

13TH EUROPEAN CONGRESS  
ON BIOTECHNOLOGY  
BARCELONA, SPAIN  
16-19 SEPTEMBER, 2007  
[www.ecb13.eu](http://www.ecb13.eu)

# Symbiosis

Science, Industry & Society

## PROGRAMME AT A GLANCE

### Sunday, 16 Sept

11:00	Registration opens
13:00 - 15:00	Workshops
15:00 - 15:30	Coffee-break
15:30 - 17:30	Workshops

### Monday, 17 Sept. - Wednesday, 19 Sept.

08:00	Registration opens
09:00	Opening Plenary Session
09:30	Opening Plenary Lecture
10:30	Coffee-break
11:00 - 13:00	Parallel Scientific Sessions
13:00 - 14:30	Lunch (Exhibition Area)
13:30 - 15:00	Poster Sessions
15:00 - 17:00	Parallel Scientific Sessions
17:00	Coffee-break
17:30	Plenary Lecture
18:30	End of Day



**PROGRAMME**      **Monday, 17 September 2007**

08:00	Registration Opens					
09:00	Opening Plenary Session & Inauguration of the 13th European Congress on Biotechnology					
09:30	Plenary Lecture: Personalized Medicine		Dr. Jonathan Knowles, Laboratory of Organic Chemistry, ETH Zürich, Switzerland			
10:30	Coffee-break					
11:00 - 13:00	Parallel Scientific Sessions					
	Health & Medicine ROOM 6	Functional Genomics & System Biology ROOM 8	Symbiosis ROOM 7	Industrial Biotechno- logy ROOM 5	Green Biotechnology ROOM 3	
11:00	Introduction	01. Innovative Medicines	02. EC FP6 Proteome Binders: Alternatives to Antibodies	03. Global Food Supply	04. Novel Enzymes & Microorganisms	05. Biomass to Biofuels & Biomaterials
11:10	Speaker 1	Chairman: Dr. Jorgen Dirach, EFB Section Medicines Development; Novo Nordisk, DK Confirmed Speakers: 1. Dr. Jorgen Dirach 2. Dr. Alastair Kent, Genetic Interest Group (GIG), European Genetic Alliances, UK 3. Dr. Outi Maki-Ikola, European Medicines Agency (EMA) 4. Dr. Philippe Cupers, Unit Major Diseases, DG RTD, Health Research, EC	Chairman: Dr Michael Taussig, Tech- nology Research Group, The Babraham Institute, UK Confirmed Speakers: 1. Dr. Per-Ake Nygren, KTH, SE 2. Prof. Andreas Plückthun, Biochemistry Institute, Zurich University, CH 3. Dr. Larry Gold, SomaLogic, Inc., USA 4. Dr Michael Taussig, Technology Research Group, The Babraham Institute, UK	Chairman: Em. Prof. Marc Van Montagu, President EFB; Ghent University, BE Confirmed Speakers: 1. Dr. Gerard Barry, International Rice Research Institute (IRRI), PH 2. Dr. Clive James, International Service for the Acquisition of Agri-biotech Applications (ISAAA), CA 3. Em. Prof. Marc Van Montagu 4. Prof. Zhangliang China Agricultural Uni- versity, CN	Chairman: Dr. Roland Wohlgenuth, Chairman EFB Section, Sigma-Aldrich, CH Confirmed Speakers: 1. Prof. Dr. Sakayu Shimizu, Division of Applied Life Sciences, Kyoto University, JP 2. Prof. Peter Leadlay, University of Cam- bridge, UK 3. Dr. Ramesh Patel, Enzyme Technology, Bristol-Myers Squibb, USA 4. Dr. Wenping Wu, Microbial Discovery Unit, Novozymes, DK	Chairman: Prof. Marc Zabeau, Plant Systems Biology, VIB/Gent University, BE Confirmed Speakers: 1. Dr. Ad De Laat, Cosun Food Technology Centre, NL 2. Dr. Ralf-Michael Schmidt, BASF Plant Science Holding GmbH, DE 3. Dr. Andreas von Felde, Energy Crops, KWS SAAT AG, DE 4. Prof. Akihiko Kondo, Kobe University, JP
