



## **WORLD FEDERATION FOR CULTURE COLLECTIONS Newsletter (No.47)–JANUARY 2010**

### **NEWS FROM THE PRESIDENT**

***Dr. David Smith  
CABI Bioscience UK Centre,  
Egham, Surrey TW20 9TY, UK***

The World Federation for Culture Collections (WFCC) was founded in 1968 and is a federation of the International Union of Microbiological Societies (IUMS) and a commission of the International Union of Biological Sciences (IUBS) with responsibility for the promotion and development of collections of cultures of micro-organisms and cultured cells (<http://www.wfcc.info>). It has provided a forum for discussion and development in the culture collection community for over four decades.

Member collections of the WFCC register with the World Data Centre on Microorganisms (WDCM; [www.wdcm.org](http://www.wdcm.org)). Hideaki Sugawara has kept us informed on WDCM statistics, there are currently 564 collections in 68 countries registered, 120 are full affiliated member collections of the WFCC, together all WDCM collections hold over 1.5 million strains. Collections affiliated to the WFCC are distinguished from other collections in their commitment to provide high quality resources for research and development. They provide a public service and agree to operate to WFCC guidelines, see the article below in the reports section on *WFCC first draft rules*. No one collection can provide all the services and resources on its own and this is why the WFCC has fostered networking and facilitated access to laboratory held living materials. International Conventions, for example the CBD and Biosafety and Biosecurity measures have continued to present challenges in the processes and procedures for providing safe and legitimate access to biological resources. The WFCC continues to advocate best practices in these areas as well as continued improvement in quality of materials and services. The WFCC will continue to

support its members in their work to achieve the level of service demanded.

The work of the WFCC and the member collections will be demonstrated at the federation's twelfth International Culture Collection Conference to be held in Florianópolis, Santa Catarina, Brazil from September 26 to October 1st, 2010. This occasion will allow us to address key issues and discuss how member collections will meet today's and future challenges. How should we address issues of access to materials for research and development, particularly free and open access to Type strains? Issues over ownership and how this should impact upon the public service culture collection? I hope that you will join the 150 who have pre-registered for ICC12, the website provides information and the programme on this meeting (<http://www.iccc12.info>).

The activities of the WFCC work programmes throughout 2009 focussed on:

- Biosecurity issues – the WFCC continues to be represented in discussions in this area; best practice for collections as described by the OECD<sup>1</sup> continue to be a basis but further work and assistance is needed in the area of risk assessment
- Quality matters: The WFCC provided input to the Global Biological Resource Centre Network demonstration project, the follow up to the OECD Biological Resource Centre Task Force initiative. The WFCC Guidelines were updated ready for publication of the third edition in 2010.
- Endangered Collections: the WFCC continues to hear from collections whose futures are in jeopardy
- Board meetings were held in Braunschweig in February and in Brussels December 2009.

In 2010 at ICC12 we will elect a new board and we are seeking nominations from the membership. I will no longer be eligible for re-election but will continue as an ex-officio member of the board for a further term (until ICC13).



The current board comprises:

<b>WFCC Executive board members 2007-2010</b>		
<b>President</b>	Dr David Smith	CABI Bioscience UK Centre, UK E-mail: <a href="mailto:d.smith@cabi.org">d.smith@cabi.org</a>
<b>Vice-President</b>	Dr. Ken Ichiro Suzuki	NITE Biological Resource Center Japan E-mail: <a href="mailto:suzuki-ken-ichiro@nite.go.jp">suzuki-ken-ichiro@nite.go.jp</a>
<b>Secretary</b>	Dr. Philippe Desmeth	Belgian Coordinated Collections of Microorganisms, Belgium E-mail: <a href="mailto:philippe.desmeth@belspo.be">philippe.desmeth@belspo.be</a>
<b>Treasurer:</b>	Dr. Peter N. Green	NCIMB Ltd, UK E-mail: <a href="mailto:p.green@ncimb.co.uk">p.green@ncimb.co.uk</a>
	Dr. Joost A. Stalpers	Centraalbureau voor Schimmelcultures, The Netherlands E-mail: <a href="mailto:Stalpers@CBS.knaw.nl">Stalpers@CBS.knaw.nl</a>
	Dr. Christine Rohde	DSMZ - Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Germany E-mail: <a href="mailto:chr@dsmz.de">chr@dsmz.de</a>
	Dr. Juncai Ma	Institute of Microbiology, Chinese Academy of Sciences Beijing, China E-mail: <a href="mailto:ma@sun.im.ac.cn">ma@sun.im.ac.cn</a>
	Dr. Gina Koenig	USA E-mail: <a href="mailto:gina@yaho.com">gina@yaho.com</a>
	Dr Nelson Lima	Universidade do Minho, Portugal E-mail: <a href="mailto:nelson@iec.uminho.pt">nelson@iec.uminho.pt</a>
	Prof. Lyndsay Sly	Australian Collection of Microorganisms University of Queensland, Australia E-mail: <a href="mailto:l.sly@uq.edu.au">l.sly@uq.edu.au</a>
	Dr Chantal Bizet	Institut Pasteur, France E-mail: <a href="mailto:bizet@pasteur.fr">bizet@pasteur.fr</a>
	Dr. Vera Weihs	Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, Germany E-mail: <a href="mailto:vew@dsmz.de">vew@dsmz.de</a>
<b>Editor Newsletter</b>	Dr. İpek Kurtböke	University of the Sunshine Coast, Australia E-mail: <a href="mailto:ikurtbok@usc.edu.au">ikurtbok@usc.edu.au</a>
<b>Ex-officio member Past President</b>	Prof. Jean Swings	BCCM/LMG Collection, Belgium E-mail: <a href="mailto:jean.swings@ugent.be">jean.swings@ugent.be</a>
<b>Ex-officio member Director WDCM</b>	Prof. Hideaki Sugawara	World Data Centre for Microorganisms, Japan E-mail: <a href="mailto:hsugawar@genes.nig.ac.jp">hsugawar@genes.nig.ac.jp</a>

The WFCC continues to work hard for the benefit of its members and is keeping a close involvement in the development of the Global BRC Network in order for it not to duplicate efforts and also to enable its members to benefit from its establishment. The WFCC continues in its endeavours to be proactive, be more involved in

policy making in the areas of conservation and utilisation of genetic resources and work closely with legislators and policy makers to enable practical solutions to be put in place.

## **NEWS FROM THE SECRETARY**

***Dr. Philippe Desmeth  
BCCM, Belgium***

Dear Colleagues, Dear WFCC members,

The 12<sup>th</sup> International Culture Collections Congress will be held next year in Florianópolis, Santa Catarina, Brazil. It is time for the WFCC membership to choose the next executive board members for 2010-2013.

WFCC is still organized in such way that most activity is done via the voluntary contribution of its members, including the executive board members. The present executive board has worked to support and defend the interest of culture collection, doing what they thought necessary to facilitate the operation of all cultures collections over the world. Here are some examples of the WFCC Board members' activities.

