



Monday 23rd June

08:30 – 09:00 – Auditorium Welcome Session

Chair: Bruce Osborne

Bruce Osborne, Mike Jones, Dr. Ruth Freeman (Science Foundation Ireland), José Pío Beltrán

09:00 – 09:45 – Auditorium – Plenary 1 - Plant Metabolism

Chair: Bruce Osborne

- **Christine Foyer, University of Leeds**
(PL001) Redox Regulation of Photosynthesis and Chloroplast Amino Acid Metabolism

09:45 – 10:30 – Auditorium – Plenary 2 - Below Ground Processes – session supported by Syngenta

Chair: José Pío Beltrán

- **Hans Lambers, University of Western Australia**
(PL002) Phosphorus Acquisition of Australian Plants on the World's Most Phosphorus-Imperished Soils.

10:30 – 11:00 Tea and Coffee Break – Liffey Suite (Exhibition Hall)

11:00 – 13:00 Break Out Sessions

Auditorium – Plant Metabolism – session supported by EPSO

Chair: Christine Foyer

- **11:00 – 11:30 - Keynote: Alisdair Fernie, Max-Planck-Institute of Molecular Plant Physiology**
(KN 001) Systems Analysis of Metabolic Phenotypes: What Have We Learnt?
- **11:30 – 11:50 - Hagai Cohen, MIGAL - Galilee Research Institute, TECHNION - Israel Institute of Technology**
(O001) Seed-Specific Expression of a Feedback-Insensitive Form of Cystathionine- γ -Synthase (CGS) in Transgenic *Arabidopsis* Stimulates Stress-Associated Genes and Primary Metabolites
- **11:50 – 12:10 - Elena Ermilova, Saint-Peterburg State University**
(O002) PII Signal Transduction Protein in *Chlamydomonas*: Characterization and Putative Role
- **12:10 – 12:30 - Laura Jaakola, UiT The Arctic University of Norway**
(O003) Regulation of Anthocyanin Biosynthesis in *Vaccinium* spp. Berries
- **12:30 – 12:50 - Helena Carvalho, Instituto de Biologia Molecular e Celular**
(O004) Involvement of Glutamine Synthetase of the Prokaryotic Type (GSI-like) in Nitrogen Signaling in *Medicago truncatula*

Liffey Hall 1 – Below Ground Processes

Chair: Hans Lambers

- **11:00 – 11:30 - Keynote: Sabrina Sabatini, University of Roma Sapienza**
(KN002) How to Maintain Coherent Root Growth
- **11:30 – 11:50 - Antia Rodriguez-Villalon, University of Lausanne**
(O005) A Molecular Genetic Framework for Protophloem Formation
- **11:50 – 12:10 Ayla Oenel, University Wuerzburg**
(O006) Lipoxygenase 6 Is Required for Jasmonate Synthesis in Roots and Promotes Stress Resistance of *Arabidopsis thaliana*
- **12:10 – 12:30 - Tracy Valentine, The James Hutton Institute**
(O007) Visualization and Quantification of Root Responses to Soil Strength and Pore Structure
- **12:30 – 12:50 - Eckhard George, Humboldt University Berlin**
(O008) Contribution of Arbuscular Mycorrhizal Hyphae and Plant Roots to Below-Ground Nutrient Dynamics

Liffey Hall 2 – Plant Development

Chair: Dolores Rodriguez

- **11:00 – 11:30 - Keynote Ueli Grossniklaus, University of Zürich**
(KN003) Molecular Control of Fertilization and Interspecific Hybridization
- **11:30 – 11:50 - Elinor Thompson, University of Greenwich**
(O009) Root and Floral Effects of Flavonoid Transport via an *Arabidopsis* MATE Family Transporter
- **11:50 – 12:10 - Gábor Kocsy, Agricultural Institute, Centre for Agricultural Research, MTA**
(O010) Redox Control of the Development of Flower Primordia and Freezing Tolerance by the Flowering Repressor ZCCT2 in Wheat
- **12:10 -12:30 - Morgane Eleouet, Aberystwyth University**
(O011) Genetic Analysis of Leaf Development in *Pisum sativum*
- **12:30 – 12:50 - Leor Eshed Williams, The Hebrew University of Jerusalem**
(O012) The ERECTA Receptor Kinase Regulates *Arabidopsis* Shoot Apical Meristem Size, Phyllotaxy and Floral Meristem Identity

Wicklow Hall 1 – Big Data - supported by the Journal of Experimental Botany and the Global Plant Science Council

