



# WORLD FEDERATION FOR CULTURE COLLECTIONS Newsletter (No.46)–AUGUST 2009

## ICCC-12 CONFERENCE

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

The 12th International Conference on Culture Collections (ICCC-12) will be held in Florianópolis, Santa Catarina, Brazil from September 26 to October 1st, 2010, at the Costão do Santinho International Events Centre. The conference program will include 10 plenary sessions, 15 parallel sessions focused on specific themes, and 9 sessions of invited poster presentations.

The plenary sessions will give an overarching view on:

- Biotechnological innovation and the development of bio-based economies
- Cutting-edge developments in microbial taxonomy and ecology
- e-infrastructures, biodiversity informatics and the dynamic integration of biological data
- From culture collections to Biological Resource Centers Network, and the
- Next steps to implement the Global Network

The parallel sessions will focus on issues related to:

- Bioprospecting, biofuels, bioremediation and health care innovation
- Trends and developments in microbial taxonomy, phylogeny and biogeography of prokaryotes, filamentous fungi, yeasts and protozoa
- Key issues in the management of resource centers, including tools for strain authentication, legal and safety matters, quality management, intellectual property rights and innovation in biotechnology, preservation of biological resources, and e-learning strategies and tools

For further information on the conference updates and scientific program details, please check the conference website <http://www.iccc12.info/>

If you have not done the pre-registration yet and want to be notified on updates and conference news, please pre-register now at <http://www.iccc12.info/preregistration>





## NEWS FROM THE PRESIDENT

*Dr. David Smith,  
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### DEMONSTRATION PROJECT FOR A GLOBAL BIOLOGICAL RESOURCE CENTRE NETWORK



**The GBRCN Demonstration Project Secretariat: David Smith, Dagmar Fritze, Dunja Martin and Susan Smith, Julius Kühn-Institut (JKI), Institute for Crop and Soils Science, Braunschweig**

**Email: [d.smith@cabi.org](mailto:d.smith@cabi.org)**

A demonstration project has been established to follow-up the work of the OECD Biological Resource Centre Initiative to enhance collection management and networking. The OECD developed the concept of a Global Biological Resources Centres Network (GBRCN) to improve access to high quality biological material and information. The German Federal Ministry of Research and Education decided to support this by funding a small central office to demonstrate the delivery of defined benefits from networking a number of key biological resource centres. We present here a short summary of the project's objectives and an update on its current activities.

The demonstration project Secretariat co-ordinates activities to deliver:

- The establishment of a GBRCN differentiated from existing networks and organisations
- The Implementation of OECD Best Practice in BRCs (OECD, 2007) assessed by independent third parties
- Towards the end of 2010 it will present: A strategy for setting up a GBRCN; An infrastructure with governance mechanisms; A programme of activities; A Secretariat structure and function

The GBRCN offers a way forward to support research and biotechnology as a platform for a knowledge-based bioeconomy. The members of the network will implement the measures to ensure authenticity of materials preserved by long-term techniques to retain stability and the provision of validated associated information. They will provide access to high quality resources to underpin the life sciences. This demonstration project focuses initially on microorganisms but the original OECD concept was that it would include BRCs holding all types of living materials and the project Secretariat will look to collaborate with initiatives in the animal, human derived material and plant domains.

The aim is to enhance the efficiency in collections of laboratory held, living biological material, by co-ordinating and driving activities to meet user needs. A network designed to accommodate the future needs of biotechnology and biomedicine. The Secretariat will try and create synergies with existing initiatives and networks to avoid duplication of effort. The complexity of legitimate collection, distribution and use of living biological material demands the coordination and sharing of activities. The task of ex-situ conservation is enormous and exceeds the technical potential of an individual collection in any individual country. Adequate collection management of well preserved and authenticated organisms is essential to guarantee quality and safety in the various areas of application, to allow controlled access to potentially hazardous organisms and to ease and improve the advantageous utilisation of the materials for health and environment. The present partnership brings together 15 countries with a global network, the World Federation for Culture Collections (WFCC) and regional networks, the European Culture Collections' Organisation (ECCO) and the Asian Consortium for Microorganisms (ACM).

