

Food Microbiology Newsletter

On the Web: www.ift.org/divisions/food_micro/

April 2008

Fare From The Chair

Greetings fellow food microbiologists! This is my first "Chair's Message" since being elected, and I have found that this is the most difficult of tasks that I have had to face as Chair. I don't know if former FMD Chairs faced similar difficulties or not, but for some reason, I simply wasn't sure what I'd write. I certainly wanted my message to be read-worthy!

The first thing I do want to do is thank **John Sofos** for his service as the previous FMD Chair and for his continued service as Past-Chair. John continues to contribute to the division, most recently in his efforts to put together a good slate of candidates for the upcoming FMD elections for FMD Executive Committee vacancies. Many thanks to John for his dedication to the FMD.

Perhaps the newest and most exciting news for our division is this year's inaugural FMD Scholarship Program. For the first time ever, the FMD sponsored undergraduate and graduate scholarships, and these were open to applicants this year. There will be two graduate student scholarships worth \$2000 each and two undergraduate scholarships worth \$500 each. Unfortunately, due to a glitch at IFT in getting the applications posted online, the undergraduate application was

omitted. This problem has now been resolved such that undergraduates will be able to apply next year. Personally, I am very pleased that we have these new scholarships in place, and particularly for the



David Golden, FMD Chair

graduate scholarships. Graduate students have relatively few scholarship opportunities as compared with undergraduates, so this is indeed a positive step for the division. I learned from IFT that the FMD had more scholarship applications than any other division, so interest among FMD graduate student members was certainly high.

I also want to congratulate Newsletter Editor, **Rob Williams**, and his wife, Christa. Rob, Christa and big brother, Grant, welcomed baby Lauren in December 2007.

Coming soon, we will have the FMD's Annual Meeting program available for you. This includes symposia as well as technical and poster sessions. I very much appreciate the long hours and hard work put in by Margaret Hardin, our Scientific Program Subcommittee representative. I know first-hand that Margaret

worked extremely hard to organize abstract reviewers, arrange sessions, and select slots for the sessions, symposia, and our Division Lecture. Thank you, Margaret. Since Margaret's efforts went on behind the scenes for most FMD members, many don't know how much work is involved in putting together the FMD scientific program; it's a daunting task. When you see Margaret at the Annual Meeting, please join me in thanking her for her hard work.

Finally, **Stephanie Drake's** term as FMD Student Liaison ends this year. Stephanie has included an article in this newsletter in which she solicits applications for the new Student Liaison. If you know of highly motivated graduate students who meet the criteria, please encourage them to apply. The Student Liaison position is a great career development opportunity for graduate students and a significant contributor to the division's activities.

The Annual Meeting begins on June 28 down in New Orleans, Louisiana. Hotels and the Convention Center are renovated, the French Quarter is cleaned up, and the city is ready for IFT. And we got's us a good program ready for ya'll, I ga-ron-tee! Hope to see you there.

Laissez les bon temps rouler!

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Thank You FMD Reception Sponsors!

The Food Microbiology Reception held at the 2007 annual meeting was a great success. There were over 120 attendees. We thank everyone who participated. The Food Microbiology Division would especially like to thank those sponsors who gave their financial support to the reception. Without their generous contributions the reception would not be possible. They are:

The Coca Cola Company
Cryovac Corporation

Dr. Catherine Cutter
Ecolab, Inc.

Food Products Association

KSU Rapid Micro Methods Workshop (Dr. Daniel Fung)

Sara Lee Corporation

Silliker Labs

The FMD would also like to thank the numerous individuals, companies and organizations that gave door-prizes for the reception, especially the **ASM Press, Blackwell Publishing, General Mills, KSU**

Rapid Micro Methods Workshop, Springer and Dr. P.C. Vasavada. The 2008 annual meeting will be here before we know. Planning has already begun for the next Food Microbiology Reception. If you would like to support the reception and have not been contacted please contact, Stephenie Drake at sldrake@unity.ncsu.edu. If you have any questions do not hesitate to contact me.