Chair: Mary Traynor and Ruth Bastow

- **11:00 – 11:30 – Keynote: Dan Stanzione, The University of Texas at Austin**
(KN004) The iPlant Collaborative: Data Intensive Infrastructure for 21st Century Biology
- **11:30 – 12:00 – Matt Vaughn, The University of Texas at Austin**
- **12:00 – 12:30 - Paul Kersey, EMBL**
(O030) Future Infrastructure for Plant Genomic Data: Ensembl Plants and Beyond
- **12:30 – 12:45 – Robert Davey, TGAC**
(O014) Aiding the Journey from Data to Publication in the Plant Sciences
- **12:45 – 13:00 Peter Kulakow, IITA**
(O032) The Cassava Trait Ontology Enables Global Access to Cassava Breeding Information on Multiple Database Platforms

13:00 – 14:00 Lunch – Liffey Suite (Exhibition Hall)

13:00 – 14:00 Wicklow Hall 1 – Elsevier "Publishing Connect Seminar"

14:00 – 14:45 – Auditorium – Plenary 3 - Plant Biology for Food Security – session supported by EPSO

Chair: Eva Mari Aro

- **Stephen Long, University of Illinois**
(PL003) Meeting the Challenge of 70% More Food and Feed Production by 2050; With Particular Reference to Progress in Bioengineering of Crop Photosynthesis

14:45 – 16:15 - Auditorium – Science Policy Session: Opportunities for Plant Scientists in Horizon 2020

Chair: Karin Metzloff, EPSO and Ulrich Schurr, Julich Research Centre / DE

- **Ciaran Mangan, Brussels, Unit Agri-Food, DG Research and Innovation, European Commission**
Bioeconomy – New Avenues for Research and Innovation Including Plant Science
- **Annette Schneegans, Brussels, Unit Research and Innovation, DG Agriculture and Rural Development, European Commission**
Moving towards Innovation Driven Agriculture in Rural Development – How Can Plant Scientists Contribute?
- **Jean-Pierre Bourguignon, Paris, President of the European Research Council (ERC)**
ERC's Support to Life Sciences – Opportunities for Plant Scientists on Frontier Research
- **José Pío Beltrán, CSIC, Valencia, President of the European Plant Science Organisation**
Potential Contributions from Plant Science to Address Societal Challenges and Advance Research and Innovation in Europe

16:15 – 16:45 Tea and Coffee Break – Liffey Suite (Exhibition Hall)

16:45 – 18:35 Break Out Sessions

Auditorium – Natural Variation in Plants

Chair: Johnathan Napier

- **16:45 – 17:15 - Keynote: Carlos Alonso-Blanco, CSIC**
(KN005) Searching for Genes Involved in Climatic Adaptation: Contributions from *Arabidopsis* Studies at a Regional Scale
- **17:15 – 17:35 - John Ferguson, University of Essex**
(O017) Natural Variation of *Arabidopsis* Photosynthesis and Seed Yield under Drought Stress
- **17:35 – 17:55 - Gabriel Tucker, Crataegus Ltd.**
(O018) Conifer Function and Structure: Development of a Theory Based on Links between Shade and Drought Tolerance, Wood Density, Taper and Maximum Height
- **17:55 – 18:15 - Roxanne van Rooijen, Wageningen University**
(O019) Natural Genetic Variation for Acclimation of Photosynthetic Light Use Efficiency to Growth Irradiance in *Arabidopsis*
- **18:15 – 18:35 - Jianbing Yan, Huazhong Agricultural University**
(O020) Association Mapping for Enhancing Maize Genetic Improvement

Liffey Hall 1 – Plant Development

Chair: Dolores Rodriguez

- **16:45 – 17:15 - Keynote: José Pío Beltrán, CSIC**
(KN006) Evolutionary Fate of the Duplicated Floral B- and C-class MADS-Box Genes in *Medicago truncatula*
- **17:15 – 17:35 - Chloe Zubieta, CNRS**
(O021) Structure of the Keratin-Like Domain from the MADS Transcription Factor SEPALATTA 3
- **17:35 – 17:55 - Inês Trindade, Heinrich-Heine University**
(O022) To Flower or Not to Flower? Epigenetic Regulation of Floral Commitment in *Arabidopsis thaliana*
- **17:55 – 18:15 - Arunika Gunawardena, Dalhousie University**
(O023) A Novel Model System to Study Developmental Programmed Cell Death *In Vivo*
- **18:15 - 18:35 - Nuria Koteyeva, Komarov Botanical Institute RAS**
(O024) Ontogenetic Patterns of Leaf Development in Kranz Versus Non-Kranz C4 Eudicots