Demonstration Project Partners:

- Brazil, Vanderlei Canhos, CRIA
- Belgium, Marlene Bosschaerts/Philippe Desmeth, BCCM
- Canada, Carolyn Babcock, AgCanada
- China, Juncai Ma, CAS; Jingang Gu, CAAS
- Finland, Erna Storgards, VTT
- France, Chantal Bizet, CRBIP
- Germany, Dagmar Fritze, DSMZ
- Italy, Barbara Parodi, ICLC
- Japan, K. Suzuki, NITE, BRC; H. Sugawara, WDCM



- Kenya, Hamadi Boga, JKUAT
- Netherlands, Joost Stalpers, CBS
- Portugal, Nelson Lima, MUM
- Spain, Esperanza Garay, CECT
- Uganda, Denis Byarugaba, University Makrere
- UK, David Smith, CABI

The partners bring a wealth of experience, many having participated throughout the OECD BRC Task Force discussions and include collections at different levels of development and implementation of best practice. The network is not solely about quality management it hopes to help focus activity on specific challenges including:

- Compliance with changing legislation – need for common approaches
- Harnessing information technology for data mining
- Training and Capacity Building
- Taxonomy – the diminishing expertise
- Massive incorporation of biodiversity items
- Harnessing new technologies to add value to collection holdings
- Recognising/utilising the value of biodiversity to solve global problems

These are not new challenges but are still high in our agenda. Activities are underway to test a self assessment mechanism to help prepare collections for implementation of independent third party auditing processes. Discussions have been held with representatives of accreditation and accredited certification bodies to examine ways to implement the OECD Best Practice for BRCs (OECD, 2007) and guidance documents are being prepared. The first of the GBRCN outreach seminars was arranged by Esperanza Garay, Spain and Nelson Lima, Portugal and was held at Ave Park which is located in Taipas, Guimarães. The Ave Park is a new Science Park where the University of Minho has its biotechnology spin off and shares conference facilities. The GBRCN seminar was held back to back with a MALDI-TOF workshop. The GBRCN seminar was split into a day of informative presentations on the background and progress, including country reports. The second day included a working meeting with certification/accreditation bodies to define the work programme in this area and presentations on Biosecurity and options for a GBRCN information system. The next steps were defined and actions assigned. In France the OECD Best Practice has been converted into a French Standard NF S96-900 which is available from AFNOR

(2008). This and other mechanisms are being explored. For example the Brazilian partners, Nacional de Metrologia, Normalização e Qualidade Industria (IMMETRO) and Instituto de Tecnologia do Paraná (TECPAR), are carrying out a gap analysis on ISO 17025 versus OECD Best Practice and Smith is exploring ISO Guide 34 versus OECD Best Practice. The GBRCN is working very closely with the EU Project EMbaRC (see page 5) in this activity and also to develop a Biosafety and Biosecurity data base, prepare a practical Biosecurity code of conduct and address risk assessment in microbiology. The WFCC is working closely with the GBRCN demonstration project to examine synergies and how both networks work together in the future. More information is available on the GBRCN web site <http://www.gbrcn.org> .

### **GBRCN Demonstration project partners at the launch meeting in Braunschweig, February 2009**



### **References**

- OECD Best Practice Guidelines for Biological Resource Centres (June 2007), <http://www.oecd.org/publications/> .
- French Standard NF S96-900 "Quality of biological resource centres (BRCs) – Management system of a BRC and quality of biological resources from human or micro-organism origin" available from Association Française de Normalisation 11, rue Francis de Pressensé F – 93 571 La Plaine Saint Denis cedex <http://www.afnor.fr>



## NEWS FROM IMCAS BRC CHINA

Dr David Smith, as the current President of the World Federation for Culture Collections (WFCC) and the representative of the Global Biological Resource Centre Network (GBRCN), was invited to attend the opening ceremony of the Biological Resource Centre at the Institute of Microbiology, Chinese Academy of Sciences (IMCAS BRC), Beijing, China.

The past President of the WFCC, Professor Jean Swings had been invited to IMCAS in 2003 to witness the start of the project to transform the Institute's General Microorganism Culture Collection into a BRC and as the current President Smith was invited to present a keynote speech at its opening. After introductory and congratulatory remarks from dignitaries and well wishers the IMCAS BRC plaque was unveiled.



The tour of the IMCAS BRC revealed state-of-the-art preservation, characterisation and research facilities.

The work undertaken at the centre bridges the gap between the microorganism and its use in biotechnology; adding value to the strains held by revealing their properties and exploring how these may be used in the design of solutions to problems and useful products. The tour was followed by a symposium addressing the uses of microorganisms in biotechnology and the developing bioeconomy.