11:35	Speaker 2					
12:00	Speaker 3					
12:25	Speaker 4					
12:50	Discussion					
13:00 - 14:30	Lunch (Exhibition Area)					
13:30 - 15:00	Poster Sessions					
15:00 - 17:00	Parallel Scientific Sessions					
	06. Antibody-based Therapeutics	07. Genome Technologies	08. Global Health	09. Biocatalyst Function & Optimization	10. Plant-based Pharmaceuticals	
15:00	Introduction	Chairman: Dr. Jaume Bertranpetit, Pompeu y Fabra University, ES Confirmed Speakers: 1. Dr. Michael Egholm, R&D, 454 Life Sciences, Inc., USA 2. Prof. Ulf Landegren, Genetics and Pathol- ogy, Rudbeck Laboratory, SE 3. Dr. Jörg Hoheisel, Functional Genome Analysis, German Cancer Research Centre 4. Dr Wilhelm Ansorge, ETH Lausanne, CH 5. Dr. Leo de Graaff, Wageningen University and Research Centre, NL	Chairman: Prof. David McConnell, EFB European Action on Global Life Sciences (EAGLES), Smurfit Institute of Genetics, IE Confirmed Speakers: 1. Dr. Joanna Rubinstein, Strategic Pro- grams Center for Global Health and Eco- nomic Development, The Earth Institute at Columbia University, USA 2. Prof. Jonathan Knowles, Global Research, Roche Corporate Headquarters, CH 3. Dr. Fotis Kafatos, European Research Council, Imperial College London, UK	Chairman: Prof. Jennifer Littlechild, The Henry Wellcome Centre for Biocatalysis at University of Exeter, UK Confirmed Speakers: 1. Dr. Seiichi Matsuda, Department of Chemistry, Rice University, USA 2. Dr. Nicholas Turner, Centre of Excellence in Biocatalysis, Univ. of Manchester, UK 3. Prof. Paul Engel, Conway Institute, Uni- versity College Dublin, IE 4. Dr. Jürgen Eck, Research & Development, B.R.A.I.N AG, Germany	Chairman: Em. Prof. Marc Van Montagu, President EFB; Ghent University, BE Confirmed Speakers: 1. Dr. Kirsi-M. Oksman-Caldentey, Plant Biotechnology, VTT Technical Research Centre of Finlandia 2. Prof. Dr. Rainer Fischer, Fraunhofer IME, DE 3. Dr. Maurice Moloney, SemBioSys Genet- ics Inc., CA 4. Dr. François Arcand, CEO, ERA Biotech, Barcelona, ES	
15:10	Speaker 1					
15:35	Speaker 2					
16:00	Speaker 3					
16:25	Speaker 4					
16:50	Discussion					
17:00	Coffee-break					
17:30	Plenary Lecture: Tailoring the Properties of Proteins through Laboratory Evolution		Prof. Donald Hilvert, Laboratory of Organic Chemistry, ETH Zürich, Switzerland			
18:30	End of Day					