Liffey Hall 2 – Food Security

Chair: Steve Long

- **16:45 – 17:15 - Keynote: Bill Davies - Lancaster University**
(KN007) Novel Hormone Traits Contributing to Drought and Heat Tolerance of Wheat
- **17:15 – 17:35 - Paula Jameson, University of Canterbury**
(O025) Differential Expression of Meristem Identity, Transporter and Cytokinin Biosynthesis and Degradation Genes during Pod and Seed Development in *Pisum sativum*
- **17:35 – 17:55 - Anthony G Condon, CSIRO Plant Industry**
(O026) Triticale: A Surprising Model for Improving Yield Potential and Resource Use by Wheat
- **17:55 – 18:15 - Ewen Mullins, Teagasc**
(O027) Securing Commercial Potato Production against the Global Pathogen *Phytophthora infestans*: Is GM Technology a Sustainable Option?
- **18:15 - 18:35 - Joachim Schiemann, Julius Kuehn Institute (JKI)**
(O028) Promoting Agricultural Biotechnology for Sustainable Development and Food Security

Wicklow Hall 1 – Big Data - supported by the Journal of Experimental Botany and the Global Plant Science Council

Chair: Mary Traynor and Ruth Bastow

- **16:45 – 17:15 - Keynote: Björn Usadel, RWTH Aachen University/FZ Jülich**
(KN008) BIGGER DATA, Smaller Problems?
- **17:15 – 17:45 – Katherine Denby, University of Warwick**
(O016) Making Data Work for Biologists: Tools to Capture and Mine Large Scale Data Sets
- **17:45 – 18:15 - Tony Pridmore, University of Nottingham**
(O029) Data Handling in Plant Phenomics – Dealing with 3D Structural Descriptions
- **18:15 – 18:30 - Anne-Françoise Adam-Blondon, INRA**
(O031) Plant Biology Open Data Interoperability in the Big Data Era
- **18:30 – 18:45 - Pedro M Barros, ITQB-UNL**
(O013) An Integrated Approach to Identify Regulatory Genes in the Crosstalk between Abiotic and Biotic Stress Response in Cork Oak (*Quercus suber*)

18:45 – 20:00 Welcome Reception and Poster Viewing Session 1 – Liffey Suite (Exhibition Hall)

Tuesday, 24th June

09:00 – 09:45 – Auditorium – Plenary 5 – Abiotic Stress Responses

Chair: Eckard George

- **Javier Paz-Ares, Centro Nacional de Biotecnología-CSIC**
(PL005) Novel Insights into Phosphate Starvation Sensing and Signalling and Its Crosstalk with Drought Signalling

09:45 – 10:30 – Auditorium – Plenary 6 – Plant Biology for Bioenergy

Chair: Mike Jones

- **Gail Taylor, University of Southampton**
(PL006) The Popular Bioenergy Option?

10:30 – 11:00 Tea and Coffee Break – Liffey Suite (Exhibition Hall)

11:00 – 13:00 Break Out Sessions

Auditorium – Abiotic Stress Responses

Chair: Vadim Demidchik

- **11:00 – 11:30 - Keynote: Graham Noctor, Université de Paris sud/CNRS**
(KN009) Redox Homeostasis and Signaling during Oxidative Stress: Facing up to the Complexity
- **11:30 – 11:50 - Christian Hermans, Université Libre de Bruxelles**
(O033) Influence of Magnesium Sources on Root Architecture
- **11:50 – 12:10 - Jennifer Ings, Aberystwyth Univeristy**
(O034) Revealing the Molecular and Physiological Responses to Water Deficit in the Bioenergy Crop *Miscanthus x giganteus*
- **12:10 – 12:30 - Jesús González-Puelles, Universidad de Salamanca**
(O035) Functional Characterization of *Arabidopsis* Transcription Factors Involved in Abiotic Stress Responses
- **12:30 – 12:50 - Christophe Maurel, CNRS-INRA**
(O036) Hormonal and Abiotic Stress Regulation of Plant Aquaporins

Liffey Hall 1 – Plant-Pathogen Interactions

Chair: Laura De Gara

- **11:00 – 11:30 - Keynote: Jacek Hennig, Institute of Biochemistry & Biophysics**
(KN010) Towards Understanding Mechanism of Action of HopQ1 Protein, Type III Secretion Effector of *Pseudomonas syringae*
- **11:30 – 11:50 - Dominik Grosskinsky, University of Copenhagen**
(O037) Cytokinin Production of *Pseudomonas fluorescens* G20-18 Determines the Biocontrol Effect against *Pseudomonas syringae* in *Arabidopsis*
- **11:50 – 12:10 - David Hallahan, The DuPont Company**
(O038) Changes in Global Gene Expression in *Arabidopsis thaliana* in Response to Anthranilic Diamide Treatment
- **12:10 – 12:30 - U.M.Aruna Kumara, University of Peradeniya**
(O040) Comparative Analysis of Intercultivar Variation against Anthracnose among Banana Cultivars Grown in Sri Lanka
- **12:30 – 12:50 – Juan Barceló, Universitat Autònoma de Barcelona**
(O039) Zinc Enhances Defense Gene Expression in *Noccaea caerulea* Infected by *Alternaria brassicicola*