## REPORTS

### THE EUROPEAN CONSORTIUM OF MICROBIAL RESOURCES CENTRES

#### EMBARC

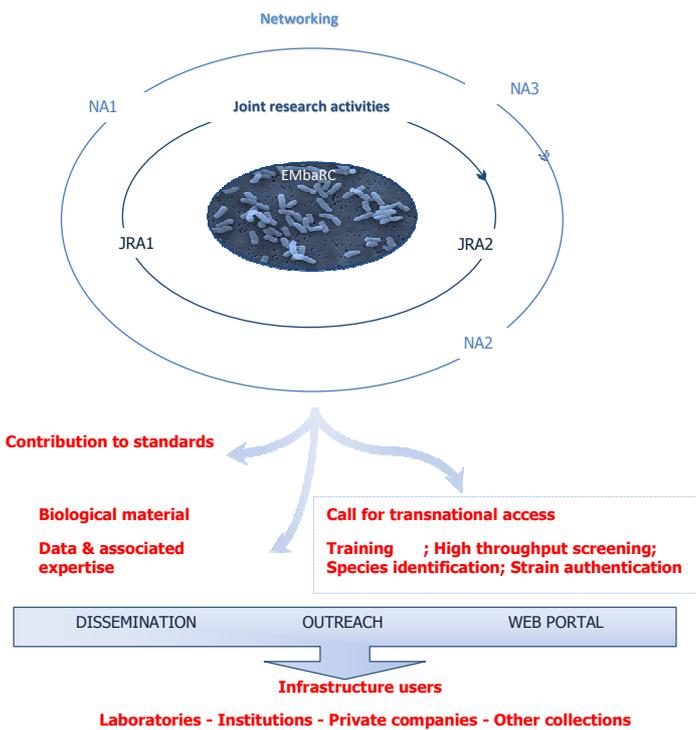
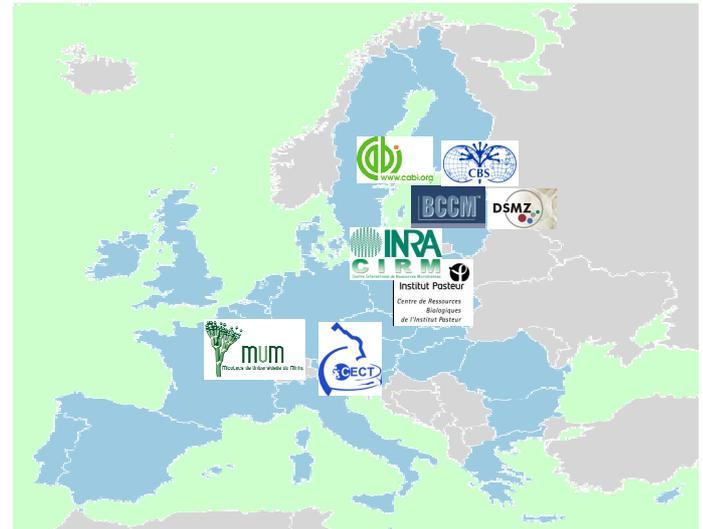


The properties of microorganisms have been harnessed by man for thousands of years, particularly in brewing and baking but their uses continue to expand not just in food and healthcare but in almost all areas of industry and environmental maintenance. Their authentication, characterisation, stable storage and supply are a major contribution to the knowledge-based bioeconomy. 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. It aims to improve, coordinate and validate microbial resource centre (MRC) delivery to European and International researchers from both public and private sectors. The EMBARC project is a mixture of networking, access, training and research.

To ensure **harmonisation** of the quality of MRCs, EMBARC plans to implement the current OECD best practice guidelines and emerging national standards for Biological Resource Centres (BRCs) at the international level. **Outreach and training** activities will enable not only the EMBARC consortium but all European collections to operate according to the standards required to deliver products and services of comparable and consistent quality thus meeting customer expectations both present and future. The EMBARC project takes European collection **networking** to new heights of coordination and efficiency providing new services and better access for users. The opportunity will be taken to work more closely with the user community. A one-stop access to the collections of EMBARC and the wider European BRC community via a searchable web portal will be provided, building on the outcomes of the previous EU projects, CABRI and EBRCN, whilst adopting appropriate new IT technologies.



Access and high-quality **support and training** to research teams are offered from the consortium partners via calls for access, enabling trainees to work in the partner facilities accessing staff, resources and technologies. The **research** part of the EMbaRC project will deliver new methods for strain and DNA preservation, novel techniques for identifying species and high throughput screening for enzymes of industrial interest. The networking elements will give better access to authentic microorganisms and validated associated data and provide a set of business models to increase self-sustainability of BRCs. This project creates **the European node of the OECD envisaged Global Biological Resource Centre Network**.



### Training and study opportunities cover

- High Throughput Screening of food bacteria and filamentous fungi
- Strain identification on pathogenic bacteria
- Handling risk group 3 microorganisms
- Taxonomy of pathogenic bacteria -food safety
- Management of microbial strains in *ex situ* collections
- State of the art techniques in bacteriology
- Identification
- Authentication, characterisation, preservation, databasing storage of micro-organisms
- Analytical and microbiological services
- Theoretical, practical and regulatory aspects of a plasmid collection management
- *In vitro* Culture of Arbuscular Mycorrhizal Fungi

If you are interested in a short course of study at one of the partners institutions please apply for the transnational access further details will appear soon on the EMbaRC web site: <http://www.embarc.eu>. In the meantime please contact David Smith [d.smith@cabi.org](mailto:d.smith@cabi.org) or Philippe Desmeth [desmeth@mbla.ucl.ac.be](mailto:desmeth@mbla.ucl.ac.be).

