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WORLD FEDERATION FOR CULTURE COLLECTIONS

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An Interdisciplinary Commission of the International Union of Biological Sciences and the International Union of Microbio-logical Societies

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### WFCC EXECUTIVE BOARD

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<p>Prof. Karel Kersters</p> <p>Rijksuniversiteit Gent</p> <p>Laboratorium voor Microbiologie</p> <p>K.L. Ledeganckstraat 35</p> <p>9000 Gent, Belgium</p> <p>Email: <a href="mailto:karel.kersters@rug.ac.be">karel.kersters@rug.ac.be</a></p>	<p>Dr. J. L. Staphorst</p> <p>Plant Protection Institute</p> <p>Agricultural Research Council</p> <p>Private Bag X134</p> <p>Pretoria, 0001, Republic of South Africa</p> <p>Email: <a href="mailto:nipbjls@plantl.agric.sa">nipbjls@plantl.agric.sa</a></p>
<p>Dr. Cletus Kurtzman</p> <p>Agricultural Research Service</p> <p>Culture Collections (NRRL)</p> <p>1815 North University Street</p> <p>Peoria, Illinois 61604, USA</p> <p>Email: <a href="mailto:kurtzman@mail.ncaur.usda.gov">kurtzman@mail.ncaur.usda.gov</a></p>	<p>Dr. Masao Takeuchi</p> <p>Institute for Fermentation</p> <p>17-85 Juso-honmachi 2-chome</p> <p>Yodogawa-Ku, Osaka 532, Japan</p> <p>Email: <a href="mailto:HBD00730@niftyserve.or.jp">HBD00730@niftyserve.or.jp</a></p>

## Ex officio

<p>Dr. Lindsay Sly (Past President)</p> <p>Australian Collection of Microorganisms</p> <p>Centre for Bacterial Diversity and Identification, Department of Microbiology</p> <p>University of Queensland</p> <p>St. Lucia 4067, Brisbane, Australia</p> <p>Tel: +61 7 365 4617; Fax: +61 7 365 4620</p> <p>Email: <a href="mailto:sly@biosci.uq.edu.au">sly@biosci.uq.edu.au</a></p>	<p>Dr. Hideaki Sugawara (Director WDCM)</p> <p>World Data Centre for Microorganisms</p> <p>Center for Information Biology</p> <p>National Institute of Genetics</p> <p>Yata 1111, Mishima, Shizuoka 411-8540, Japan</p> <p>Tel: +81 559 81 6895; Fax: +81 559 81 6896</p> <p>Email: <a href="mailto:hsugawar@genes.nig.ac.jp">hsugawar@genes.nig.ac.jp</a></p>
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## Editor Newsletter

<p>Dr. Dieter Claus</p> <p>Chemnitzer Str. 3, 37085 Göttingen, Germany, Tel.: +49 551 792653; Fax: +49 551 55791;</p> <p>(new!) Email: <a href="mailto:dclaus@gmx.net">dclaus@gmx.net</a></p>
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## WFCC COMMITTEES

<p><b>Committee on Biodiversity</b></p> <p><i>Chair:</i> Mrs. Barbara Kirsop</p> <p>Stainfield House</p> <p>Stainfield, Bourne, Lincolnshire PE10 0RS, UK</p> <p>Tel: +44 1778 570618; Fax: +44 1778 570175</p> <p>Email: <a href="mailto:bio@biostrat.demon.co.uk">bio@biostrat.demon.co.uk</a></p>	<p><b>Committee on Endangered Culture Collections</b></p> <p><i>Chair:</i> Dr. Maija-Liisa Suihko</p> <p>VTT, Biotechnology and Food Research</p> <p>P.O. Box 1501, 02044 VTT, Finland</p> <p>Tel: +358 9 4565133; Fax: +358 9 4552028</p> <p>Email: <a href="mailto:majja-liisa.suihko@vtt.fi">majja-liisa.suihko@vtt.fi</a></p>
<p><b>Committee on Education and Capacity Building</b></p> <p><i>Chair:</i> Dr. Nina Gunde-Cimerman</p> <p>Culture Collection of Fungi (MZKI), National Institute of Chemistry</p> <p>Hajdrihova 19, 61115 Ljubljana, Slovenia</p> <p>Tel: +386 61 176 03 35; Fax: +386 61 125 92 44</p> <p>Email: <a href="mailto:nina.gunde.cimerman@ki.si">nina.gunde.cimerman@ki.si</a></p>	<p><b>Committee on Publications and Publicity</b></p> <p><i>Chair:</i> Dr. Robert Samson</p> <p>Centraalbureau voor Schimmelcultures</p> <p>P.O. Box 273, 3740 AG Baarn, The Netherlands</p> <p>Tel: +31 3554 81211; Fax: +31 3554 16142</p> <p>Email: <a href="mailto:samson@cbs.knaw.nl">samson@cbs.knaw.nl</a></p>
<p><b>Committee on Patents</b></p> <p><i>Chair:</i> Dr. Dagmar Fritze</p> <p>DSMZ-Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH</p> <p>Mascheroder Weg 1b, 38124 Braunschweig, Germany</p> <p>Tel: +49 531 2616 254; Fax: +49 531 2616 418</p> <p>Email: <a href="mailto:dfr@dsmz.de">dfr@dsmz.de</a></p>	<p><b>Committee on Postal, Quarantine and Safety Regulations,</b></p> <p><i>Chair:</i> Dr. David Smith</p> <p>International Mycological Institute</p> <p>Bakeham Lane, Egham, Surrey TW20 9TY, UK</p> <p>Tel: +44 1784 470 111; Fax: +44 1784 470 909</p> <p>Email: <a href="mailto:d.smith@cabi.org">d.smith@cabi.org</a></p>

**Committee on World Data Centre for Microorganisms**

*Chair:* Dr. Lindsay Sly

Australian Collection of Microorganisms,  
Centre for Bacterial Diversity and Identification, Department of Microbiology  
University of Queensland

St. Lucia 4067, Brisbane, Australia

Tel: +61 7 365 4617; Fax: +61 7 365 4620;

Email: [sly@biosci.uq.edu.au](mailto:sly@biosci.uq.edu.au)

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**WFCC MATTERS**

**Visit the WFCC and WDCM Homepages**

**THE WORLD FEDERATION FOR CULTURE COLLECTIONS (WFCC)**

a Network of Specialist Microbiologists

<http://www.wfcc.nig.ac.jp/>

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**WFCC WORLD DATA CENTRE FOR MICROORGANISMS (WDCM)**

<http://wdcn.nig.ac.jp/>

**Guide to WDCM and Supporting Organizations Sequence and Phylogenetic Analysis**

**Locator of Culture Collections and Strains Genome Projects**

Databases Provided by Individual Culture Biodiversity

Collections and Cell Banks Other

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World Data Centre for Microorganisms Symposium

*Microbial Resources Centers in the 21st century: New Paradigms*

Kudankaikan, Tokyo, Japan

February 16th, 1999

<<http://wdcm.nig.ac.jp/prog.html>>

Organized by:

WFCC-MIRCEN World Data Centre for Microorganisms (WDCM)

Sponsors:

Inoue Foundation for Science; Kato Memorial Bioscience Foundation;  
The Naitou Foundation; The Kajima Foundation; The Asahi Glass Foundation

Endorsed by:

Asia-Pacific Bioinformatics Network (APBioNet); Japan Society for Culture Collections (JSCC);  
Japan Society for Information & Knowledge(JSIK);  
MESSC National Institute of Genetics, Center for Information Biology

Supported by:

United Nations Educational, Scientific and Cultural Organization (UNESCO);  
Science and Technology Agency, Japan; Ministry of International Trade and Industry, Japan;  
Human Science Foundation of Japan; Ministry of Agriculture, Forestry and Fisheries, Japan;  
The Environment Agency

Organizing Committee

Dr. Jan De Brabandere (Belgium), Dr. Raymond H. Cypess (United States of America)  
Dr. Alan Doyle (United Kingdom), Dr. Dirk van der Mei (The Netherlands)  
Dr. Erko Stackebrandt (Germany), Prof. Hideaki Sugawara (Chair, Japan)  
Dr. Makoto Watanabe (Japan)

## Introduction

The WFCC-MIRCEN World Data Centre for Microorganisms (WDCM) is pleased to invite you to participate in their symposium "Microbial Resources Centers in the 21st century: New Paradigms". Based on the presentations of its international participants, the symposium will develop a world-wide vision for culture collections in the age of genomics and biodiversity.