Stephenie Drake
FMD Student Representative

IFT Committee on Divisions 2008 Directives

Guidelines for Division Educational Programs – Updated and Board approved guidelines regarding educational programs outside the Annual Meeting Scientific Program are posted on ift.org at:

<http://members.ift.org/IFT/Communities/Volunteer+Leaders/divisiontools.htm>

Note that you must be logged in to open this page. Please take some time to review these and other important documents posted on the volunteer leader site. The tools posted there are designed to assist you in all you do on behalf of your Division and the Institute.

Membership Referral Program – The Institute relies upon its Divisions to retain and promote membership. We have recently launched a Membership Referral Program; please access details at: <http://www.ift.org/cms/?pid=1001683> to learn how you and your Division can benefit from participation in this initiative.

Division Officers' Workshop – In conjunction with the Annual Meeting in New Orleans, the workshop offers Division Officers the opportunity to hear current Institute initiatives and share best practices. Please encourage your Officers to attend this in-

formative session; details will be provided in the upcoming months.

Strategic Leadership Forum – Each year the Institute offers training to potential IFT leaders. The purpose is to cultivate talent who will contribute to the Institute's implementation of its strategy and objectives. We ask that your Division participant(s) present their experience at future Executive Committee meetings; and that they write an article for the Division newsletter or website on the event. We are confident that you will benefit greatly.

Newsworthy Information??? To have any news items included in the next issue of the FMD newsletter, please submit them to Rob Williams (rcwillia@vt.edu) by **May 9, 2008**. If you have any questions regarding the appropriateness of items for the newsletter or if you wish to make any comments regarding the current issue, then please contact Rob.

2007 FMD Competition Judges and Reviewers

The FMD thanks the following individuals for their assistance with competitions at the 2007 Annual Meeting:

Z. John Ordal Oral Competition

Dr. Cathy Cutter
Penn State University

Dr. Rob Williams
Virginia Tech

Dr. Charlene Wolf-Hall
North Dakota State University

John C. Ayres Poster Competition

Dr. Stephanie Doores
Penn State University

Dr. David Golden
University of Tennessee

Dr. Randy W. Worobo
Cornell

In addition to the program abstract reviewers, we also thank the following individuals for helping with the review of some of the abstracts:

Dr. Steve Knabel
Penn State University

Dr. Kumar Venkitanarayanan
University of Connecticut

FMD Student Representative Needed

Are you interested in being involved in with Food Microbiology Division of IFT? The IFT-FMD is looking for a graduate student that is willing to take on the position of Student Representative through the 2010 IFT annual meeting in Chicago, IL. The position is a two-year appointment starting at the conclusion of the 2008 annual meeting. Due to the fact that this position is a 2 year commitment, the student should be a M.S. candidate just starting on a two-year program, a Ph.D. candidate with

two years to go, or a M.S. candidate planning to continue on towards a Ph.D.

As student representative for the FMD, you will be involved with IFT and meet other members interested in food microbiology and network with some wonderful people. The responsibilities of the student representative include planning and fundraising for the IFT-FMD reception held at the IFT annual meeting, collecting and submitting microbiology-related college bowl questions, and attending the IFTSA stu-

dent representative meetings and FMD executive committee meetings.

If you are interested in this position, please send a 250-word statement about yourself to me (sldrake@unity.ncsu.edu) by **April 30, 2008**. If you have any questions, please feel free to contact me as well. I look forward to hearing from you! This is a wonderful opportunity.

Stephenie Drake
FMD Student Representative

"(The FMD Student Rep Position) is a wonderful opportunity"

S. Drake, FMD Student Rep

Penn State: Food Micro Short Course - May 20-22, 2008

University Park – The Food Microbiology Short course provides insight into the most recent developments of foodborne pathogens, toxins and contaminants that may occur in a food plant environment. The short course is delivered in classroom and laboratory environments and includes a mixture of theory, demonstrations and practical sessions on the fundamentals of food microbiology and food safety. Attendees

can develop a detailed understanding of the methods used to isolate important spoilage microorganisms and foodborne pathogens and the role of food microbiologist in ensuring safe food products. The program provides a basic understanding of the ecology of microorganisms in foods as well as detection, enumeration, isolation and identification of pathogens such as *E. coli* O157:H7, *Listeria*, *Salmonella*,

Campylobacter, and/or their toxins; spoilage and mycotoxigenic fungi, and mycotoxins.