The Organization for Economic Co-operation and Development (OECD) Working Group on Biological Resources Centres (BRC) points out the crucial roles of BRCs in bio-economy, underlining the necessity to provide the adequate support to enable the BRCs to meet the increasing challenges of biodiversity and genomics<sup>(1)</sup>. Fostering the implementation of OECD best practices, Dr. Chantal Bizet and David Smith focused on quality matters. Following the recommendations of OECD regarding the global structuring of the BRC networks<sup>(2)</sup>, a core of culture collections has started the GBRCN pilot project<sup>(3)</sup> under the general managementship of our present president, Dr. David Smith who represents the interests of WFCC in its development.

The Convention on Biological Diversity (CBD) emphasises the role of biodiversity to sustain life on



earth but micro-biodiversity has not yet received the central place it deserves. The developing CBD legislation on Access and Benefit Sharing could emphasize the role of culture collections but unrealistic regulation could hamper the operation of our centres. Several members of the board advocate in international forum the special place of scientific research and the role of collections in *ex situ* conservation and study of micro-biodiversity. In this context, intellectual property issues, such as the development of the "bundles of right" concept and the follow up of the "microbial commons" were handled by the board secretary.

In the complex framework of the international packaging and transport regulations, Dr. Christine Rohde regularly advocates the culture collections concerns about efficient International Regulations and pragmatic rules for shipping biological material, including appropriate biosecurity guidelines.

Challenges and opportunities pave the daily route of culture collections and it is important to maintain good communication between the members. The WFCC electronic newsletter managed and published by Dr. İpek Kurtböke, and the WFCC website under Prof. Hideaki Sugawara supervision with the team of the Japan National Institute of Genetics are the main communication tools for our community. The CCINFO database and complementary WDCM database are unique to WFCC.

To keep the pioneer work of WDCM in Information Technology at the top, Dr. Juncai Ma and Dr. Ken Suzuki, with Prof. Sugawara, looked for harnessing new technologies, collaborating with initiatives like straininfo.net, or Global Unique Identifiers implementation in life sciences.

In conjunction with the effort on IT via WDCM, Nelson Lima worked on capacity building issues, where new tools such as e-learning can be used to help WFCC collections to deliver the new demands on collections.

Our members face technical and financial challenges exacerbated by the economic degradation that has considerably decreased their funding and income. Dr. Peter Green and Dr. Joost Stalpers devoted extra time to

react to calls for support from endangered collections, seeking opportunities for grants in aid or for technical solution to secure valuable material. Last but not least, Dr. Vera Weihs and Prof. Lindsay Sly support Prof. Vanderlei Canhos in organising ICC 12.

As shown in the examples above, all present WFCC executive board members try with limited means to help the community of culture collections. Now, according to the WFCC rules, we prepare the election of the next board. First, the candidates for the executive board must be proposed by a Nominations committee that will make up a list of candidates. Our members will then select the new executive board members out of this list.

The Nominations committee is open for suggestions from all WFCC members and invite all of you to suggest possible candidates for the election of the board members. Please note that, according to the WFCC statutes<sup>(4)</sup> and bylaws, Dr. David Smith can not be elected again as president because he has already served two terms as president.

For your information you can find the composition of the present board on the WFCC website. Your suggestions can be sent to the secretary of the board, by email at [desp@belspo.be](mailto:desp@belspo.be), or by fax to the attention of Philippe Desmeth, BCCM c/o BelSPO, Fax + 32 2 230 59 12.

Looking forward receiving your suggestion and recommendations, we thank you in advance.

For the president and the board,

Yours sincerely,

**Philippe Desmeth**

**Secretary**

(1) See document Biological Resource Centres Underpinning the future of Life Sciences and Biotechnology. OECD Science & Information Technology, May 2001, vol. 2001, no.7, pp.1-68 (69 pages) OECD.

(2) See recommendations in document: OECD Best Practice Guidelines for Biological resource Centre, 2007, OECD, Paris.

(3) See <http://www.gbrcn.org>

(4) <http://www.wfcc.info/statutes.html>



## REPORTS FROM THE EXECUTIVE BOARD

### WFCC FIRST DRAFT RULES

The WFCC has operated as a typical scientific organization with statutes and byelaws for the past 40 years. Members have accepted to follow these when joining the WFCC. In more recent times the WFCC has taken various positions on key issues, such as, use of material transfer agreements to enable access and benefit sharing and in areas such as biosecurity (see standpoint outlined below). The Board believes that members should actually agree to implement WFCC best practice and sign up to such positions. It is by these commitments that WFCC affiliate member collections are distinguished from other culture collections. The WFCC Executive Board discussions have resulted in the following draft set of basic rules which we will amend following consultation with membership and put to ICC12 General Assembly for adoption. Please comment on the value and content of these to the WFCC Board via the Secretary Philippe Desmeth. They refer (Rule 1) to adoption of the WFCC Guidelines, please visit the WFCC web site and comment upon the 2009 version (Third Edition) of this guidance.

1. The member collection must accept and implement WFCC Guidelines on the establishment and operation of culture collections. Where unable to implement all elements they must put in place a plan to implement within a reasonable period of time (3 years of joining).
2. The member collection shall take all measures possible to prevent the mis-use of biological materials and information in their stewardship. Further WFCC guidance on Biosecurity is given in Newsletter issue 34 and posted on the WFCC web site. (<http://www.wfcc.nig.ac.jp/NEWSLETTER/newsletter34/a1.html>)
3. The member collection shall provide access to the minimum level of data to facilitate the operation of the WDCM.
4. The member collection shall implement the WFCC principles of Access and Benefit Sharing

Regime agreed by WFCC General Assembly 2007.

(<http://www.wfcc.info/NEWSLETTER/GGTSPU-styx2.bba.de-31757-6599860-DAT/WFCC-NL-January-2009.pdf>)

5. The member collection shall record details of the origin of material (country of origin being mandatory) and to whom it is despatched, utilising material transfer agreements as far as practically possible, so at the very least they know the route of deposit of the material into the member collection and those who have received it.
6. The collection shall protect and respect Intellectual Property Rights of the depositor and not claim ownership of the materials deposited. This does not preclude the member collection or its employees developing intellectual property (IP) associated with the biological materials deposited and protection of these rights.
7. Where appropriate and where spare capacity exists, back-up collections of important materials will be maintained. This can be with another member collection, subject to agreement.
8. The member collection will be free to mention its membership in appropriate published material.
9. Membership is subject to the approval of the WFCC Executive Board.