The WDCM is a component of the WFCC (World Federation for Culture Collections) and also a center in the UNESCO MIRCEN (Microbiological Resource Centers) network. The Centre was founded at the University of Queensland, Australia in the 1960s and is now hosted by the National Institute of Genetics, Japan [website <http://wdcm.nig.ac.jp/>], providing on-line databases on culture collections and their holdings and a search engine named AHMII for distributed databases on the Internet.

The WDCM has also developed software packages for data management and analysis of microbial data and welcomed some trainees in the field of bioinformatics. This international symposium is a new aspect of the WDCM activities, which are also within the framework of the UNESCO Network of Microbial Resources Centres (MIRCENs).

### Major topics

The symposium will be mainly structured around different institutional presentations. However, the following major topics will be discussed:

**Research and development:** linkage with academia, linkage with industry, systematics, rapid identification procedures, databases/informatics, capacity building;

**Scope of holdings:** effects of genome projects and biodiversity projects, nonculturable strains, evaluation of genomics, symbiotic species, micro-arrays/chip technology;

**Quality control:** quality assurance and management, standardization of methodology, standardization and minimum requirements of data, ISO series requirements;

**International coordination:** mechanism for institutional networking, computer networking, redundancy, load-balance and safe deposit, postal, quarantine and safety regulations

## Program (as of February 4th, 1999)

8:30 -	Registration
9:10 - 9:20	Opening - Prof. Hideaki Sugawara, WDCM
Session I	<i>Chair: Dr. David Smith</i>
9:20 - 9:50	<i>Prof. Kazuo Komagata, TUA: Microbial Resources Centers in Japan and Asia</i>
9:50 - 10:00	Short Break



Session II	<i>Chair: Dr. Jennie C. Hunter-Cevera</i>
10:00 - 10:30	Prof. Takashi Gojobori, NIG: Impact of Genomics on Taxonomy
10:30 - 11:00	Dr. Erko Stackebrandt, DSMZ: DSMZ, a Government Supported Culture Collection, dedicated to diversity, quality and research
11:00 - 11:30	Break
Session III	<i>Chair: Dr. Erko Stackebrandt</i>
11:30 - 12:00	Dr. Cletus P. Kurtzman, NRRL: A Government Supported Culture Collection
12:00 - 12:30	Dr. Raymond H. Cypess, ATCC: A Self-supporting Collection
12:30 - 13:30	Lunch
Session IV	<i>Chair: Prof. Kenneth E. Sanderson</i>
13:30 - 14:00	Dr. Dirk van der Mei, CBS: A Culture Collection at the Crossroad of Science, Politics and Economics
14:00 - 14:30	Ms. Françoise Symoens, BCCM: Belgian Co-ordinated Collections of Micro-organisms - BCCM: a network of publicly financed not-for-profit collections
14:30 - 15:00	Break
Session V	<i>Chair: Dr. Makoto Watanabe</i>
15:00 - 15:30	Dr. Alan Doyle, The Wellcome Trust: The New Arrangement to Coordinate UK Collections and the CABRI Project
15:30 - 16:00	Dr. David Smith, IMI: CAB International Bioscience Genetic Resource Collection: Challenges for the Future
16:00 - 16:30	Break
16:30 - 17:30	Summary and recommendations <i>Chair: Dr. Lindsay Sly</i>
18:00-20:00	Get-together

Contact: URL address <http://wcdm.nig.ac.jp/prog.html>

E-mail address [yfujisaw@genes.nig.ac.jp](mailto:yfujisaw@genes.nig.ac.jp)

FAX +81-(0)559-81-6896

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# WFCC Committee Reports

## BIODIVERSITY COMMITTEE

### [1] REPORT ON HALIFAX WORKSHOP

The interim report on the workshop organised by the WFCC EB and Biodiversity Committee (held in Halifax Nova Scotia, August 1998) on the economic value of microbial genetic resources has been prepared and is available online from the WFCC Web Site. The URL is:

<http://wdcm.nig.ac.jp/wfcc/Halifax98.html>.

This interim report contains a summary of the workshop, the Recommendations, Programme, List of Participants and the Abstracts. Some of the abstracts are extended versions, but some are still short abstracts. The final version of the Report will contain all extended abstracts that have been made available by the contributors plus any associated background information. This will replace the interim version online and will also be printed and widely distributed.

### [2] PRE-CBD MICROBIAL EX-SITU DEPOSITS

A letter has been received by the President of the WFCC from the CBD Secretariat informing the Federation that following decision IV/8 on access and benefit sharing taken by the Parties at the Fourth Conference of the Parties (COP4), the Secretariat is requested to prepare a background document on pre-CBD ex-situ deposits and the implementation of measures to promote benefit sharing arrangements. The background document will be presented at the CBD intersessional meeting to be held from 7-9 June 1999, before its submission for consideration by COP5. The Secretariat requests support in providing information on this issue from the WFCC.

At present the CBD applies to post-CBD resources only, but there are moves by some to extend compliance with the CBD to pre-CBD deposits as well. While this would require agreement from the Parties to the Convention, it is important that the WFCC members consider the practicability and consequences of such compliance.

There are two issues to consider.

Do the collections have the information on pre-CBD deposits needed in order to apportion benefits?

If so, do the collections have the resources to meet the requirements?

It may be that some collections have the same level of information (depositor, country of origin, date etc) on pre-CBD deposits as with the post-CBD deposits so that compliance may not be a problem. With other collections it may be that the required information is not, and has never been, supplied to the collection. In these cases compliance will be impossible.

The President of WFCC is writing to the CBD Secretariat suggesting that these issues be discussed at two forthcoming international meetings (OECD meeting in Tokyo, February 1999; MOSAICC meeting in Brussels, February 1999). In addition, the WFCC could provide an interim summary on the numbers and level of information available on pre-CBD deposits so that at least the practicability of compliance with any future decision can be incorporated into the Secretariat report to COP5. To this end, the Biodiversity Committee would be willing to receive brief indications about the level of information available and to compile this for the CBD Secretariat.

Collections willing to support this effort could send a note to [barbara@biostrat.demon.co.uk](mailto:barbara@biostrat.demon.co.uk) (Fax: +44 1778 570175) with the following information:

Name of Collection:

Country in which collection is resident:

Approximate number of pre-CBD deposits (pre 1993): [ <100; >100; >1000; other ]

Whether the following information is likely to be available: country of origin; name of depositor; date of deposit: [ All available; Some available; None available ]

Comments: eg on type of data available; manpower required to get full data; data on cards/in digital format.

This information will allow the WFCC to give the CBD an indication of the practicability of any likely future need for compliance and the extent of the workload for which support would be required in order to cooperate. Whether collections are willing to comply in extending CBD compliance to pre- CBD deposits (as the Botanical Garden, Kew, has agreed) is a matter for them and their governments. It should be stressed that to date no decision has been made about extending compliance to pre-CBD deposits.

Barbara Kirsop

Chair, Committee on Biodiversity, Bioline Publications

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## The need to work towards an endangered culture collection rescue programme

Peter N Green, Curator NCIMB

Although there are around 600 culture collections listed in the World Data Centre for Microorganisms (WDCM), there are undoubtedly many more unknown to the scientific community at large. Some of these collections will be highly specialised and perhaps the lifetime effort of a particular scientist. Alternatively they may be an industrial or an in-house collection which has served or is still serving a particular R+D function.

