

European Plant Science Organisation

7th EPSO Conference

'Plants for a Greening Economy'

Porto Heli, Greece

01 – 04 September 2013

http://www.epsoweb.org/7th-epso-conference-1-4-september-2013-greece

Programme by 28 August 2013

Confirmed chairs and speakers are in bold

Saturday	**31 August 2013**	
P.M..	Arrival I	
20:00	*EPSO General Meeting Dinner*	*EPSO representatives (no public dinner)*
Sunday	**1 September 2013**	
9:00 – 17:00	*EPSO General Meeting*	*EPSO representatives (no public meeting)*
From 16:00	Registration **Exhibition**	
P.M.	Arrival II	
19:00 - 20:30	**Opening and keynote** **Chairs:** **Karin Metzlaff**, Brussels, BE **George Skaracis**, Athens, GR	**Speakers:** **Karin Metzlaff** and **George Skaracis** (10 min) *Executive Director of the European Plant Science Organisation* *Local Conference Organiser and Head of Laboratory of Plant Breeding and Biometry, Agricultural University of Athens, GR* **Athanasios Tsaftaris**, GR (10 min) *Minister for Rural Development and Food, GR* Opening on behalf of Greek government Harvesting the outputs of the –omics field for a sustainable agriculture and food security **Theodoros Skylakakis,** GR (10 min) *Member of the European Parliament, GR* Title t.b.a **Gregory Stephanopoulos**, US, (60 min), *MIT* **S01** Keynote: Plants, the key to a sustainable bioeconomy
20:45 – 22:30	Welcome Reception	
Monday	**2 September 2013**	
9:00 – 11:00	**Regulatory networks in plants** **Chair: Heribert Hirt**, Evry, FR	**Speakers:** **Dierk Scheel,** IPB Halle, DE (25 + 5 min) **P020** for **S02** Calcium and MAP kinase signalling in PAMP-triggered immunity *Co-sponsored by SESVanderHave* **Phil Benfey**, Duke University, Durham, US (25 + 5 min) **S03** Regulation of the plant root development **Javier Paz-Ares**, CNB, ES (25 + 5 min) **S04** Functional genomics of transcription factors *EMBO lecture* **Célia Miguel,** IBET, Oeiras, PT (15 + 5 min) **S05** Disclosing a mechanism of thermospermine homeostasis control essential for proper xylem development
11:00	Coffee break	