The call for transnational access will be made on the EMbaRC web site and will involve submission of a proposal in the areas listed below. Applicants should be based in the European Union or associated states and can apply for short study periods. Following your submission there will be a peer review of proposals and the successful applicants will have a short study visit at a partner collection.



## The EMbaRC partners:

BRC	Partner	Holdings
CIRM	Institut National de la Recherche Agronomique, INRA <a href="mailto:sylvie.lortal@rennes.inra.fr">sylvie.lortal@rennes.inra.fr</a> <a href="http://www.rennes.inra.fr">www.rennes.inra.fr</a>	Yeasts (CIRM-Levures) Filamentous fungi (CIRM-CF) Food bacteria (CIRM-BIA) Animal or human pathogenic bacteria (CIRM-BP)
CRBIP	Institut Pasteur, IP Chantal Bizet : <a href="mailto:embarc@pasteur.fr">embarc@pasteur.fr</a> <a href="http://www.crbip.pasteur.fr">www.crbip.pasteur.fr</a>	Bacteria Fungi Viruses (class 3)
DSMZ	Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, DSMZ <a href="mailto:erko@dsMZ.de">erko@dsMZ.de</a> <a href="http://www.dsmz.de">www.dsmz.de</a>	Micro-organisms Human and animal cell lines Plant cell lines Plant viruses
CABI	CAB International Europe David Smith <a href="mailto:d.smith@cabi.org">d.smith@cabi.org</a> <a href="http://www.cabi.org">www.cabi.org</a>	Filamentous fungi and yeasts Plant pathogenic bacteria; Nematodes Biocontrol agents belonging to these groups
CECT	Universitat de València-Estudi General, UVEG <a href="mailto:esperanza.garay@uv.es">esperanza.garay@uv.es</a> <a href="http://www.cect.org">www.cect.org</a>	Bacteria Filamentous fungi Yeasts
MUM	Universidade do Minho, Uminho <a href="mailto:micotea@deb.uminho.pt">micotea@deb.uminho.pt</a> <a href="http://www.micoteca.deb.uminho.pt">www.micoteca.deb.uminho.pt</a>	Fungi
CBS	Koninklijke Nederlandse Akademie Van Wetenschappen, KNAW Joost A. Stalpers <a href="mailto:j.stalpers@cbs.knaw.nl">j.stalpers@cbs.knaw.nl</a> <a href="http://www.cbs.knaw.nl">www.cbs.knaw.nl</a>	Fungi (filamentous fungi and yeasts) Bacteria, Plasmids, Phages DNA libraries, DNA (from CBS strains)
BCCM/LMBP & BCCM/LMG	Universiteit Gent, UGent <a href="mailto:bccm.lmbp@dmb.r.ugent.be">bccm.lmbp@dmb.r.ugent.be</a> <a href="http://www.bccm.belspo.be/">www.bccm.belspo.be/</a>	Plasmids and DNA libraries (BCCM/LMBP) Bacteria (BCCM/LMG)
BCCM/MUCL	Université Catholique de Louvain, UCL <a href="mailto:bccm.MUCL@uclouvain.be">bccm.MUCL@uclouvain.be</a> <a href="http://www.bccm.belspo.be">www.bccm.belspo.be</a>	Filamentous fungi and yeasts Arbuscular Mycorrhizal Fungi
SPP-PS	Service Public Fédéral de Programmation Politique Scientifique, SPP-PS <a href="http://www.bccm.belspo.be">www.bccm.belspo.be</a>	Not applicable

## MYCOBANK

### A PUBLIC SERVICE FOR MYCOLOGY

**Joost A. Stalpers, CBS, Utrecht, The Netherlands**

Mycobank ([www.mycobank.org](http://www.mycobank.org)) was officially launched by the CBS Fungal Biodiversity Centre towards the end of 2004. It was envisaged as a freely available electronic depository system for fungal taxonomic novelties, including associated data. Since 2007 MycoBank operates under the auspices of the International Mycological Association, and is directed by an international Scientific Advisory Board in terms of actions and policy.

#### *Why MycoBank?*

Taxonomical data tend to be much dispersed and the mycological field is no exception. Even now, every year names are published in more than a hundred periodicals, and some hardly contain mycology. No library can afford to have them all and many countries have mycologists, but not a dedicated mycological library. There are also many catalogues, both printed and on-line, and, although much is present on the Internet, search engines may fail to find the desired information on the first few pages. MycoBank offers everybody the opportunity to make relevant data available to the scientific world in a structured way.

