

"Good science is not possible without collaboration ,

Promote sustainable collaboration in plant sciences through coordinating and funding excellent transnational research

#### www.era-caps.org

"Specialists in the field are not always available locally or nationally

> "International collaboration avoids duplication of effort



### ERA-CAPS ID CARD

#### **Description:**

ERA-CAPS was initially funded by the European Commission as an ERA-NET initiative in the Seventh Framework Programme. It was established for the development and coordination of Plant Sciences in the European Research Area. The central idea of ERA-CAPS was to promote the robust development of Plant Sciences by structuring and coordinating national efforts and investment. ERA-CAPS gathers a group of 25 partners from 22 different countries that are responsible for funding or coordinating plant sciences research in their respective countries/regions.

#### ERA-CAPS was preceded by the very successful ERA-NET in Plant Genomics (ERA-PG, for information please see <u>http://www.eracaps.org/about/about-era-pg</u>).

ERA-PG ran from 2004-2009 and administered a number of joint calls that resulted in 55M EUR of funding for transnational plant genomics research, as well as producing influential reports and position papers. ERA-CAPS has carried out an evaluation of the programme and is monitoring its outcomes.

The ERA-CAPS programme is currently the only option for basic collaborative research in plant science across Europe, providing a critical mass and selected by scientific excellence.

#### **Active since:**

December 1, 2011

#### **Objectives:**

- To foster the development and coordination of Plant Sciences transnationally
- To further support a transnational Research Area of Plant Sciences

### Members

#### PARTNERS

**UNITED KINGDOM (BBSRC)** AUSTRIA (FWF) **BELGIUM (FNRS) DENMARK (DASTI/IFD) ESTONIA** (ETAG) FRANCE (INRA) **GERMANY** (DFG) HUNGARY (MTA-ATK) **ISRAEL (MOARD)** LATVIA (LZA) **NETHERLANDS (NWO) NEW ZEALAND (MBIE)** NORWAY (RCN) POLAND (NCBiR) PORTUGAL (FCT) SERBIA (MPNTR) SPAIN (MINECO)



#### **OBSERVERS**

EUROPE (EPSO) SLOVENIA (MAFF) FRANCE (ANR) ITALY (MIPAAF) UNITED STATES (NSF) INDIA (DBT)\* JAPAN (JST)\*

\* not shown on the map

# ERA-CAPS highlights

# Over the past four years, the ERA-CAPS Network has achieved significant results in various areas:

#### Research Funding -

- Implementation of two joint calls leading to 26 transnational research projects worth 42 M EUR of funding.
- Mobilisation of more than 1000 researchers from 30 different countries as call applicants (including eight non-European countries).

#### Policy making

- Common Data Sharing policy adopted and implemented for the Second call.
- Roadmap for data standards adopted.
- Development of Guidelines on Intellectual Property Rights Conditions for Collaborative Research Projects.

#### Networking -

- Three strategic workshops implemented on developing a common agenda and on network sustainability.
- Organisation of two Grant Holders' workshops gathering 26 projects and their funders.

#### Dissemination

- Publication of ten articles in external media.
- 50.000 page visits by 30.000 individual visitors reached through the website: www.eracaps.org
- Development of Plant Science database: http://eracaps-psd.org/
- Publication of ten articles in external media.

#### Internationalisation

- ERA-CAPS was successful in attracting international partners in its programme such as the NSF (USA), MBIE (New Zealand), etc.
- Researchers from over the globe applied to the ERA-CAPS calls from countries covering five continents: Europe, Asia, North America, South America and Oceania.

### The First ERA-CAPS Call

• Thematic area: Research in fundamental molecular plant science

highlighting the themes:

- Food Security
- Non-food crops
- Adaptation to a changing climate
- Biotic/abiotic stresses
- Participating countries: Austria, Belgium, Canada (non-funding),
  Denmark, Finland (non-funding), France, Germany, Ireland, Israel, Italy (non-funding),
  Latvia, The Netherlands, New Zealand, Norway, Poland, Portugal, Serbia, Spain
  (non-funding), Sweden (non-funding), UK, USA (parallel funding)
- Call closure date: 15 February 2013
- Number of proposals received: 110
- Number of applicants: 500 teams
- Number of funded projects: 14 (73 teams)
- Total funding awarded: 21.9 M EUR

