

# **GARNet:**

## **Supporting Technological Innovation in UK Plant Science**



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## WELCOME TO GARNet

GARNet supports UK scientists to develop and undertake excellent research using *Arabidopsis thaliana*

**[www.garnetcommunity.org.uk](http://www.garnetcommunity.org.uk)**



# Who are GARNet?

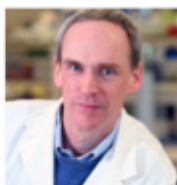
## Managed by GARNet Advisory Committee



**Steven  
Spoel**

GARNet Chair  
University of Edinburgh

[More info »](#)



**Jim  
Murray**

GARNet PI  
Cardiff University

[More info »](#)



**Geraint  
Parry**

GARNet Coordinator  
Cardiff University

[More info »](#)



**Ruth  
Bastow**

Centre for Crop Health  
and Protection (CHAP)

[More info »](#)



**Yoselin  
Benitez-Alfonso**

University of Leeds

[More info »](#)



**Daniel  
Gibbs**

University of  
Birmingham

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**Murray  
Grant**

University of Warwick

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**Andrea  
Harper**

University of York

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**Jill  
Harrison**

University of Bristol

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**Eirini  
Kaiserli**

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[More info »](#)



**Sabina  
Leonelli**

University of Exeter

[More info »](#)



**Sean  
May**

NASC, University of  
Nottingham

[More info »](#)



**Sarah  
McKim**

University of Dundee at  
the James Hutton  
Institute

[More info »](#)



**Colin  
Turnbull**

Imperial College

[More info »](#)



**Renier  
Van der Hooft**

University of Oxford

[More info »](#)

# GARNet Past and Present.



## Funded by BBSRC Responsive Mode since 2000

**2000-2004:** University of York: *Focus on Genomics.*

**2005-2009:** University of Edinburgh: *Focus on Systems Biology*

**2009-2014:** University of Warwick: *Focus on Synthetic Biology*

**2015-2020:** Cardiff University: *Focus on New Technologies and Translation*

**2020-2025:** Cardiff University

- > Enhance UK research expertise in the technologies required for discovery-led plant science through provision of training opportunities.
- > Represent UK fundamental plant science researchers in the changing global research environment
- > Promote opportunities for interactions between industry and the discovery-led plant science research
- > Provide a unified voice and support for the UK fundamental plant science research community.

# GARNet2020 Organised Events

- **September 2015: Plant CRISPR-Cas Workshop:** John Innes Centre
- **April 2016: Integrating Large Data into Plant Science: From Big Data to Discovery:** Dartington Hall, Devon.
- **September 2016: GARNet2016: Innovation in the Plant Sciences:** Cardiff University
- **December 2016: GARNet NatVar2016: Natural Variation as a tool for Gene Discovery and Crop Improvement:** University of Cambridge
- **March 2017: CyVerseUK Workshop:** University of York
- **July 2017: SEB Satellite Meeting: New Breeding Technologies in the Plant Sciences- Applications and Implication in Gene Editing:** Gothenberg University
- **December 2017: SEB Cell Symposium: From Proteome to Phenotype: The Role of Post Translational modifications:** University of Edinburgh
- **March 2018: CRISPR-Cas9 Workshop:** University of Bristol
- **September 2018: GARNet2018: A Plant Science Showcase**
- **December 2018: CyVerse RNA-Seq Analysis workshop**

# GARNet2020 Community Involvement

## Involvement with External Committees to support Community Initiatives

- NIAB Wheat Transformation Resource
- John Innes Centre '**CRISPRinCROPS**' gene editing resource
- SEB Plant Science Committee



# GARNet2020 Community Involvement

## Involvement with External Committees to support Community Initiatives

- UK Plant Science Federation Committee



# GARNet2020 Community Involvement

## Involvement with External Committees to support Community Initiatives

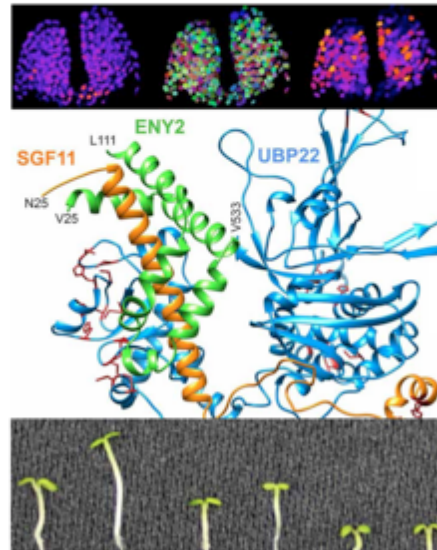
- Multinational Arabidopsis Steering Committee (MASC)

