

2nd International Congress on Biotechnology and Biodiversity (CIBB-2014)

The Biotechnology Research Center of Ecuador (CIBE) (Guayaquil, Ecuador) is the organizer of the 2nd International Congress of Biotechnology and Biodiversity (CIBB-2014). The Congress will be held in Guayaquil, Ecuador, on June 9-12, 2014 and will focus on the latest and most relevant topics in biotechnology and biodiversity, including biodiscovery, bioprospecting, metagenomics, and genetic engineering.

The scientific program is divided into six fields: *Omic tools in plants and microorganisms; Biodiscovery and Biodiversity; Transgenics and biosafety; Agrobiotechnology; Biofuel and bioprocess; and Plant pathology and Pest management.*

Interestingly, the organizers of the Congress have defined very specific objectives for the meeting, which are predominantly focused on the challenges facing the banana industry. CIBE aims to create a forum to analyze the main trends in the use of biotechnology in banana industry, and this will be accomplished with contributions from the world's leading experts. The organizers intend to gather banana producers and exporters together with scientists to discuss the most important results of the research on fungicide resistance in *Mycosphaerella fijiensis* (a fungus species which significantly affects banana yield), climate change adaptation and technological innovations.

Abstract submission deadline is February 28, 2014. The full Congress program will be published on April 18, 2014. For more information, please refer to the Congress website: <http://iicibb2014.sytes.net/congreso>.

11th World Congress on Industrial Biotechnology

The BIO World Congress on Industrial Biotechnology is an important event for business leaders, investors, and policy makers in biofuels, biobased products, and renewable chemicals. In 2014, the Congress will be organized in Philadelphia (Pennsylvania, USA) on May

12-15. The BIO World Congress will explore how industrial biotechnology may build a foundation for environmentally sustainable growth in the economy, provide energy security, and contribute to a cleaner environment.

Subjects highlighted in the program include algae, advanced biofuels, biomass production, biobased materials, dedicated energy crops, pharmaceutical intermediates, food ingredients, renewable chemicals, marine bio-resources and synthetic biology. The event is composed of five plenary sessions, workshops, poster sessions, *Clean Tech Investor Sessions* and networking events. The topics of the plenary sessions are: *Regional Approach to a Global Biobased Economy, Feeding Next Generation Biorefineries in 2013, Building a Sustainable Biobased Industry, Biomanufacturing on a Commercial Scale, and Feeling the Heat of the Biofuels Boom.*

Selected posters will be presented in eight program tracks: *Advanced Biofuels and Biorefinery Platforms; Algae, Specialty Crops, and Biomass Supply; Growing Global Markets, Renewable Chemical Platforms and Biobased Materials; Specialty Chemicals, Pharma Intermediates, Food Ingredients; Synthetic Biology and Genomics Research; Technical Presentations; and Academic Research Presentations.*

Event details may be accessed at: <http://www.bio.org/events/conferences/world-congress>.

Concerns around the clinical application of next generation sequencing

The rapid development of massively parallel DNA sequencing technologies in recent years has provided a significant breakthrough in the genome-wide research landscape. Next generation sequencing (NGS) has made a huge impact in basic research and this technology is consequently anticipated to be translated into clinical practice. It enables comprehensive whole-genome sequencing, which may be used for the clinical testing of Mendelian disorders, cancer, tissue matching, disease-related risk prediction or pharmacogenetics. However, NGS can also provide incidental findings of

known or yet unknown importance, which raises new ethical issues.

In January 2013, the *European Journal of Human Genetics* published an article discussing the minimal information which should be included in the informed consent for whole genome sequencing studies in the clinical setting. Based on the systematic review of papers on specific ethical issues related to informed consent for NGS analyses, the authors proposed a list of 10 minimum elements of information which should be included in such formulars for medical NGS testing. Moreover, the authors proposed guidelines for the classification of incidental findings, which is of particular merit since NGS can provide considerable genetic information that may potentially alter clinical decisions. Selected genetic findings may also be useful for the current diagnosis or treatment of certain diseases, or even have an impact on reproductive life decisions (e.g. information about carrier status of mutations for autosomal recessive disorders).