### Standpoint of the WFCC with regard to dangerous organisms

WFCC guidance on Biosecurity:

(<http://www.wfcc.nig.ac.jp/NEWSLETTER/newsletter34/a1.html>)

1. The WFCC supports the Biological and Toxin Weapons Convention of 1972 (BTWC) that prohibits the development, possession, and use of biological weapons.
2. It is not the policy of the WFCC to influence the range of biological resources maintained and to interfere with research activities of member collections. To the knowledge of the WFCC no culture collection of its membership is involved in active research on biological weapons.
3. The control of access to dangerous organisms lies with the country in which the collection is based. The national governments are the enforcers of national and international



legislation. The WFCC urges its members to strictly follow all national and international legislations concerning distribution of sensitive materials to third parties.

The WFCC requires its members to adopt best practice in performing their role in the conservation and utilisation of biodiversity, in compliance with such legislation. Indeed, the WFCC was the first organisation to compile an internationally approved set of guidelines covering all aspects of culture collection activity for its members (Guidelines for the Establishment and Operation of Collections of Cultures of Microorganisms, 1st edition 1990, 2nd edition 1999, 3<sup>rd</sup> edition draft 2009 (<http://wdcm.nig.ac.jp/>)). In this context, sufficient and trained staff, knowledge, expertise and a well-functioning computerized shipping/export department are prerequisites for culture collections.

One of the topics extensively treated in the Guidelines concerns the capability of collections to meet all relevant national and international regulations concerning the control, transportation and health and safety aspects of resource handling and distribution. Several guidelines are devoted to aspects of liability, safe distribution of strains, data access and traceability, with explicit emphasis on strains which are potentially pathogenic to man, animals or plants (see Guidelines for the Establishment and Operation of Collections of Microorganisms <http://wdcm.nig.ac.jp/>).

The World Data Centre for Microorganisms (WDCM) serves as a clearinghouse for information on microbial strains available at those culture collections throughout the world. Not all collections, currently over 560, are affiliated members of the WFCC. The WFCC members supply the organisms they hold subject to the provision of relevant permits and licenses and are released only to bona fide users in compliance with national and international legislation and conventions. The WFCC does not, and never has, controlled the distribution of cultures from these collections.

#### Future actions

- As a consequence of the acceptance of the principles of the Biological and Toxic Weapons Convention, the WFCC requires its members to control access to the dangerous organisms listed

by the Australia Group as a minimum requirement. Half of the home countries of the members' collections are member of the Australia Group.

- Security will have to be maintained, not only in culture collections, but in all microbial laboratories (e.g. private, university, state) in general. This will require consultations with IUMS, ASM and others in order to design a Code of Conduct. Such actions are in progress, for example, through the European Union, OECD and projects such as EMbaRC (EMbaRC is an EU project funded under the Seventh Framework Programme Research Infrastructures (INFRA-2008-1.1.2.9: Biological Resources Centres (BRCs)) for microorganisms). Contribution of the WFCC to such initiatives continues.

It is the duty and responsibility of a professional organisation like WFCC, together with colleagues-microbiologists from all over the world and from other organisations to contribute to greater security in the world. This needs surgical precision and should in no way hamper scientific research.

#### WFCC position on Access and benefit sharing

<http://www.wfcc.info/NEWSLETTER/GGTSPU-styx2.bba.de-31757-6599860-DAT/WFCC-NL-January-2009.pdf>

The WFCC works towards the development of a balanced system as described in its paper to COP9 (Smith, D. & Desmeth, P. 2007<sup>1</sup>). Exchange of specimens must be accompanied by Material Transfer Agreements (MTA) outlining well-defined property rights moving away from the static concept of ownership. European collections have agreed common text that could be used as a basis and thus a model for others to adopt (<http://www.eccosite.org>)

<sup>1</sup>Smith, D. & Desmeth, P. (2007). *Access and benefit sharing, a main preoccupation of the World Federation of Culture Collections*. In: UNEP/CBD/WG-ABS/6/INF/3 13 December 2007 *Compilation of submissions provided by parties, governments, indigenous and local communities and stakeholders on concrete options on substantive items on the agenda of the fifth and sixth meetings of the ad hoc open ended working group on access and benefit sharing*. Canada: UNEP/CBD, pp. 68-70.



## NEWS FROM MEMBERS

OECD Biological Resource Centre Best Practice these centres were:

### BRAZIL CONTINUE TO DEVELOP THEIR NATIONAL COLLECTIONS

**David Smith, Dagmar Fritze and Vanderlei Canhos**

Efforts to establish Guidelines and Strategies for the Modernization of Brazilian Biological Collections and Consolidation of Integrated Biodiversity Information Systems in Brazil are bearing fruit. Over the past six years a survey of Brazilian collections has been carried out and a programme to develop national collections established. Despite Biological collections (museums, herbaria, microorganisms) represent basic infrastructure for scientific development and innovation in health, agriculture, environment, and industry it was recognised that the knowledge base on Brazil's biodiversity was incipient and dispersed. At that time it was estimated that there were 2.5 to 3 billion samples deposited in collections worldwide. Brazil only contributes to 1% of this total, which is very little when one considers the size of its biodiversity. A project was developed to establish an action plan for consolidated and integrated network of biological collections in Brazil. Specific objectives included:

- Carry out a critical analysis of the transformations that biological collections, taxonomy, and informatics for biodiversity are undergoing
- Make recommendations that will lead to an increase in our capacity to answer the challenges presented associated with the use of natural resources and its impacts to biodiversity
- Recommend guidelines and strategies to modernize and consolidate an integrated network of biological collections associated to an infrastructure for data and information sharing.

A project was established "Sistema de Informação e de avaliação da Conformidade de material biológico para coleções de interesse biotecnológico" (Processo 01.05.0068.00, Financiadora de Estudos e Projetos - FINEP). The Brazilian Program for Biological Resource Centres was initiated and four collections were identified for enhancement of facilities and implementation of

- *Coleção Brasileira de Microorganismos de Ambiente e Indústria (CBMAI), Universidade Estadual de Campinas (UNICAMP)*
- *Coleção de Leishmania do Instituto Oswaldo Cruz (CLIOC), Fundação Oswaldo Cruz (Fiocruz)*
- *Banco de Germoplasma de Bacillus para Controle Biológico (BGB/LBE), Empresa Brasileira de Pesquisa Agropecuária (Embrapa)*
- *Banco de Células do Rio de Janeiro (BCRJ), Universidade Federal do Rio de Janeiro (UFRJ): Health and biomedical applications (human and animal cell lines)*

The programme has successfully negotiated further funding to extend the national collection network to eight and to create an infrastructure to underpin research and development in Brazil. Members of the GBRCN Secretariat were invited to visit Brazil to discuss these activities and further develop Brazil's contribution to the GBRCN demonstration project. The visit was designed to achieve two main goals; to assess the extent to which one of the developed collections implements the OECD BRC Best Practice and secondly to engage the microbiology community and policy makers in Brazil in the GBRCN at the 25<sup>th</sup> Congresso Brasileiro de Microbiologia (Brazilian Microbiology Congress). The trip was arranged by the GBRCN partners in Brazil and funded by the Brazilian Government, via the project "Information System for Collections of Biotechnological Interest" (SICol-5, Processo 1738/08 FINEP), and the INPI (Instituto Nacional de Propriedade Industrial)/WIPO (World Intellectual Property Organisation) cooperation agreement.

