 1985-1986, by the Association for Women in Science. She is a Fellow of AAM.



**Dr. J. Stanley Bailey**, is a Research Microbiologist with the United States Department of Agriculture, a Fellow of AAM and adjunct professor with the Poultry Science Department at the University of Georgia. He was the secretary of the **Microbiology Methods Committee of AOAC** and has published over 300 publications in the areas of poultry microbiology and microbiological methods.

## Assistant Director



**Dr. Randall Phebus**, associate professor of Food Science at KSU, is the assistant director of the workshop and Vice President of Steris FoodLabs, Inc. He specializes in the **detection of foodborne pathogens** (*E. coli* O157:H7, *Listeria*, *Campylobacter* and *Arcobacter*) and **intervention strategies** (such as steam pasteurization of meat) to reduce pathogens in meat products.

## Honorary Visiting Professor

**Dr. Nelson A. Cox**, a research microbiologist, USDA, He is a well known Poultry Microbiologist and was one of the original lecturers in this workshop series in 1981 and participated in more than 15 workshops.

## Guest Lecturers

**Reginald Bennett, P.C. Vasavada, Cecile Lahellec, Richard Oberst, Ann Marie McNamara and Scott Russell** have been guest lecturers in recent years.



## Twenty-First International Symposium/Workshop

Rapid Methods and Automation in Microbiology

Kansas State University • July 6–13, 2001

<b>July 5, Thursday</b>	Arrival (Note 1)	7:00 p.m.	Workshop and Mini-Symposium Opening Banquet (Great Kansas Beef) After Dinner Speech "Mumm . . . Mumm . . . Good" Dr. Ralph Richardson, Dean of Veterinary Medicine Kansas State Univeristy
<b>July 6, Friday</b>	All sessions in Holiday Inn		Aggieville—On your own!
11:00 a.m.	Food Science Seminar "Salmonella in Pork Production in France." Dr. Philippe Fravallo, AFSSA, Paris, France		
Noon	Registration Visit Exhibits and Posters (Note 2)	<b>July 7, Saturday</b>	Morning Sessions at Holiday Inn
1:00 p.m.	Welcome Remarks Dr. Jack Riley, Department Head Dr. Curtis Kastner, Research Coordinator Animal Sciences and Industry Kansas State University	8:30–10:00 a.m.	"Historical Perspective of Rapid Methods and Automation in Microbiology" "Miniaturized Microbiological Methods" "Comparative Analyses of Viable Cell Counts" Dr. Daniel Y.C. Fung, Director
1:15 p.m.	Paul A. Hartman Memorial Lecture "Detection of Foodborne Pathogens in Fresh Produce" Dr. Larry Beuchat, University of Georgia, Griffin.	10:00–10:30 a.m.	Coffee Break Visit Exhibits and Posters
2:15–3:00 p.m.	Coffee Break Visit Exhibits and Posters	10:30–11:30 a.m.	Open Discussion on Needs and Experiences of Rapid Methods Dr. Randy Phebus, Assistant Director, Discussion Leader
3:00–4:00 p.m.	Distinguished Fellow Lecture "Molecular Surveillance and Automated Methods for Characterization of Antibiotic Resistance Genes in Foodborne Pathogens." Dr. Seamus Fanning, Molecular Diagnostic Unit, Cork Institute of Technology, Cork, Ireland	11:30 a.m.– 1:00 p.m.	Luncheon and Review of Immunology (Optional) Dr. Millicent C. Goldschmidt Visit Exhibits and Posters
4:00–5:00 p.m.	Distinguished Fellow Lecture "Rapid Detection of <i>Listeria monocytogenes</i> and Food Safety" Dr. Catherine Donnelly, Professor and Interim Dean The University of Vermont, Burlington, VT.	1:00 p.m.	End of Mini-Symposium, Exhibits and Posters
5:00–7:00 p.m.	Wine and Cheese Reception Visit Exhibits and Posters.	1:30 p.m.	Start of the Workshop (Call Hall, KSU Campus) Review of Conventional Methods and Organization of Laboratory Sessions
		2:30–5:00 p.m.	Workshop Laboratory Work Commences
		7:00 p.m.	Workshop and Mini-Symposium Reception at the home of Dr. Catherine L. Fung Dr. Daniel Y.C. Fung

### Note:

- 1. Arrival**—At Manhattan Municipal Airport, call Holiday Inn (direct phone line in baggage area) for Courtesy Van to Holidome or KSU dormitory. If you rent a car be sure to obtain KSU parking permit from Dr. Fung starting Monday, July 9.
- 2. Poster Session**—Please indicate on the registration form if you wish to present a scientific poster at the Mini-Symposium. A space will be available for display of posters. A certificate of participation will be issued to the senior author. Top three posters will win awards.