Liffey Hall 2 – Plant Development

Chair: Aldo Ceriotti

- **11:00 – 11:30 - Keynote: Paula McSteen, University of Missouri**
(KN011) Auxin and Plant Development
- **11:30 – 11:50 - Jiri Santrucek, University of South Bohemia**
(O041) Do Stomata and Epidermis Develop in Response to Ambient or Leaf Internal CO₂ Concentration?
- **11:50 – 12:10 - Hélène Proust, University of Oxford**
(O042) A Mutagenesis Screen in the Earliest Divergent Lineage of Land Plants Highlights the Importance of *RSL* Genes in the Development of the First Rooting System
- **12:10 – 12:30 - Frank Wellmer, Trinity College Dublin**
(O043) Direct Repression of the Leaf Development Program by Floral Organ Identity Factors
- **12:30 – 12:50 - Marko Chersicola, National Institute of Biology**
(O044) Asymmetry of Molecular Processes during Abscission in Tomato (*Solanum lycopersicum* L.)

Wicklow Hall 1 – Systems and Synthetic Biology – session supported by Journal of Plant Physiology

Chair: TBC

- **11:00 – 11:30 - Keynote: Dirk Inze, VIB/Ghent University**
(KN012) Plant Organ Growth
- **11:30 – 11:50 - Dheeraj Rathore, Teagasc**
(O045) Synthesising Novel Crops Using *Ensifer*-Mediated Technology (EMT) - a Technology Platform with the Potential to Contribute Positively to Global Food Security
- **11:50 – 12:10 - Dieter Ernst, Helmholtz Zentrum München**
(O046) Common Ragweed (*Ambrosia artemisiifolia*): Systems Biology to Understand the Reaction of the Allergenic Pollen to Air Pollutions and Climate Change
- **12:10 – 12:30 - Nicola Everitt, University of Nottingham**
(O047) Let's Get Physical: A Biomechanical View of Seed Imbibition
- **12:30 – 12:50 - John Finn, Teagasc**
(O113) Four-Species Mixtures Improve Yield and Resistance to Weed Invasion in Experimental Grassland Swards across 31 International Sites

EcoCem Room – Plant Biology for Bioenergy

Chair: Gail Taylor

- **11:00 – 11:30 - J. Clifton-Brown, Aberyswyth University**
(KN013) Current Advances in Breeding and Testing *Miscanthus*
- **11:30 – 12:00 - Salvatore Cosentino, Università di Catania**
(KN031) Response of Perennial Bioenergy Grasses under Stress Conditions on Mediterranean areas
- **12:00 – 12:30 - Trevor Hodkinson, Trinity College Dublin**
(KN030) Utilising Natural Genetic Variation to Develop Novel Biomass Grasses for Marginal Lands

13:00 – 14:00 Lunch – Liffey Suite (Exhibition Hall)

13:00 – 14:00 Wicklow Hall 1 - "EPSO - Science Communication"

- **Anne Osterrieder, Oxford Brookes University**
Creative ways to Communicate your Research

14:00 –14:45 – Auditorium – Plenary 7 – Organelle Biology – session supported by EPSO

Chair: Alisdair Fernie

- **James Whelan, LA Trobe University**
(PL007) Mitochondria as a Sensing and Signaling Hub in Plant Cells

14:45 –15:30 – Auditorium – Plenary 8 – Plant-Pathogen Interactions – session supported by SESVANDERHAVE

Chair: Jacek Hennig

- **John Mundy, U. Copenhagen**
(PL008) Genes Required for Programmed Cell Death in Plant Innate Immunity

15:30 – 16:00 Tea and Coffee Break – Liffey Suite (Exhibition Hall)

16:00 – 17:50 Break Out Sessions

Auditorium – Abiotic Stress

Chair: Jana Albrechtova

- **16:00 – 16:30 - Keynote: Paul McCabe, University College Dublin**
(KN014) Application of a Root Hair Assay to Study Plant Programmed Cell Death
- **16:30 – 16:50 - Éva Hideg, University of Pécs**
(O049) Singlet Oxygen Photosensitizers in Leaves
- **16:50 – 17:10 - Els Keunen, Hasselt University**
(O050) The Mitochondrial Alternative Oxidase as a Modulator of the Oxidative Challenge in Cadmium-Exposed *Arabidopsis thaliana*
- **17:10 – 17:30 - Dolores Rodriguez, University of Salamanca**
(O051) Molecular and Genetic Study of Cluster D PP2Cs and Their Interacting Proteins in Plants
- **17:30 – 17:50 - Véronique Hugouvieux, CEA Grenoble**
(O052) Toward a Better Understanding of *Arabidopsis thaliana* "Selenium Binding Protein 1" (SBP1) Function in Detoxification Mechanisms: Characterisation of SBP1 Chelating Properties toward Two Soil Pollutants Cd and Se