**PROGRAMME Tuesday, 18 September 2007**

08:00	Registration Opens					
09:00	Opening Plenary Session: <b>Special Keynote Speech, European Commissioner for Science &amp; Research Janez Potocnik, European Commission</b>					
09:30	Plenary Lecture: Antibody Engineering & Therapeutic Antibodies Sir Greg Winter, Acting Director, MRC Laboratory of Molecular Biology, UK					
10:30	Coffee-break					
11:00 - 13:00	Parallel Scientific Sessions					
	Health & Medicine	Functional Genomics & System Biology	Symbiosis	Industrial Biotechnology	Green Biotechnology	
11:00	Introduction	11. Systems Biology & Biosimulation	12. Human Atlas Projects – from RNA to Proteins	13. Global Water Supply	14. Biocatalytic Process Design	15. Molecular Plant Breeding
11:10	Speaker 1	Chairman: Prof. Lilia Alberghina, Biotech. & Biosciences Milano-Bicocca University, IT Confirmed Speakers: 1. Prof. Stefan Hohmann, Cell & Molecular Biology/Microbiology, Göteborg Univ., SE 2. Dr. Andrea Pfeifer, German Cancer Research Center, DE 3. Dr. Hans Peter Fischer, Genedata AG, CH 4. Prof. Manuel Canovas, University of Murcia, ES	Chairman: Dr. Mathias Uhlen, Royal Institute of Technology (KTH), SE Confirmed Speakers: 1. Prof. Sophia Hober, Proteomics, KTH, SE 2. Prof. Olli Kallioniemi, VTT Technical Research Centre of Finland & Univ. of Turku 3. Dr. Bernhard Küster, Analytical Sciences & Informatics, Cellzome AG, DE 4. Mrs. Hanna Tegel, School of Biotechnology, KTH, SE	Chairman: Dr. Ismail Serageldin, Library of Alexandria, EG 2. Dr. Mohamed Ait-Kadi, General Council of Agricultural Development- Ministry of Agriculture, Rural Development & Forestry, MA 3. Dr. Ismail Serageldin	Chairman: Dr. Marcel Wubbolts, DSM, NL Confirmed Speakers: 1. Prof. Dr. Andreas Liese, TUHH, DE 2. Dr. Robert DiCosimo, DuPont Central Research & Development, USA 3. Dr. Roger Sheldon, Delft University of Technology / CLEA Technologies BV, NL 4. Dr. Frank Baganz, Biochemical Engineering, University College London, UK	Chairman: Dr. Johan Peleman, R&D, Nunhems BV, NL Confirmed Speakers: 1. Prof. Dani Zamir, The Hebrew University of Jerusalem, IL 2. Dr. Anker Sorensen, Keygene N.V., NL 3. Dr. Antoni Rafalski, Pioneer Hi-Bred Intl. - a DuPont Compant, USA 4. Dr. David Caparrós-Ruiz, Consorci CSIC-IRTA, Spain
11:35	Speaker 2					
12:00	Speaker 3					
12:25	Speaker 4					
12:50	Discussion					
13:00 – 14:30	Lunch (Exhibition Area)					
13:30 – 15:00	Poster Sessions					
15:00 - 17:00	Parallel Scientific Sessions					
	16. Biomakers, Including Diagnostics & Imaging	17. Comparative Genomics	18. Bioenergy & Bioeconomy	19. Innovative Downstream Process	20. Plant Systems Biology	
15:00	Introduction	Chairman: Prof. Svante Pääbo, Max-Planck-Institute of Evolutionary Anthropology, DE Confirmed Speakers: 1. Dr. Huanming Yang, Beijing Genomics Institute (BGI), CN 2. Dr. Siv Andersson, Evolutionary Biology Center at Uppsala University, SE 3. Prof. Leif Andersson, Functional Genomics, Uppsala University, SE 4. Dr. Johan van Hylckama Vlieg, NIZO food research, The Netherlands	Chairman: Dr. Pekka Lindroos, Biotechnology Policy, Min.Trade & Ind, FI Confirmed Speakers: 1. Dr. Paulo Arruda, Universidade Estadual de Campinas, Allellyx Applied Genomics, BR 2. Dr. Alfredo Aguilar, Unit Biotechnology – Directorate Food, Agriculture & Biotechnology, DG Research, EC 3. Dr. Thomas Schäfer, Business Development, Novozymes, DE 4. Dr. Eduardo Trigo, CEO Group, AR	Chairman: Dr. Alois Jungbauer, Dept. Biotechnology, University of Natural Resources and Applied Life Sciences, AT Confirmed Speakers: 1. Dr. Linda Lua, Institute for Molecular Bioscience at the University of Queensland, AU 2. Dr. Ales Podgornik, BIA separations, SI 3. Dr. Alois Jungbauer, University of Natural Resources and Applied Life Sciences, AT 4. Dr. Timothy Hobley, Technical University Denmark	Chairman: Dr. Mark Stitt, Max Planck Institute of Molecular Plant Physiology, DE Confirmed Speakers: 1. Dr. Pierre Hilson, Functional Genomics Group, Ghent University, BE 2. Prof. Wilhelm Gruissem, Plant Biotechnology, ETH Zurich, CH 3. Dr. Staffan Persson, Max Planck Institute of Molecular Plant Physiology, DE	
15:10	Speaker 1					
15:35	Speaker 2					
16:00	Speaker 3					
16:25	Speaker 4					
16:50	Discussion					
17:00	Coffee-break					
17:30	Plenary Lecture: The Neanderthal Genome Project Prof. Svante Pääbo, Max-Planck-Institute of Evolutionary Anthropology, DE					
18:30	End of Day					