### Saturday, July 7, 2001\*

**Afternoon Laboratory:** Viable Cell Counts—Conventional, Petrifilm, Redigel, ISOGRID, Oxyrase, MicroBioLogics, Olympus, Becton Dickinson BioScience, Charm Sciences, Inc., Ecolite Products, Remel

### Sunday, July 8, 2001

**Morning Lecture:** Comparative Analysis of Diagnostic Kits (Dr. J.S. Bailey and Dr. Scott Russell)

**Afternoon Laboratory:** API, MicroID, Enterotube, Biolog, Crystal, Neogen, Oxyrase, Spiral Biotech, DNA Probe (Gene-Trak)

### Monday, July 9, 2001

**Morning Lecture:** Food Pathogens—*Salmonella*, *Campylobacter*, *Yersinia*, Hemorrhagic *E. coli*, etc. (Dr. Bailey, Dr. Russell)

**Afternoon Laboratory:** BioControl Products, Tecra (International BioProducts), Neogen, VIDAS (bioMerieux, Inc.), Celsis, SAS, Air Sampler, Bioscience International, EM Scientific, Merck

### Tuesday, July 10, 2001

**Morning Lecture:** Mechanization, New approaches, Sophisticated light scattering detection systems, Impedance, Conductance (Dr. M.C. Goldschmidt)

**Afternoon Laboratory:** Microbiology International, RABIT, Zylux, MicroBioLogics, New Horizons Diagnostic, ELSIA (Organon Teknika), Diffchamb, Detex (Molecular Circuitry, Inc.), Millipore, Umedik

#### • Workshop Picnic •

### Wednesday, July 11, 2001—Molecular Food Microbiology Day

**Morning Lecture:** Radiometry, Microcalorimetry, ATP Detection (Dr. M. C. Goldschmidt), PCR lecture (Dr. Dick Oberst)

**Afternoon Laboratory:** Qualicon Bax, Riboprinting, Perkin Elmer, Probelia, BioteCon Diagnostics, Inc. Experiments at the KSU Veterinary College

#### • Workshop Farewell Banquet •

### Thursday, July 12, 2001

**Morning Lecture:** Emerging Pathogens and Competitive Exclusions (Dr. Russell, Dr. P.C. Vasavada)

**Afternoon Laboratory:** Detection of emerging pathogens, Conventional vs. Rapid Methods, MUG Motility, Oxoid, Dynal, Chemunex, EiaFoss, and BioTrace

### Friday, July 13, 2001

**Morning Lecture and Laboratory:** Rapid detection of microbial toxins (Reginald Bennett), novel microbiological tests. A look into the future, Presentation of Certificates

**Noon:** Departure

\* The participation of Commercial companies and speakers are in the negotiation stage.

### Social Activities

Welcome and farewell receptions, one lunch, two banquets, and a midweek picnic are planned. Informal, optional dinner meetings will be arranged. Spouses are welcome to attend at no charge except for ticketed events. Due to hot weather, casual dress during the workshop is recommended. You may wish to wear coats and ties/dresses to the banquets.

### Location

The Rapid Methods and Automation in Microbiology Symposium/Workshop will be held at the **Holiday Inn/Holidome** in Manhattan, Kansas, and **Call Hall** with a newly renovated modern laboratory and excellent lecture halls, on the Kansas State University campus.

### Transportation

Manhattan has an airport served by U.S. Air-Express. The charming city is approximately 130 miles west of Kansas City on Interstate Highway 70, a scenic drive of about two and one-half hours. KCI Roadrunner/Travelers Express is an airport van shuttle service which runs between the Kansas City International Airport and Manhattan. For schedule information and reservations, call toll free in the United States 1-800-747-2524, from outside the United States call 1-785-539-2284, or contact your travel agent. Reservations are recommended.

