



*“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 <http://www.eracaps.org/about/about-era-pg>).

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

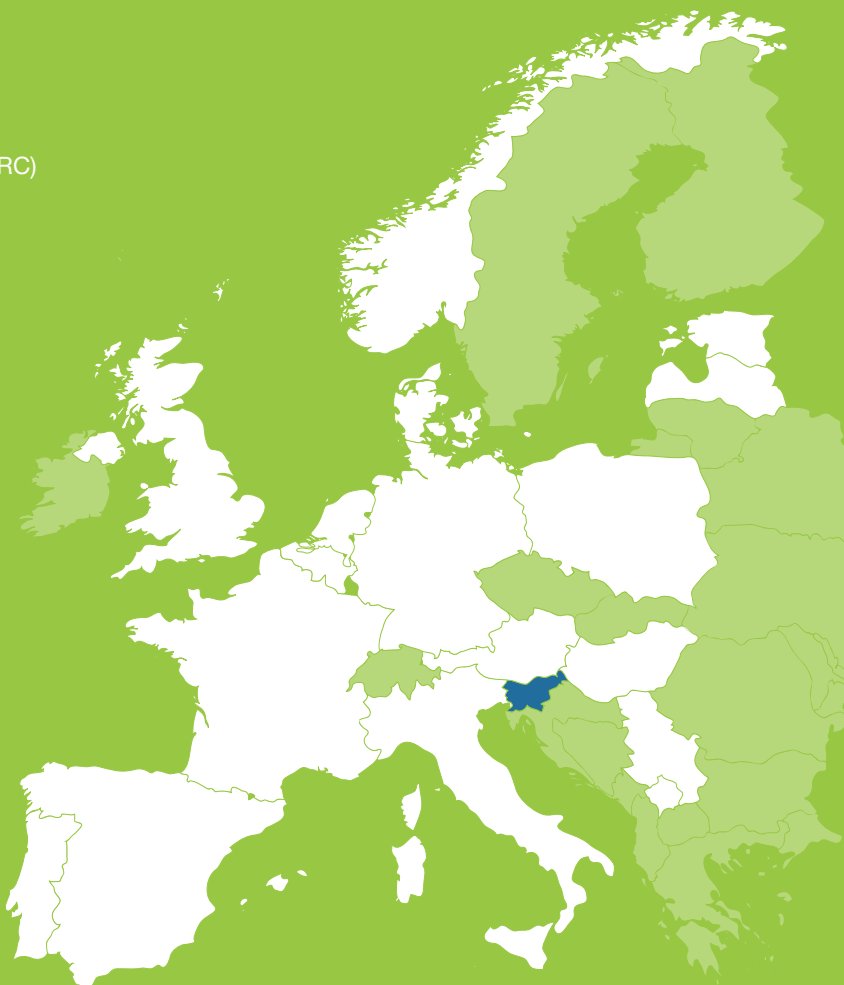
Objectives:

- 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)
ITALY (MIUR)
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:

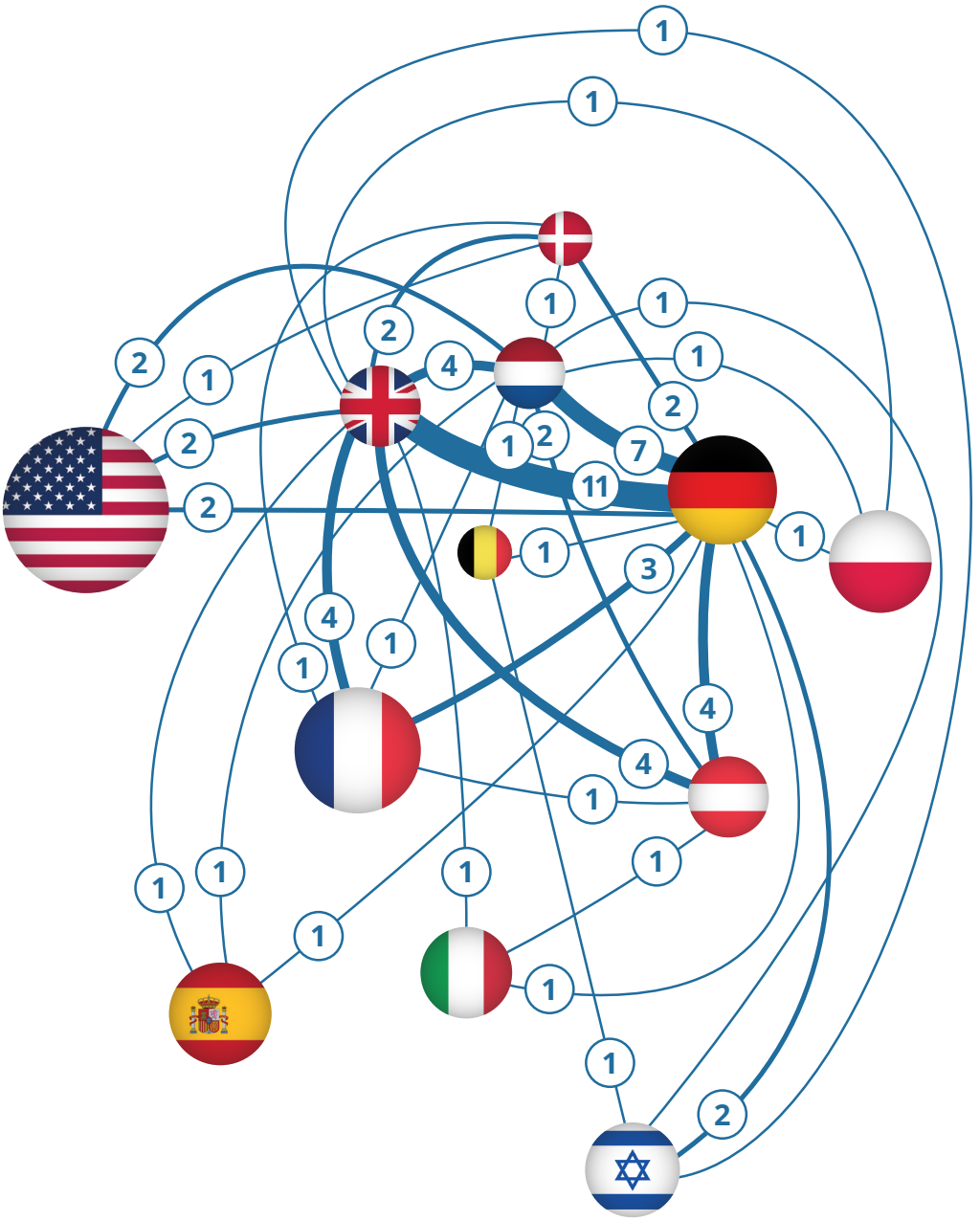
- Food Security
 - Non-food crops
 - Adaptation to a changing climate
 - Biotic/abiotic stresses
-
- **Participating countries:** Austria, Belgium, Canada (non-funding), Denmark, Finland (non-funding), France, Germany, Ireland, Israel, Italy (non-funding), Latvia, The Netherlands, New Zealand, Norway, 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, Peter, U Wien, Austria | Austria, Germany, UK |
| DURETrit | 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 Institute Entwicklungsbiologie, 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 | Sonnenwald, 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>