11:30 – 13:30	**Plant response and adaptation to biotic stresses** **Chair: Jonathan Jones**, Sainsbury Lab, Norwich, UK,	**Speakers:** **John Mundy**, Univ Copenhagen, DK (25 + 5 min) Plant cell death mechanisms *Sponsored by KWS Saat AG* **Matthias Erb**, Max Planck Inst. Jena, DE (25 + 5 min) Signaling in plant-insect interactions *Sponsored by Südzucker AG* **Xinnian Dong**, Duke Univ., US (25 + 5 min) Salicylate acid signal receptors and transduction in plant immunity **Panagiotis Sarris,** Sainsbury Lab, Norwich, UK, (15 + 5 min) Plant R gene allelic variation in defence activation: The case of *Arabidopsis* RRS1/RPS4	**S06** **S07** **S08** **S09**
13:30 – 15:30	Lunch & networking **Exhibition**		
14:00 – 15:30	**Poster Session I with drinks** **Chair: Jacek Hennig**, Institute of Biochemistry and Biophysics, Polish Academy of Science, Warsaw, PL	14:00 – 14:30 Opening and short presentations of two selected posters: **Bretislav Brzobohaty**, CZ (5 + 5 min) **Shimon Gepstein**, IL (5 + 5 min) 14:30 – 15:00 Even poster numbers will be attended 15:00 – 15:30 Uneven poster numbers will be attended	 **Pxx** **Pxx**
15:30 – 17:00	**Plant response and adaptation to abiotic stress** (multilevel approach) **Chair: Christophe Plomion**, Biodiversity, Genes and Communities, INRA, Bordeaux, FR	**Speakers:** **Jian-Kang Zhu**, Purdue, US (25 + 5 min) Epigenetic changes in response to climate change (at individual levels) *Sponsored by Syngenta* **Marc de Block**, Bayer, Gent, BE (25 + 5 min) Shaping the epigenetic components of plant performance and abiotic stress tolerance **Kazuki Saito**, RIKEN Center, JAP (25 + 5 min) Metabolomics finds a new class of plant lipid essential for protection against phosphorus depletion	**S10** **S11** **S12**
17:00	Coffee break		
17:30 – 20:00	**Science policy: Plant science and agriculture** **Chairs: Eckhard George**, Grossbeeren, DE **& Karin Metzlaff**, Brussels, BE	**Speakers:** **Heribert Hirt**, INRA, Evry, FR (25 + 5 min) *President of the European Plant Science Organisation* Agriculture – opportunities and challenges and how plant science can help addressing these **Nikiforos Sivenas**, Brussels, BE (25 + 5 min) *Principal Advisor to the Director General, DG Agriculture and Rural Development, European Commission* Addressing societal challenges - moving towards innovation driven agriculture - Potential of future research and innovation in Europe and beyond **Panagiota Mylona**, Brussels, BE (25 + 5 min) *Directorate FAFB, DG Research and Innovation, European Commission* Bioeconomy – plant science and agriculture – new avenues for research and innovation **Peter Hedden,** Rothamsted Research, UK *Vice-Chair of European Research Council (ERC) LS9 Panel* European Research Council's support to Life Sciences - an opportunity for the Plant Science research community in Europe **Wilhelm Gruissem**, Zurich, CH (25 + 5 min) *President of the Global Plant Council* Global needs and contributions from plant science to these – first actions from the Global Plant Council	**S13** **S14** **S15** **S16** **S17**
20:15	Dinner		

Tuesday	3 September 2013	
8:30 – 10:30	**Plant response and adaptation to low resource availability** **Chair: Ton Bisseling,** Wageningen, NL	**Speakers:** **Kazuko Yamaguchi-Shinozaki**, Univ. Tokyo, JAP (25 + 5 min) **S18** Plant responses and adaptation to water stress *Sponsored by KWS Saat AG* **Eckhard George**, Leibniz Inst. Grossbeeren, DE (25 + 5 min) **S19** Urban agriculture: a new trend that requires novel plant types adapted to urban environments? **Andreas J. Karamanos**, Agricultural Univ. Athens, GR (25 +5 min) **S20** Strategies developed by crop germplasm facing water shortage in relation to production potential under drought **Filip Rolland,** KU Leuven, BE (15 + 5 min) **S21** The hybrid Four-CBS-Domain KIN$\beta\gamma$-subunit functions as the canonical γ subunit of the plant energy sensor SnRK1
10:30	Coffee break	
11:00 – 13:00	**Climate change – the mitigating role of plants** **Chair: Uli Schurr,** Julich, DE	**Speakers:** **Reinhart Ceulemans,** Univ. Antwerp, BE (25 + 5 min) **S22** Mitigating greenhouse gas emissions via bio-energy production using short-rotation coppice of fast-growing trees? **Dan Yakir**, Weizmann, IL (25 + 5 min) **S23** Does carbon sequestration of semin-arid regions contribute to climate change mitigation? **Franco Miglietta,** CNR di Firenze, IT (25 + 5 min) **S24** Plants, carbon and climate: Effects, limitations and feedback **Bruce Osborne**, UC Dublin, IE (15 + 5 min) **S25** Contrasting effects of afforestation on carbon sequestration and greenhouse gas emissions
13:00 – 17:30	Excursion **Exhibition**	
17:30	Coffee break	
18:00 – 20:00	**Global food security I: Sufficiency and affordability** **Chair: Chiara Tonelli,** Milano, IT *Session sponsored by Bayer CropScience*	**Speakers:** **Jean-Christophe Glaszmann**, CIRAD, Montpellier, FR (25 + 5 min) **S26** Towards European – Developing Countries longer term partnerships and linking stakeholders in plant sciences for sustainable intensification of agricultural production – advances and outlook following the FAO-EPSO workshop **Mauricio A Lopes**, Embrapa, BRA (25 + 5 min) **S27** Biological resources in the context of green economy **Rodomiro Ortiz**, SLU Alnarp, SE (25 + 5 min) **S28** Major developments in international breeding practices **Florian Schröper**, IME Aachen, DE (15 + 5 min) **S29** Fast and highly sensitive detection of plant pathogens using a novel magnetic immunoassay
	Dinner	