Liffey Hall 1 – Plant Pathogen Interactions

Chair: John Mundy

- **16:00 – 16:30 - Keynote: Salma Balazadeh, Max Planck Institute of Molecular Plant Physiology**
(KN015) STAX, a Novel Negative Transcriptional Regulator of Defense Response against *Pseudomonas syringae*
- **16:30 – 16:50 - Angela Feechan, University College Dublin**
(O053) R-Genes from a Family of TIR-NBS-LRRs at the Wild Grapevine Locus *RUN1* Provide Resistance to Both Powdery and Downy Mildew in Cultivated Grapevine
- **16:50 – 17:10 - Eleanor M Gilroy, The James Hutton Institute**
(O054) Pumped Up on (Brassin)Steroids: Multiple *Phytophthora infestans* Effectors Manipulate the Brassinosteroid Pathway in Potato
- **17:10 – 17:30 - Eva Häffner, Freie Universität Berlin**
(O055) Differential Transcriptional and Phytohormone Responses in Susceptible and Resistant *Arabidopsis* Genotypes upon *Verticillium longisporum* Infection
- **17:30 – 17:50 - Fiona Doohan, University College Dublin**
(O056) Orphan Genes as Tools for Improving Wheat Disease Resistance

Liffey Hall 2 – Organelle Biology

Chair: Jim Whelan

- **16:00 – 16:30 - Keynote: Paul Jarvis, University of Oxford**
(KN016) Protein Import into Chloroplasts and Its Regulation by the Ubiquitin-Proteasome System
- **16:30 – 16:50 - Carlos M Vicent, Center for Research in Agrigenomics**
(O057) The Evolutionary Conserved OBAP1 Protein Participates in the Regulation of Oil Body Size
- **16:50 – 17:10 - Saijaliisa Kangasjärvi, University of Turku**
(O058) PP2A Phosphatase Interacts with CPK Kinase and Regulates Pathogenesis Responses Triggered by Organellar ROS Signals
- **17:10 – 17:30 - Mariana Sottomayor, IBMC - Instituto de Biologia Molecular e Celular**
(O059) The Proteome of a Toxic Vacuole: Analysis of the Leaf Vacuoles from the Alkaloid Producing Plant *Catharanthus roseus*
- **17:30 – 17:50 - Antje von Schaewen, WWU Münster**
(O060) Defects in Peroxisomal Targeting of OPPP Enzymes PGL3 or PGD2 Reduces Fertility in *Arabidopsis thaliana*

EcoCem Room – Plant Biology for Bioenergy

Chair: Gail Taylor

- **16:00 – 16:20 - Manfred Klaas, Teagasc**
(O065) Exploring Differentially Expressed Genes and Pathways under Drought, Flooding and Salinity Conditions in Reed Canary Grass (*Phalaris arundinacea*), an Allopolyploid C3 Forage and Bioenergy Grass Species
- **16:20 – 16:40 - Grantley W. Lycett, University of Nottingham**
(O066) Modification of Cell Wall Composition and Recalcitrance to Saccharification by Manipulation of *RAB* GTPase Genes
- **16:40 – 17:00 - Ángel Cordero Vicente, University College Dublin**
(O067) The Effect of Short Low Temperature Events on Upland and Lowland Switchgrass (*Panicum virgatum* L.) Cultivars Used for Biomass Production: Impact on Carbon Assimilation, Photochemistry and Biomass Production
- **17:00 – 17:20 - Uday Divi, CSIRO**
(O068) Characterization of Chinese Tallow, a Biofuel Crop: Deciphering Lipid Pathways and Regulatory Gene Networks
- **17:20 – 17:40 - Jasper G. Clarke, Centre for Novel Agricultural Products**
(O069) QTL Mapping in *Jatropha curcas*

18:00 – 19:00 Foyer Spaces – Level 3, 4 & 5 Poster Viewing Session 2

19:00 – 20:00 - Auditorium – Public Lecture – The Challenge of Global Food Security

Chair: Bruce Osborne

- **Prof. Charles Godfray, Director of the Oxford Martin Program on the Future of Food, Oxford University**

Panel Discussion: Bill Davies, Steve Long, José Pío Beltrán, Frank O'Mara

Wednesday 25th June

09:00 – 09:45 – Auditorium – Plenary 9 – Plants and Environment – session supported by Tree Physiology

Chair: Heinz Rennenberg

- **Ülo Niinemets, Estonian University of Life Sciences**
(PL009) How Plant "Talk" Can Alter the World.

