
NOTES FROM DIVISION O CHAIR

The 102nd General Meeting of the American Society for Microbiology is scheduled this year for May 19-23 in Salt Lake City, Utah. Division O will be presenting three symposia and four poster sessions.

Division O is pleased to present as our Divisional Lecturer Dr. J. H. David Wu who will be presenting "Bone Marrow Tissue Engineering and Molecular Control of Blood Cell Formation" on Wednesday starting at 2:30 p.m. at Salt Palace Convention Center, Ballroom F. Dr. Wu is well known for his novel work on mammalian engineering, a new topic we will discuss at our Business Meeting. The details of Dr. Wu's presentation are provided elsewhere in this newsletter.

The Divisional lecture will be followed by the Division O Symposium Fungal Secondary Metabolism: Ecological and Evolutionary Perspectives. Other symposia include Cells in Microgravity: Problems and Prospects, Tuesday, May 21, 8-10:30 a.m., Ballroom F; Exploring Secondary Metabolism Using Emerging Technologies, Thursday, May 23, 8-10:30 a.m., Ballroom B.

Thanks to ASM, the Kikkoman Corporation, Schering-Plough and New Brunswick Scientific, almost all of the eligible applicants for the student travel award were

funded this year (13 students received the awards at \$500 each). We are very grateful for the generous support we have received from many corporations every year (acknowledged later in this newsletter). There will be four poster sessions: Monday, 10:30 a.m. - 12:00 noon; Monday, 1:00-2:30 p.m.; Tuesday 1:00-2:30 p.m., and Wednesday 10:30 a.m. - 12:00 noon.

In keeping with tradition, BD Industrial will be the sole sponsor for our Division O mixer, a hallmark of our social program at the annual meeting. This mixer always promises to be an enjoyable social event and we look forward to seeing our friends at this meeting. The mixer will be held Tuesday evening in the Little America Hotel, 7:00 p.m. - 10:00 p.m.

Finally, I would urge our membership to attend our Division O Business meeting. This will be held Wednesday at the Salt Palace Convention Center, Ballroom F from 1:15 p.m.- 2:15 p.m. just before our Divisional Lecture.

I look forward to seeing you all in Salt Lake City.

Nancy Keller, Chair Division O, ASM

DIVISIONAL ACTIVITIES

NEW DIVISION O WEBSITE

We are pleased to announce the completion of the upgraded ASM O website. The site can be accessed through the American Society for Microbiology main webpage (www.asmtoday.org) under "Scientific Divisions" or directly at <http://www.asmtoday.org/division/o/index.html>.



At last year's Division O business meeting in Orlando it was unanimously agreed upon to initiate an upgrade of the Division O website. In July 2001, a fundraising E-mail was sent to Division O members soliciting funds from corporate sponsors for development and maintenance by a commercial website developer of an updated version of the Division O website. Two companies, Pfizer and Microbia, provided funding to cover about three quarters (\$750.00) of the cost of website development. Their kind support is recognized by inclusion of the corporate logos and links to their corporate websites on the main webpage. These monies were received through the efforts of Richard Wax (Pfizer) and Reed Doten (Microbia). The remaining funds (\$250.00) needed to complete development of the website were provided from ASM Division O funds. Additional funds are solicited to maintain and constantly upgrade the website. Please send your monetary support to the undersigned. Recognition of support will be given to each and every contributor.

The site provides information such as Division Officers, a history of Division O by Arnie Demain, membership profile, news of upcoming meetings and events, Division O newsletters, links of interest, and much more. We think you will find the Division O website quite informative and a useful tool for outreach to potential new members. This site will only be as good as the Division O membership makes it, so please be sure to visit the site and give me or any of the Newsletter editorial board your feedback using the DivOWebmaster link present on each webpage.

Jeff Cary, FermentOgram Editorial

Board

THE DIVISIONAL LECTURE



Professor J. H. David Wu has been working on the *Clostridium thermocellum* cellulosome for the last 15 years, starting from when he was a PhD student working for Prof. Arnold Demain at MIT. He employs microbiological, biochemical, molecular biological, and biophysical approaches to study cellulosome biosynthesis and its structure-function relationship. His work has led to the discoveries of the modular structure of the cellulosomal scaffolding, the Family 48 glycosyl hydrolases, and the novel 3-D structure of the cellulosomal dockerin.