For more information, please contact:

Dr. Cathy Cutter
(cnc3@psu.edu, 814-865-8862)

Dr. Hassan Gourama
(hxg7@psu.edu, 610-396-6121)

Future Challenges to Microbial Food Safety: A conference jointly organized by EFSA and the Dutch Food and Consumer Product Safety Authority (VWA)

**Wolfheze, The Netherlands
June 9 - 12, 2008**

Overall improvement of food safety will be given a boost if not only separate parts of the system improve, but if synergy can be created between new developments in various areas of food safety. The steady improvement of food safety doesn't happen autonomously, but is the result of an extensive effort by scientists, producers and risk managers. All of these parties are continuously improving tools they employ for their part of the venture. As a result, detection methods are more sensitive/specific than a few years ago, and databases are more complete - to take just two random examples. Synergy between different elements can only be created as result of a long-term vision on how to work with new and improved tools combined with an agenda on which problems to tackle.

Strange as it may sound, we also have to develop ideas on which price we are willing to pay for increased food safety - price not only defined economically, but also in terms of loss of taste and reduced variety. Are we prepared to accept safety risks for a superior taste? A good example of this dilemma is the consumption of raw milk and products made with it. Some may judge better taste worth the risk involved, while others would never take the chance. Possibly an altered produc-

tion process could reduce risk without sacrificing taste. Targeting one specific risk, one-dimensionally, can result in increasing other much more important risks. Similarly there is an increased demand for unprocessed or minimally processed foods to conserve vitamins and preserve the original taste. The challenge is to make this possible without creating unacceptable food safety risks. This in turn requires a conceptually novel approach.

How can we conceive this conceptually novel approach? If the answer were simple, the approach would have been implemented long ago and it would not be new anymore. Intuitively it seems most likely that breakthrough will come from an integrated approach combining several instruments relevant to food safety, as outlined in the first paragraph. How to actually do that will still require several creative steps.

The conference, Future Challenges to Food Safety, is aimed at bringing together the different disciplines needed for the innovation depicted above. The speakers and the scientific committee are top experts in the areas of microbial physiology, public health, modeling and risk assessment. The speakers have been asked not to focus on technical details or short-term issues, but rather to dwell on tackling the problems they see at the horizon

and sharpen insights that are needed to arrive at better options for risk managers. The result will not only be an agenda of priorities in microbial food safety for the coming decade, but will be also the basis for a road map of how to best achieve these.

The participants are asked to contribute through informal discussions with colleagues of different disciplines and in breakout sessions focused on a variety of subjects. The outcome of the various sessions will be combined with reviews written by the speakers and published in a special issue of the International Journal of Food Microbiology, a well-respected peer-reviewed journal. The most challenging aspect of the conference is that the focus is not on small steps to improve food safety tomorrow or next year, but on how we really can make a big leap in a decade, and what should be done, investigated and organized to achieve this.

The program and other details can be found on

http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1178668253157.htm

For registration and additional information you can contact:

VWAfoodmicrobiology2008@vwa.nl

"Steady improvement of food safety doesn't happen autonomously, but is the result of an extensive effort by scientists, producers and risk managers."

Predictive Microbiology Information Portal

A new Internet resource could be invaluable to food processors—especially to smaller meat and poultry processing companies. The information it provides can answer food safety questions and help food processors make science-based decisions to produce safe and wholesome products for consumers. **Called the Predictive Microbiology Information Portal**, or PMIP, it offers information on research, regulations and resources related to *Listeria monocytogenes* in ready-to-eat foods. Soon it will be

expanded to include other pathogen and food combinations. To help ensure the safety of food processing methods, a searchable database allows users to find information that can be used to develop plans for Hazard Analysis and Critical Control Point inspection.

Developed in collaboration with Rutgers University and Decisionalysis Risk Consultants, Inc., of Ottawa, Ontario, the portal includes a tutorial with instructions on using and inter-

preting predictive models. It links to the ARS Pathogen Modeling Program and ComBase, which provide diverse resources associated with databases, regulatory requirements and food safety principles.