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

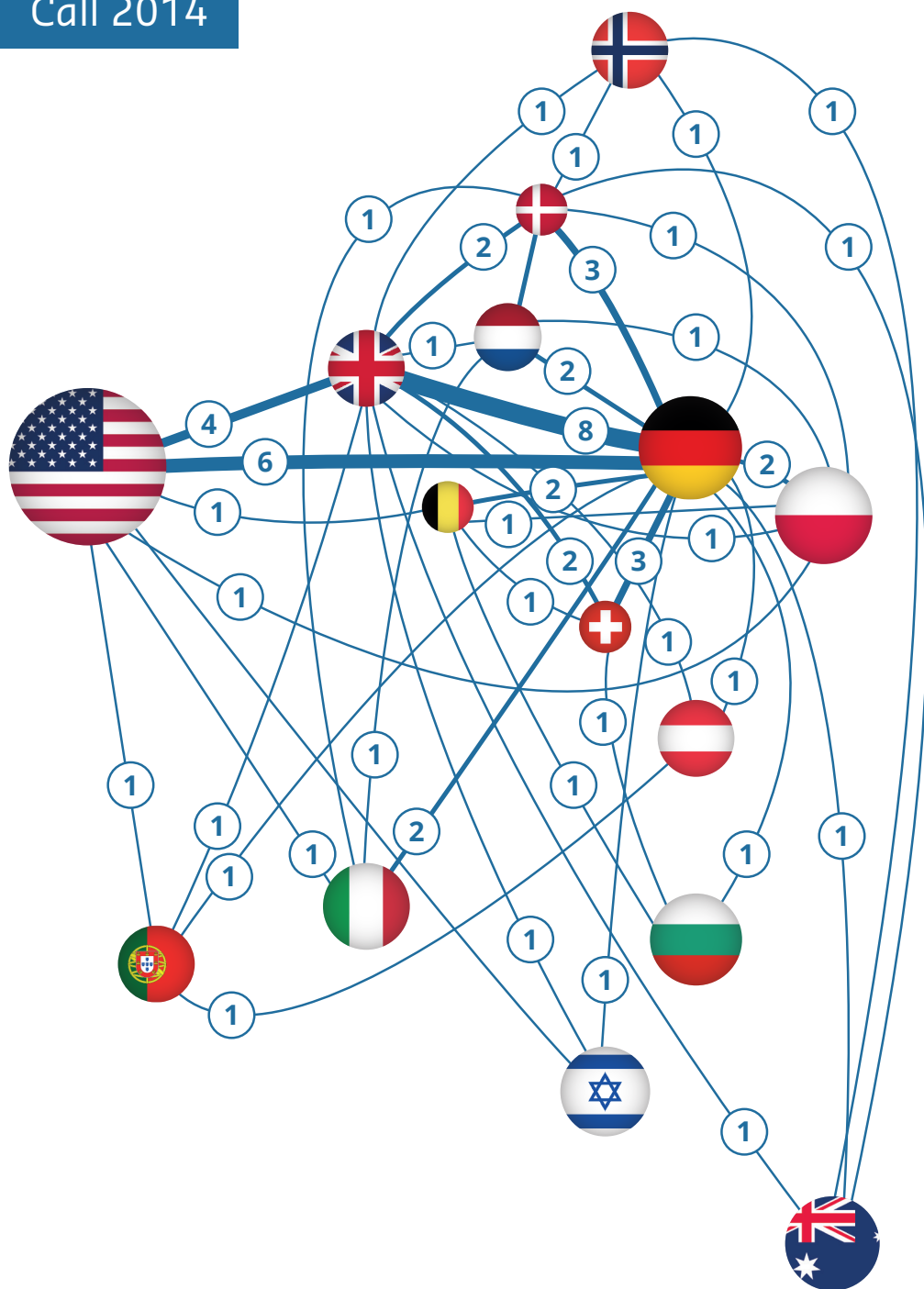


| Acronym | Project title | Coordinated by | Applicant countries |
|---------------------|---|---|---|
| AbioSen | Molecular mechanisms of abiotic stress-induced senescence in plants | Müller-Röber, Bernd, Potsdam U, Germany | Germany, Belgium, Bulgaria, Switzerland |
| AI-UCIDATE | Towards a molecular 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 <i>Phaseolus vulgaris</i> and <i>P. coccineus</i> | Papa, Roberto, U Politecnica delle Marche, Italy | Italy, 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 | Nürnbergger, Thorsten, Tübingen ECU, Germany | Germany, Denmark, Italy, Netherlands |
| SOURS | 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>

Call 2014



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: www.eracaps.org
- ERA-CAPS Coordination Office:
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- For contact information of the ERA-CAPS partners and observers, please refer to the 'Partners' page of our website: www.eracaps.org
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