### Accommodations

A block of rooms has been set aside for workshop participants at the Manhattan Holiday Inn/Holidome, 530 Richards Drive. **Please refer to the workshop when making reservations directly with the Holiday Inn/Holidome at 1-785-539-5311, FAX: 1-785-539-8368.** The rate for a single or double room is \$70 plus tax per night. Please make reservations before **June 22, 2001**, to receive the reduced rate.

Campus student residence hall facilities featuring single rooms with bathroom facilities on each corridor are also available for workshop participants. Reservations include 8 nights (Thursday through Thursday) and 8 optional breakfasts (Friday through Friday). Additional nights are also available. Transportation will be furnished to and from the Holiday Inn. For more information or a reservation for campus residence halls, call 1-785-532-5569. **The deadline for reservations is June 22, 2001.**

### Workshop Fees

The registration fee for the 2001 *Rapid Methods and Automation in Microbiology Workshop* is \$1,755 (includes the mini-symposium). This includes eight days of program sessions and laboratories, all handout materials, and a one year subscription to *Journal of Rapid Methods and Automation in Microbiology*. Also included are two banquets, one lunch, a picnic, and receptions. Other meals, lodging, and transportation are not included. **Payment must be in U.S. dollars or by World Wide Money Order.**



### Mini-Symposium Fees

The registration fee for the Mini-Symposium of July 6, and 7 is \$455. The fee includes all sessions, handouts, coffee breaks, one lunch, symposium banquet, and a reception.

### University Credit

Two hours of graduate credits (optional) are available for an additional \$286.

### CEU's

Each participant will receive a Certificate of Participation upon completion of the workshop. Optional CEU's are also available for an additional \$15. Mark the appropriate section of your registration form if you wish to receive these optional CEU's.

### Bank/Wire Transfer

In the bank/wire transfer, be sure to include Division of Continuing Education, Rapid Methods and Automation in Microbiology and your last name.

Account Name: State Fee Acct.  
Account No.: 40180123  
Intrust Bank  
630 Humboldt  
Manhattan, KS 66502  
785-565-5400  
Routing No.: 101100029  
Sort or Swift Code: CBKCUS44

### Registration Information

The workshop registration fee, less a \$50 handling charge, will be cheerfully refunded if notice of cancellation is received on or before **June 22, 2001**. Thereafter, a 75 percent refund will be made.

### Questions

If you have questions concerning the workshop scientific content or format, contact Dr. Daniel Y.C. Fung at Tel: (785) 532-5654, Fax: (785) 532-5681, or E-Mail: [dfung@oznet.ksu.edu](mailto:dfung@oznet.ksu.edu)

Questions concerning registration or general information should be directed to the Rapid Methods and Automation in Microbiology Program Coordinator at **1-800-432-8222** (in the U.S.) or 1-785-532-5575 (outside the U.S.).

### Graduate Student Fellowships

Fellowships, including tuition, room, and board may be awarded to highly qualified degree-seeking graduate students to participate in the workshop as special assistants. Contact Dr. Daniel Y.C. Fung for details. **Application deadline: April 15, 2001.**

### The Rapid International Microbiology Family

**Previous Participants**, numbering about 2,000 scientists from 1981 to 2000, came from 55 countries and 46 states of United States.

Since 1990, 24 internationally known scientists were designated as **Distinguished Fellows**. Since 1987, 36 outstanding graduate students and scholars were named **Fellows**.

In the 20th anniversary celebration 15 previous participants were named **Alumnus Fellows** for their special lectures in the Gala occasion.

### Fast, Easy Registration



Online Registration: <http://www.dce.ksu.edu/dce/cl/microbiology/>



By Phone—Call us now at 1-800-432-8222 or (785) 532-5569 and ask for Non-Credit Programs Registration. Office hours: Mon.–Fri., 8 am to 5 pm CST.



By Mail—Send registration form to Microbiology, 131 College Court Building, Kansas State University, Manhattan, KS 66506-6015.