Many of the service or national collections will be government supported either directly by a grant or indirectly through their host Institutions' budget. Indeed it is widely recognised and accepted (though not always practised) that the professional Curation of a major culture collection without government or industrial support is unsustainable. While many of our national or service collections are finding difficulty in attracting or retaining viable funding, the pressures are arguably more acute on many of the private collections which exist. Certainly many would perceive these private collections as being more susceptible

to loss of support and consequently at greater risk. Although one tends to hear of the larger or more prestigious private collections seeking alternative storage or management facilities, realistically there are many smaller collections whose fate with the autoclave would appear unavoidable if action is not taken on their behalf. As it may already be too late for some, a pro-active strategy on behalf of both the WFCC via its endangered collections committee, as well as individual national or service collections, has to be implemented before the potentially valuable genetic resources held in these threatened oases of biodiversity are lost forever.

While bodies such as the WFCC endangered collections committee can offer support and advice, many may be unaware of its existence, or view it as sympathetic but impotent. So what can be done to help endangered collections? Possibilities are limited. Certainly organisations such as the WFCC can raise their profile in this area, and reaffirm and advertise their good offices and policies with regard to helping endangered collections (either in situ or via relocation to a new home). However, the major stumbling block is more often than not financial. The WFCC (or indeed national/service culture collections) have no means of directly funding rescue operations. Be this rescue a visit to assess and help secure the collection in situ or investigate its relocation. Clearly money has to be found from some quarter to allow such biodiversity to remain in a genetic resource centre, and also to allow, if possible, access to that resource for the wider scientific community. The ideal solution is for the endangered collection to remain on-site, or at the very least, within its country of origin. This should always be viewed as the preferable option and initial assistance should be with a view to achieving that end. However, there will be occasions when this is not possible and consequently alternatives such as transfer of the endangered collection is the only realistic option.

When considering such rescue operations, culture collections whose only option is transfer to a service collection, can be broadly divided into two categories.

#### (a) Industrial Collections

Industrial collections, which are often the result of a Companies R+D programme for example, may no longer be required due to change of policy or streamlining of the organisation, or may be deemed uneconomic to maintain in-house. Nevertheless, the host organisation may not wish the collection be destroyed or permanently lost in light of both present and possible future R&D policies. For such collections a possible option is for an appropriate service collection to relocate and maintain them. The relocated collection can, for a fee, either be mothballed after removal, or can be maintained on a cost effective basis agreed between the Institution involved and the recipient collection. In either case the onus to pay for this lies with the industrial partner. Such arrangements can beneficially expand the resource base of the recipient collection and at the same time allow more economic use of the industrialists resources. Such industrial collections can either be maintained for the donor as a closed collection or be made available to the user community via the host collection.

#### (b) Private collections

As already mentioned private collections or collections without any obvious means of funding or sustainability are often perceived as being at greater risk of extinction than are industrial collections. This may or not be true. Nevertheless, in order to save or maintain these collections, alternative sources of funding have to be found. So far such sources have been spectacular by their absence.

While rain forests and Pandas are politically sexier or cuddlier than culture collections their value in terms of biodiversity is no more or less than the humble bug. Government and international funding agencies need to be re-visited and made more fully aware of this and the consequences of neglect. Similarly industry should voluntarily adopt a more responsible role in an effort to repay the legacy owed as a result of its microbial exploitation of the environment. While the Convention on Biological Diversity (CBD) seeks to protect the sovereign rights of the country of origin of new isolates and to offer some form of recompense for their removal and exploitation, rarely is any such compensation offered in lieu of the tasks

performed by culture collections who maintain these organisms for future generations of scientists and researchers. This imbalance needs to be addressed.

Strenuous and/or renewed efforts have to be made to both charitable organisations, industrial representatives and commercial funding bodies both nationally and internationally to provide additional, substantial and ongoing financial support to save these global microbial resources. In order to achieve this, both individual culture collections and organisations such as the WFCC, should have a clear policy on the options available to endangered or outsourcing culture collections who seek advice or assistance. They should also be more involved in the pro-active advertising of these policies as well the various fundraising initiatives required to support them. In particular, they both should:

Formulate a clear policy on endangered culture collection management.

Advertise their policy and any provisions they can offer via relevant collection/ WFCC literature and web sites.

Coordinate funding campaigns via various funding bodies at both national and international level.

Provide advice and guidance to endangered collection managers.

Have a rapid response mechanism for crisis management.

Over the coming months the WFCC endangered collections committee will be working towards achieving these goals. As a start to this process I would invite anyone with concerns or suggestions as a result of this document, bright ideas about national or international sources of funding; or alternatively who can help source industrial or private sector finances to please contact the author at the address below. This will allow committee to incorporate your ideas and views as it works towards a meaningful and structured policy which can deliver real help where it is most urgently required.

Address: NCIMB Ltd.

23 St Machar Drive, Aberdeen AB24 3RY, UK  
Tel: 01224 273332, Fax: 01224 272461

Email: [ncimb@abdn.ac.uk](mailto:ncimb@abdn.ac.uk)

Dr. Green is a member of the *WFCC Endangered Collection Committee*.

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## IN MEMORIAM

Jozef De Ley (1924 - 1997)

Professor De Ley, an eminent Belgian microbiologist, passed away on November 16, 1997. Born in 1924 in Gent, Jozef De Ley studied chemistry at the State University of Gent. He obtained the PhD degree in 1949

and the Aggregate for Higher Education in 1958, with a fundamental contribution on novel aspects of the oxidative metabolism of carbohydrates by micro-organisms. Jozef De Ley performed research at the laboratory of A.I. Virtanen (Helsinki, Finland), the Microbiology Laboratory (A.J. Kluyver) in Delft, the Netherlands, and the Department of Bacteriology (M. Doudoroff) at the University of California in Berkeley, U.S.A. He was the founder of the Laboratory of Microbiology at the Faculty of Sciences of the University of Gent, where research initially focused mainly on comparative aspects of bacterial metabolism, leading to the discovery of new enzymes, new metabolites and pathways. In 1961, a half-year sabbatical visit to the Department of Microbiology at the University of Illinois in Urbana, U.S.A. stimulated him and some staff-members in Gent to start investigations on the genomic relationships of various groups of Gram negative bacteria. This was carried out with the aid of molecular techniques such as DNA:DNA hybridisations and mol% G+C determinations of genomic DNA. The optimisation and standardisation of the DNA:rRNA hybridisation technique, emphasising Tm(e) as the relevant taxonomic parameter, were the start of a comprehensive phylogenetic study of the *Proteobacteria*, resulting in numerous publications (e.g. in International Journal of Systematic Bacteriology) and a growing scientific recognition. The collaboration and contacts with Peter Sneath's group (Leicester, UK) led to the introduction of numerical treatment of microbiological data in Gent, where De Ley advocated the polyphasic approach in bacterial taxonomy.

Jozef De Ley was visiting professor at many foreign universities and was frequently invited to speak at international congresses and symposia. He was also member of several taxonomic subcommittees of the ICSB.

The numerous bacterial strains that were investigated in De Ley's laboratory, were carefully preserved by lyophilisation, and formed the basis of a public service bacterial culture collection, nowadays operating under the acronym BCCM™/LMG.

De Ley and his team made numerous contributions to the international literature on bacterial biochemistry and taxonomy. The genus *Deleya* and the new species *Sulfurospirillum deleyianum* were named after him. In the 1984 edition of the taxonomic 'bible' (Bergey's Manual of Systematic Bacteriology) De Ley was co-author of the chapters on the genera *Acetobacter*, *Agrobacterium*, *Alcaligenes*, *Frateuria*, *Gluconobacter* and *Zymomonas*. He was also author or co-author of a number of chapters in the second edition of a four-volume standard work named 'The Prokaryotes'.