David Smith, Dagmar Fritze and Dunja Martin visited the Coleção Brasileira de Microorganismos de Ambiente e Indústria (CBMAI) culture collection of environmental and industrial microorganisms at Universidade Estadual de Campinas (UNICAMP) to assess the extent to which they had implemented the OECD Biological Resource Centre (BRC) Best Practice. Paulo Holanda, auditor, Biotechnology and Conformity Assessment Programs, TECPAR, Technology Institute of Paraná organised the assessment visit and led the assessment team accompanied by the CBMAI staff, Lara Sette (Curator) and Fabiana Fantinatti-Garbogini (Quality Manager).



The management processes were impressive and it was agreed that these more than met the needs of the OECD Best Practice although a confirmatory audit would be necessary to assess the procedures in practice when the collection was established in its new facilities in 2010.

Discussions on the GBR CN Information System were held at CRIA – Centro de Referência em Informação Ambiental with Vanderlei Canhos and Sidnei de Souza. Little progress had been made on developing a model GBR CN information system and the SICOL culture collection system was demonstrated as a possible solution. A small pilot project was agreed that would initially link the Brazilian networked collections through the species-Link system with the small test group of GBR CN and CABRI databases.

A pre-congress closed meeting with representatives of the National Institute of Metrology, Standardization and Industrial Quality (INMETRO), INPI and the Brazilian national collection network was held in Porto de Galinhas. Dunja Martin presented parts of her talk to be delivered at the Brazilian Microbiology Congress highlighting the fact that implementation of ISO systems (9001, 17025, Guide 34) did not implement fully the OECD BRC Best Practice although being compatible in several ways. It was also pointed out that ISO Guide 34 and ISO 17025 had requirements that would be difficult to apply in the BRC situation. The discussions resulted in a suggestion by INMETRO that the best approach would be to position the OECD Best Practice in an equivalent status to GLP – Good Laboratory Practice. The GBR CN Secretariat will consult partners and suggest this approach to them and their accreditation bodies. Brazilian partners will continue to support the GBR CN Demonstration project in the development of model systems for implementation of best practice and access to GBR CN member collection data.

Presentations were made by Smith, Fritze and Martin at the Simpósio de Coleções Culturais at the 25<sup>th</sup> Congresso Brasileiro de Microbiologia (Brazilian Microbiology Congress) held in Porto de Galinhas. The special session on culture collections began with presentations on the Brazilian BRC network development project and further opportunities for funding. The latter was covered by Reinaldo Ferraz representing the Executive Secretary of the Ministry of Science and Technology. The discussion session generated lively and enthusiastic debate; all

were pleased with the Brazilian projects and participation in the GBR CN demonstration project. The presentations are available at <http://www.cria.org.br/eventos/cbm25>, and the report on the special session and the participants list will be available on the web site in due course.

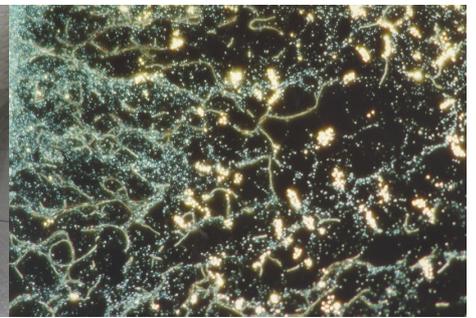
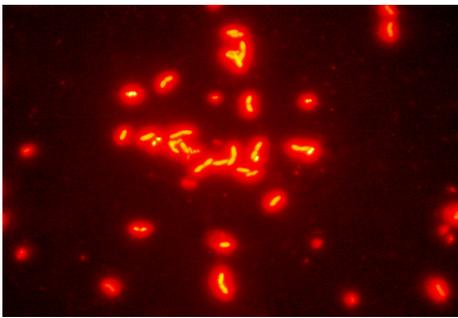


The audit team with Coleção Brasileira de Microorganismos de Ambiente e Indústria (CBMAI) staff (From left to right: David Smith, Dagmar Fritze, Dunja Martin, Valéria Maia Oliveira (CPQBA, Head of Microbial Resources Division), Fabiana Fantinatti-Garborggini (CBMAI, Quality Manager), Lara Sette (CBMAI, Curator) and Paulo Holanda, Biotechnology and Conformity Assessment Programs, TECPAR, Technology Institute of Paraná).

## **REPORT ON THE 6TH ANNUAL MEETING OF ASIAN CONSORTIUM FOR THE CONSERVATION AND SUSTAINABLE USE OF MICROBIAL RESOURCES (ACM)**

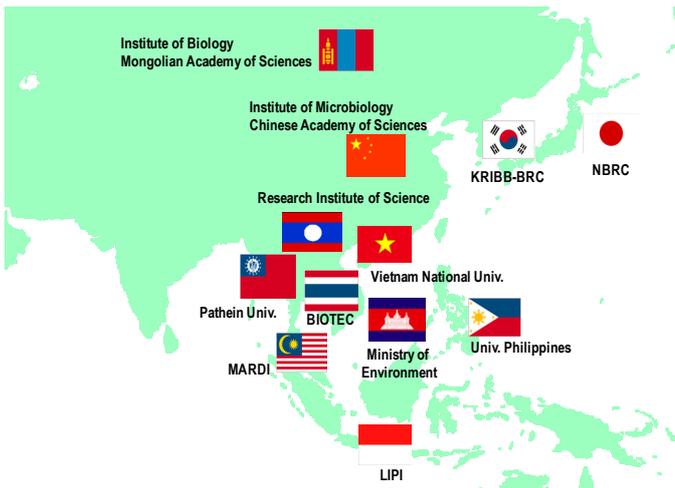
***Ken-ichiro Suzuki***  
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The Asian Consortium for the Conservation and Sustainable Use of Microbial Resources (ACM) was established at the occasion of ICC10 held at Tsukuba, Japan in October 2004.



**Fig.1: Members of the Asian Consortium for the Conservation and Sustainable Use of Microbial Resources (ACM)**

**Fig. 2: Ms. Nguyen Thi Doan, the Vice President of Vietnam giving welcome address**



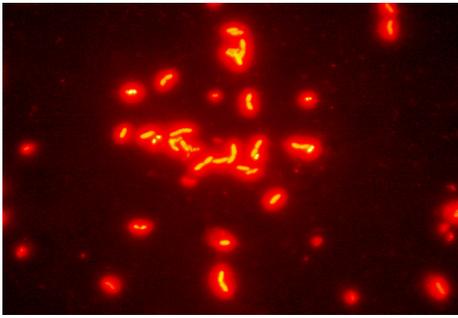
The ACM is composed of the microbiologists mainly concerned with culture collections in twelve Asian countries and aims (1) to establish a framework for international cooperation to encourage microbial researches, (2) to develop microbial resources characteristic for each country, (3) to construct the mechanism for academia and industry to utilize microbial resources, (4) to establish international BRC network, (5) to establish international standards for biological material transfer and benefit-sharing, and (6) to improve and share standardized techniques for BRCs. Since 2004, we have meetings annually and exchange information by the country report of the member countries and by the task force meetings for specific subjects.

