



*international society
for seed science*

**3rd ISSS Workshop on Molecular Aspects of Seed
Dormancy and Germination**
18 – 21 July 2010
York, UK

Programme

Sunday 18th July

VENUE: York Art Gallery

18.00 – 19.30 **Registration**

18.00 – 20.30 **Welcome Reception** (*drinks and canapés, with opportunity to enjoy unique artworks on display*)

Monday 19th July

VENUE: The Hospitium

08.30-09.15 **Registration**

08.30-09.00 *Tea/Coffee with Danish Pastry*

Opening session

Session Chair: Dr Steven Penfield

09.15 **Overview of workshop and welcome to participants by the organisers**

Prof Bill Finch Savage, President Elect, ISSS.

Prof Ian Graham, Dr Steven Penfield, University of York.

09.30 **Prof Giltsu Choi**

Title: Collaborative regulation of seed germination by PIL5 and other transcription factors

Followed by oral presentations chosen from invited abstracts:

10.15 Prof Luis Lopez-Molina

Title: Seed dormancy: the role of GA, ABA and the seed coat

10.30 Prof Kent Bradford

Title: Transcriptomic analyses of lettuce (*Lactuca sativa* L.) seeds in relation to thermodormancy

10.45 *Tea/Coffee with biscuits*

Second session

Session Chair: Dr Gerhard Leubner

11.15 **Dr Eiji Nambara**

Title: Studies of ABA action on Arabidopsis seed germination

Followed by oral presentations chosen from invited abstracts:

12.00 Dr Kazumi Nakabayashi

Title: DOG1 employs the ABA pathway for induction of seed dormancy in *Arabidopsis thaliana*

12.15 Mr Abelardo Modrego

Title: PP2C interacting proteins have a role in ABA-regulated seed dormancy and germination

12.30 **Lunch**

Third session

Session Chair: Prof Derek Bewley

14.00 **Dr Camille Steber**

Title: GA signalling, a wake-up call for Arabidopsis seed germination

Followed by oral presentations chosen from invited abstracts:

14.45 Mrs Antje Voegelé

Title: GID1 gene family members fulfill distinct regulatory functions during seed germination

15.00 Mr Alejandro Fernandez-Arbaizar

Title: HAB2 protein phosphatase-2C is a negative regulator of ABA signalling during seed germination with a key role in seed development

15.15 *Tea/Coffee with biscuits*

Fourth session

Session Chair: Dr Henk Hilhorst

15.45 **Prof Mike Holdsworth**

Title: Molecular networks regulating the biomechanics of germination

Followed by oral presentations chosen from invited abstracts:

16.30 Dr George Bassel

Title: Gene expression networks during Arabidopsis seed germination and dormancy

16.45 Dr Ada Linkies

Title: Superior housekeeping genes for state-of-the-art qPCR normalization during seed germination obtained by tissue-specific transcriptome analysis and cross-species comparison

Poster session

17.00 Opportunity to view the posters, drinks provided

18.30 Close

Evening – no events arranged

Tuesday 20th July

VENUE: The Hospitium

08.30-09.00 *Tea/Coffee with Danish Pastry*

Fifth session

Session Chair: Prof Christophe Bailly

09.00 **Prof Ian Graham**

Title: Dissecting the role of peroxisomal beta-oxidation in the control of seed germination

Followed by oral presentations chosen from invited abstracts:

- 09.45 Dr Michael Roberts
Title: Long term priming of plant defence by seed treatments
- 10.00 Dr Wilco Ligterink
Title: Putting omics tools to work: unraveling the complex trait of seed quality in tomato by genetical genomics
- 10.15 Dr Ronny Joosen
Title: Genes for seed quality: new tools and approaches
- 10.30 *Tea/Coffee with biscuits*

Sixth session

Session Chair: Dr Henry Bruggink

- 11.00 **Dr Steven Penfield**
Title: The control of seed dormancy by environmental signals

Followed by oral presentations chosen from invited abstracts:

- 11.45 Prof Naoto Kawakami
Title: Physiological, genetical and molecular links between dormancy and germination response to temperature of Arabidopsis seeds
- 12.00 Dr Leónie Bentsink
Title: Natural variation for seed dormancy – seed dormancy in nature is regulated by distinct genetic and molecular pathways
- 12.15 Miss Sarah Kendall
Title: The role of temperature in seed dormancy and germination regulation

12.30 ***Lunch***

Seventh session

Session Chair: Prof Oscar Lorenzo

- 14.00 **Dr Wim Soppe**
Title: The molecular regulation of seed dormancy in Arabidopsis

Followed by oral presentations chosen from invited abstracts:

- 14.45 Miss Emma Miatton
Title: Molecular characterization of two interactors of the dormancy protein DOG1 in *Arabidopsis thaliana*
- 15.00 Mr Kai Gräber
Title: Cross-species investigations on the DOG1 seed dormancy gene – evidence for an evolutionary conserved mechanism

15.15 *Tea/Coffee with biscuits*

Eighth session

Session Chair: Prof Maarten Koornneef

- 15.45 **Dr Frank Gubler**
Title: Hormonal and molecular regulation of grain dormancy in barley and wheat

Followed by oral presentations chosen from invited abstracts:

- 16.30 Dr Thomas Howard
Title: The impact of altered starch accumulation on seed dormancy and pre-harvest sprouting tolerance in barley (*Hordeum vulgare*)
- 16.45 Dr Juliette Leymarie
Title: Interaction between hormonal and ROS signalling in barley seed dormancy
- 17.00 Close

CONFERENCE DINNER – EVENING Tuesday 20th July
VENUE: The Merchant Adventurers' Hall
(meet 19.00 for drinks, dinner 19.30)

Wednesday 21st July

VENUE: The Hospitium

08.30-09.15 *Tea/Coffee with Danish Pastry*

Ninth session

Session Chair: Prof Bill Finch-Savage

09.00 **Prof Bill Finch-Savage**

Title: Molecular physiology of seed dormancy cycling in field and laboratory environments

Followed by oral presentations chosen from invited abstracts:

09.45 Dr Jin-Yong Hu

Title: A locus harbouring the ath-miR824 affects seed germination and adaptability of Arabidopsis in field

10.00 Dr Julia Buitink

Title: Characterization of dormancy behaviour in seeds of *Medicago truncatula* highlights a role for the MtSNF4b subunit of the sucrose non-fermenting related kinase (SnRK1) complex in after-ripening

10.15 Mr Jérémie Bazin

Title: Oxidation of stored mRNA is associated with seed dormancy alleviation during dry after-ripening

10.30 *Tea/Coffee with biscuits*

Tenth session

Session Chair: Prof Ian Graham

11.00 **Dr Isabel Diaz**

Title: Cysteine-proteases and their inhibitors act as partners in the mobilization of barley seed reserves during germination

Followed by oral presentations chosen from invited abstracts:

11.45 Dr Mark Hooks

Title: Modelling the peroxisomal carbon leak during lipid mobilization in Arabidopsis

12.00 Dr Wanda Waterworth

Title: Safeguarding genome integrity during germination: a novel DNA ligase is an important determinant of seed viability and longevity

12.15 Mr Noorullah Khan

Title: Genes for seed quality – a physiological genetical genomic approach to find genes for seed quality in tomato

12.30 ***Farewell and closing remarks***

oooooooooooooooooooo

Special thanks go to our meeting sponsors:

International Society for Seed Science (ISSS)

New Phytologist

Norddeutsche Pflanzenzucht Hans-Georg Lembke KG (NPZ)