After joining the University of Rochester, David Wu developed a novel 3-D bone marrow culture system conducive to multilineal blood cell differentiation. His group is also the first to report the circadian gene expression in bone marrow, providing a molecular basis for circadian rhythms of the bone marrow functions. His research group continues to probe the cellulosome mechanism as well as the molecular events governing blood cell formation.

D. Wu served as the Division O Chair in 1997/1998 and its Alternate Councilor (2000-2002). He also served as an editor for Applied Microbiology and Biotechnology and the ASM Manual of Industrial Microbiology and Biotechnology (Second Edition). He has participated in various review panels for NSF, DOE, NIH, and NREL. He is currently a Fellow of the American Academy of Microbiology and the International Editor for the Journal of Bioscience and Bioengineering.

About the presentation "Bone Marrow Tissue Engineering and Molecular Control of Blood Cell Formation": When mouse and human bone marrow cells are cultured in a porous scaffolding as immobilized microorganisms, they preserve their 3D growth configuration and ability to generate multiple lineages of blood cells. Discovery of the circadian gene expression in such culture system led to the understanding that blood cell production is temporarily organized by an internal biological clock as photosynthetic and nitrogen-fixation activities in cyanobacteria are temporarily separated.

THE DIVISION O MIXER



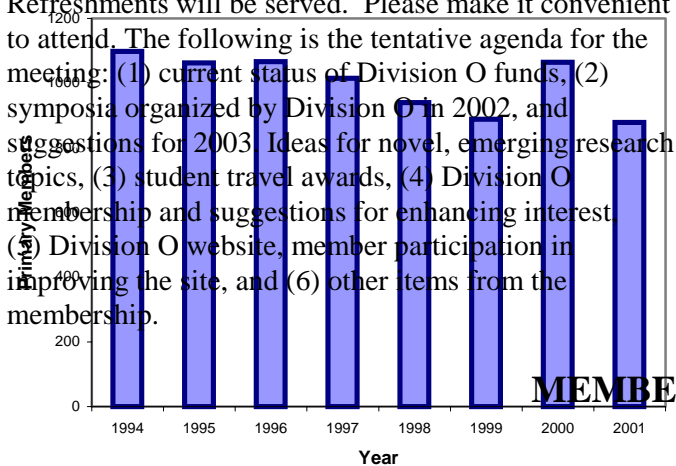
With the very generous support of **BD Industrial** (manufacturers of DIFCO, and BBL products), the Division O mixer will be held on Tuesday, May 21, 2002 from 7:00 p.m. to 10:00 p.m. in Ballroom B of the Little America Hotel. A large crowd is expected, so come early and register for exciting door prizes!! Compare notes with other Divisional members over good food and drinks.

THE DIVISION O BUSINESS MEETING



The Division O Business Meeting will be held on Wednesday, May 22, 2002 from 1:15-2:15 p.m. in Ballroom F of the Salt Lake City Convention Center. Refreshments will be served. Please make it convenient to attend. The following is the tentative agenda for the meeting:

(1) current status of Division O funds, (2) symposia organized by Division O in 2002, and suggestions for 2003. Ideas for novel, emerging research topics, (3) student travel awards, (4) Division O membership and suggestions for enhancing interest in membership, (5) Division O website, member participation in improving the site, and (6) other items from the membership.

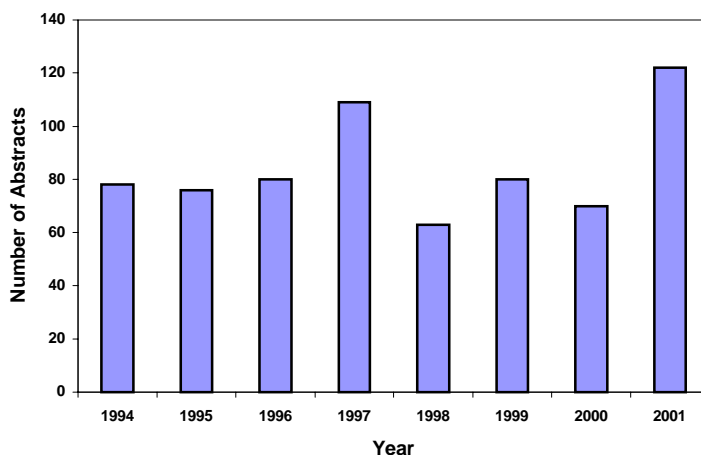


MEMBERSHIP ALERT!