#### *A depository for nomenclatural novelties*

The system allows mycologists to deposit new names, be it names of new taxa or new combinations. It also requires some basic information, both nomenclatural (for example the basionym or type information) and taxonomical (e.g. a description). As soon as a name is deposited, the MycoBank system automatically e-mails a unique registration number to the depositor.

Before the deposit is accepted, the MycoBank software checks the uniqueness of the name: there is an automatic search for existing homonyms and the depositor will immediately be warned if an earlier homonym exists. After the deposit, MycoBank administrators check the correctness of the name (for example for the correct termination, or typing errors) and will make suggestions when appropriate. MycoBank never applies any censorship, and a depositor may deposit anything he/she wants. The final judgement lies



with the journal editors and reviewers, where it belongs.

The correspondence between MycoBank and the depositor remains strictly confidential. The deposited name is restricted until the name has actually been published; only in searches for homonyms users may be informed of the existence of a name "in press", but without any additional data, so neither the identity of the depositor nor the intended source of publication will be revealed. In some instances though (especially new combinations), potential authors have queried such names with MycoBank staff, who again contacted the primary depositor, leading to either cross references between two papers, or in some cases joint publications authored by all scientists involved.

The search for homonyms is based on the *Index Fungorum*. CBS is (with CABI and New Zealand Landcare) one of the three custodians of Index Fungorum, and has contributed more than 100.000 new records, additions and corrections, including all new registrations (when published). At the moment the versions of the CABI site and MycoBank are not completely identical, but we hope to have a working web-based system that automatically updates the respective hubs towards the end of 2009.

The advantages of MycoBank above printed sources are obvious: (a) between 2004 and 2007 new names have been published in more than a hundred periodicals (excl. numerous books), and no indexing publication will cover them all, (b) a time gap of up to 18 months between the publication of a new name and the publication in an index is not unusual and (c) MycoBank allows the publication of additional data as descriptions, illustrations, DNA sequences etc. Finally MycoBank is a free service, and accessible from anywhere with internet access.

The acceptance of MycoBank by the mycological community is best illustrated by the following data: in 2006, 870 out of 1710 novelties were registered through MycoBank (approx. 50%). In 2007, 1445 novelties were registered, which is approx. 85% of the total for that year.

Furthermore, the number of periodicals requiring MycoBank numbers as prerequisite to publication is increasing steadily. Judged from the sources of the total amount of newly published names in 2004, these periodicals already account for over 50% of the expected novelties, and these numbers are rapidly increasing. In fact, the leading mycological journals in

the ISI system (International Statistical Institute, Web of Knowledge) require authors to deposit novelties in MycoBank.

### ***Additional taxonomic information on species***

Depositors of nomenclatural novelties are asked to deposit - besides a description and type information - also other data, for example illustrations, sequences, physiological data, links to web-based data, etc. Also data on existing taxa can be deposited, provided full information is given of the source of the data, and a number of scientists are constantly updating MycoBank to complete the information for certain groups of fungi, or geographical regions. MycoBank at the moment contains over 30.000 descriptions and 10.000 illustrations, all with full references to either the original publication or – in case of unpublished material – to its owner. MycoBank now actively searches collaboration with the managers of those websites that contain authorised information on fungi by providing short-links directly to the information. These can be descriptions, illustrations or literature.

### ***Using MycoBank***

For depositing names or data in MycoBank, a registration is necessary, but not so for searching and retrieving data. The user has now three different searches available: a basic search, where only one term (e.g. a name, or an author) can be introduced, a standard search, where 2 search factors can be given, connected with Boolean operators, and the possibility or additional criteria such as year, rank, type of name (e.g. basionym, combination, nom. nov.) and status (legitimate, valid, invalid) and sorting parameters. The advanced search gives you virtually every searching possibility, but it may take some time. This will improve as soon as a new hosting system has been implemented.

### ***The species bank concept***

MycoBank contains additional taxonomic information, for example heterotypic synonymy and an opinion on the correct name. However, it is clear that this can not be done only by the present curatorial staff. Because the literature is too vast to monitor and judge all developments, this can only adequately be achieved by (groups of) dedicated specialists. At the moment MycoBank contains eight species banks, which each contains a number of species, usually belonging to a taxonomic unit as a family or several families



(*Mycosphaerellaceae*, resupinate *Russulales*), but sometimes one or several genera (*Aspergillus*-*Penicillium*) or an ecological group (medical fungi) or morphological units (yeasts). A species bank contains besides rather complete sets of descriptions and illustrations and heterotypic synonymy also structured morphological and molecular data, allowing for example polyphasic identification. In the near future it will be possible to curate species banks on-line, and IMA and MycoBank will actively stimulate individual researchers or research groups to adopt a larger fungal taxon. These specialists or groups of specialists will have full rights and control, and will have the final responsibility for the taxonomic decisions. Simultaneously a Wiki-type system will also be provided, so that different taxonomic opinions can also be viewed.