De Ley received the Bergey Award in 1985 and the C.B. van Niel International Prize 1990 - 1994 for his numerous contributions to bacterial systematics. He retired in 1989.

Jozef De Ley was highly energetic and determined; he was a hard-working, conscientious scientist and teacher, who stimulated many Belgian and foreign PhD students. He devoted the greater part of his lifetime to microbiology. The microbiological community will remember Jozef De Ley as one of the pioneers of modern microbial taxonomy.

Karel Kersters

Laboratorium voor Microbiologie ,Department of Biochemistry,  
Physiology and Microbiology ,Universiteit Gent

Ledeganckstraat 35 B-9000 Gent, Belgium

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## FOCUS ON CULTURE COLLECTIONS

### ATCC: Preparing for the Future in a New Home

Elizabeth Brown, ATCC

When ATCC moved into its facility in Rockville, Maryland, 34 years ago, the custom- designed building was hailed as the "permanent facilities" of the organization. ATCC's subsequent growth, however, has paralleled that of research in the biosciences during the past two decades. The organization has outgrown those "permanent facilities," and in March of 1998 moved to a new state-of-the-art laboratory in Manassas, Virginia. Accompanying the move is a renewed commitment to serving scientists throughout the world by distributing standardized cultures and expanding programs to provide a wider range of services for the 21<sup>st</sup> century.

#### Facility

The new facility is a fitting home for the world's largest culture collection. The storage area for the repository itself has 8,200 square feet (770 square meters) of storage space and includes 55 ultra-low mechanical freezers and space for 65 vapor-phase liquid nitrogen freezers. A back-up power generator stands ready in case of a power failure. Adjacent to the repository is the manufacturing area, which contains the media preparation laboratory, freezing and freeze-drying equipment, and a shipping and receiving area.

The laboratory area, with a specialized air handling system and Biosafety Level 2 and 3 containment stations, surrounds a central core with instrumentation rooms and environmental chambers to provide support activities for the various departments. A multi-level security system is in place throughout the plant, featuring card access and continuous monitoring of critical building and equipment functions.

ATCC also occupies space in a nearby building shared with George Mason University. Research laboratories and bioinformatics staff are located there.

The new facility provides the infrastructure for ATCC to expand in ways that were not possible in Rockville. There are three primary areas in which the organization is able to grow: collections, research, and grants and contracts.

#### Expanding the Collections

The various collections within ATCC are expanding to accommodate current trends in bioscience research. Bacteriology is continuing its goal of representing the majority of described genera by acquiring type strains. Environmentally important prokaryotes are another area of interest and ATCC has recently acquired numerous extremophiles.

Cell Biology is performing further characterization and study of its current collection as well as increasing accessions. By adapting molecular tools to the study of cell lines, Dr. Yvonne Reid and Scott Durkin are using short tandem repeat loci to improve characterization of ATCC's human cell lines. Dr. Debra Boles has compiled a list of ATCC's colorectal cancer lines that have p53 and APC mutations.

Through collaborations with other laboratories, the Molecular Biology Program offers clones from 41,000 human genes, which represent all of those presently known and about half of the genes in the genome. The collection also offers the complete genome of several bacteria.

With nearly 30,000 strains of fungi, Mycology continues to add to the variety of fungi in its collection. It is currently acquiring yeast transformation hosts and other species of importance to industry and biotechnology. Recent additions to Virology include a human herpes virus that is adapted to continuous cell culture and several new chlamydia species. Protistology is continuing to acquire and distribute disease-causing protozoans in support of research in these serious diseases.

## Regulatory Affairs

We have reorganized our Regulatory Affairs/Quality Assurance Program in order to facilitate internal quality assurance and regulatory documentation efforts, as well as monitor regulations that pertain to ATCC products. Along with new computer software for ordering and inventory control, the RA/QA program has streamlined regulatory compliance procedures.

## Research

One goal of the relocation was to provide space for research. In the new facility and the building shared with George Mason University, ATCC now has several more laboratories devoted solely to that purpose.

Dr. David Emerson is studying lithotropic iron-oxidizing bacteria and recently described novel species of these organisms. Dr. Thomas Nerad of Protistology is researching the taxonomy and systematics of *Acanthamoeba* and heteroloboseans (amoeboflagellates).

Research areas in the Cell Biology Program include establishment of pufferfish cell lines as models for genome studies.

## Grants and contracts

Perhaps the best indicator of ATCC's expanding programs is the increase in grants and contracts that have been awarded, especially in the category of repository management.

Shortly before the move to the new facility, ATCC won a contract to manage the repository of materials and data for the Centers for Disease Control and Prevention (CDC). At the time, this was the largest contract in ATCC's history, and it involved relocation of ATCC employees to the Georgia site to hire employees, inventory existing materials, and set up the database.

Recently ATCC was awarded another outstanding contract: managing an international repository of malaria materials for the National Institute of Allergy and Infectious Diseases, an agency within the National Institutes of Health (NIH). This repository was established by the Multilateral Initiative on Malaria in response to the continuing threat that malaria poses throughout the world. This project, known as the Malaria Research and Reference Reagent Repository, will offer biological materials such as parasites, vectors, and host tissues; a comprehensive electronic database and print catalog; and training in the form of workshops, meetings, and conferences. Dr. Yimin Wu has joined ATCC to supervise the repository, and an advisory group of scientists from throughout the world will guide the acquisition of materials.

With funding from a three-year grant from NIH, ATCC is the new home to the Yeast Genetic Stock Center (YGSC), formerly at the University of California, Berkeley, in the laboratory of Dr. Robert K. Mortimer. Composed of approximately 1,200 strains of *Saccharomyces cerevisiae*, the YGSC houses strains bearing mutations useful in the research of fungal geneticists, medical and industrial mycologists, molecular geneticists, and other researchers. ATCC has engaged a yeast geneticist, Dr. K.L. Tom Gu, to curate the collection and conduct associated research. The YGSC will be maintained as a distinct entity within ATCC.

## Future



With long-term facility issues now solved and the collection materials safely settled in a new home, ATCC can look forward to enlarging the collections and improving customer service. Our immediate challenges are similar to those faced by many nonprofit collections. We must secure funding sources; the federal government provides only 10% core support of our total collection activities spending. It is also our goal to continue to evolve with bioscience to best serve the needs of scientists.

We approach our 75<sup>th</sup> anniversary in the year 2000 with a balance of dedication to our historical repository mission and a commitment to use our facilities and technology to support cutting-edge biotechnology research.

*ATCC's new address:*

10801 University Blvd. ,Manassas, VA 20110-2209

Phone: 703-365-2700

E-mail: [news@atcc.org](mailto:news@atcc.org)

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## The Culture Collection of Conjugatophyceae (SVCK) at the University of Hamburg, Germany

Monika Engels

More than 30 years ago a culture collection of Conjugatophyceae was established at the Institut für Allgemeine Botanik der Universität Hamburg (Engels 1995, Engels & Mix 1980, Mix 1973). Starting point had been a few strains, that were object of physiological research in a working group, headed by Horst Drawert at the Pflanzenphysiologisches Institut der Freien Universität Berlin. In 1959 this team moved from Berlin to Marburg, taking 7 of the strains with them. One member of this group was Marianne Mix, who started intensive research in this group of algae, namely as far as cell- morphology and taxonomy were concerned. For these purposes more strains were required, so that the number of cultures increased very strongly in the years from 1962 to 1964. This was possible, not only by the intensive collecting activity of Mix, but also by the support of L. Kies, L.A. Whitford, D. Mollenhauer and a lot of other scientists, that sent samples from places all over the world or offered their strains.