Wednesday	4 September 2013		
9:00 – 11:00	**Global food security II: Nutritional quality and safety** **Chair: Eckhard George**, Grossbeeren, DE	**Speakers:** **Cathie Martin**, JIC, Norwich, UK (25+5 min) Plant pigments and human health – advances and outlook following the EPSO workshop *Sponsored by The Plant Cell* **Jan Delcour**, K.U. Leuven, BE (25 + 5 min) Advances in cereal dietary fibre (incl. research on plants, production, chemistry and function) *Sponsored by PhytoTechnology* **Maurice Moloney,** Rothamsted, UK (25 + 5 min) Omega3 fatty acids – soybean, rapeseed etc. *Co-sponsored by Dow Agrosciences* **Theresa Fitzpatrick**, Univ of Geneva, CH (15 + 5 min) Unraveling the homeostasis of two components of the vitamin B complex and their possible exploitation for beneficial purposes in plants	**S30** **S31** **S32** **S33**
11:00	Coffee break		
11:30 – 13:30	**Plant breeding and sustainability: Novel methodologies and targets, genomes in action** **Chair: George Skaracis**, Athens, GR	**Speakers:** **Alain Charcosset,** INRA, Paris, FR (25 + 5 min) Advances in molecular breeding *Sponsored by SESVanderHave* **Marcel Prins**, Keygene, NL (25 + 5 min) NGS technologies for molecular breeding **Jordi Comadran Trabal**, Hutton Inst, UK (25 + 5 min) Whole genome association mapping, a platform for gene isolation **Jochen Kumlehn**, IPK Gatersleben, DE (15 + 5 min) TALE nuclease-mediated gene targeting in barley	**S34** **S35** **S36** **S37**
13:30 – 15:30 **14:00 – 15:30**	Lunch and networking **Poster Session II** **Chair: Jose Pio Beltran**, Valencia, ES	14:00 – 14:30 Opening and short presentations of two selected posters: **Søren Borg**, Univ Aarhus, DK (5 + 5 min) **Pxx** **Pauline Lemonnier**, CNRS, FR (5+5min) **Pxx** 14:30 – 15:00 Uneven poster numbers will be attended 15:00 – 15:30 Even poster numbers will be attended	
15:30 – 17:30	**Plant driven bioeconomy: Bioenergy, biofuels, molecular farming, biomaterials** **Chair: Eva-Mari Aro**, Turku, FI	**Speakers:** **Angela Karp**, Rothamsted Research, UK (25 + 5 min) Tailoring plants for biorefineries *Sponsored by Agrisera* **Merja Penttilä**, Technical Research Centre, FI (25 + 5 min) Metabolic engineering of yeast and filamentous fungi for conversion of hemicellulose sugars to chemicals *Sponsored by FESPB* **Nico Dissmeyer**, Leibniz Institute of Plant Biochemistry, Halle, DE (25 + 5 min) Protein quality control – from protein recognition and degradation to conditional protein expression *Sponsored by Südzucker AG* **Henrik Aspeborg**, Royal Institute of Technology, Stockholm, SE (15 + 5 min) Plant GH5 enzymes – alternative tools for plant polysaccharide modifications	**S38** **S39** **S40** **S41**
17:30	Coffee Break		

