

# 94th Annual



## International Workshop XXIV

### Rapid Methods and Automation in Microbiology

June 18-25, 2004 Mini-Symposium/Workshop  
Kansas State University Manhattan, Kansas

*A Symposium and Workshop  
Shaping the New Millennium  
1980-2004*

Rapid Methods and  
Automation in Microbiology XXIV  
Shaping the New Millennium  
June 18-25, 2004



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



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# Rapid Methods and Automation in Microbiology XXIV

## 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 two-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, Peoples Republic of China, Singapore, Finland, Iceland, Brazil, Thailand, Colombia, Poland, Hungary, Zimbabwe, Chile, Argentina, Hong Kong, the Philippines, Korea, Taiwan, and the United States. He has more than 600 publications in journals, books, and proceedings, and is the recipient of the **1997 International Award** given by the 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 won the **2001 Waksman Outstanding Educator Award** given by the Society for Industrial Microbiology.

## Visiting Professors



**Dr. Millicent C. Goldschmidt**, 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 more than 350 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. 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.

## Laboratory Coordinator



**Beth Ann Crozier-Dodson**, research assistant, will coordinate the hands-on laboratory sessions and functions of the workshop. She has assisted Dr. Fung in workshops in the United States, Mexico, Norway, and other locations.

## Guest Lecturers and Visiting Professors

**Nelson A. Cox** (a founding Fellow), **Reginald Bennett**, **P.C. Vasavada**, **Cecile Lahellec**, **Richard Oberst**, **Ann Marie McNamara**, **Julian Cox**, and **Scott Russell** have been guest lecturers in recent years.



## Twenty-Fourth International Symposium/Workshop

Rapid Methods and Automation in Microbiology

Kansas State University • June 18–25, 2004

June 17, Thurs.	Arrival (Note 1)	7:00 pm	Workshop and Mini-Symposium Opening Banquet—Great Kansas Beef After Dinner Speaker “Recent Developments of Rapid Methods in Veterinary Medicine” Dr. M. M. Chengappa, University Distinguished Professor, Kansas State University
June 18, Fri.**	All sessions at Holiday Inn		
11:00 am	Food Science Seminar “Origin and Control of <i>Salmonella</i> in Animal Productions” Dr. Marianne Chemaly, AFSSA, France		
Noon	Registration Visit Exhibits and Posters (Note 2)		Aggieville—On your own!
1:00 pm	Welcome Remarks Dr. Jack Riley, Department Head Animal Sciences and Industry Dr. Curtis Kastner, Director Food Science Institute	<b>June 19, Sat.**</b> 8:30–10:00 am	Morning Sessions at Holiday Inn “History of Rapid Methods and Market Trends” Dr. Daniel Y. C. Fung
1:15 pm	Paul A. Hartman Memorial Lecture “Microsystem Based Biosensors for Rapid Detection of Microbes” Dr. Marion Scott, Sandia National Lab	10:00–10:30 am	Coffee Break Visit Exhibits and Posters
2:15–3:00 pm	Coffee Break Visit Exhibits and Posters	10:30–11:30 am	Open Discussion on Needs and Experiences of Rapid Methods Dr. Randy Phebus, Assistant Director, Discussion Leader
3:00–3:30 pm	Parade of Participants	11:30 am–1:00 pm	Luncheon and Review of Immunology (Optional) Dr. Millicent C. Goldschmidt Visit Exhibits and Posters
3:30–4:15 pm	Distinguished Fellow Lecture “Use of Rapid Methods in the Food Industry” Dr. Ann Marie McNamara, Silliker Laboratory	1:00 pm	End of Mini-Symposium, Exhibits and Posters
4:15–5:00 pm	Distinguished Alumni Fellow Lecture “Rapid Methods: An Update from the Pacific Rim” Dr. Julian Cox, Australia	1:30 pm	Start of the Workshop (Call Hall, KSU Campus) Organization of Laboratory Sessions
5:15–7:00 pm	Wine and Cheese Reception Visit Exhibits and Posters Industry Exhibition and Poster Session all day	2:30–5:00 pm	Laboratory Work Commences Beth Ann Crozier-Dodson Laboratory Coordinator
		7:00 pm	Workshop and Mini-Symposium Reception at the Konza Prairie Lodge

### 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 a KSU parking permit from Dr. Fung starting Monday, June 21.
- 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 receive awards.