The enlargement of the collection continued after moving from Marburg to Hamburg in 1965. Nowadays the collection accommodates about 500 strains of Conjugatophyceae, world wide collected. In the last years the SVC is indebted especially to K. Handke, who enriched the collection with a lot of very rare species and to D.Czarnecki entrusting us his strains.

In all this time there has been not only an increase in strain number, but also in the number of projects, dealing with strains of our collection. To investigations in taxonomy, morphology and cell-physiology (f. e. Nossag & Kasprik 1993) other projects have been added, like research in sexuality (Handke 1996) and karyology of the Conjugatophyceae (Kasprik 1973) as well as in molecular biology by the teams of B.Surek (Surek & al.1994) and R.W. Hoshaw. Of course the collection always has been used for identification purposes and comparisons in taxonomic work, too. A complete list of papers, deriving from strains of the SVCK is published together with the data of the strains (Engels 1995 and in the internet, see below).

Beside that, there is a tradition in using the strains of the SVCK for education in lessons of universities and

schools. This offer is completed by training courses for graduated students for example in 1997 at the university in Göttingen (sponsored by the Niedersächsische Akademie der Wissenschaften).

This development was supported by becoming a member of the WFCC in 1978, where the collection runs under the number 480 and the abbreviation SVCK. The strains are listed in the World Data Centre (WDC) in Mishima (Japan) and since 1996 their data are published in the internet: [http://www.rrz.uni-hamburg.de/biologie/b\\_online/d44\\_1/441.htm](http://www.rrz.uni-hamburg.de/biologie/b_online/d44_1/441.htm)

In the last years the conservation of biological diversity became a central concern of biologists and environmentalists. One way to protect the genetic diversity of the bio-sphere is the "ex-situ"- conservation of organisms in culture collections (Hawksworth 1996, Hawksworth & Colwell 1994). To this goal the SVCK makes a contribution, as the natural environment of most of the members of the Conjugatophyceae, oligotrophe swamps, moors and bogs with low pH, are very much endangered or have even been lost, world wide.

In Germany, for example more than 60% of the taxa of the Conjugatophyceae are endangered or very strongly endangered (Gutowski & Mollenhauer 1995). An investigation in the region of the town Hamburg proves that 52% of the species listed in former years could not be found again (Handke & Kies 1990). In this sense the Culture Collection of Conjugatophyceae has the function of a reserve, giving a last resort for endangered species of this taxonomic group.

On the other side the number of cultured strains is limited by the amount of work involved in serial subculture. Therefor new methods of culture technology are investigated. There is some evidence, that cryopreservation might be a useful tool for the SVCK. First results demonstrate, that a large number of our strains survive freezing and storage in liquid nitrogen (Engels 1984, 1997, 1998, Morris & al. 1986). But it will still need a long time to find an optimal freezing protocol for each of the strains.

#### References:

Engels, M., 1984: Untersuchungen zum Tiefgefrieren von Kulturen von *Cylindrocystis brebissonii* De Bary (Conjugatophyceae, Chlorophyta). - Mitteilungsband der Botaniker Tagung in Wien, 1018.

Engels, M., 1995: Liste der Sammlung von Conjugaten-Kulturen (SVCK) am Institut für Allgemeine Botanik der Universität Hamburg. - Mitt. Inst. Allg. Bot. Hamburg 25, 65-98.

Engels, M., 1997: Cryopreservation of algae, with special reference to the Conjugatophyceae, Chlorophyta. - Infusionstherapie und Transfusionsmedizin 24, 384.

Engels, M., 1998: Influence of cell morphology on the success of cryopreservation in the Zygnematophyceae. - Cryo-Letters 19, 207-208.

Engels, M. & Mix, M., 1980: 1. Nachtrag zur Liste der Sammlung von Conjugaten-Kulturen im Institut für Allgemeine Botanik der Universität Hamburg. - Mitt. Inst. Allg. Bot. Hamburg 17, 165-171.

Gutowski, A. & Mollenhauer, D., 1996: Rote Liste der Desmidiaceen Deutschlands. Bundesamt f. Naturschutz, Bonn-Bad Godesberg, Schriftenreihe f. Vegetationskunde 28, 679-708.

Handke, K., 1996: Zygosporien Saccodermer und Placodermer Desmidiaceen (Conjugatophyceae, Chlorophyta) in Aufsammlungen der Jahre 1971-1995 aus Europa, Asien und Amerika. Mitt. Inst. Bot. Hamburg 26, 5-129.

Handke, K. & Kies, L., 1990: Bestandsaufnahme und Kartierung der Desmidiaceen (Zieralgen) von Hamburg. - Gutachten im Auftrag der Umweltbehörde/Naturschutzamt Hamburg.

Hawksworth, D. L., 1996: Microbial collections as a tool in biodiversity and biosystematic research.- in: Culture Collections to Improve the Quality of Life. Proc. VIII.th Int. Congr. Cult. Coll., Veldhoven, 26-35.

Hawksworth, D.L. & Colwell, R.R., 1992: Microbial diversity 21: Biodiversity amongst microorganisms and its relevance. - Biodiversity and Conservation 1, 221-226.

Kasprik, W., 1973: Beiträge zur Karyologie der Desmidiaceen-Gattung *Micrasterias*. - Beih. Nova Hedwigia 42, 115-138.

Mix, M., 1973: Liste der Sammlung von Conjugaten-Kulturen im Institut für Allgemeine Botanik der Universität Hamburg. - Mitt. Staatsinst. Allg. Bot. 14, 136-169.

Morris, G.J., Coulson, G.E. & Engels, M., 1986: A cryomicroscopic study of *Cylindrocystis brebissonii* De Bary and two Species of *Micrasterias* Ralfs (Conjugatophyceae, Chlorophyta) during freezing and thawing. - J. Exp. Bot. 37, 842-856.

Nossag, J. & Kasprik, W., 1993: The movement of *Micrasterias thomasiana* (Desmidiaceae, Zygnematophyceae) in directed blue light.- Phycologia 32, 332-337.

Surek, B., Beememann, U., Melkonian, M. & Bhattacharya, D., 1994: Ribosomal RNA sequence comparison demonstrate an evolutionary relationship between Zygnematales and Charophytes. Pl. System. Evol. 191, 171-181.

Address:

Sammlung von Conjugaten-Kulturen, Institut für Allgemeine Botanik der Universität

Ohnhorststr. 18, D-22609 Hamburg, Germany

Voice:+49-040-822 82 321, Fax:+49-040-822 82 254

e-mail:[engels@botanik.uni-hamburg.de](mailto:engels@botanik.uni-hamburg.de)

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## NEWS FROM AND FOR CULTURE COLLECTIONS

### CODATA Conference and ICSU General Assembly

The WFCC is a co-opt member of the Committee on Data for Science and Technology (CODATA) of the International Council of Scientific Unions (ICSU). The 16<sup>th</sup> Inter-national CODATA Conference and the 21<sup>st</sup> ICSU General Assembly took place in New Delhi on 8-14 November, 1998. Professor Hideaki Sugawara introduced the experience of WDCM in the use of information highways for biology and biotechnology. The activities of WFCC were described in the report on Bioscience by Dr. Karen Wilson who is the delegate

of the International Union of Biological Sciences (IUBS). The next meeting will be held in Torino, Italy in 2000.

Address change: Dr. Alan Doyle, Secretary, WFCC

The Wellcome Trust

183 Euston Road  
London NW1 2BE Great Britain  
Tel: + 44 171 611-8888, Fax: +44 171 611-854

## OECD Working Party for Biotechnology(WPB)

At its 6<sup>th</sup> session (24-25 February 1998) the OECD Working Party for Biotechnology (WPB) agreed to set up a Steering Group to develop and approve the programme for the OECD Workshop on Scientific and Technological Infrastructure (Support for Biological Resources Centers). The Steering Group (Chair: Prof. Hideaki SUGAWARA) developed a draft programme, which was approved by the OECD WPB. The workshop is on microbial resources centres (microorganisms, cell lines, viruses, plasmids, cDNA, gene libraries and relevant databases/informatics) and is held on 17-18 February 1999 in Tokyo, Japan.