DIVISION O NEWSLETTER

The desire is to have this newsletter published twice a year — one in the fall and one in spring only if enough information is available to do so. **The Spring issue** will deal primarily with the general meeting and **the Fall issue** will contain all other pertinent information to the membership particularly regarding the ASM Annual meeting. Two issues will be possible only if the membership provides suggestions and news notes for both issues. Members are encouraged to send short articles or viewpoints for inclusion in the Fall issue. Please contact the Editorial Board for any comments.

FermentOgram Editorial Board



SPECIAL THANKS!



We are indebted to the following companies which, in 2000-2001, have financially supported the Division O activities:

**BD INDUSTRIAL
ARCHER DANIELS MIDLAND CO.
KIKKOMAN CORPORATION, JAPAN
DUPONT COMPANY**

**MERCK RESEARCH LABORATORIES
NEW BRUNSWICK SCIENTIFIC CO., INC.
PFIZER, INC.
SCHERING-PLOUGH RESEARCH INSTITUTE**

ELANCO ANIMAL HEALTH

ELI LILLY & CO.

GENENCOR INTERNATIONAL, INC.

BC INTERNATIONAL

The Editorial Board is grateful to **Peter Baum, Lori A. Smith, Linda Barnes-Pretlow** and **Jennifer Mercurio** (ASM) for helping us with programming details (thanks for their patience!), to **Althea Hunt** of New Orleans for assistance in preparation of the Newsletter.

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NOMINATION FOR CHAIR, DIVISION O (Year 2002-2003)

A Nominating Committee, chaired by Dr. Rodney Bothast, USDA-ARS-National Center for Agricultural Utilization Research (e-mail: rbothast@mail.ncaur), has been appointed consisting of three division members for selecting candidates from within the division membership for election to the office of Chair-Elect. The Committee consists of Drs. Arnold Demain, Joan Bennett and Deepak Bhatnagar. The information on the proposed candidates will be provided to ASM **no later than June 1, 2002**. Please direct your suggestions and comments to any of the committee member.

Division O Fermentation and Biotechnology Officers July 1, 2001

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DIVISION O PROGRAM AT A GLANCE

We have tried to provide the correct seminar and poster information in this newsletter, but please consult your meeting program and bulletin boards at the conference site for last-minute changes in schedule or location. Please try to attend all of them.

DIVISION O MEETINGS/DIVISIONAL LECTURE

Day, Date, Time, Location	Description
Wednesday, May 22, 2002 1:15-2:15 p.m. Ballroom F, Convention Center	<i>Annual Business Meeting</i>
Wednesday, May 22, 2002 2:30 p.m. Ballroom F, Convention Center	<i>Divisional lecture</i> Dr. David Wu Bone Marrow Tissue Engineering and Molecular Control of Blood Cell Formation
Tuesday, May 21, 2002 7:00-10:00 p.m. Ballroom B, Little America Hotel	<i>Mixer</i> (Generously supported by BD Industrial)

DIVISION O SYMPOSIA

Day, Date, Time, Location	Description	
Tuesday, May 21 (8:00-10:30 am) Ballroom F; Session No. 105/O	<i>Cells in Microgravity: Problems and Prospects</i>	Division O Symposium
Wednesday, May 22, (2:30 pm) Ballroom F	<i>Bone Marrow Tissue Engineering and Molecular Control of Blood Cell Formation</i>	Division O Lecture
Wednesday, May 22 (2:30-5:00 pm) Ballroom F; Session No. 261/O	<i>Fungal Secondary Metabolism: Ecological and Evolutionary Perspectives</i>	Division O Symposium
Thursday, May 23, (8:00-10:30 am) Ballroom B; Session No. 274/O	<i>Exploring Secondary Metabolism Using Emerging Technologies</i>	Division O Symposium