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From Bench to Bountiful Harvests

Multinational Arabidopsis Steering Committee  
(MASC)

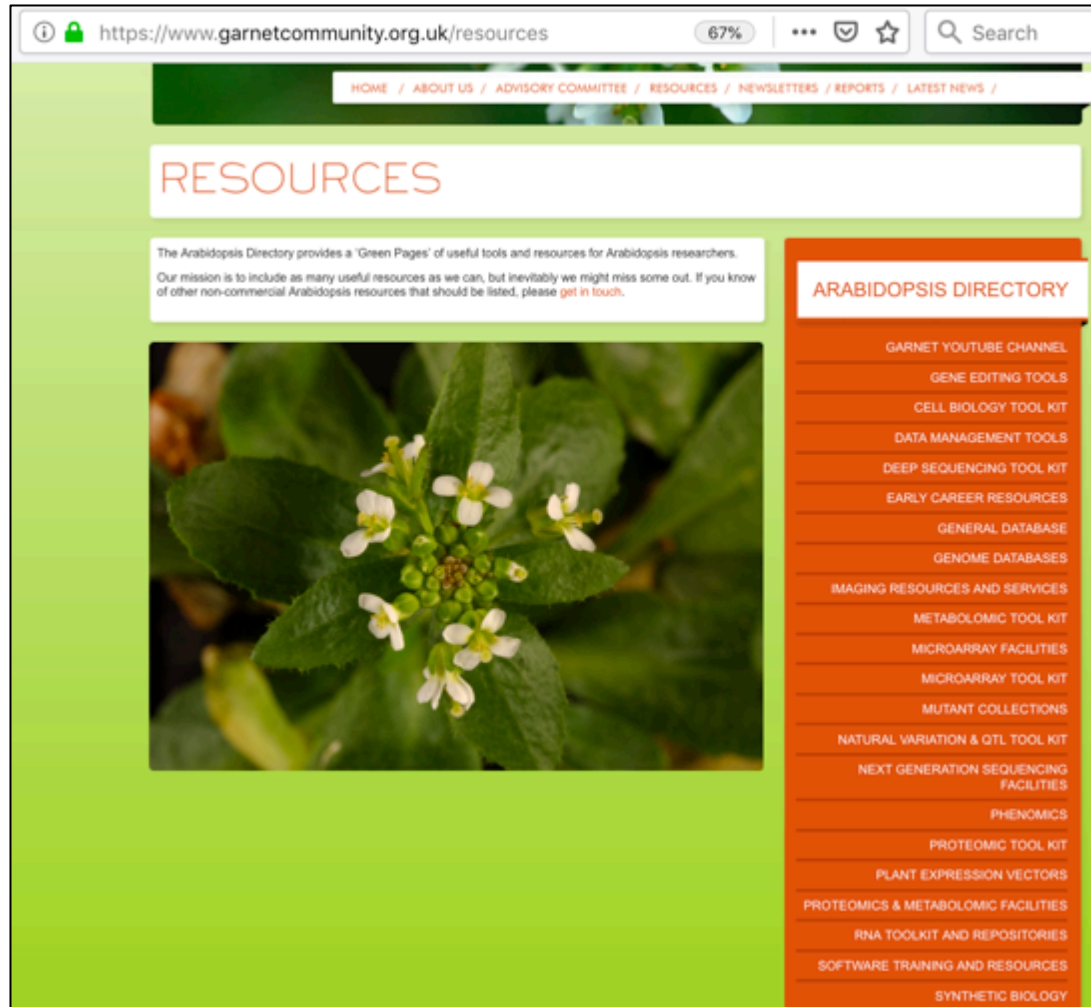
Annual Report 2018/2019





# How do we Communicate?

- GARNet Website [www.garnetcommunity.org.uk/](http://www.garnetcommunity.org.uk/)
  - Resources Page