It is a closed meeting for the member countries of OECD WPB. However, anyone can contribute so-called room-documents to the workshop.

The Workshop follows the WDCM symposium on "Microbial Resources Centers in the 21st century: New Paradigms" which is held on February 16<sup>th</sup> (see <http://wdcm.nig.ac.jp/prog.html> and the announcement above).

Contact: Prof. Hideaki Sugawara (Director WDCM)

World Data Centre for Microorganisms  
Center for Information Biology, National Institute of Genetics  
Yata 1111, Mishima, Shizuoka 411-8540, Japan  
Tel: +81 559 81 6895; Fax: +81 559 81 6896  
Email: [hsugawar@genes.nig.ac.jp](mailto:hsugawar@genes.nig.ac.jp)

The workshop "Microbial Resource Centers and Sustainable Development in the Americas" was held at the new facilities of the American Type Culture Collection (ATCC), May 28-29, 1998. The workshop organized by ATCC in collaboration with the Tropical Culture Collection (CCT-Brazil) was funded by the Organization of American States (OAS) and co-sponsored by WFCC. Further information on the workshop goals, key discussion issues, recommendations and background documents are available at <http://www.bdt.org.br/bdt/oeaproj/micwks>.

The workshop "Biosafety in Microbiology and Culture Collections" organized by the IberoAmerican Network for Biotechnological Development (CYTED-REVYTED) and the Argentina-Brazil Biotechnology Center (CABBIO) was held in Buenos Aires, Argentina, October 14-16. Among the key issues discussed at the meeting were the procedures for distribution of biological material, biosafety and quality control in culture collections and laboratories, the establishment of International Depository Authorities (IDA's) in Latin America and the coordinated effort to consolidate the Argentinian Network of Culture Collection. At the meeting the third edition of the National Catalogue of Strains was released, with information on

strains held at 9 Argentinian collections. For further information on the meeting recommendations please contact:

Dr Faustino Siñeriz, PROIMI, Tucuman, Argentina.

Fax: 081-344 667, E-mail: [fsineriz@proimi.edu.ar](mailto:fsineriz@proimi.edu.ar)

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## NEW CATALOGUES AND DATABASES OF CULTURE COLLECTIONS

List of Cultures 1998, Animal Cell Lines, 5<sup>th</sup> edition, Edited by Touho Yoshida and Motonobu Satoh, Institute for Fermentation (IFO), Osaka, 17-85, Juso-honmachi 2-chome, Yodogawa-ku, Osaka 532-8686, Japan.

Now Available - Catalogue of the University of Alberta Microfungus Collection & Herbarium(UAMH), 3rd Edition 1998. Price \$25 US except Canadian orders [includes Catalogue, mailing & taxes). Order through internet site <http://www.devonian.ualberta.ca/uamh>) or by email: [lynne.sigler@ualberta.ca](mailto:lynne.sigler@ualberta.ca)

The Japan Society for Culture Collections (JSCC), the former Japan Federation for Culture Collections, has published the sixth edition of JSCC Catalogue of Cultures in November, 1998. The catalogue includes 3,060 strains of bacteria, 70 archaea, 4,381 fungal and 509 algal strains and some protozoa and viruses available at the 23 affiliated culture collections of JSCC. It also includes a short introduction to collections for patent strains, mutants and plasmid-bearing bacteria and animal/human cells. The catalogue (ISBN 4-930813-89-1) may be ordered from: Business Center for Academic Societies Japan, Tokyo (FAX: +81-3-5814-5822).

"Colecciones Nacionales de Microorganismos - Catalogo de Cepas, Third Edition, July 1998. Published by the "Centro Argentino - Brasileño de Biotecnología-CABBIO", Buenos Aires, Argentina.

For further information contact :

Mirtha Floccari, Universidad de Buenos Aires, Argentina.

Fax: 54-1-782-0458, E-mail: [mir@qb.fcen.uba.ar](mailto:mir@qb.fcen.uba.ar)

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## BIOLOGY ON THE WEB

Fungal Genetics Stock Center's World Wide Web site(<http://www.kumc.edu/research/fgsc/main.html>) supplies information about fungi, the FGSC history, the FGSC catalog, the availability of strains from the collection (*Neurospora* Collection, *Aspergillus* Collection, *Sordaria* Collection, *Fusarium* and *Nectria* Collection), the Fungal Genetics Newsletter on-line and other topics.

Information on the Oregon Collection of Methanogens (OCM), which provides strictly anaerobic, methanogenic *Archaeobacteria* and other fastidiously strict anaerobes, can be found at <http://nagual.esi.ogi.edu/ocm>.

The Ecological Database of the World's Insect Pathogens(EDWIP) provides information on insect pathogens and their hosts (<http://insectweb.inhs.uiuc.edu/>).

The Office of Biosafety of the Laboratory Centre for Disease Control (Canada) offers several publications at <http://www.hc-sc.gc.ca/hpb/lcdc/biosafety/index.html> : *Laboratory Biosafety Guidelines; Material Safety Data Sheets for Infectious Substances (bacteria, fungi, viruses, parasites); Quarterly Biosafety Listings; What You Should Know About Importing Human Pathogens into Canada.*

The Working Party on Safety in Biotechnology of the European Federation of Biotechnology offers information on the Biological and Toxin Weapons Convention (BTWC), on Laboratory Acquired Infections (a bibliography compiled by Chris Collins, UK) and other publications, and links to a list to biosafety related sites (<http://www.bokut.ac.at/iam/ebf/>).

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## RECENT PUBLICATIONS OF INTEREST TO CULTURE COLLECTIONS

R.M. Atlas Biological weapons pose challenge for microbiology community. Microbiologists should help shape policies protecting against biological weapons but safeguarding legitimate research. *ASM News* 64, 383-389 (1998)

B. Dixon Viable but nonculturable. Is the concept of "viable but nonculturable still viable itself, or does it call for reassessment? *ASM News* 64, 372-373 (1998); see also a letter by Gregg Bogosian: *Viable but nonculturable or dead?* *ASM News* 64, 547 (1998)

L. Sigler, A. Flis Utility and features of a PC Windows-based database for managing microbial strain data. *Journal of Industrial Microbiology and Biotechnology* 20, 86-89 (1998)

M.E. Floccari Métodos de conservación de cultivos bacterianos. *Revista Argentina de Microbiología* (1998) 30: 42-51

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## NEW BOOKS AND SOFTWARE RELEVANT TO CULTURE COLLECTION WORK

-	Official Methods of Analysis of AOAC International, 16 <sup>th</sup> edition, 4 <sup>th</sup> revision. AOAC International, 1998, 2100 pp., Print version Vol. 1 & 2 US\$ 399.00, CD-ROM US\$ 359.00, Print and CD-ROM US \$ 673.00. ISBN 0 935584 54 4 ( <a href="http://www.aoac.org">http://www.aoac.org</a> )
-	FDA Bacteriological Analytical Manual, 8 <sup>th</sup> edition, revision A. AOAC International, 1998, 614 pp., US\$ 129.00. ISBN 0935584 59 5 ( <a href="http://www.aoac.org">http://www.aoac.org</a> )
Adolph, K.W.	Microbial Genome Methods. CRC Press, 1997, 304 pp., •v62.00. ISBN 0 8493 4410 7
Anke, T. (ed.)	Fungal Biotechnology. Chapman & Hall, 1997, 409 pp., •v29.95. ISBN 3 8261 0090 5