For more information, contact:

Vijay K. Juneja
USDA-ARS Microbial
Food Safety Res. Unit
Wyndmoor, PA
vijay.juneja@ars.usda.gov

The PMIP Web address is www.ars.usda.gov/naa/errc/mfsru/portal

Grocery Manufacturers Association Appoints Bob Brackett Senior Vice President and Chief Science and Regulatory Affairs Officer

In November 2007, Grocery Manufacturers Association (GMA) president and CEO, Cal Dooley, announced the appointment of Robert E. Brackett, Ph.D., as Senior Vice President and Chief Science and Regulatory Affairs Officer.

"I am delighted to welcome Bob to the GMA team," said Cal Dooley. "His demonstrated leadership, deep experience in the food safety arena and his academic background will help GMA and its member companies continue to deliver on their promise to provide consumers with safe, abundant and affordable food."

Brackett mostly recently served as Director of the U.S. Food and Drug

Administration's (FDA) Center for Food Safety and Applied Nutrition (CFSAN), a position he held beginning in 2004. Prior to his appointment as CFSAN Director, he also served as the Director of Food Safety and Security and as Senior Microbiologist at the center.

Prior to joining the FDA, Dr. Brackett served as a professor at the University of Georgia's Center for Food Safety, and as an assistant professor at North Carolina State University's Extension Foods and Nutrition division.

"I am honored to join the Grocery Manufacturers Association, and look forward to working with Cal Dooley and the association's staff

and members to advance the organization's mission," said Bob Brackett.

Brackett is the recipient of numerous professional awards and holds a Ph.D. and a Masters degree in food microbiology from the University of Wisconsin. He also earned his Bachelor's degree in Bacteriology from the University of Wisconsin.

In his new position, Dr. Brackett reports to GMA president and CEO, Cal Dooley, and oversees all of the association's scientific and regulatory activity, including the operation of its in-house food safety laboratory.

2007 IFT-FMD Graduate Paper Competition Winners

Congratulations to the 2007 IFT-FMD graduate paper competition winners! The winners for each competition appear below and photographs of the winners are located on the following page:

2007 John C. Ayres Poster Competition

- 1st Place** **Kalpna Kushwaha**
(\$300) Oklahoma State University
Presentation Title: Virulence analysis of surface-adherent strains of *Listeria monocytogenes* in tissue culture assays.
- 2nd Place** **Annegret Mannig**
(\$200) Ohio State University
Presentation Title: Rapid method for detecting *Salmonella* serovars in food using hydrophobic grid membranes combined with infrared spectroscopy.
- 3rd Place** **Alyssa L. Franci**
(\$100) University of Illinois Urbana-Champaign
Presentation Title: Functional genomics of carbohydrate utilization in *Lactobacillus gasseri*.
- 4th Place** **Luxin Wang**
Honorable Mention (\$50) University of Missouri-Columbia
Presentation Title: Rapid quantification of culturable and viable-but-nonculturable *Escherichia coli* O157:H7 in beef products using EMA-reverse transcription-real time PCR.
- 5th Place** **Oleksandr Tokarskyy**
Honorable Mention (\$50) Mississippi State University
Presentation Title: Changes in microbiological profile of Gulf Coast oysters during refrigerated storage.

2007 Z. John Ordal Oral Competition

- 1st Place** **Amit Pal**
(\$300) University of Minnesota
Presentation Title: Predictive modeling of *Listeria monocytogenes* in ready-to-eat frankfurters for safety-based consume-by date labels.
- 2nd Place** **Rebecca L. Thompson**
(\$200) Utah State University
Presentation Title: *Listeria monocytogenes* control in ready to eat meats.
- 3rd Place** **Mawill R. Rodriguez-Marval**
(\$100) Colorado State University
Presentation Title: Use of microwave ovens for inactivation of *Listeria monocytogenes* inoculated on frankfurters.
- 4th Place** **Claudia Ionita**
Honorable Mention (\$50) Purdue University
Presentation Title: Development of methodology to study survival of *Listeria monocytogenes* on food and food contact surfaces.
- 5th Place** **Min Jung Park**
Honorable Mention (\$50) Korea University
Presentation Title: Production of gamma-aminobutyric acid (GABA) by *Lactobacillus* isolated from traditional fermented kimchi.