### Prospects

The increasing acceptance of MycoBank is reason for confidence that the International Code of Botanical Nomenclature will make the deposit of new names in a public database a condition for valid and legitimate publication. As a consequence the mycological community will have these names plus a minimum set of data available at the onset of publication.

It is also feasible that, when the Index Fungorum has reached a real good coverage of the available names, the nomenclatural past will become a closed system by making only these names priorable. That would end the current situation where the literature is a black box containing unnoticed names that are a threat to well-established names and a constant source of instability. This would solve the problems that the bacteriologists faced in 1980, but without the drawback of facing numerous taxa without a valid name.

Finally it is hoped, that the possibility to adopt groups of fungi will be attractive to scientists, and that it would be a much-used reference source. New developments such as linking species banks to strains, and DNA Barcodes, will undoubtedly add further to the usability of the system.

### References

- Crous PW, Gams W, Stalpers JA, Robert V, Stegehuis G (2004). MycoBank: an online initiative to launch mycology into the 21st century. *Studies in Mycology* **50**: 19–22.
- Crous PW, Gams W, Stalpers JA, Cannon PF, Kirk PM, David JC, Triebel D (2004). An online database of names and descriptions as an alternative to registration. *Mycological Research* **108**: 1236–1238.

## ENDANGERED COLLECTIONS

### THE MICROORGANISM COLLECTION OF MICROBIOLOGY DEPARTMENT OF PONTIFICIA UNIVERSIDAD JAVERIANA. CMDM-PUJ

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The Pontificia University of Javeriana was founded in 1623 and is one of the oldest Universities in Colombia. It houses 178 research groups and has modern resources to support the latest methods of teaching, research and service provision. There are 18 faculties and 213 academic research programmes spread over 62 departments and 14 Institutes. A staff of around 3599 teaches 18000 undergraduates and 3000 post graduates. The science faculty in particular has 2000 students and 27 research groups working in the fields of biotechnology, bioinformatics, human health, biodiversity and conservation.

Within the Microbiology Department there are four main research themes: **The Industrial and Environmental Biotechnology Group** which works mainly in bioremediation and biodeterioration. Their objectives are to find microorganisms with metabolic activities useful for the removal of toxic compounds from industrial wastes as well as developing methods for the detection of a range of water borne pathogens with the aim of rapid diagnosis and establishing effective disinfection protocols. This group is also active in the screening of natural flora for novel industrial enzymes and antibiotics. **The Agricultural and Veterinary Microbiology Group** focus on the biochemical and molecular characterisation of microorganisms with biocontrol potential as well as examining the use of microbes in improving plant and animal nutrition. Finally, **The Infectious Diseases Group** conducts research into etiological agents of the major human pathogens in Colombia to aid diagnosis, prevention and treatment strategies. In particular the group work with Chagas disease, leishmaniasis, hepatitis B and C, HIV, *H. pylori* and a range of food poisoning bacteria.



The Microorganism Collection of the Microbiology Department of Pontificia Universidad Javeriana (CMDM – PUJ) in Bogotá, D.C, Colombia, was established on July of 2001 and is registered with the World Federation for Culture Collections (WFCC) World Data Center for Microorganisms (WDCM - 857) since April of 2004. It was established to support the teaching of microbiology in careers like medicine, nursing, microbiology, bacteriology, biology, ecology, and veterinary microbiology. The collection is also a major support to the above research groups in microbiology in the Javeriana University. It is one of the few collections that lend services to other universities in Colombia and it's the only collection in Colombia that offers services such as biochemical identification of bacteria, and deposit and maintenance of strains. The collection aspires to possess an important number of strains of environmental origin, because Colombia is the second country of the world with the largest natural resources of biodiversity in terms of flora and fauna. The Javeriana collection preserves bacteria and fungi of medical, industrial, agricultural and veterinarian interest. These specimens were obtained as a result of donation, research, and clinical and environmental sampling. At present we maintain around 250 cultures and are rapidly growing. The current methods of preservation are: periodic transfer, storage under oil/liquid paraffin, sterile water and mechanical freezer (BHI + glycerol 20%, -70°C in cryovials).