### Saturday, June 19, 2004

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

### Sunday, June 20, 2004

**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), BioSys

### Monday, June 21, 2004

**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 Science

### Tuesday, June 22, 2004

**Morning Lecture:** Mechanization, New Approaches, Sophisticated light scattering detection systems, Impedance, Conductance (Dr. Millicent Goldschmidt)

**Afternoon Laboratory:** Microbiology International, RABIT, Matrix MicroScience Inc., New Horizons Diagnostic, ELISA (Organon Teknika), Diffchamb, Strategic Diagnostics, Millipore

#### • Workshop Picnic •

### Wednesday, June 23, 2004

#### Molecular Food Microbiology Day

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

**Afternoon Laboratory:** Perkin Elmer, iQ BioRad, Dupont Qualicon, Cepheid, Idaho Technologies, Roche Diagnostics. Experiments at the KSU Veterinary College

#### • Workshop Farewell Banquet •

### Thursday, June 24, 2004

**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, BioTrace, IGEN

### Friday, June 25, 2004

**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 is in the negotiation stage.

\*\* A mini-symposium occurs on June 18th and 19th. A room for scientific poster sessions will be available. Poster competition and awards will be given.

### 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 \$72 plus tax per night. Please make reservations before **May 15, 2004**, 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 May 15, 2004.**

### Workshop Fees

The registration fee for the 2004 *Rapid Methods and Automation in Microbiology Workshop* is \$1,895 (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 June 18–19 is \$515. The fee includes all sessions, handouts, coffee breaks, one lunch, symposium banquet, and a reception.

### University Credit

Two hours of graduate credit (optional) are available for an additional \$452.

### CEUs

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

### 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

### Refund/Cancellation Information

The workshop registration fee, less a \$100 handling charge, will be cheerfully refunded if notice of cancellation is received on or before **May 28, 2004**. After that date, a 75 percent refund will be available until **June 17, 2004**. Due to guarantees we must give, no refund will be available after **June 17, 2004**.

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.

### 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, 2004.**

### The Rapid International Microbiology Family

**Previous Participants**, numbering about 3,000 scientists from 1981 to 2003, came from 58 countries and 46 states of the United States. Since 1990, 30 internationally known scientists were designated as **Distinguished Fellows**. Since 1987, 45 outstanding graduate students and scholars were named **Fellows**. In the 20th anniversary celebration 15 previous participants were named **Alumni Fellows** for their special lectures in the Gala occasion.

### 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.).

### Fast, Easy Registration



#### Online Registration:

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



**By Phone**—Call 1-800-432-8222 (in the U.S.) or 1-785-532-5569 (outside the U.S.) 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 1-785-532-2422. Attn: Microbiology.

### 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 (June 18–19).

### 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 XXIV

Register online at: <http://www.dce.ksu.edu/dce/cl/microbiology/>

• \_\_\_\_\_  
 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 May 28, 2004 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: \_\_\_\_\_

\_\_\_\_\_ \$1,895 Workshop registration fee (includes mini-symposium, June 18–19)

\_\_\_\_\_ \$515 Mini-Symposium only (June 18–19)

\_\_\_\_\_ \$452 Two Hours Graduate Credit (optional)

\_\_\_\_\_ \$15 CEUs (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 1-785-532-2422 or e-mail [info@dce.ksu.edu](mailto:info@dce.ksu.edu).