DIVISION O POSTER SESSIONS

Session No., Day, Date, Time, Location	Description
40/O Monday, May 20 (10:30 a.m-12:00 noon) Poster Board Nos.: Poster Presentation No. O-1 to O-24	<i>Bioprocess, Bioproducts, & Novel Organisms</i>
69/O Monday, May 20 (1:00-2:30 p.m.) Poster Board Nos.: Poster Presentation No. O-25 to O47	<i>Biotransformation, Microbial Degradation, and Bioremediation</i>
156/O Tuesday, May 21 (1:00-2:30 p.m.) Poster Board Nos.: Poster Presentation No. O-48 to O-70	<i>Genetics and Gene Expression</i>

222/O Wednesday, May 22 (10:30 a.m.-12:00 noon)

Biotechnology and Industrial Enzymes

Poster Board Nos.:

Poster Presentation No. O-71 to O-91

STUDENT TRAVEL GRANTS (DIVISION O)

CORPORATE PARTNERS STUDENT TRAVEL GRANTS

The following students are supported by an educational grant through the ASM Corporate Partners Program

Poster Session Number/Day	Description	Student
40 Monday	Conversion of Synthesis Gas to Ethanol by Clostridial Strain P7	S.-C. Liou, The University of Oklahoma
40 Monday	Batch Culture of <i>Pseudomonas fluorescense</i> : Automated Recording and Mathematical Simulation of Growth and Product Formation Dynamics	A. Makarov, Stevens Institute of Technology
40 Monday	Purification and Characterization of Galactosidase from <i>Ruminococcus gnavus</i> : Activity against Blood Type B Antigen	J. Hata, Univ. of Missouri-Columbia, Dept. of Pathology
156 Tuesday	Molecular Characterization of the Aflatoxin Biosynthetic Cluster from <i>Aspergillus ochraceoroseus</i>	C. Bennett, University of New Orleans
156 Tuesday	A requirement for 2 methylcitrate synthase3 for sterigmatocystin biosynthesis and sexual development in <i>Aspergillus nidulans</i>	Y. Zhang, UW-Madison
156 Tuesday	Identification of the <i>rpoD</i> gene in <i>Biofidobacterium lactic</i>	J. Park, University of New South Wales
156 Tuesday	Cloning and Characterization of the <i>Clostridium beijerinckii</i> NCIMB 8052 and <i>C. beijerinckii</i> BA101 _{sol} Operons	T. Jesse, University of Illinois at Urbana-Champaign
156 Tuesday	Cloning and Expression of Genes for Thermostable Pentose Phosphate Pathway Enzymes from <i>Methanococcus jannaschii</i>	A. Hatcher, University of Minnesota, Morris
222 Wednesday	Scale-up Verification of IEFBA for Lactic Acid Recovery	A. Sosa, PROMIMI-Biotecnologia

KIKKOMAN CORP. DIVISION O STUDENT TRAVEL AWARDS

The following students are supported by an educational grant from the Kikkoman Corporation, Japan

Poster Session Number/Day	Description	Student
40 Monday	Production of carotenoid pigments by <i>Rhodococcus fascians</i>	R. Carrera-Gutierrez, Universidad Autonoma de Chihuahua
156 Tuesday	Cellular and subcellular distribution of enzymes involved in aflatoxin biosynthesis in time-dependent fractionated colonies of <i>Aspergillus parasiticus</i>	L.-W. Lee, Michigan State University

NEW BRUNSWICK SCIENTIFIC CO. DIVISION O STUDENT TRAVEL AWARDS

The following students are supported by an educational grant from New Brunswick Scientific Co., Inc.

Poster Session Number/Day	Description	Student
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69
Monday T-RFLP fingerprinting of microbial communities from
petroleum contaminated soil mesocosms treated with a
biosurfactant

N. Barengo, PROIMI Biotechnologia

STUDENT TRAVEL GRANTS (DIVISION O)

SCHERLING-PLOUGH RESEARCH INSTITUTE DIVISION O STUDENT TRAVEL AWARDS

The following students are supported by an educational grant from Scherling-Plough Research Institute

Poster Session Number/Day	Description	Student
69 Monday	Biodegradation of Brominated Biphenyls by Members of the Genus <i>Sphingomonas</i>	E. Olesnicky, Drew University

DIVISION O STUDENT TRAVEL AWARDS

The following students are supported by an educational grant from the Division O general fund donations.