John C. Ayres Poster Competition



L-R: **Hassan Gourama**, FMD Division Representative; **Kalpana Kushwaha**, Oklahoma State University (1st Place); **Alyssa L. Francl**, University of Illinois Urbana-Champaign (3rd Place); **Luxin Wang**, University of Missouri-Columbia (4th Place). *Not pictured:* **Annegret Mannig**, Ohio State University (2nd Place) and **Oleksandr Tokarsky**, Mississippi State University (5th Place).

Z. John Ordal Oral Competition



L-R: **Amit Pal**, University of Minnesota (1st Place); **Mawill Rodriguez-Marval**, Colorado State University (3rd Place); **Claudia Ionita**, Purdue University (4th Place); **Min Jung Park**, Korea University (5th Place); **Hassan Gourama**, FMD Division Representative. *Not pictured:* **Rebecca Thompson**, Utah State University (2nd Place).



Food Microbiology Division Newsletter

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The information presented in this Newsletter represents the opinions of the contributors and does not necessarily represent the official position of neither IFT nor the Food Microbiology Division of IFT and should not be interpreted as such.

IFT Diversity Statement

IFT accepts and adopts the concept of diversity which views society as a mixture of all backgrounds, each with a unique contribution. IFT seeks to retain and celebrate individual differences and therefore will not discriminate based on race, color, gender, sexual orientation, age, religion, national origin, disability or veteran status.

IFT – FOOD MICROBIOLOGY DIVISION - 2007/2008 OFFICERS

Chair	Members-at-Large	Councilor	Awards
David A. Golden Univ. of Tennessee Dept. of Food Sci. & Tech. Knoxville TN 37996 Business : (865) 974-7247 Fax : (865) 974-2750 david.golden@tennessee.edu Term Expires: 08/31/2008	James S. Dickson Iowa State Univ. Dept of Animal Science Ames IA 50011 Business : (515) 294-4733 Fax : (515) 294-6019 jdickson@iastate.edu Term Expires: 08/31/2009	Mark A. Harrison Univ. of Georgia Dept. Food Sci. & Tech. Athens GA 30602-7610 Business : (706) 542-1088 Fax : (706) 542-1050 mahfst@uga.edu Term Expires: 08/31/2008	Susan Abraham Northland Laboratories 1818 Skokie Boulevard Northbrook IL, 60062-4106 Business: (847) 942-4136 Fax: (847) 272-2348 sabraham3001@yahoo.com Term Expires: 08/31/2008
Chair-Designate		Alternate Councilor	Competitions
Peter J. Taormina John Morrell & Co 805 E Kemper Rd Cincinnati OH 45246 Business : (513) 346-7558 Fax : (513) 346-7552 ptaormina@johnmorrell.com Term Expires: 08/31/2008	Margaret D. Hardin Texas A&M University Dept. of Animal Science College Station TX 77843 Business: (979) 862-4994 Fax : (979) 862-3475 margaret.hardin@tamu.edu Term Expires: 08/31/2008	Dallas G. Hoover Univ. of Delaware Dept of Animal & Food Sci. Newark DE 19716-2150 Business : (302) 831-8772 Fax : (302) 831-2822 dgh@udel.edu Term Expires: 08/31/2008	Hassan Gourama Pennsylvania State Univ. Berks Campus Reading PA, 19610-6009 Business: (610) 396-6121 Fax: (610) 396-6024 hxg7@psu.edu Term Expires: 08/31/2008
Past-Chair		SPS Representative	Web Editor
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Secretary		Student Rep	Newsletter
Catherine N. Cutter Pennsylvania State Univ. Dept. of Food Sci. & Tech. University Park PA 16802 Business : (814) 865-8862 Fax : (814) 863-6132 cnc3@psu.edu Term Expires: 08/31/2008	Thomas Montville Rutgers-The State Univ. of NJ Food Science Bldg. New Brunswick NJ 08901 Business : (732) 932-9611 Fax : (732) 932-6776 montville@aesop.rutgers.edu Term Expires: 08/31/2009	Stephenie Lynn Drake 105 Dartmouth Rd. Raleigh NC 27609 sldrake@unity.ncsu.edu Term Expires: 08/31/2008	Robert C. Williams Virginia Tech Food Science & Technology Blacksburg VA 24060-0418 Business : (540) 231-4106 Fax : (540) 231-9293 rcwillia@vt.edu Term Expires: 08/31/2008