**PROGRAMME**      **Wednesday, 19 September 2007**

08:00	Registration Opens					
09:00	Opening Plenary Session					
09:30	Plenary Lecture: Nanomedicine		Dr. Dwight S. Seferos, International Institute for Nanotechnology, Northwestern University, USA			
10:30	Coffee-break					
11:00 - 13:00	Parallel Scientific Sessions					
	<b>Health &amp; Medicine</b>	<b>Functional Genomics &amp; System Biology</b>	<b>Symbiosis</b>	<b>Industrial Biotechnology</b>	<b>Green Biotechnology</b>	
11:00	Introduction	21. Advanced Drug & Gene Delivery Systems	22. Nanobiotechnology	23. Ethical Issues in Biotechnology	24. Metabolic Engineering & Applied Systems Biology	25. 20 Years of Insect Control With Bt Technology
11:10	Speaker 1	Chairman: Dr. Turkan Eldem, Pharmaceutical Biotech., Hacettepe University, TR Confirmed Speakers: 1. Dr. Kostas Kostarelos, Centre for Drug Delivery Research, Univ. of London, UK 2. Dr. Raymond Schifellers, Dept. Pharmaceutical Sciences, Utrecht University, NL 3. Dr. Lisbet Santoni, Narvalus S.r.l., IT	Chairman: Prof. Maria Garcia-Parajo, BioNanophotonics, IBEC, ES Confirmed Speakers: 1. Prof. Lars Montelius, Lund University, SE 2. Dr. Albert van den Berg, BIOS/Lab-on-a-Chip group, University of Twente, MESA+ Institute for Nanotechnology, NL 3. Dr. Stefan Diez, Max-Planck-Institute of Molecular of Cell Biology and Genetics, CH 4. Dr. Paul Millner, University of Leeds, UK	Chairman: Dr. Sandy Thomas, Foresight OSI, UK Confirmed Speakers: 1. Prof. Tom Murray, The Hastings Center, USA 2. Prof. Huanming Yang, BGI, CN 3. Prof. Harald Schmidt, Nuffield Council on Bioethics, UK 4. Dr. Francois Hirsch, Governance & Ethics, DG Research, EC	Chairman: Prof. Uwe Sauer, Institute of Molecular Systems Biology, ETH Zurich, CH Confirmed Speakers: 1. Prof. Dr. Jack Pronk, Kluuyver Centre for Genomics of Industrial Fermentation; Delft University of Technology, NL 2. Daniel Klein-Marcuschamer, Massachusetts Institute of Technology, USA 3. Prof. Friedrich Srienc, University of Minnesota, USA 4. Mr. Jose Otero, BioCentrum-Technical University of Denmark	Chairman: Dr. Marnix Peferoen, CropDesign N.V., BE Confirmed Speakers: 1. Dr. Juan Ferre, Genetics, University of Valencia, ES 2. Dr. David Fischhoff, Technology Strategy & Development, Monsanto, USA 3. Dr. Geert Plaetinck, Head of RNAi Technology, Devgen, BE
11:35	Speaker 2					
12:00	Speaker 3					
12:25	Speaker 4					
12:50	Discussion					
13:00 – 14:30	Lunch (Exhibition Area)					
13:30 – 15:00	Poster Sessions					
15:00 - 17:00	Parallel Scientific Sessions					
	<b>26. Nanobiotechnology in Medicine</b>	<b>27. Systems &amp; Synthetic Biology</b>	<b>28. Chronic Diseases in the Developing World</b>	<b>29. Fermentation Science &amp; Engineering</b>	<b>30. Novel Perspectives of GM Plants</b>	
15:00	Introduction	Chairman: Dr. Alfonso Valencia, Spanish National Cancer Research Center, ES Confirmed Speakers: 1. Prof. Luis Serrano, Barcelona Biomedical Research Park, ES 2. Dr. Sven Panke, Bioprocess Laboratory, ETH Zurich, CH 3. Prof. Douglas Kell, Manchester Centre for Integrative Systems Biology, University of Manchester, UK 4. Ms. Duygu Dikicioglu, Bogazici University, TR	Chairman: Dr. Anil Kapur, World Diabetes Foundation, DK Confirmed Speakers: 1. Dr. Twalib Ngoma, Ocean Road Cancer Institute (ORCI), TZ 2. Dr. Helen Alderson, World Heart Federation, CH 3. Dr. Anil Kapur	Chairman: Prof. Ing. Dirk Weuster-Botz, Institute of Biochemical Engineering, Technical University of Munich, DE Confirmed Speakers: 1. Prof. Gary Lye, Biochemical Engineering, University College London, UK 2. Dr. Jochen Buechs, Biochemical Engineering, RWTH Aachen University, DE 3. Prof. Dr. J.G.E. Gardeniers, MESA+ Institute for Nanotechnology, NL 4. Prof. Peter Neubauer, University of Oulu, FI	Chairman: Dr. Johan Cardoen, CEO CropDesign N.V., BE Confirmed Speakers: 1. Dr. Michel van Lookeren, Bayer Crop-Science N.V., BE 2. Dr. Alan Kriz, BASF Plant Science, LLC, USA 3. Dr. Tom Adams, Genomic Technology, Monsanto, USA	
15:10	Speaker 1					
15:35	Speaker 2					
16:00	Speaker 3					
16:25	Speaker 4					
16:50	Discussion					
17:00	Coffee-break					
17:30	Plenary Lecture: Biotechnology & Society		Dr. Ismail Serageldin, Director, Bibliotheca Alexandrina; Chairman, EAGLES European Action on Global Life Science, Egypt			
18:30	End of Congress					