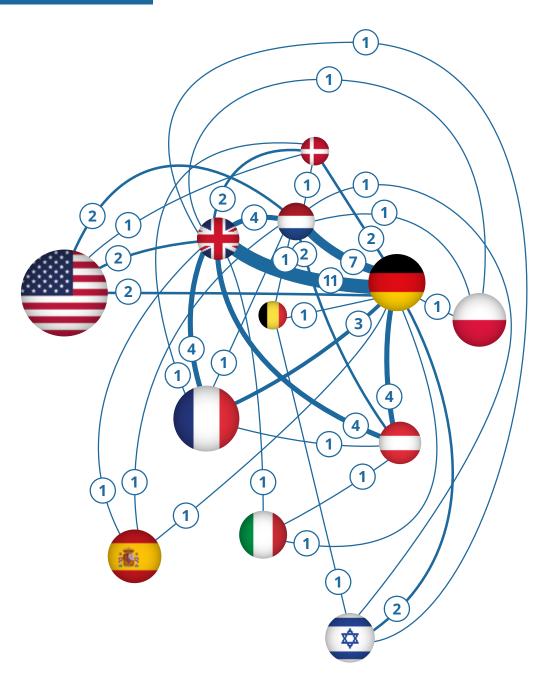


Acronym	Project title	Coordinated by	Applicant countries
ABCEED	Identifying and exploiting genetic variation controlling seed yield and quality in oilseed crops	Bevan, Michael W., John Innes Centre, UK	UK, Germany, France
BARLEY-NAM	Locating exotic genes that control agronomic traits under stress in a wild barley nested association mapping (NAM) population	Flavell, Andrew John, U of Dundee, UK	UK, Israel, Germany
BENZEX	Biosynthesis, transport and exudation of 1,4-benzoxazin-3-ones as determinants of plant biotic interactions	Erb, Matthias, Max Planck Institute for Chemical Ecology, Germany	Germany, UK, Denmark, USA
DeCOP	Delineating the crossover control networks in plants	Schlögelhofer, Pe- ter, U Wien, Austria	Austria, Germany, UK
DURESTrit	Functional characterisation and validation of nonhost components in Triticeae species for durable resistance against fungal diseases	Schweizer, Patrick, Leibniz I f Pflanzen- genetik u Kulturpfl, Germany	Germany, Netherlands, UK, USA
EURO-PEC	European Plant Embryology Consortium	Weijers, Dolf, U Wageningen, Netherlands	Netherlands, Germany, Austria
Evo-Genapus	Evolution of genomes: Structure-function relationships in the polyploid crop species Brassica napus	Bancroft, Ian, John Innes Centre, UK	UK, Germany, France
FLOWPLAST	Plasticity of flowering time in response to environmental signals in Arabidopsis thaliana	Schmid, Markus, Max Planck Insti- tute Entwicklungs- biologie, Germany	Germany, Netherlands, Poland, UK
H.I.P.	Homeostasis of Isoprenoids in Plants: understanding compartmentalization, flux and transport of isoprenoids in glandular trichomes for non-crop and crop species	Tissier, Alain, Leibniz I f Pflanzen- biochemie (IPB), Germany	Germany, Belgium, Israel, Netherlands
HotSol	Future-proofing potato: Mechanisms and markers for global-warming tolerant ideotypes	Sonnewald, Uwe, Erlangen-Nürnberg U, Germany	Germany, Netherlands, UK, Spain
N-vironment	The role of the N-end rule pathway in controlling plant response to the environment	Holdsworth, Michael, U of Nottingham, UK	UK, Italy, Germany, Austria
PER ASPERA	Plant endoplasmic reticulum architecture and seed productivity	Frigerio, Lorenzo, U Warwick, UK	UK, France, Austria
RootBarriers	Plant root diffusional barriers: genesis and implications for nutrient efficiency and stress tolerance	Salt, David E, U of Aberdeen, UK	UK, Netherlands, Germany, France, Denmark
SeedAdapt	Dimorphic fruits, seeds and seedlings as adaptation mechanisms to abiotic stress in unpredictable environments	Leubner, Gerhard, U of London, UK	UK, Netherlands, Germany, Austria

More information, including abstracts of projects:

http://www.eracaps.org/joint-calls/era-caps-funded-projects

### Call 2012



### The Second ERA-CAPS Call

• Thematic area: Research in fundamental molecular plant science

highlighting the themes:

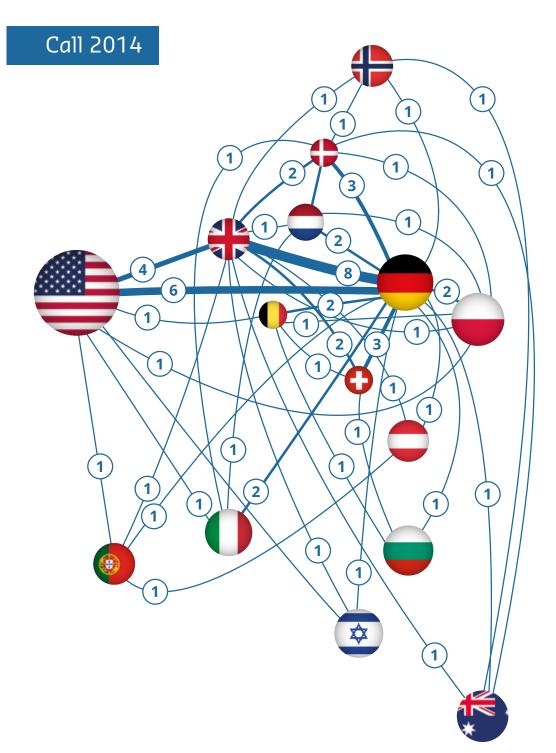
- Food Security
- Non-food crops
- Adaptation to a changing climate
- Biotic/abiotic stresses

• **Participating countries:** Australia (non-funding), Austria, Belgium, Bulgaria (non-funding), Chile (non-funding), China (non-funding), Czech Republic (non-funding), Denmark, Estonia, Finland (non-funding), France (non-funding), Germany, Hungary, Israel, Italy, Latvia, The Netherlands (non-funding), New Zealand, Norway, Poland, Portugal, Saudi Arabia (non-funding), Serbia, Slovakia (non-funding), Spain (non-funding, Sweden (non-funding), Switzerland, UK, USA

- Call closure date: 14 March 2014
- Number of proposals received: 142
- Number of applicants: 672 teams
- Number of funded projects: 12 (57 teams)
- Total funding awarded: 20 M EUR



Acronym	Project title	Coordinated by	Applicant countries
AbioSen	Molecular mechanisms of abiotic stress-induced senescence in plants	Müller-Röber, Bernd, Potsdam U, Germany	Germany, Belgium, Bulgaria, Switzerland
AI-UCIDATE	Towards a molecular understanding of Aluminium genotoxicity for crop improvement	de Veylder, Lieven, U Ghent, Belgium	Belgium, Germany, Poland, USA
BEAN_ADAPT	Evolution in a changing environment: the genetic architecture of adaptation outside centers of domestication of Phaseolus vulgaris and P. coccineus	Papa, Roberto, U Politecnica delle Marche, Italy	ltaly, Germany, USA
DesignStarch	Designing starch: harnessing carbohydrate polymer synthesis in plants	Ebenhöh, Oliver, Düsseldorf U, Germany	Germany, UK, Switzerland
EfectaWheat	An Effector- and Genomics-Assisted Pipeline for Necrotrophic Pathogen Resistance Breeding in Wheat	Cockram, James, National I of Agricultural Botany, UK	UK, Denmark, Germany, Norway, Australia
EVOREPRO	Evolution of Sexual Reproduction in Plants	Becker, Jörg, I Gulbenkian de Ciencia, Portugal	Portugal, UK, Germany, Austria, USA
INTREPID	Investigating Triticeae Epigenomes for Domestication	Hall, Anthony, Department of Functional Genomics, UK	UK, Germany, USA
MAQBAT	Mechanistic Analysis of Quantitative Disease Resistance in Brassicas by Associative Transcriptomics	Ridout, Christopher J., John Innes Centre, UK	UK, Denmark, Germany, Poland, Netherlands
PHYTOCAL	Phytochrome Control of Resource Allocation and Growth in Arabidopsis and in Brassicaceae crops	Halliday, Karen, U of Edinburgh, UK	UK, Germany, USA
RegulaTomE	Regulating Tomato quality through Expression	Martin, Cathie, John Innes Centre, UK	UK, Germany, USA, Israel
SIPIS	Decoding ligand-receptor specificities of LysM proteins in plant immunity and symbiosis	Nürnberger, Thorsten, Tübingen EKU, Germany	Germany, Denmark, Italy, Netherlands
SOURSI	Simultaneous manipulation of source and sink metabolism for improved crop yield	Sweetlove, Lee, U of Oxford, UK	UK, Germany, Switzerland



More information, including abstracts of projects:

http://www.eracaps.org/joint-calls/era-caps-funded-projects

## The future of ERA-CAPS

Although the funding for the Network by the European Commission ended in May 2015, several ERA-CAPS partners are committed to continue their efforts in supporting transnational research in plant sciences. This is why ERA-CAPS will continue as a **self-sustained Network** beyond this date and will aim at launching a Third joint call in the course of 2016. Updated information will be available on the ERA-CAPS website.

### Contact Information

- URL: <u>www.eracaps.org</u>
- ERA-CAPS Coordination Office: Dr Paul Wiley (BBSRC, UK), eracaps@bbsrc.ac.uk
- For contact information of the ERA-CAPS partners and observers, please refer to the 'Partners' page of our website: <u>www.eracaps.org</u>
- Communication Office:
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