09:45 – 10:30 – Auditorium – Plenary 10 – Plant Invasions and Impacts- Session supported by Bayer

Chair: Heinz Muller-Schaerer

- **Philip Hulme, Lincoln University**
(PL010) The Impact of Invasive Plants on Biodiversity and Ecosystem Services.

10:30 – 11:00 Tea and Coffee Break – Liffey Suite (Exhibition Hall)

11:00 – 13:00 Break Out Sessions

Auditorium – Plants and Environment

Chair: Ülo Niinemets

- **11:00 – 11:30 - Keynote: Jaume Flexas, Universitat de les Illes Balears**
(KN018) Anatomical Evidence for Mesophyll Conductance Limitation to Photosynthesis
- **11:30 – 11:50 -Chooi-Hua Goh, The Australian National University**
(O070) Are Legume Supernodulation Genes Controlling Plastic Responses to Nitrogen?
- **11:50 – 12:10 - Charlotte Poschenrieder, Universitat Autònoma de Barcelona**
(O071) Factors Affecting Snail Herbivory on *Noccaea praecox*, a Cd-Hyperaccumulator
- **12:10 – 12:30 - Aidan Farrell, The University of the West Indies**
(O072) Response to Heat and Light Stress in Two Tropical Savanna Sedges
- **12:30 – 12:50 - Anne Plessis, New York University**
(O073) Modeling Gene Expression in Response to Environmental Conditions in Field Grown Rice

Liffey Hall 1 – Plant Invasions and Impacts

Chair: Phil Hulme

- **11:00 – 11:30 - Keynote: Heinz Müller-Schärer, University of Fribourg**
(KN019) “Areas of High Conservation Value in Georgia (Caucasus): Present and Future Threats by Invasive Plants”.
- **11:30 – 11:50 - Jane Molofsky, University of Vermont**
(O074) How Important is Admixture Between Divergent Populations in Contributing to Ecosystem Transformations Post Introduction?
- **11:50 – 12:10 - Margherita Gioria, Academy of Sciences of the Czech Republic**
(O075) The Role of Competition in Plant Invasions
- **12:10 – 12:30 - Dario Fornara, University of Ulster**
(O076) Ecosystem-Level Impact of Invasive Riparian Plant Species: What Do We Know?
- **12:30 – 12:50 - Christina Maguas and Mark Fennell**

Liffey Hall 2 – Abiotic Stress Responses

Chair: Petcu Elena

- **11:00 – 11:30 - Keynote: Bernd Mueller-Roeber, University of Potsdam**
(KN020) NAC Transcription Factor ATAF1 Acts Upstream of ORE1 and GLK1 and Integrates ABA Signalling with Senescence
- **11:30 – 11:50 - Nelson Saibo, iBET/ITQB**
(O079) New Insights into the Molecular Mechanisms underlying Rice Responses to Abiotic Stress
- **11:50 – 12:10 - John Hamill, Deakin University**
(O080) Genes from the Drought Resistant Resurrection Grass *Sporobolus stapfianus* Can Increase Yield and Stress Tolerance in *Arabidopsis* - What about Crop Plants?
- **12:10 – 12:30 – Federica Zanetti, Bologna University**
(O081) Effects of Progressive Drying Up on Photosynthetic Capacity and Sugars Accumulation of Sweet Sorghum during Vegetative and Reproductive Stages
- **12:30 – 12:50 - Scott Sinclair, Ruhr University Bochum**
(O082) Analysis of the *hma2,hma4* Double Mutant in the Model Plant *Arabidopsis thaliana* Provides Evidence for Shoot-to-Root Signaling in the Response of Plants to Zn-Deficiency



13:00 – 14:00 - Lunch - Liffey Suite (Exhibition Hall)

14:00 – 18:00 - Conference Tours

14:00 – 18:00 - Liffey Hall 1 – Closed Meeting: EU Projects

14:00 – 14.45 - Liffey Hall 2 – FESPB AGM

19:00 – 23:30 – Conference Dinner

Thursday 26th June

09:00 – 09:45 – Auditorium – Plenary 11 – Symbiotic Interactions – session supported by Plant Biology (Wiley)

Chair: Marc Andre Selosse

- **Giles Oldroyd, John Innes Centre.**
(PL011) Calcium Encoding and Decoding during Symbiotic Signalling.

09:45 – 10:30 – Auditorium – Plenary 12 – Plant Evolution and Phylogenetics

Chair: Isabel Sanmartin

- David Beerling, University of Sheffield.
(PL012) Stomata: Microscopic Gateways to Evolution and Extinction.