S. Busby, C.M. Thomas, N. L. Brown	Molecular Microbiology. Springer, 1998, 334 pp., US\$ 129.00. ISBN 3 540 63873 3
J.W. Dale	Molecular Genetics of Bacteria, Third edition. Wiley, 1998, 336 pp., Pbk •v18.99, Hbk •v45.00. ISBN 0 471 97783 7
G.C. Carroll, P. Tudzynski	Plant Relationships, Part A. The Mycota(K.Esser, P.A. Lemke, eds.), Vol. 5. Springer, 1997, 253 pp., US\$ 169.00. ISBN 3 540 58006 9
G.C. Carroll, P. Tudzynski	Plant Relationships, Part B. The Mycota (K. Esser, P.A. Lemke, eds.), Vol. 5. Springer, 1997, 288 pp., US\$ 179.00. ISBN 3 540 62018 4
T. Fenchel, G.M. King, T. H. Blackburn	Bacterial Biogeochemistry: The Ecophysiology of Mineral Cycling. 2 <sup>nd</sup> edition, Academic Press Inc., 1998, 307 pp., US\$ 64.95. ISBN 0 12 103455 0
B.A. Forbes et al.	Bailey's & Scott's Diagnostic Microbiology, 10 <sup>th</sup> edition. Mosby, 1998, 1088 pp., US\$ 67.00. ISBN 0 8151 2535 6 ( <a href="http://www.mosby.com">http://www.mosby.com</a> )
J.C. Frisvad, P.D. Bridge, D.K. Arora (eds.)	Chemical Fungal Taxonomy. Marcel Dekker Inc., 1998, 424 pp., US \$ 175.00. ISBN 0 8247 0069 4 ( <a href="http://www.dekker.com">www.dekker.com</a> )
R. Fuller (ed.)	Probiotics 2. Application and Practical Aspects. Chapman & Hall, 1997, 212 pp., •v65.00. ISBN 0 412 73610 1
M. Gross	Life on the Edge. Amazing Creatures Thriving in Extreme Environments. Plenum Publish. Corp., 1998, 214 pp., US\$ 31.14. ISBN 0 306 45786 5
K. Horikoshi, M. Fukuda, T. Kudo	Microbial Diversity and Genetics of Biodegradation. S. Karger AG, 1997, 210 pp., US\$ 214.00, ISBN 3 8055 6589 5
K. Horikoshi, W.B. Grant	Extremophiles. Microbial Life in Extreme Environments. Wiley, 1998, 350 pp., approx. •v65.00. ISBN 0 471 98174 5
W.B. Hugo, A.D. Russell (eds.)	Pharmaceutical Microbiology. Blackwell Science, 1998, 528 pp., •v39.50. ISBN 0 632 04196 X

H.D. Isenberg (ed.)	Essential Procedures for Clinical Microbiology. ASM Press, 1998, 833 pp., US\$ 79.95. ISBN 1 55581 125 6
C.P. Kurtzman, J.W. Fell	The Yeasts. A Taxonomic Study. 4 <sup>th</sup> revised and enlarged edition. Elsevier Science, 1998, 1100 pp., US\$ 460.00. ISBN 0 444 81312 8. For complete contents visit <a href="http://www.elsevier.com/locate/isbn/0444813128">http://www.elsevier.com/locate/isbn/0444813128</a>
L.M. de la Maza et al.	Color Atlas of Diagnostic Microbiology. Mosby, 1997, 224 pp., US \$ 71.00. ISBN 0 8151 0621( <a href="http://www.mosby.com">http://www.mosby.com</a> )
D.E. Rawling	Biomining: Theory, Microbes and Industrial Processes. Springer, 1997, 302 pp., US\$ 119.00. ISBN 3 540 63252 2
S.D. Pillai	Microbial Pathogens within Aquifers. Springer, 1998, 154 pp., US \$ 129.00. ISBN 3 540 63891 1

A.D. Russell, W.B. Hugo, G.A.J. Ayliffe	Principles and Practice of Disinfection, Preservation and Sterilization. Third edition. Blackwell Science, 1998, 832 pp., •v85.00. ISBN 0 632 04194 3
J.A. Shapiro, M. Dworkin	Bacteria as Multicellular Organisms. Oxford University Press, 1997, 480 pp., US\$95.00. ISBN 0 19 509159 0
C.J. Sindermann, T.K. Sawyer	The Scientist as Consultant: Building New Career Opportunities. Plenum Publishing Corp., 1997, 340 pp., US\$ 29.95. ISBN 0 306 45637 0
J.F.T. Spencer, D.M. Spencer	Yeasts in Natural and Artificial Habitats. Springer, 1997, 381 pp., US\$ 130.00. ISBN 3 540 56820 4
D. Sheehan (ed.)	Bioremediation Protocols. Methods in Biotechnology, Vol 2. Humana Press, 1997, 352 pp., US\$ 99 ISBN 0 89603 437 2
A. Varma	Mycorrhiza Manual. Springer, 1998, 542 pp., US\$ 99.95. ISBN 3 540 62437 6
A. Varma, B. Hock	Mycorrhiza, Structure: Function, Molecular Biology and Biotechnology, 2 <sup>nd</sup> ed. Springer, 1998, Approx. 630 pp., DM 298.00. ISBN 3 540 63981 0
G.M. Walker	Yeast Physiology and Biotechnology. Wiley, 1998, 360 pp., Pbk •v29.95, Hbk •v70.00. ISBN 0 471 96446 8
D.T. Wicklow, B.E. Söderström	Environmental and Microbial Relationships. The Mycota (K. Esser, P.A. Lemke, eds.), Vol. 4. Springer, 1997, 373 pp., US\$ 235.00. ISBN 3 540 58005 0

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## WORKSHOPS AND TRAINING COURSES

CABI Bioscience UK Centre, Egham, Surrey offers the following training courses in 1999.

For further details, please contact Mrs Stephanie Groundwater, CABI Bioscience UK Centre, Egham, Surrey, TW20 9TY, UK.

Tel: +44 (0)1784 470111. Fax: +44 (0)1491 829100. Email: [S.Groundwater@CABI.org](mailto:S.Groundwater@CABI.org).

### Basic Mycological Techniques, 22 - 23 February 1999

Designed for microbiology technicians or others needing help with traditional mycological techniques, this course will be of particular value to new technical staff, or those wishing to gain experience of working with fungi. The course fee is •v495, including refreshments and cold buffet lunches. For further details, please contact:

### Biochemical and Molecular Characterisation of Bacteria and Fungi

28 June - 09 July 1999

An introduction to established and new techniques for the fingerprinting and characterisation of filamentous fungi, bacteria and nematodes and to analysis of the data they generate. This course will be particularly useful for those with some experience of PCR who need to know more about the different applications and methods available or who have encountered problems. The course fee of •v2,400 includes the cost of self-catering accommodation.

### Culture Preservation Techniques for Bacteria and Filamentous Fungi

08 -10 November 1999

This course will be of interest to microbiology technicians, laboratory managers and others needing to maintain fungal or bacterial isolates. There will be opportunities to see and work in the Genetic Resources Collection which is one of the largest service collections of filamentous fungi, bacteria and yeasts in the world. The course fee of •v800 includes course manuals and cold buffet lunches.

### MBL 1999 Summer Course: Microbial Diversity

June 13-July 29, 1999

An intensive course for graduate or postdoctoral students who want to be competent in microbiological techniques for working with a broad range of microbes, and in approaches for recognizing both possible affinities of yet uncultivated bacteria, and for understanding putative phylogenetic relationships. The course emphasizes that the great strength of microbiology lies in the diversity of microbial types that can be exploited for basic research in a wide range of scientific disciplines.

Emphasis will be on the isolation and cultivation of organisms that are distinguished by their physiological, biochemical, and morphological properties. Techniques for cultivation of strict anaerobes will be particularly emphasized. In addition, there will be an extensive series of lectures describing the physiology, biochemistry, and relationships of a variety of bacteria.