# How do we Communicate?

- **GARNet Website** [www.garnetcommunity.org.uk/](http://www.garnetcommunity.org.uk/)
  - **Reports**



The screenshot shows the 'REPORTS' section of the GARNet website. It features a green header with the word 'REPORTS' in orange. Below the header is an orange box with white text explaining that various reports and meeting transcripts are available for download. The main content area is divided into three report entries, each with a title, date, summary, and a 'DOWNLOAD' button. To the right of the reports is a green sidebar with a white box containing the title 'Reversing the Decline in Plant Science Applications to the BBSRC Responsive Mode: Analysis and recommendations from GARNet' and a background image of a plant.

## REPORTS

Over the years GARNet has either produced or provided information and evidence for a variety of reports and meeting transcripts. A number of which are available to download here. We hope you find them really useful.

### Minutes from GARNet Advisory Committee meeting: June 2019

3rd Jul 2019

The 68th GARNet Advisory Committee meeting was held at the University of Birmingham on June 13th 2019. The meeting was hosted and chaired by [Daniel Gibbs](#).

Attached are the minutes from this meeting that include interesting finding from UKRI-BBSRC regarding the movement of submitted Responsive mode grant applications.

[DOWNLOAD](#)

### Promoting research links between UK and China scientists

14th Jun 2019

At the [ICAR2019 meeting](#) in Wuhan the GARNet coordinator arranged a workshop to promote interactions between UK and Chinese plant scientists at all levels.

**Workshop- Developing Plant Science Collaborations between UK and China (Shanghai Hall)**

- Geraint Parry ( GARNet Coordinator, UK) General introduction to plant science research in the United Kingdom and to available sources of funding
- Xiaofeng Cao ( Institute of Genetics and Developmental Biology): Introducing research and opportunities available at [CEPAMS](#).
- Yuling Jiao ( Institute of Genetics and Developmental Biology, CAS ); Robert Sablowski ( John Innes Centre ). Introducing plant science research and opportunities at the John Innes Centre as well as benefits of interactions through the Newton Fund.

The attached document is a summary of Geraint Parry's presentation and outlines the Plant Science opportunities for Chinese students and researchers.

[DOWNLOAD](#)

### MASC Annual Report 2019

10th Jun 2019

The annual report from the Multinational Arabidopsis Steering Committee (MASC) is attached and now available for download

This report documents the progress in Arabidopsis research amongst member countries, project resources and MASC subcommittees.

The GARNet coordinator is current secretary of MASC, which provides the UK community with significant input into the activity of this organisation that has guided global Arabidopsis research over the past three decades.

### Reversing the Decline in Plant Science Applications to the BBSRC Responsive Mode: Analysis and recommendations from GARNet

# How do we Communicate?

- GARNet Website [www.garnetcommunity.org.uk/](http://www.garnetcommunity.org.uk/)
- GARNish Newsletter

## NEWSLETTERS

GARNish is the biannual newsletter produced by GARNet for the Arabidopsis and wider Plant Science community. GARNish contains information on the latest news, events and funding, it also highlights exciting new tools and resources, and provides a showcase for the excellent UK Plant Science base. If you would like to provide an article for a future issue of GARNet please [contact us](#).

**June 2019 / EDITION 31**  
**THE FUTURE OF RNA-SEQ ANALYSIS**

**Contents**  
Included in this edition is:

- Update from UKPSF and the Global Plant Council
- List of Upcoming Events
- Introducing the Shiny 3D RNA-Seq analysis App
- Reports from UK Plant Networks
- Update from UKRI-BBSRC including about transfers of responsive mode grants
- Stories from Fascination of Plants Day
- Report from ICAR2019
- The Future of Gene Editing in the UK
- Spotlight on the University of Liverpool
- Analysis of Arabidopsis Publications

If you like to suggest any articles to be included in future edition then please contact the GARNet coordinator, Geraint Parry.