By Fax—Fax the registration form to (785) 532-5637. Attn: Microbiology.

### Cancellation Policy

The Division of Continuing Education may cancel or postpone any course or activity because of insufficient enrollment or other unforeseen circumstances. If a program is canceled or postponed, the Division of Continuing Education will refund registration fees but cannot be held responsible for other costs, charges, or expenses, including cancellation/change charges assessed by airlines or travel agencies.

### Limited Enrollment

Enrollment in the Workshop is limited. Please register as soon as possible to guarantee your enrollment. There is no enrollment limit for the Mini-Symposium. (July 6, and 7)

### Web Site

Program and registration information is available via the World Wide Web at <http://www.dce.ksu.edu/dce/cl/microbiology/>

For other continuing education opportunities, visit the KSU Division of Continuing Education web site at <http://www.dce.ksu.edu/>

### Letter of Invitation

If you require a visa to enter the United States and need a letter of invitation to the workshop, please let us know. *(This letter of invitation will be faxed to you or sent to you via E-mail. We will not send original letters to embassies or provide assistance in securing a visa.)*



# Registration Form—Rapid Methods and Automation in Microbiology XXI

• \_\_\_\_\_  
 First Name Middle Initial Family or Last Name  
 (EXACTLY as you wish it to appear on certificate)

• \_\_\_\_\_  
 Job Title (Please be specific)

• \_\_\_\_\_  
 Company, Agency, or University, etc.

• \_\_\_\_\_  
 Address

• \_\_\_\_\_  
 City, State, ZIP Code, Country

• Telephone \_\_\_\_\_ • FAX \_\_\_\_\_  
 (include country and area codes for both numbers)

• e-mail \_\_\_\_\_

•  Male  Female

**Assistance for Participants with Disabilities/Dietary Requirements**  
 In order to assist you, please indicate by June 22, 2001 any special requirements and assistance needed. \_\_\_\_\_

•  I request vegetarian meals. (Due to guarantees which must be given in advance, changes cannot be permitted at the conference/workshop, etc.)

• Poster Presentation \_\_\_ Yes \_\_\_ No  
 8 feet x 4 feet maximum

Senior Author of Poster: \_\_\_\_\_

\_\_\_\_\_ \$1,755 Workshop registration fee (includes mini-symposium, July 6-7)

\_\_\_\_\_ \$455 Mini-Symposium only (July 6-7)



\_\_\_\_\_ \$286 Two Hours Graduate Credit (optional)

\_\_\_\_\_ \$15 CEU's (optional)

**Method of Payment**

Check (payable to Kansas State University)

Invoice my company at the address on form

Charge to: MasterCard  Visa 

Bank Wire Transfer

• \_\_\_\_\_  
 Print Cardholder's Name Cardholder's Signature

• \_\_\_\_\_  
 Card Number Expiration Date

To register by telephone, call **1-785-532-5569** and ask for conference registration. Or FAX your registration to us at **1-785-532-5637** or E-mail **info@cee.ksu.edu**.

**Roster Release**

\_\_\_\_\_ Initial here if you do not want your name on the participant roster for this program.