Directors: Edward Leadbetter, University of Connecticut, and Abigail Salyers, University of Illinois. Tuition:

\$3,750. Contact: Carol Hamel, Admissions Coordinator, Marine Biological Laboratory, Woods Hole, MA 02543-1015, USA, email: [admissions@mbi.edu](mailto:admissions@mbi.edu), Internet: <http://www.mbl.edu>.

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## CONFERENCES AND MEETINGS

1999

Archaea: Bridging the Gap Between Bacteria and Eukarya, 9-14 January, 1999, Taos, USA. Contact: Keystone Symposia, Drawer 1630, Silverthorne, CO 80498, USA (Fax: +1 970 262 1525; E-mail: [keystone@symposi.com](mailto:keystone@symposi.com) ; <http://www.colorado.net/symposia>)

World Data Centre for Microorganisms Symposium: Microbial Resources Centers in the 21<sup>st</sup> Century: New Paradigms, 16 February, 1999, Kudankaikan, Tokyo, Japan. Contact: Yumi Fujisawa, WDCM (Fax: +81 559 81 6896; E-mail: [yfujisaw@genes.nig.ac.jp](mailto:yfujisaw@genes.nig.ac.jp); <http://wdcm.nig.ac.jp/prog.html>)

143<sup>rd</sup> Ordinary Meeting of the Society for General Microbiology: Microbial Signalling and Communication 12-16 April, 1999, Edinburgh, UK. Contact: SMG (Meeting Office), Marlborough House, Basingstoke Road, Spencers Wood, Reading RG7 1AE, UK E-mail: [meetings@socgenmicrobiol.org.uk](mailto:meetings@socgenmicrobiol.org.uk); Fax: +44 118 988 5656; <http://www.socgenmicrobiol.org.uk/meetings.htm>)

99<sup>th</sup> General Meeting of the American Society of Microbiology, 30 May-3 June, 1999, Chicago, Illinois, USA. Contact: ASM Meeting Department, 1325 Massachusetts Avenue, NW, Washington DC 20005, USA (<http://www.asmtg.org>)

9<sup>th</sup> European Congress on Biotechnology (including Health, Agro-Food, Environment and Chemicals), 11-15 July, 1999, Brussels, Belgium.

XI<sup>th</sup> International Congress of Virology, 9-13 August, 1999, Sydney, Australia. Contact: IUMS Congress Secretariat, GPO Box 128, Sydney, NSW 2001, Australia (Fax: +61 2 9262 3135; E-mail: [iums@tourhosts.com.au](mailto:iums@tourhosts.com.au)). Dead-line for abstracts: 26 February 1999

IX<sup>th</sup> International Congress of Bacteriology and Applied Microbiology and IX<sup>th</sup> International Congress of Mycology, 16-20 August, 1999, Sydney, Australia. Contact: IUMS Congress Secretariat, GPO Box 128, Sydney, NSW 2001, Australia (Fax: +61 2 9262 3135; E-mail: [iums@tourhosts.com.au](mailto:iums@tourhosts.com.au)). Deadline for abstracts: 5 March 1999.

7<sup>th</sup> International Fungal Biology Conference, 22-25 August, 1999, Groningen, The Netherlands. Contact: H. Sietsma, University of Groningen, Biologisch Centrum, Kerklaan 30, 9751 NN Haren, The Netherlands (Fax: +31 503632 273; E-mail: [j.h.sietsma@biol.rug.nl](mailto:j.h.sietsma@biol.rug.nl); <http://www.biol.rug.nl/fungalconf>)

Sixth Symposium on Lactic Acid Bacteria, 19-23 September 1999, The Netherlands. Contact: Dr. A.M. Ledebor, Unilever Research, P.O. Box 114, 3130 AC Vlaardingen, The Netherlands (Fax: +31 10 460 5383)

XIII<sup>th</sup> Congress of European Mycologists, 21-25 September 1999, Alcalá de Henares, Madrid, Spain.

Contact: Dr. R. Galán, Dpto. de Biología Vegetal, Facultad de Ciencias, Universidad de Alcalá, Alcalá de Henares, Madrid, Spain (Fax: +34 1 885 5066; E-mail: [BVMHF@JARIFA.ALCALA.ES](mailto:BVMHF@JARIFA.ALCALA.ES))

2000

Symposium BioEd 2000: The Challenge of the Next Century, 15-18 May, 2000, Paris, France. Contact: IUBS-Commission for Biological Education, 51 Bd de Montmorency, 75016 Paris, France (Fax: +33 1 45 25 20 29; E-mail: [iubs@paris7.jussieu.fr](mailto:iubs@paris7.jussieu.fr); <http://www.unige.ch/fapse/SSE/teachers/giordan/LDES>)

ISY 2000 10th International Symposium on Yeasts, 28 August-1 September 2000, Papendal, Arnhem, The Netherlands Contact: e-mail: [ISY2000@TuDelft.nl](mailto:ISY2000@TuDelft.nl)

BIOTECHNOLOGY 2000; 11th International Biotechnology Symposium & Exhibition, 3-8 September 2000, Berlin, Germany. Contact: DECHEMA e.v. c/o 11th IBS, Theodor-Heuss-Allee 25, 60486 Frankfurt am Main, Germany (Fax: +49 69 7564 201; E-mail: [info@dechema.de](mailto:info@dechema.de); Web: <http://www.dechema.de>)

ICCC-9 Ninth International Congress for Culture Collections: *Microbial Resources for the New Millennium*, July 23-28, 2000, Brisbane, Australia. Contact: Dr. Lindsay Sly, ICC9 Secretariat, Univ. of Queensland, Dept. of Microbiol., Australian Collection of Microorganisms, Brisbane, Austr. 4072 (Fax: + 61 7 3365 1566/4620; E-mail: [sly@biosci.uq.edu.au](mailto:sly@biosci.uq.edu.au))

#### How to sterilize when you haven't got a sterilizer

During the VI International Congress of Microbiology, Rome, Italy, 6-12 September 1953, the following communication was presented and published in the congress proceedings *Riassunti delle Comunicazioni*, Vol. I, Sezioni I-VII, Roma, 1953, p. 191:

#### *MIND ON THE GROWTH OF BACTERIA*

*Richard de Silva*

*(Medical Research Institute, Ceylon)*

*While undergoing a course of mind training, which included hypnotism, twenty five years ago the author carried out experiments to find out whether mental influences could inhibit the growth of bacteria. The parallel plate method was adopted, one of each pair serving as the "subject plate" and the other serving as the control. A known quantity of melted nutrient agar was added to the measured quantity of a diluted typhoid culture already in sterilized Petri dishes. All precautions were taken as far as possible to avoid fallacies likely to occur in an experiment of this nature, specially the culture, glass ware, and the technique being identical in all details.*



*Concentrating intensely on one member of each pair the formula "no growth, no growth, no growth, you are sterile, you are sterile, you are dead, you are dead" was repeated continuing for about thirty minutes, after which the dishes were left in an incubator. After twenty four hours the number of colonies on both plates were counted with the following results:*

*Colony counts*

*Subject Plate Control Plate*

*99 250*

*60 216*

*39 75*

*6 24*

*This experiment was repeated often and every time, it was found that there were fewer colonies*

*the "subject plate" than in the control. If these results are considered the above figures might be regarded as revealing a statistically significant effect of mind over bacterial growth. The present trend among scientists to investigate "every thing and not merely one's predilections" encouraged the author to publish the results.*

*(The cartoon was published around 1960 in a German newspaper as part of a short note titled "Faith-Healer", referring to the above article. The newspaper is not known, the name of the artist is Koglin)*

For the 1999 und 2000 issues of the WFCC Newsletter the Editor invites contributions from WFCC Committees, from Culture Collections, from WFCC Members and from anybody else who likes to develop the newsletter into an information source for culture collections and their users.

Send your contributions to Dieter Claus <[dclaus@gmx.net](mailto:dclaus@gmx.net)>; or fax +49 551 55791

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