The 6th ACM Meeting was held at Movenpick Hotel Hanoi on 27 and 28 November 2009 and 16 members from China, Japan, Korea, Malaysia, the Philippines and Thailand participated with about 40 Vietnamese participants. Unfortunately no members joined from Cambodia, Indonesia, Laos, Myanmar and Mongolia. It was hosted by Prof. Nguyen Lan Dung and Dr. Duong Van Hop, Vietnam National University, Hanoi, with careful preparation and splendid hospitality. The welcome address was given by Ms. Nguyen Thi Doan, the Vice President of Vietnam.

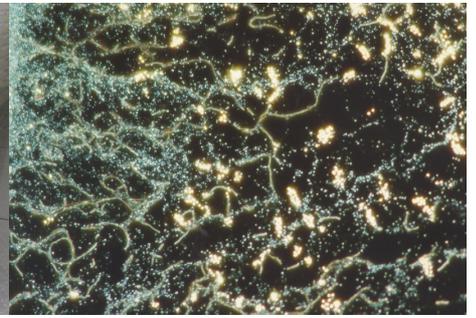
Four keynote lectures were presented by Dr. N. Fujita (Japan, Genomic approach to seasonal and pandemic influenza viruses), Prof. P. Thornart (Belgium, From the cells to the end product, the case of lactic starter production), Prof. T. Nihira (Japan, Deciphering on-off signalling network of *Streptomyces* secondary metabolism) and Dr. Vu Nguyen Thanh (Vietnam, Yeast biodiversity and application in biotechnology – research at FIRI Vietnam). The ACM meeting is held accompanied with an open symposium in order to make microbiologists around the host culture collection aware of the importance of a biological resource centre.

The Task Force on Biological Information Management is chaired by K. Suzuki (Japan) and reported that the prototype of integrated strain database of four culture collections, namely BCC (Thailand, 1088 strains), CGMCC (China, 9958 strains), KCTC (Korea, 5466 strains) and NBRC (Japan, 13113 strains), has been developed and maintained by Dr. J. Ma of China. The next stage is to invite other culture collections who have strain database to join. Assistance will be provided for data arrangement required for integration.

Task Force on Human Resource Development (HRC) welcomed the new chairperson, Dr. R. Monsalud (Philippines) taking over the works of Prof. I. Gandjar (Indonesia). Dr. Monsalud proposed to start e-meetings to collect opinions from the members on this matter.



**Fig. 3: Group photo of the participants of ACM symposium**



**Fig. 4: Prof. Nguyen Lan Dung (Left) and the author**



The Task Force on Management of Material Transfer (MMT) is chaired by Dr. T Changthavorn (Thailand) and he reported the present status of the guidelines of MMT including a model material transfer agreement (MTA) commonly used among the member countries. The difference of the situation in countries was discussed.

I would like to express thanks for Prof. Nguyen Lan Dung, Dr. Duong Van Hop, and the staff of the Vietnam National University, Hanoi for their contribution to the successful meeting of ACM6.

The foreign members of ACM had an opportunity to visit the National Assembly Office of Vietnam to meet the Vice Chairperson of the Vietnam National Assembly. We emphasized in front of her that BRCs should be strengthened and the infrastructure provided to utilize biological resources for research and industry through international cooperation.

## **THE FRENCH BRC STANDARD**

***Céline Druetz***  
***AFNOR Certification***  
***La Plaine Saint-Denis, France***

After the five years of financial support by NITE, it may be the turning point for ACM. We need further discussion on the future management of the ACM. One idea is to open the consortium with participants funding their own expenses. The next ACM meeting will be held in Japan on 14 to 16 of October 2010, just before the 10<sup>th</sup> Congress of Parties (COP10) of the convention on Biological Diversity (CBD). We are eager to achieve a successful meeting to demonstrate the win-win relationships between Asian countries at different stages in progress of biotechnology and life sciences with relevance to utilization of microbial resources.

Since December 2006, the AFNOR group (the French organization for standardization) has worked on the three following topics:

- Elaboration of a French standard dedicated to BRCs
- Setting-up of the corresponding certification process
- Definition of an action plan for the recognition of the French standard at an international level

The French BRC standard was published in July 2008. It is entitled "Quality of BRC – BRC Management system and quality of the biological resources from human and microbiological sources" (NF S96-900). This standard is



based on the related OECD guidelines and is compatible with ISO 9001. Its scope is designed to fit current regulations and applies to organizations whose principle assignments are to preserve and make human biological samples or microbiological resources available in particular for research, education, and industry.

## INSTITUT PASTEUR

***Chantal Bizet, Bernard Papierok and  
Romain Faugeron  
Institut Pasteur  
Paris, France***

The NF S96-900 standard specifies requirements relative to BRC Quality Management System (QMS) and requirements necessary for ensuring quality in BRCs. The standard is divided into three parts:

In October 2009 the Centre de Ressources Biologiques de l'Institut Pasteur (CRBIP) has been certified according to the French norm NF S96-900, for acquisition, control, preservation and distribution of biological resources, including microbial strains (bacteria, cyanobacteria, fungi, and viruses), and human samples.

**Part 1:** Organization and quality policy (similar to ISO 9001)

- Quality Management System: a set of established, implemented and monitored processes and procedures:
  - To apply BRC's quality policy
  - To achieve target objectives
  - Responsibility of the management
  - Measurement, analysis and improvement

## THE ROMANIAN BIORESOURCE CENTRE AND ADVANCED RESEARCH ASSOCIATION

**Part 2:** Resources required for the BRC to operate

- Staff competences and training
- Laboratory equipment
- Conservation equipment
- IT system

The Association is a non-governmental organization founded in July 2008 by some Romanian researchers acting as an initiative committee for bringing together the culture collections of Romania. Information on the organization can be found at: [www.rbcar.ro](http://www.rbcar.ro)

**Part 3:** Handling biological resources

- Methods
- Quality control
- Preparation, conservation
- Associated data

## ATLAS OF LIVING AUSTRALIA

In summary, the main requirements a BRC has to meet to be certified according to the NF S96-900 standard are the following:

- To establish, document, set up and maintain a sound Quality Management System
- To supply conform biological resources
- To have its QMS certified by an independent certification body

The initiative will develop a **biodiversity data management system** which will link Australia's biological knowledge with its scientific and agricultural reference collections and other custodians of biological information. For further details see <http://www.ala.org.au/>. The **Australian Microbial Resources Research Network** (AMRRN, <http://amrin.org/>) which brings together the living microbial collections of the Australian Biological Resource Centers and is now making their data available through the Atlas of Living Australia.