### Roster Release

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

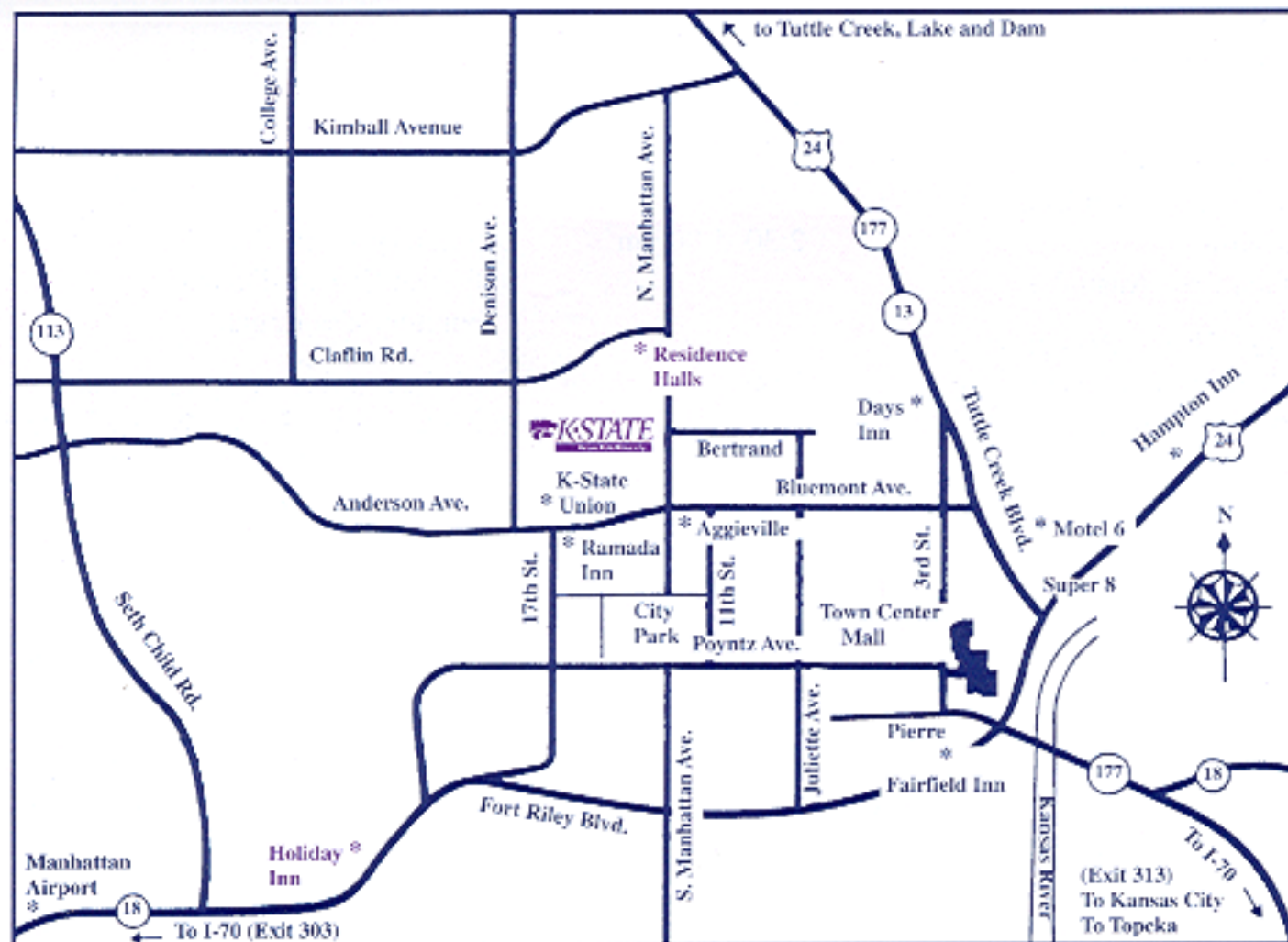
### Return this form to:

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.dce.ksu.edu/dce/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 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), as required by applicable laws and regulations. Responsibility for coordination of compliance efforts and receipt of inquiries, including those concerning Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990, has been delegated to Clyde Howant, Director of Affirmative Action, Kansas State University, 214 Anderson Hall, Manhattan, KS 66506–0124. 785-532-6220.

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