The information on the Javeriana collection is available in catalogues where users can find a complete listing of the microorganisms that the collection maintains. In the event of a need for additional strain information about a particular microorganism, we have information about morphology and biochemical characteristics, the origin of the strain, the location and time of collection and the depositor. Due to limitations of economic resources, the information of the collection is not in web site. Each microorganism deposited in the collection, is identified with a code that identifies our collection and a number that it is assigned according to the order of receipt of the strains in the collection. Code: CMDM - PUJ continued by the assignment number according to the order of accession. The cultures are currently classified by observation of characteristic such as colony morphology, microscopic properties and biochemical reactions. The analysis of these features together with the quantitative determination of the colony counts before and after the maintenance process offers the necessary information for the correct evaluation of the

conservation technique to choose. The cultures of the Javeriana collection are currently preserved in glycerol broth at -70°C, in quantities of 2 ml per cryovial. The fungal cultures are also conserved by periodic transfers, under oil/liquid paraffin and/or sterile water also. The transfer interval varies with the microorganism, and is considered on a case by case basis for each species. Once "preserved" these cultures are held at 4 °C for periods which vary between 15 days and 2 months before sub-culture. We realize this is far from optimal for many strains and we risk losing valuable material if culture identification and preservation methods are not improved.

Currently microorganisms are not deposited whose identification is not clear, or where the protocol or investigation methodology is not appropriate for the recovery of the microorganism that researchers want to be deposited in the collection. The collection therefore has two urgent problems; the identification and preservation of strains; the latter because the old freeze drying equipment is broken and it is difficult and expensive to repair in Latin America. In 2009 the identification of the strains will begin aided by molecular methods thanks to the recent grant awarded by the SfAM (Society for Applied Microbiology) and with the grant money the University will buy a thermocyclator that will be a great contribution in the identification of collection strains especially for fungi and bacteria of environmental origin. In this year the anaerobic bacteria from extreme environments will be incorporated into the collection with the objective of centralizing all the collections of the university in a single unit and this way to unify conservation methods, administration of the deposits of microorganisms and to make more efficient the resources dedicated to the conservation of strains in the University. For this reason the facilities of the collection were remodeled in the year 2008 and today it is had been allocated two laboratories for bacteria and fungi, to carry out the guardianship work and storage of the culture appropriately. Thanks to the donation from SfAM, we will be able to advance in the classification of the strains for technical of molecular biology that finally will mean an advance toward the quality and identification of the strains of the collection. Work is also in hand to raise money to repair our freeze drier and again we have to thank our friends from SfAM for this wonderful help and support. Special thanks must go to Dr Peter Green and colleagues on the WFCC Endangered Culture Collection Task Group who gave us useful advice and helped with the grant applications to help sustain and improve our very important fledgling collection



which will benefit future generations of Colombian scientists.

## CURRENT STATUS OF THE UKFCC

The United Kingdom Federation for Culture Collections (UKFCC) has now adopted Affiliated Membership status, as a special interest group, within SfAM (The UK Society for Applied Microbiology).

The UKFCC was originally set up to "support the interest of UK collections of cultures and their users and to improve technical standards in collaboration with bodies such as ECCO and WFCC." In essence its membership contained both culture collection professionals as well as members of the scientific community who used reference materials in their work. Over the years the original membership of over 100 had dwindled to less than 40 many of whom were retired or in the later stages of their careers.

As a result of an ongoing review by committee, it was decided, rather than winding up the Federation, we would try to retain it as a special interest group within a Learned Society such as SfAM, Committee felt that it would be potentially detrimental to lose such an important (albeit small) focus group within the UK and we should first attempt to regenerate and/or retain the original objectives and function of the UKFCC under the protective umbrella of the UKFCC.

Benefits of Affiliated Membership of SfAM include:

- A free copy of the SfAM quarterly magazine the "Microbiologist"
- Substantially reduced fees for attending SfAM meetings and conferences
- Access to private members areas of the SfAM web site
- The opportunity to have an annual fully funded culture collection meeting  
(This could be a stand alone training course or as part of a Society Symposium)
- The opportunity to have a dedicated column on culture collection news or hot topics in every issue of the "Microbiologist" and have a dedicated presence on the SfAM web site.

Time will tell if there is sufficient interest to retain the UKFCC in this format. Wish us luck and of course WFCC has indirectly benefited financially by closure of the UKFCC accounts with the proviso that the money assists educational tasks defined by WFCC EB. There is of course no bar on non-UK scientists wishing to join SfAM and participate in this new focus group so please write to me ([p.green@ncimb.com](mailto:p.green@ncimb.com)) or directly to Julie Wright at SfAM ([Julie@sfam.org.uk](mailto:Julie@sfam.org.uk)) if you wish to join us!

**Peter Green**

**Former Treasurer UKFCC**

**E-mail:** [P.Green@ncimb.com](mailto:P.Green@ncimb.com)

## ANNOUNCEMENTS

### WFCC SKERMAN AWARD FOR MICROBIAL TAXONOMY

The World Federation for Culture Collections invites applications from young microbial taxonomists for the WFCC Skerman Award for Taxonomy. The Award was established to honour the contribution made by Professor V. B. D. Skerman to bacterial taxonomy, to the establishment of the WFCC World Data Centre for Microorganisms (WDCM), and to the development of the WFCC.