## ENDANGERED COLLECTIONS

### THE MICROBIOLOGICAL COLLECTION OF UNIVERSIDAD DEL VALLE DE GUATEMALA (CMUVG)

**Dinora Roche Recinos<sup>\*1</sup> y Maricruz Álvarez Mury<sup>2</sup>**

<sup>1</sup> Instituto de investigaciones, Centers for Disease Control and Prevention, Central America and Panama (CDC-CAP), Universidad del Valle de Guatemala, Guatemala.

<sup>2</sup> Laboratorio de Análisis de agua y alimentos, Centro de Estudios en Salud (CES), Universidad del Valle Guatemala, Guatemala

\*E-mail: [droche@gt.cdc.gov](mailto:droche@gt.cdc.gov)



The Universidad del Valle de Guatemala was founded in 1966, as a private university. Eleven years later in 1977 the university founded its own Research Institute. The Research Institute currently has 8 centers and 17 specialized laboratories. In addition, there are 5 independent support units.

Within the Research Institute there are three main research themes:

- **The Medical and Tropical Diseases Research Group**, which performs multidisciplinary field and laboratory, studies of

important diseases that affect humans in the following principal areas: Malaria/Dengue, Chagas disease, Leishmaniasis, food-borne and waterborne diseases (water and sanitation), acute respiratory diseases, and HIV/AIDS.

- **The Agricultural and Environmental Group** promotes preservation, sustainable use, and monitoring of the natural resources of the country. It also investigates new technologies for the quick diagnosis of diseases and provides training to various institutions and also advises technicians and agriculturists in the application of biological control technologies.
- **The Food Technology and Research Group** develops research activities to establish the physical, chemical, nutritional, and biological composition of both conventional and unconventional foods, raw or processed, as well as agro-industrial products and by-products.

The microbiological collection of the Research Institute of the Universidad del Valle de Guatemala, was established on June 2007. This collection derived from the AGROCYT project 06-2005 called "Comprobación de la existencia de cepas de *Bacillus thuringiensis* en la filoesfera del árbol de aguacate y verificar la toxicidad de las proteínas producidas hacia los insectos plaga" which had as one of its objectives to find and isolate native *Bacillus thuringiensis* strains from the phyllosphere of the avocado Hass tree grown in two regions of Guatemala: Sacatepéquez and Alta Verapaz.

The collection aspires to become an example for all the collections that the university has, and to become a centre for centralization of different kind of strains. For this reason, a storage area in the third floor of the Research Institute was accommodated and remodelled to become the new laboratory that will hold the collection, to carry out the work and storage of the cultures appropriately.

The collection holds some strains of medical and industrial importance and mainly the 296 environmental isolates of presumptive *Bacillus thuringiensis* from the project. The current method of preservation used is: mechanical freezer (NB + glycerol 20%, -70°C in cryovials), in quantities of 2 ml per micro-vial. The viability of the cultures is tested every 6 months, with subcultures in nutritive agar plates. We realize that this



on its own is not the best way to preserve and maintain the cultures given equipment breakdown could lead to loss of the collection, but due to having no budget and the lack of alternative equipment we can not do more. We realize that we will lose valuable material if we do not improve the preservation and testing methods for the collection.

The information on the microbiological collection of the university is available in an electronic catalogue where everyone that is interested can find a complete listing of the microorganisms that the collection holds and the information of the laboratory that holds them. The electronic page where the information is available is: <http://coleccionmicrobiologicauvq.blogspot.com/>. We would like to make this catalogue as well as the collection available for all the people interested in research and applied microbiology in all its fields.

Due to the *B. thuringiensis* project, the catalogue created has individual photographic records of the colony and morphology (Gram and Coomassie blue smears) to verify morphology and crystal presence. It also has the record of the fragments of its 16sDNA ribosomal gene obtained by SSCP-PCR, for all the isolates that where crystal positive for the Coomassie blue stain. Thus because not all the isolates where identified with this method we need to run biochemical tests on the other isolates for there correct identification.

The fledgling collection currently has a number of urgent problems: primarily the identification and preservation of strains because of the lack of money for buying a freeze-dryer to optimally preserve the strains, and a means of their accurate characterization that would more accurately identify future deposits in the collection. However, thanks to the donation of the SfAM, we are looking at the possibility of acquiring suitable used equipment which can be refurbished and to some money we hope to raise, which, if successful will allow us to freeze-dry our cultures to correctly store them.

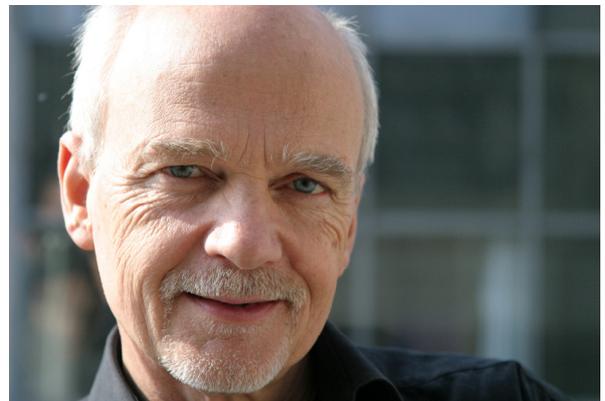
We thank SfAM for their help and support, specially Dr. Green and colleagues on the WFCC Endangered Culture Collection Task Group, who gave us useful advice and helped the grant applications for the sustainment and improvement of our small but important collection which we hope will provide a sound base on which to begin to

develop an improved reference collection for future local scientists.

## ANNOUNCEMENTS

### RETIREMENT

#### Prof. ERKO STACKEBRANDT



Professor Dr. Erko Stackebrandt, recently retired director of the DSMZ-German Collection of Microorganisms and Cell Cultures GmbH, Braunschweig, Germany received the 2009 Bergey Medal for recognition of his lifelong achievements in the field of systematic bacteriology.

He is the first microbiologist world-wide to have received both, the Bergey Medal and the Bergey Award, given in 1991, while working in Australia at the University of Queensland, in recognition of his outstanding contributions to bacterial taxonomy. These prestigious distinctions were awarded by the Bergey's Manual Trust, Michigan, USA.

Prof. Erko Stackebrandt has published more than 550 peer-reviewed papers and more than 180 book chapters and other scientific contributions in the field of bacterial systematics, phylogeny and ecology. He has contributed to the descriptions of more than 400 prokaryotic species and 80 genera. He is now living in Paris, France but can still be contacted at [erko@dsmz.de](mailto:erko@dsmz.de)

## USEFUL LINKS

<http://www.escmid.org/>



## **FUTURE CONFERENCES AND WORKSHOPS**

### **9<sup>TH</sup> INTERNATIONAL HIGH CONTAINMENT WORKSHOP**

**May 16th - 21st, 2010**

***Canadian Science Centre for Human and Animal Health  
Winnipeg, Manitoba, Canada***

The Public Health Agency of Canada and the International Centre for Infectious Diseases, Sandia National Laboratories and Smith Carter Architects and Engineers, Inc. are pleased to co-present the 9th Annual International High Containment Biosafety Workshop.