## WORKSHOPS

### Sunday, 16 September 2007

13:00 - 14:00	The Art of Comprehensive Solid State Bioprocessing. Introduction to solid-state bioprocessing and its engineering challenges (David A.Mitchell)
14:00 - 15:00	Design and operation of bioreactors for solid-state bioprocessing (Marin Berovic)
15:30 - 17:30	Case study: Taking a solid-state bioprocess from the laboratory to large-scale. (Arjen Rizjema)
15:30 - 17:30	PAT: Process Analytical technologies

### Monday, 17 September 2007

11:00 - 13:00	PRRI - Public Research and Regulation Initiative.
15:00 - 17:00	Bioreactors across the Scales. Chairman: Professor Alvin W. Nienow, University of Birmingham, UK Speaker 1. Professor Igor Plazl, University of Ljubljana, Slovenia: Studies at the Microreactor Scale. Speaker 2. Professor Jochen Buechs, RWTH Aachen University, DE: Studies at the Shake Flask Scale. Speaker 3. Professor Andreas Lubbert, Martin-Luther-Universität Halle-Wittenberg, DE: Studies in Bubble and Airlift Bioreactors and Their Area of Application Speaker 4. Dr. Henk Noorman, DSM, NL: An Industrial Perspective of the Needs of the Large Scale Practitioner

### Tuesday, 18 September 2007

15:00 - 17:00	Cell Engineering for High Quality Protein Production.
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## SATELLITE EVENTS

### Monday, 17 September 2007

11:00 - 13:00 and 15:00 - 17:00	International Day. International Cooperation in Biotechnology and International participation in European research projects.
11:00 - 13:00 and 15:00 - 17:00	YEBN Annual Meeting. Annual Meeting of the Young European Biotech Network

### Tuesday, 18 September 2007

10:30 - 18:30	Tech Transfer Summit. The first International Tech Transfer Summit, with a special focus on patenting, international partnering, and licensing.
Tuesday 15:00 - Thursday 13:00 (3 days)	EAGLES Food Forum. European Action on Global Life Sciences Food Forum

### Wednesday, 19 September 2007

Tuesday 15:00 - Thursday 13:00 (3 days)	EAGLES Food Forum. European Action on Global Life Sciences Food Forum
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