Similar considerations led the U.S. Food and Drug Administration (FDA) to address, on November 22, 2013, a warning letter to the personal genomics company 23andMe (Mountain View, California, USA). The FDA expressed a concern about the public health consequences of marketing a DNA testing kit which, according to 23andMe, may provide health reports on 254 diseases and conditions, including categories such as the carrier status, health risks, and drug response. However, the company claims that the DNA test may be specifically used as a first step in the prevention of serious diseases such as diabetes, coronary heart disease, and breast cancer. In 2012, the company submitted an application to the FDA requesting classification of their test as a Personal Genome Service (PGS), but failed to provide results of any studies validating the test. The FDA's response was that 23andMe is offering the DNA testing kit without marketing clearance or approval, which is a violation of the Federal Food, Drug and Cosmetic Act. It also demanded that 23andMe immediately discontinue marketing of the PGS until it received agency marketing authorization for the medical device.

Sources

Ayuso C., Millán J.M., Mancheño M., Dal-Ré R. (2013). *Informed consent for whole-genome sequencing studies in the clinical setting. Proposed recommendations on essential content and process*. Eur. J. Hum. Genet. 21(10): 1054-1059. doi: 10.1038/ejhg.2012.297.

FDA Warning Letter, Document Number: GEN1300666, available at: <http://www.fda.gov/ICECI/EnforcementActions/WarningLetters/2013/ucm376296.htm>

Frontiers in Plant Research – workshop for early career scientists

The John Innes Centre (Norwich, United Kingdom) will organize an informal workshop to engage the next generation of scientists to address new challenges in future plant research on July 6-9, 2014.

The workshop program includes presentations of participants and group discussions on the theories and technologies guiding plant biology, and the importance of mathematical modeling in research. A wide range of topics including molecular, cellular, developmental, population, synthetic and computational approaches in plant research will be covered.

The workshop tutors are Enrico Coen, Caroline Dean, Stan Marée and Sarah O'Connor, lab/project leaders at the John Innes Centre (Norwich, United Kingdom), and Mark Patterson, the executive director of eLife Sciences Publications, Ltd (Cambridge, United Kingdom).

The closing date for applications is March 31, 2014. The only prerequisite for participants is three or more years of previous research experience. Interested applicants should submit their educational and research history, including publications and presentations, together with a description of their future career aspirations. Travel and accommodation expenses are covered by the organizers.

A detailed workshop program and on-line application form are available at: <https://opportunities.jic.ac.uk/frontiers/index.htm>.

The 16th European Congress on Biotechnology

The 16th European Congress on Biotechnology (ECB16) will take place in Edinburgh, Scotland on July 13-16, 2014. The congress is organized by the European Federation of Biotechnology (EFB) (based in Barcelona, Spain).

The Congress intends to provide a review of the most recent accomplishments in a multitude of biotechnology applications, including environmental and green biotechnology, microbial physiology, microbial synthetic

and systems biology, applied biocatalysis, industrial biotechnology, biochemical engineering and medical biotechnology. The scientific program comprises plenary lectures that will be presented by the world's top biotechnologists, events addressing social and political issues specifically targeted to the job seeking needs of young biotechnologists, twenty scientific symposia as well as satellite events for graduate schools and industry. The Congress will be opened with a presentation by Professor Anne Glover, Chief Scientific Advisor to the European Commission.

The deadline for abstract submission is March 31, 2014. There is a wide range of six different categories of abstracts, i.e. General biotechnology; Underpinning

technologies; Synthetic and systems biology; Medical and biopharmaceutical biotechnology; Plant and environmental biotechnology; and Bioengineering and bioprocessing. Abstracts describing original unpublished work must be submitted electronically via the ECB16 website, but only those who have registered and paid for ECB16 may submit an abstract. Notifications of acceptance will be e-mailed to the submitting authors no later than May 31, 2014.

The abstract submission system, information about confirmed speakers, registration fees and accommodation possibilities are available at the Congress website: <http://www.ecb16.com>.