This workshop addresses the increasing needs of biosafety professionals, facility operators and managers for advanced training in critical aspects of biocontainment.

This rigorous five-day course allows participants to work hands-on in the special containment and facility support areas (BSL 3 and 4) of the Canadian Science Centre for Human and Animal Health, one of the world's most recognized containment laboratory complexes. Course material has been updated and revised for current needs of biosafety professionals.

Workshop topics include for example:

- Design and operation of containment laboratories
- Methodology and application of risk assessments
- Personal protective equipment use and assessment
- Principles and practices of containment laboratory entry/exist
- Assessment and performance verification of primary and secondary containment devices
- Monitoring and testing for decontamination; practices and procedures
- Response to emergencies and biological spills
- Implementation of high impact training programs

- Safety and quality management systems in the laboratory
- Lessons learned in facility design and construction

The uniqueness of this workshop is its intensive, participatory learning approach. Teams of 4-6 work with different instructors each day to complete technical modules, supplemented by plenary lectures and discussions.

Space is limited and participants are determined through a critical review of applications.

The deadline for applications is Monday, January 11, 2010 so act now.

The cost to attend is \$3150 CAD (Plus Goods and Services Tax). As of December 3, 2009 the approximate price in American dollars is \$2990 (Plus Goods and Services Tax). The cost in American dollars is subject to currency fluctuations.

Directly preceding the International High Containment Workshop, a seminar on Biosafety Management Systems in Laboratories is being offered May 11th -14th, 2010.

Check out the website for more information  
<http://biosafety.ca/bmsl/home.html>

We encourage people to attend both. Both workshops are highly complimentary and integrated.

Participants who attend both the International High Containment Workshop and the Biosafety Management Systems in Laboratories Seminar will receive a 10% discount in their course tuition for the International High Containment Workshop.

If you have questions or need more information, please view our website [www.biosafety.ca](http://www.biosafety.ca) (Click on the International High Containment Workshop tab) or contact us at [biorisk@icid.com](mailto: biorisk@icid.com)



## ICCC-12 CONFERENCE

**Florianópolis, Santa Catarina, Brazil from  
September 26 to October 1, 2010**

The organization of the 12th International Conference on Culture Collections (ICCC-12) is progressing well. The event organized by the World Federation for Culture Collections (WFCC) in collaboration with the Brazilian Society for Microbiology (SBM) will be held at the Costão do Santinho International Events Centre (Florianópolis, Santa Catarina, Brazil) from September 26 to October 1st, 2010. The conference goal is to bring together organizations, collection curators and research leaders in different disciplines that depend on the access to biological material and services provided by microbial resource centres. The interdisciplinary international discussion on the new roles of resource centres will involve policy makers, officers of research-funding agencies, leaders of collection-based institutions, curators and other stakeholders. The scientific program include 10 plenary sessions, 15 parallel sessions, and poster sessions and 9 sessions of invited oral presentations from selected posters.

The 10 plenary sessions will address the trends and developments on the following themes:

- Biotechnological innovation and the development of bio-based economies
- Cutting-edge developments in microbial taxonomy and ecology
- e-Infrastructures, biological data management and networking
- New roles for the Microbial Resource Centres and the Global Biological Resource Centres Network

The 15 parallel session's presentations and discussions will focus on:

- Bioprospecting, biofuels, bioremediation and health care innovation
- Trends and developments in microbial taxonomy, phylogeny and biogeography of prokaryotes, filamentous fungi, yeasts and protozoa
- Key themes and issues that is relevant for the management of microbial resource centres, including new technologies for strains

authentication, legal and safety issues, quality management, intellectual property rights and biotechnological innovation, preservation of biological material and e-learning tools.

The 9 sessions of invited oral presentations from selected posters, will address the following focal themes:

- Biotechnological applications
- Microbial taxonomy and ecology
- Microbial resource centres management and networking

The training courses and satellite workshops to be offered in association with the conference include:

- Preservation of Laboratory held Biological Material and Related Quality Management
- A Practical Approach to Microbial Identification by MALDI-TOF ICMS (Matrix-Assisted Laser Desorption Ionization Time-Of-Flight Intact Cell Mass Spectrometry).

Workshops:

- Information Systems, Data Management and Microbial Resource Centres Networking
- Successful Patenting in Biotechnology

For further information on travel and logistic arrangements, conference fees, training courses and satellite workshops please check the conference website <http://www.iccc12.info/index>

The second announcement of ICCC-12 will be released in February 2010. We hope to see you in Florianópolis.

### ICCC-12 Organizing Committee





## CALL FOR PROPOSALS TO HOST THE 2013 INTERNATIONAL CULTURE COLLECTIONS CONFERENCE (ICCC13)

Proposals are requested to host the Thirteenth International Culture Collections Conference. The 12<sup>th</sup> will be held in Florianópolis, Santa Catarina, Brazil from September 26 to October 1st, 2010. Further information on the ICCC-12 Conference entitled ***Biological Resource Centres: gateway to biodiversity and services for biotechnological innovation*** is available at <http://www.iccc12.info/>. The Conference usually attracts 3-400 participants and the event is spread over 5 days. It brings together the culture collections and their users highlighting both the research that is undertaken within collections and key science, technology and policy developments that impact upon the work of collections and their users.

The proposal should provide information under the following headings:

1. **Proposed dates** (in 2013, normally in the later half of the year)
2. **Venue**
3. **Facilities available for the congress**
  - Size and number of lecture rooms
  - Potential for work shops and training courses in laboratories
  - Presentation media support
    - Slide projectors
    - Video drives and projectors
    - Movie projectors
    - Overhead projectors
    - PC projectors
  - Banquet facility
4. **Accommodation**

*The costs of hotel rooms* if available at the conference centre plus a range of other accommodation available across a range of prices
5. **Suggestions for the planning**, e.g. the number of concurrent sessions (plenary papers, symposia,