Poster Session Number/Day	Description	Student
69 Monday	Widespread Anerobic PAH Biodegradation Activity in Sediments Along a Natural Salinity Gradient with Varying Contaminant Levels	S. Verthein, University of Illinois at Chicago
69 Monday	The Influence of Spent Brewer's Yeast on Cadmium and Lead Solubility	K. Atchison, University of Colorado
156 Tuesday	Citrate Catabolism by Lactobacilli in Ripening Cheese	D.-M. Ilenys, University of Winconsin-Madison

DIVISION O MEETING DETAILS

□ **DIVISION O SYMPOSIUM (Tuesday., May 21, 8:00-10:30 am)**
Ballroom F

CONVENER: *A. E. DESJARDINS, USDA/ARS, Peoria, IL*
D. BHATNAGAR, USDA/ARS/SRRC, New Orleans, LA

CELLS IN MICROGRAVITY: PROBLEMS AND PROSPECTS

CONVENERS: *N. R. PELLIS, NASA-Johnson Space Center Houston, TX*

A. L. DEMAIN, Drew University, Madison, NJ

Stachybotrys: A Trouble-Making, but Fascinating Fungus
B. B. JARVIS, Univ. of maryland, College Park, MD

Physics of Bacteria in Modified Gravity

P. TODD, Space Hardware Optimization Technology (SHOT), Inc., Greenville, IN

Effects of Space Fight on Antibiotic Production

A. E. DESJARDINS, USDA/ARS/Peoria, IL

Reactivation of Latent Viruses in Microgravity

D. KLAUS, Univ. of Colorado, Boulder, CO

Microbiology in Microgravity: Novel Approaches to Study Bacterial Pathogenesis

C. A. Nickerson, Tulane University School of Medicine, New Orleans, LA

The Bacterial Stress Response under Microgravity Conditions

A. C. Matin, Stanford University School of Medicine, Stanford, CA

□ **DIVISION O LECTURE**

(Tuesday, May 22, 2:30 pm)

Ballroom F

Bone Marrow Tissue Engineering and Molecular Control of Blood Cell Formation

J. H. D. WU, Univ. of Rochester, Rochester, NY

□ **DIVISION O SYMPOSIUM (Wed., May 22, 2:30-5:00 pm)**
Ballroom F

FUNGAL SECONDARY METABOLISM: ECOLOGICAL AND EVOLUTIONARY PERSPECTIVES

Lolines: A Weapon in Grass-Endophyte Protective Mutualisms

H. H. WILKINSON, Texas A&M University, College Station, TX

Trichothecenes: From Yellow Rain to Green Wheat

A. E. DESJARDINS, USDA/ARS, Peoria, IL

Aflatoxins: Are They Biological Weapons?

D. BHATNAGAR, USDA/ARS/SRRC, New Orleans, LA



□DIVISION O SYMPOSIUM (Thurs., May 23, 8:00-10:30 am)

Ballroom B

**EXPLORING SECONDARY METABOLISM USING
EMERGING TECHNOLOGIES**

CONVENERS: *G. A. PAYNE, North Carolina State University,
Raleigh, NC*

M. BEREMAND, Texas A&M University, College Station, TX

Multianalyte Detection Using an Electronic Taste Chip

J. T. MCDEVITT, University of Texas, Austin, TX

Chipping Away at Secondary Metabolism

M. BEREMAND, Texas A&M University, College Station, TX

**Using Genomic Tools to Help Link Sex and Secondary
Metabolism**

D. J. EBBOLE, Texas A&M University, College Station, TX

**Genomic and Metabolic Tools to Accelerate the Strain
Improvement Process in Filamentous Fungi**

J. ROYER, Microbia, Inc., Cambridge, MA

Predicting Function of Secondary Metabolic Enzymes

C. A. TOWNSEND, The Johns Hopkins University, Baltimore, MD