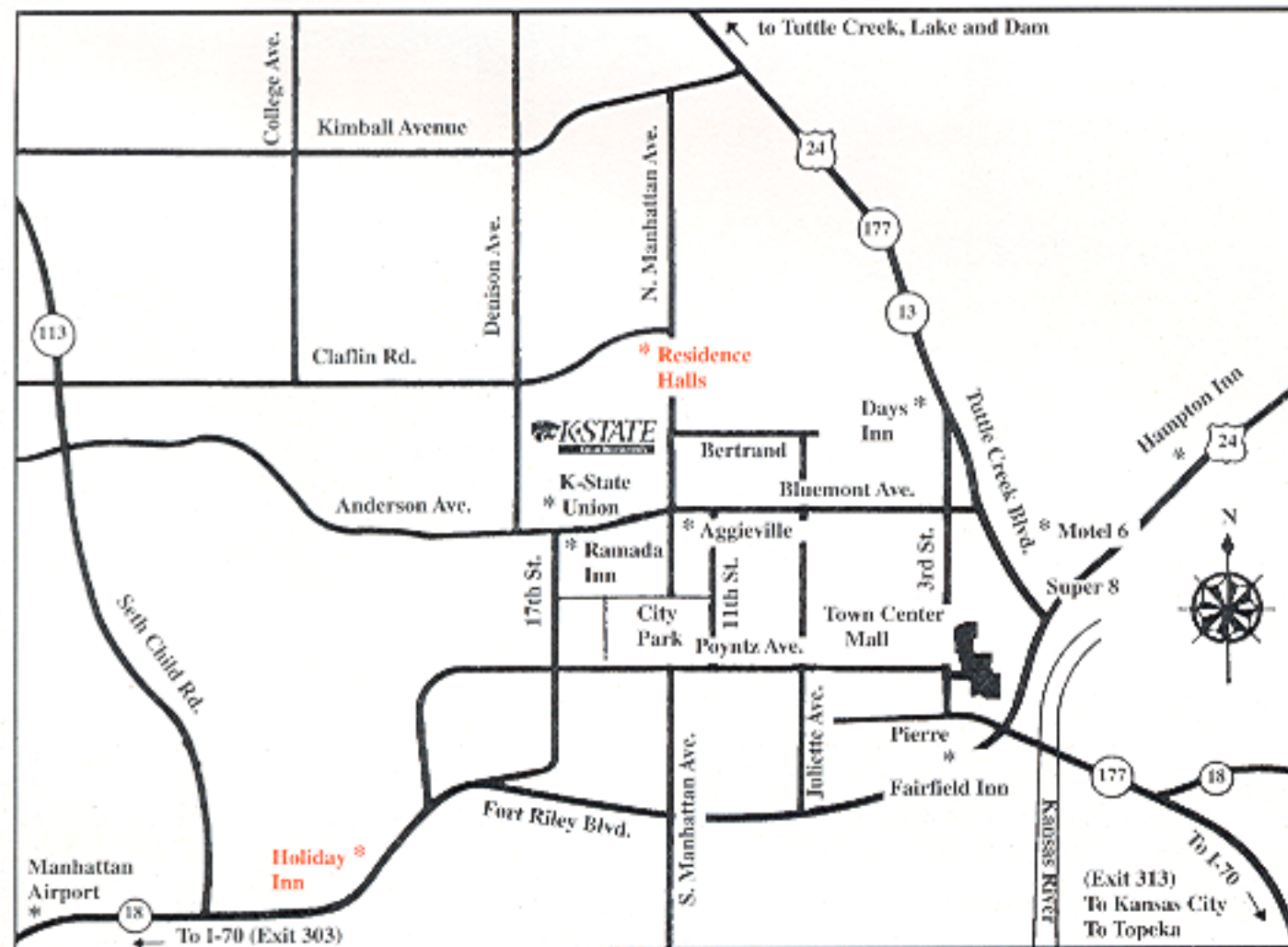
**Return this form to:**

Rapid Methods and Automation in Microbiology—Registration  
 Kansas State University Division of Continuing Education  
 131 College Court Building  
 Manhattan, KS 66506-6015 USA

cut and mail (keep a copy)

See this brochure on the World Wide Web at <http://www.cee.ksu.edu/cee/cl/microbiology/>

## Manhattan, Kansas



**Special Assistance**

Kansas State University is committed to making program activities accessible to all participants. If you have special requirements due to disabilities or dietary restrictions, indicate your needs on the registration form or contact the Division of Continuing Education Registrar at (785) 532-5566 at least three weeks before the start of the program. After this date, we will make every effort to provide the assistance, but cannot guarantee that requested services will be available.

**Notice of nondiscrimination**

Kansas State University is committed to a policy of nondiscrimination on the basis of race, sex, national origin, disability, religion, age, sexual orientation, or other nonmerit reasons, in admissions, educational programs or activities, and employment (including employment of disabled veterans and veterans of the Vietnam Era), all as required by applicable laws and regulations. Responsibility for coordination of compliance efforts and receipt of inquiries, including those concerning Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act, has been delegated to Jane D. Rowlett, Ph.D., Director of Unclassified Affairs and University Compliance, Kansas State University, 204 Anderson Hall, Manhattan, KS 66506-0124 (785-532-4392).