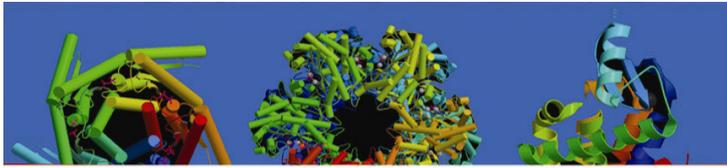
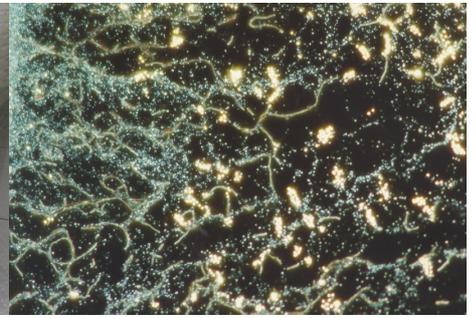
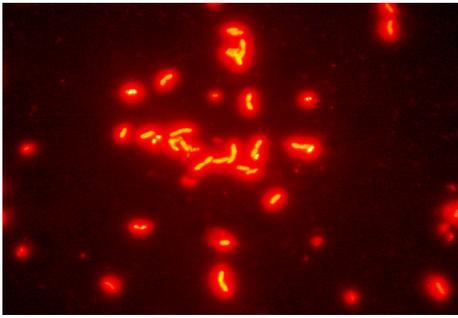
- contributed papers, posters, workshops)
- 6. **Congress tours and excursions**
- 7. **Local Organizing Group**
- 8. **Possible sources of financial support to the Congress**
- 9. **Financial support for the participants from developing countries**
- 10. **Other possible support**
- 11. **Local sponsorship opportunities**

The proposals will be assessed by the WFCC Executive Board and a decision made to enable preparation for announcement at ICCC12 in Brazil.

Please submit your proposal to the WFCC Secretary:

Philippe Desmeth: International Cooperation Officer,  
Belgian Coordinated Collections of Microorganisms, c/o  
BCCM Rue de la Science, Brussels B-1000, Belgium.

E-mail: [desmeth@mbla.ucl.ac.be](mailto:desmeth@mbla.ucl.ac.be)





# ECCO XXIX. Meeting

## European Culture Collections' Organisation

Let's meet in the timeless city, Istanbul, where a warm welcome awaits you!!



**JULY 01 - 02, 2010**  
**THE MARMARA TAKSİM HOTEL**  
**ISTANBUL**

### SCIENTIFIC SECRETARIAT

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### CONGRESS ORGANIZER

**SYMCON PCO**  
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**ANKARA**  
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 06690 Cankaya - ANKARA  
 Phone : +90 (312) 467 35 70/71  
 Fax : +90 (312) 467 38 02



[www.eccosite.org](http://www.eccosite.org)

### INVITATION

**ISTANBUL**  
*Metropolis of Past and Present,*

*"...One minute.... one minute.... we are now passing Sarayburnu.... I see an immense land, full of lights.... I see endless things and colours.... We leave Sarayburnu behind.... and now Istanbul.  
 To great, glorious, magnificent Istanbul. Thanks God for this glory to mankind. I have never in my life even dreamt of such beauty..."*

*Edmondo de Amicis,  
 Italian writer and journalist (1846-1908).*

Istanbul, the city which Edmondo de Amicis, Italian writer and journalist mentions heartily. We will be honoured to meet you at the '29th ECCO Meeting' on July 2010, where two great continents; Europe and Asia unite. In the year of 1993, as we join together with the respectable researchers who are in mission at the European's Culture Collections Centres at the '12th ECCO Meeting' we are glad to say that it will be a great pleasure for us to have such an honour to reunite.

In order to organize this meeting with the latest technological developments, observations and experiences from Europe and Turkey, reaching to contiguous countries and their honorable scientists participations, gives us the opportunity to introduce Turkish Culture and Tradition. I hope to come together in Istanbul's nice and sunny summer days at 29th ECCO.

With My Best Regards,

Prof. Dr. Bulent Gurler

Curator of KUKENS  
 (Istanbul Medical Faculty,  
 Centre for Research and Application of  
 Culture Collections of Microorganisms)




[www.eccosite.org](http://www.eccosite.org)



[www.eccosite.org](http://www.eccosite.org)



## OTHER CONFERENCES

### 2<sup>ND</sup> INTERNATIONAL CONFERENCE ON DRUG DISCOVERY AND THERAPY

1-4 February, 2010  
Dubai, UAE  
[www.icddt-om.com](http://www.icddt-om.com)

### 14TH INTERNATIONAL CONGRESS ON INFECTIOUS DISEASES (14TH ICID)

9-12 March, 2010  
Miami, FL, USA  
[http://www.isid.org/14th\\_icid/index.shtml](http://www.isid.org/14th_icid/index.shtml)

### INTERNATIONAL SYMPOSIUM ON HIV AND EMERGING INFECTIOUS DISEASES

16-17 March, 2010  
Marseille, France  
<http://www.isheid.com/site/-10ISHEID,671-?lang=eng>

### FOURTH EUROPEAN CONGRESS OF VIROLOGY

7-11 April, 2010  
Lake Como, Italy  
<http://www.eurovirology2010.org/>

### MOLECULAR TYPING METHODS FOR BACTERIAL PATHOGENS

19-23, April, 2010  
Zagreb, Croatia  
[http://www.escmid.org/profession\\_career/educational\\_activities/current\\_escmid\\_courses\\_and\\_workshops/molecular\\_typing\\_methods\\_for\\_bacterial\\_pathogens/](http://www.escmid.org/profession_career/educational_activities/current_escmid_courses_and_workshops/molecular_typing_methods_for_bacterial_pathogens/)

### 4<sup>th</sup> EUROPEAN SPORES CONFERENCE

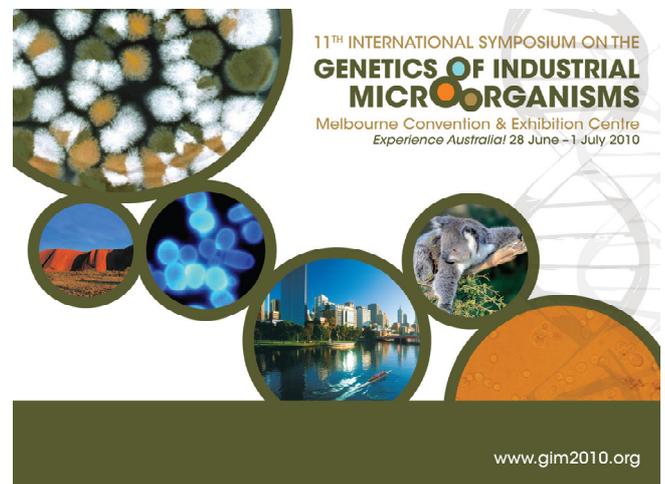
27-29 May, 2010  
Cortona, Italy  
[http://www.sporesconference.com/Spores\\_Conference/Home.html](http://www.sporesconference.com/Spores_Conference/Home.html)

### 5<sup>th</sup> INTERNATIONAL BIOENGINEERING CONGRESS

16-19 June 2010  
Izmir, Turkey  
<http://www.bec2010.com/default.asp>

### GIM 2010

28 June-1 July 2010  
Melbourne, Australia  
<http://www.gim2010.org/>



### 1<sup>st</sup> ANNUAL WORLD CONGRESS OF PETROLEUM MICROBIOLOGY (WCP) 2010

28-30 July, 2010  
Dalian, China  
<http://www.bitpetrobio.com/wcp2010/>