18:00 – 20:00	**Plant evolution – Biodiversity and ecosystems** **Chair: Bruce Osborne,** Dublin, IE	**Speakers:** **Sandy Knapp**, Natural History Museum, London, UK **S42** Biodiversity conservation (25 + 5 min) *Sponsored by Distinguished Scientist Fellowship Program, King Saud University* **Tom Whitham**, Univ. Northern Arizona, US (25 + 5 min) **S43** The community genetics of biodiversity **Filippos Aravanopoulos**, Univ. Thessaloniki, GR (15+ 5 min) **S44** Genomic monitoring of perennial plant populations: early warning system and conservation value **Adam Takos**, Univ Copenhagne, DK (15 + 5 min) **S45** Repeated evolution of cyanogenic glucoside biosynthetic gene clusters
20:45	Conference Dinner with music	**Karin Metzlaff**, Brussels, BE & **George Skaracis**, Athens, GR: Prizes for the three best posters will be awarded Conference 2014 will be announced Close of the conference
Thursday	**5 September 2013**	
A.M.	Departure I	
09:00-13:00	*ERA-CAPS High Level group Meeting*	
09:00 – 18:00	*EPPN Workshop: Plant Phenotyping*	
t.b.a.	*Side-Meetings*	*e.g. from your EU projects, COST etc.*
	Private excursions via tourist office	
Friday	**6 September 2013**	
t.b.a.	*Side-Meetings*	*e.g. from your EU projects, COST etc.*
	Private excursions via tourist office	
Saturday	**7 September 2013**	
A.M.	Departure II	

Time Schedule

Morning				Afternoon				Evening
Saturday, 31 August 2013								
Xx p.m. Arrival I								
Sunday, 1 September 2013								
9 – 17:00				16 – 19:00		19-20:30	Break	20:45-22:30
EPSO General Meeting				Registration; Coffee at 18:00 Arrival II		Opening **Keynote**		Welcome reception
Monday, 2 September 2013								
9 - 11:00	Break	11:30 – 13:30	13:30-15:30	15:30 – 17:00	Break	17:30 – 20:00	Break	20:15
Regulatory networks in plants	Cof-fee	**Plant response / adaptation to biotic stresses**	Lunch; **Poster** session; Network	**Plant response / adaptation to abiotic stresses**	Cof-fee	**Plant science and agriculture**		Dinner
Tuesday, 3 September 2013								
8:30 - 10:30	Break	11 -13:00	13 – 17:30		Break	18 – 20:00	Break	20:15
Plant response / adaptation to low resource availability	Cof-fee	**Climate change – the mitigating role of plants**	Excursion *[ERA-CAPS Management Board meeting]*		Cof-fee	**Global food security I: sufficiency & affordability**		Dinner
Wednesday, 4 September 2013								
9 - 11:00	Break	11:30 – 13:30	13:30-15:30	15:30 – 17:30	Break	18:00- 20:00	Break	20:45 – 23:00
Global food security II: nutritional quality & safety	Cof-fee	**Plant breeding & sustainability: novel methods, targets**	Lunch; **Poster** session; Network	**Plant driven bioeconomy: energy, fuels, molecular farming, materials**	Cof-fee	**Plant evolution – biodiversity and ecosystems**	Shuttle	Conference dinner with music Closing

Thursday, 5 September 2013	**Friday, 6 September 2013**	**Saturday, 7 September 2013**
Xx a.m. Departure I		Xx am Departure II
ERA-CAPS High Level Group Meeting		
EPPN Workshop: Plant Phenotyping		
Side Meetings (e.g. from your EU projects, COST etc.)	*Side Meetings (e.g. from your EU projects, COST etc.)*	
Private excursions via tourist office	*Private excursions via tourist office*	

We would like to thank our committees and secretariat members for organising this conference:

Members of the **organising committee:** Jose-Pio Beltran, Ton Bisseling, Eckhard George, Jacek Hennig, Heribert Hirt, Jonathan Jones, Bruce Osborne, Christophe Plomion, Karin Metzlaff (EPSO coordinator), Eva-Mari Aro and Chiara Tonelli.

Members of the **local committee:** George N. Skaracis (Local coordinator), Nickolas Panopoulos, Epaminondas Paplomatas, Polydefkis Chatzopoulos, Filippos Aravanopoulos, Nicolas Ioannou (CY), Zach Adam (IL), Hillel Fromm (IL)

Conference **secretariat:** Katerina Karkala (EPSO conference officer) and Ourania Pavli (local assistant)