10:30 – 11:00 Tea and Coffee Break – Liffey Suite (Exhibition Hall)

11:00 – 13:00 Break Out Sessions

Auditorium – Symbiotic Interactions

Chair: Giles Oldroyd

- **11:00 – 11:30 - Keynote: Marc-Andre Selosse, Museum National d'Histoire Naturelle**
(KN021) Mixotrophy: How Mycorrhizal Networks Can Shape Plant Physiology
- **11:30 – 11:50 - Brian R. Murphy, MIGAL - Trinity College Dublin**
(O083) The Biocontrol and Biofertilisation Potential of Fungal Root Endophytes of Barley
- **11:50 – 12:10 - Samira Hassan, Australian National University**
(O084) Differential Roles of Flavonoids in Plant-Rhizobia Symbioses
- **12:10 – 12:30 - Daniel Garcia-Seco, San Pablo CEU University Faculty of Pharmacy**
(O086) Blackberry (*Rubus* sp.) RNA-Seq Analysis Reveals Genes Differentially Expressed after Challenge with the Beneficial Rhizobacteria *Pseudomonas fluorescens* N21.4 under Field Conditions

Liffey Hall 1 – Plant Evolution and Phylogenetics

Chair: David Beerling

- **11:00 – 11:30 - Keynote: Isabel Sanmartin, Real Jardin Botanico, CSIC**
(KN022) Unravelling the Evolutionary Response of Plants to Climate Change Using New Biogeographic and Phylogenetic Approaches

- **11:30 – 11:50 - Elena Voznesenskaya, V. L. Komarov Botanical Institute of Russian Academy of Sciences**
(O088) Multiple Structural and Functional Transitions in Development of C4 Kranz Anatomy in *Salsola*
- **11:50 – 12:10 - Conor Meade, National University of Ireland Maynooth**
(O089) *Non Tabula Rasa in Hiberniam*. Multiple Separate Pleistocene Expansion Events Characterise the *Arenaria ciliata* Complex in Europe and Ireland
- **12:10 – 12:30 - Caroline Elliott-Kingston, University College Dublin**
(O090) Relationship between Speed of Stomatal Closure and Stomatal Size

Liffey Hall 2 – Plants and Environment

Chair: Jiri Satruek

- **11:00 – 11:30 - Keynote: Ronan Sulpice, NUI Galway**
(KN023) Environment Is Unstable: How Plants Can Cope with It?
- **11:30 – 11:50 - Jana Albrechtova, Charles University in Prague, Faculty of Science**
(O091) Photosynthetic Apparatus of Norway Spruce (*Picea abies*) and European Beech (*Fagus sylvatica*) Respond Differently to Elevated Carbon Dioxide
- **11:50 – 12:10 - Olaf Thomas Bouman, Cape Breton University**
(O092) Light Acclimation of Leaf Chemistry and Structure in Advance Regeneration of Beech (*Fagus sylvatica* L.)
- **12:10 – 12:30 - Susanne Berger, University Wuerzburg**
(O093) Function of Class II TGA Transcription Factors in Oxylin Signaling
- **12:30 – 12:50 - Stephan Wenkel, University of Tuebingen**
(O094) Role of Leaf Patterning Factors in the Shade-Escape Response

Wicklow Hall 1 – Land Use and GHGs

Chair: Svend Christensen

- **11:00 – 11:30 - Keynote: Axel Don, Thünen Institute**
(KN024) Land-Use and Land-Management Impact on the Carbon Balance of European Ecosystems
- **11:30 – 11:50 - Mike Whitfield, Trinity College Dublin**
(O095) Scaling Soil Process Modelling to the National Level
- **11:50 – 12:10 - Órlaith Ní Choncubhair, Teagasc**
(O096) Carbon Balance Implications of Establishing Perennial Grasses for Bioenergy Production
- **12:10 – 12:30 - Rachel Marshall, Centre for Ecology and Hydrology**
(O097) The Greenhouse Gas Balance of Land Conversion to Bioenergy Crops: *Developing a UK Network*
- **12:30 – 12:50 - Michael Williams, Trinity College Dublin**
(O098) Nitrogen Losses from Legume Based Agriculture

13:00 – 14:00 Lunch – Liffey Suite (Exhibition Hall)

13:00 – 14:00 Wicklow Hall 1 – Why and How to Submit to the Journal of Plant Physiology

Prof. Christian Wilhelm, Editor-in-Chief of the Journal of Plant Physiology

14:00 – 14:45 – Auditorium – Plenary 13 – Photosynthesis and Respiration

Chair: Agu Laisk

- **Eva-Mari Aro, University of Turku**
(PL013) Novel Insights into Regulation of Light Harvesting and Electron Transfer in Plant Chloroplasts - Impact on Plant Acclimation Strategies