The aim of the Award is to encourage taxonomic research by young microbiologists and to reward excellence in taxonomic research and significant contributions to the discipline.

The successful recipient of the Award will receive a prize of \$2000 together with a return economy class airfare and registration costs to attend the Twelfth International Congress for Culture Collections (ICCC 12) to be held in Florianópolis, Santa Catarina, Brazil from September 26 to October 1, 2010, and will be invited to deliver the Skerman Award Lecture on their research. The recipient will also receive a certificate of the Award.

Applicants should normally be less than 40 years of age at the time of application. Applicants should provide a *Curriculum Vita*, a list of research publications, the



names and addresses of two referees familiar with their research who have agreed to act as referees, and copies of their three most significant research publications.

Applications should be submitted to the WFCC Secretary: Dr. Philippe Desmeth: International Cooperation Officer, Belgian Coordinated Collections of Microorganisms, c/o BCCM Rue de la Science, Brussels B-1000, Belgium. E-mail: [desp@belspo.be](mailto:desp@belspo.be)

**The deadline for applications is 1 January 2010.**

## **WFCC ELECTIONS: NEW PRESIDENT AND EXECUTIVE BOARD**

**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 to organise the recurrent pool 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 collections, doing what they thought necessary to facilitate the operation of all culture collections over the world. We present here 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> with our present president, Dr. David Smith as General manager who represents the interests of WFCC in its development.

The Convention on Biological Diversity (CBD) points 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. Ipek 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, look to harness 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 incomes. Dr.



Peter Green and Dr. Joost Stalpers and other members of the *Endangered Culture Collections Task Group* 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. Funding has recently been approved to help a further two endangered collections in Guatemala and Vietnam.

Last but not least, Dr. Vera Weihs and Prof. Lindsay Sly support Prof. Vanderlei Canhos in organising ICCC 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 from 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, + 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>

## THE EU DUAL-USE REGULATION

is updated: Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items (Recast), is published in the Official Journal L 134/1-269, 29 May 2009, ISSN 1725-2555. The Regulation will be set in force on 27 August 2009. It is 269 pages long and like all editions of the Official Journal of the EU it can be found online under EUR-Lex <http://eur-lex.europa.eu/en/index.htm>

## USEFUL LINKS

<http://www.mycotaxon.com/resources/checklists/asan-v89-checklist-2009.pdf>

## BOOKS

### CONTEMPORARY TRENDS IN BACTERIOPHAGE RESEARCH

H.T. Adams (Ed.)

<https://www.novapublishers.com/catalog/index.php>

## FUTURES CONFERENCES

### 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 1, 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 ~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:

- Proposed dates (in 2013, normally in the later half of the year)
- Venue
- Facilities available for the congress
- Size and number of lecture rooms
- Potential for work shops and training courses in laboratories
- Presentation media support (e.g. Slide projectors, video drives and projectors, movie projectors, overhead projectors, PC projectors)
- Accommodation (*The costs of hotel rooms* if available at the conference centre plus a range of other accommodation available across a range of prices)
- Suggestions for the planning, e.g. the number of concurrent sessions (plenary papers, symposia, contributed papers, posters, workshops)
- Banquet facility, Congress tours and excursions
- Local Organizing Group
- Possible sources of financial support to the Congress
- Financial support for the participants from developing countries
- Other possible support
- Local sponsorship opportunities

The proposals will be assessed by the WFCC Executive Board and a decision made to enable preparation for announcement at ICC12 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: [desp@belspo.be](mailto:desp@belspo.be)

## OTHER CONFERENCES

### ESCV-2009

**27-30 September 2009**  
**Istanbul, Turkey**  
[www.escv2009.org](http://www.escv2009.org)

### INTERNATIONAL SEMINAR ON GREENING EDUCATION

**30 September-2nd October 2009**  
**Karlsruhe, Germany**  
<http://www.etechgermany.com/GreeningEducationEvent.pdf>

### VIBRIO 2009

**4-6 November 2009**  
**Copacabana Beach, Rio de Janeiro City**  
<http://www.biologia.ufrj.br/vibrio2009/>

### 7<sup>th</sup> ANNUAL CONGRESS OF INTERNATIONAL DRUG DISCOVERY SCIENCE AND TECHNOLOGY (IDDST)

**22-25 October, 2009**  
**Shanghai, China**  
<http://www.iddst.com>

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

**27-29 May, 2010**  
**Cortona, Italy**  
<http://www.cortonaweb.net/eng/guida/index.php>

### GIM 2010

**28 June-1 July 2010**  
**Melbourne, Australia**  
[www.gim2010.org](http://www.gim2010.org)