GARNish  
June 2019 Edition 31

**3D RNA-seq App**  
3D RNA-seq analysis

DOWNLOAD

**December 2018 / EDITION 30**  
**OPENING UP GLOBAL BIOTECH INNOVATION**

**Contents**  
The 30th edition of the GARNish newsletter is now available for download from the GARNet website:

Contents

- > UKPSF and GPC Update
- > HVCIP Annual Meeting
- > Introducing OpenMTA
- > CONNECTED Network
- > BBSRC Funding Update
- > iGEM Synthetic Biology
- > Spotlight on University of Birmingham
- > GARNet2018
- > ICAR2019

GARNish  
December 2018 Edition 30

Opening up Global  
Biotech Innovation

Open  
MTA

DOWNLOAD

# How do we Communicate?

- **ArabUK Email List**

**[www.jiscmail.ac.uk/ARABUK](http://www.jiscmail.ac.uk/ARABUK)**



- **GARNet blog: [blog.garnetcommunity.org.uk/](http://blog.garnetcommunity.org.uk/)**




- **[@GARNetweets](#)**
  - **4K followers**



# How do we Communicate?

## - GARNet YouTube channel and Podcast




**GARNet Community**  
83 subscribers

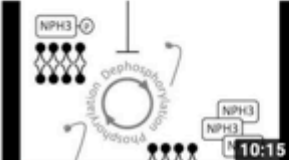
[CUSTOMIZE CHANNEL](#) [YOUTUBE STUDIO \(BETA\)](#)

[HOME](#) [VIDEOS](#) [PLAYLISTS](#) [CHANNELS](#) [DISCUSSION](#) [ABOUT](#) [SEARCH](#)

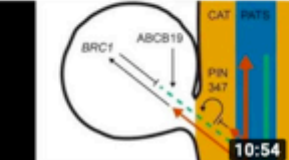
Uploads [PLAY ALL](#) [SORT BY](#)




**Introducing Cost Action CA16212 INDEPTH**  
6 views • 1 day ago




**John Christie talks to GARNet about Phototropism**  
28 views • 2 months ago




**Martin van Rongen talks to GARNet**  
54 views • 3 months ago




**Sarah McKim talks to GARNet about Barley Spikelet**  
43 views • 3 months ago



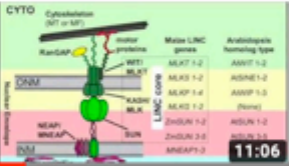
**Discussion about INDEPTH Short Term Scientific**  
58 views • 3 months ago



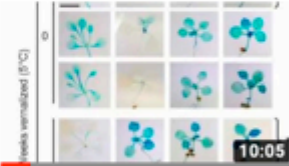
**INDEPTH Cost Action Prague Main Meeting: February 2019**  
74 views • 3 months ago



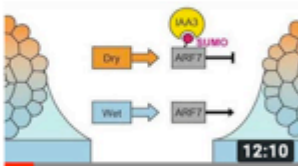
**Belinda Clarke introduces the RSB Growing the future**  
6 views • 5 months ago



**Hank Bass (Florida State University) talks to GARNet**  
131 views • 5 months ago



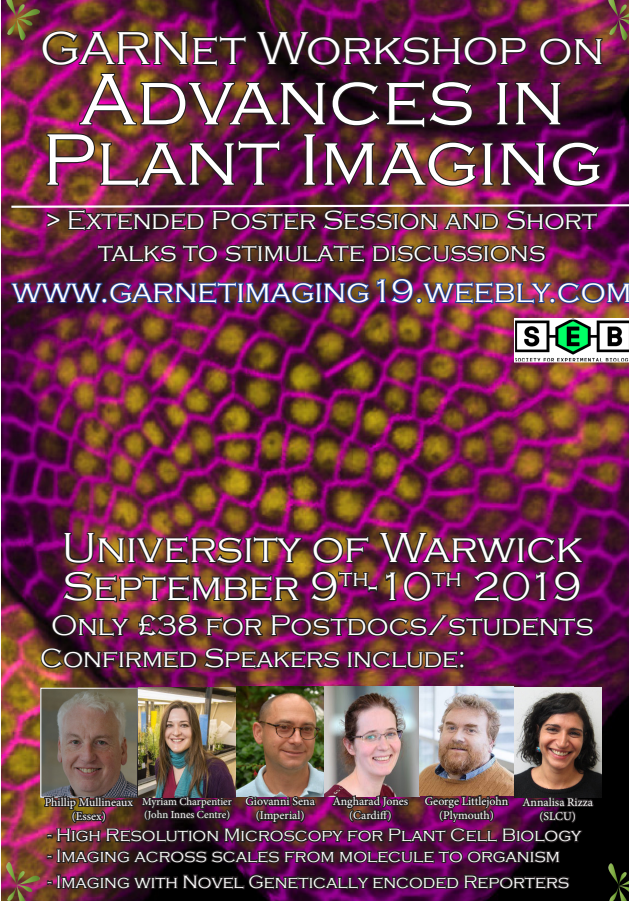
**Daniel Gibbs (University of Birmingham) talked to**  
37 views • 5 months ago