14:45 – 15:30 - Auditorium – Plenary 14 – Phenomics – sessions supported by Bayer

Chair: Christian Granier

- **Ulrich Schurr, Forschungszentrum Jülich - IBG-2: Plant Sciences**
(PL014) Plant Phenotyping: Overcoming the Bottleneck by Integrated Approaches

15:30 – 16:00 Tea and Coffee Break – Liffey Suite (Exhibition Hall)

16:00 – 18:00 Break Out Sessions

Auditorium – Photosynthesis and Respiration

Chair: Eva Mari Aro

- **16:00 – 16:30 - Keynote: Agu Laisk, University of Tartu**
(KN025) Quantum Yield of Photosynthesis
- **16:30 – 16:50 - Nathalie Luchaire, INRA**
(O099) The Carbon Balance of Microvine Plants is Decreased under Elevated Temperature
- **16:50 – 17:10 - Jennifer Selinski, University of Osnabrueck**
(O100) Five Alternative Oxidases in *Arabidopsis thaliana*: What Makes the Difference?
- **17:10 – 17:30 - Imre Vass, Biological Research Centre, Hungarian Academy of Sciences**
(O101) Molecular Mechanisms of Photodamage of the Photosynthetic Apparatus
- **17:30 – 17:50 - Matthew Saunders, The James Hutton Institute**
(O102) The Importance of Understanding Photosynthesis at the Ecosystem Scale

Liffey Hall 1 – Phenomics

Chair: Ulli Schurr

- **16:00 – 16:30 - Keynote: Christine Granier, INRA**
(KN026) Multi-Scale Leaf Growth Phenotyping: Modelling the Relationships between Traits over Time and in Response to Environmental Stresses Gives Insight into Leaf Growth Plasticity
- **16:30 – 16:50 - Paul Kenny, Biological Research Center, Szeged University**
(O103) Plant Phenotyping as a Tool in Optimizing Crop Productivity
- **16:50 – 17:10 - Marta Malinowska, Institute of Biological, Environmental & Rural Sciences (IBERS)**
(O104) Using Phenomics Analysis to Identify Genotypic Variation in Drought Responses of *Miscanthus* under Drought Stress
- **17:10 – 17:30 - Tony Pridmore, University of Nottingham**
(O105) Integrated Root Phenomics: Systems and Applications
- **17:30 – 17:50 - Onno Muller, Forschungszentrum Julich**
(O106) Field Phenotyping - Quantitative Information on Plant Structure and Function from the Real World

Liffey Hall 2 – Abiotic Stress Responses

Chair: Javier Paz Ares

- **16:00 – 16:30 - Keynote: Ulrike Bechtold, University of Essex**
(KN027) Using High-Resolution Profiling of Transcripts to Understand Early Signaling Events in Slow Progressive Drying
- **16:30 – 16:50 - Luigi Sanita'di Toppi, University of Parma**
(O107) Response to Metal(loid)s in the Basal Liverwort *Lunularia cruciata*
- **16:50 – 17:10 - Vadim Demidchik, Belarusian State University**
(O108) ROS-Activated Cation Channels in Plants: Past, Present and Future
- **17:10 – 17:30 - Isabel A. Abreu, iBET/ITQB-UNL**
(O109) SUMOylation in Plant Drought Stress: Who Is Regulating the Regulator?
- **17:30 – 17:50 - M. Margarida Oliveira, Instituto de Tecnologia Quimica e Biologica - Universidade Nova de Lisboa**
(O110) Physiology and Transcriptomics of Drought Stress Response/Recovery in *Jatropha curcas*

Wicklow Hall 1 – Epigenetics

Chair: Frank Wellmer

- **16:00 – 16:30 - Keynote: Claudia Köhler, Swedish University of Agricultural Sciences**
(KN028) How Epigenetics Contributes to Plant Speciation
- **16:30 – 16:50 - Sara Farrona, Heinrich-Heine-University Dusseldorf**
(O111) Identification of Novel Components of the Polycomb Pathway in *Arabidopsis*
- **16:50 – 17:10 - Christel Carles, University Grenoble Alpes**
(O112) Chromatin Dynamics at the Onset of Gene Activation: From Genetics to Epigenetics
- **17:10 – 17:30 - Pooja Pandey, Leibniz Institute of Plant Genetics and Crop Plant Research**
(O114) Epigenetic Modifications Associated with the Change of Cellular Identity during Pollen Embryogenesis in *Hordeum vulgare*

18:00 – 18:45 – Auditorium – Closing and Awards