**Malcolm Bennett talks to GARNet**  
122 views • 6 months ago

# Upcoming Events:

- **GARNet Advances in Plant Imaging**
  - **University of Warwick: Sept 9<sup>th</sup>-10<sup>th</sup>**
  - **Early bird registration ends July 24<sup>th</sup>**
  - **<https://garnetimaging19.weebly.com/>**



The poster features a background image of plant cells with green cell walls and yellowish-green cytoplasm. The text is white and yellow. At the top, the title 'GARNET WORKSHOP ON ADVANCES IN PLANT IMAGING' is written in large, white, serif capital letters. Below the title, a horizontal line separates it from the text '> EXTENDED POSTER SESSION AND SHORT TALKS TO STIMULATE DISCUSSIONS'. Below this, the website 'WWW.GARNETIMAGING19.WEEBLY.COM' is written in yellow. To the right of the website is the S-E-B logo, which consists of three squares: a green one with 'S', a yellow one with 'E', and a blue one with 'B', with the text 'SOCIETY FOR ENVIRONMENTAL BIOLOGY' underneath. Below the logo, the text 'UNIVERSITY OF WARWICK SEPTEMBER 9<sup>TH</sup>-10<sup>TH</sup> 2019' is written in white. Below this, 'ONLY £38 FOR POSTDOCS/STUDENTS' is written in white. Below that, 'CONFIRMED SPEAKERS INCLUDE:' is written in white. Below this text is a row of six small portrait photos of the speakers. Below the photos are their names and affiliations: Phillip Mullineaux (Essex), Myriam Charpentier (John Innes Centre), Giovanni Sena (Imperial), Angharad Jones (Cardiff), George Littlejohn (Plymouth), and Annalisa Rizza (SLCU). At the bottom, three bullet points are listed in white: '- HIGH RESOLUTION MICROSCOPY FOR PLANT CELL BIOLOGY', '- IMAGING ACROSS SCALES FROM MOLECULE TO ORGANISM', and '- IMAGING WITH NOVEL GENETICALLY ENCODED REPORTERS'. The poster is decorated with small green leaves in the corners.

GARNET WORKSHOP ON  
ADVANCES IN  
PLANT IMAGING

> EXTENDED POSTER SESSION AND SHORT  
TALKS TO STIMULATE DISCUSSIONS

WWW.GARNETIMAGING19.WEEBLY.COM

S E B  
SOCIETY FOR ENVIRONMENTAL BIOLOGY

UNIVERSITY OF WARWICK  
SEPTEMBER 9<sup>TH</sup>-10<sup>TH</sup> 2019

ONLY £38 FOR POSTDOCS/STUDENTS

CONFIRMED SPEAKERS INCLUDE:

Phillip Mullineaux (Essex) Myriam Charpentier (John Innes Centre) Giovanni Sena (Imperial) Angharad Jones (Cardiff) George Littlejohn (Plymouth) Annalisa Rizza (SLCU)

- HIGH RESOLUTION MICROSCOPY FOR PLANT CELL BIOLOGY
- IMAGING ACROSS SCALES FROM MOLECULE TO ORGANISM
- IMAGING WITH NOVEL GENETICALLY ENCODED REPORTERS

# Upcoming Events:

- **Training Workshop on 3D RNA-seq App**
  - **University of Leeds: Oct 23<sup>rd</sup>-24<sup>th</sup>**
  - **Website coming soon....**





# ...and Finally....

- **ICAR2021**
  - **Belfast June 21<sup>st</sup>-25<sup>th</sup> 2021**
  - **<http://icar2021.arabidopsisresearch.org/>**

