



# Programme

Monday 25th June 2018

Session 1 Dalhousie Building University of Dundee

09:00 Arrival and Welcome - Robbie Waugh

| Session 1 | Chair                 | Robbie Waugh  |
|-----------|-----------------------|---|
| 09:10     | Takao Komatsuda       | <i>Super-open flowering 1</i> mutant generated by chronic irradiation by gamma ray to wild barley'                              |
| 09:35     | Mingjiu Li            | Genetic characterization of the albostrians barley provides new insights on underlying mechanism of leaf variegation            |
| 10:00     | Nils Stein            | HvRaw1 – a major gene controlling trichome formation on barley awns   |
| 10:25     |                       | Coffee and Posters  |
| Session 2 | Chair                 | Rachel Burton   |
| 10:45     | Moritz Jost           | Identification and characterisation of barley broad leaf mutants and the affected genes   |
| 11:10     | Guillermina Mendiando | The Cys-Arg/N-End Rule Pathway Is a General Sensor of Abiotic Stress in barley  |
| 11:35     | Kay Trafford          | Lys3 encodes a DOF transcription factor required for embryo-size determination in barley.                                       |
| 12:00     | Ravi Koppolu          | Genetic regulation of lateral spikelet size in barley   |
| 12:25     |                       | Lunch and Posters   |
| Session 3 | Chair                 | Christoph Dockter   |
| 13:25     | Laura Rossini         | Hunting genes for barley shoot architecture through mutant and germplasm collections  |
| 13:50     | Gary Muehlbauer       | Are tiller and leaf development controlled by the same genetic modules?   |
| 14:15     | Martin Mascher        | Mutation identification by direct comparison of whole-genome sequencing data of mutant and wild type individuals                |
| 14:40     | Agatha Walla          | Functional characterisation of high tillering mutants in barley   |
| 15:05     |                       | Coffee and Posters  |
| Session 4 | Chair                 | Nils Stein  |
| 15:25     | Sarah McKim           | VRS3 encodes a chromatin state regulator represses lateral spikelet fertility and modifies the function of other row-type genes |
| 15:50     | Brian Steffenson      | Characterization of leaf rust resistance genes and their introgression into Bowman barley                                       |
| 16:15     | Zoe Wilson            | Environmentally sensitive control of male fertility in barley   |
| 16:40     | Ivan Acosta           | Molecular mechanisms of anther opening in barley  |
| 17:15     |                       | Poster session, refreshments and canapes  |



**Tuesday 26th June 2018****Session 2 Dalhousie Building University of Dundee**

|                  |                               |  |
|------------------|-------------------------------|--|
| 09:00            | Arrival                       |  |
| <b>Session 5</b> | <b>Chair</b>                  | <b>Laura Rossini</b>   |
| 09:10            | Thorsten Schnurbusch          | Gene networks for functional gene identification during barley spike development   |
| 09:35            | Wilma van Esse                | Changing plant architecture to improve crop yield  |
| 10:00            | Chiara Campoli                | Walking a Waxy Path: Molecular Characterisation of Barley Eceriferum-yy  |
| 10:25            |                               | Coffee and Posters   |
| <b>Session 6</b> | <b>Chair</b>                  | <b>Zoe Wilson</b>  |
| 10:45            | Claire Halpin                 | Understanding cell wall biosynthesis and properties in barley  |
| 11:10            | Matt Tucker                   | The use of natural variation to identify genes controlling differentiation during ovule and seed development in barley   |
| 11:35            | Monika Spiller                | Improving crops biomass by uncovering the circadian clock network using dynamical models                                 |
| 12:00            | Thirulogachandar Venkatasubbu | Dosage of duplicated and antifunctionalized homeobox proteins influences leaf and spikelet development in barley         |
| 12:25            |                               | Lunch and Posters  |
| <b>Session 7</b> | <b>Chair</b>                  | <b>Sarah McKim</b>   |
| 13:25            | Stephen Jobling               | Breeding barley grains with improved nutrition and health benefits   |
| 13:50            | Kelly Houston                 | Genome editing using CRISPR-Cas9: generating mutants to characterise putative cell wall genes                            |
| 14:15            | Ilka Braumann                 | QTL-mapping combined with whole genome resequencing identifies induced variation associated with improved starch quality |
| 14:40            | Silvio Salvi                  | Cloning root mutants in barley   |
| 15:05            |                               | Coffee and Posters   |
| <b>Session 8</b> | <b>Chair</b>                  | <b>Gary Muehlbauer</b>   |
| 15:25            | Isabelle Colas                | Using Barley mutants to understand meiosis and recombination in cereals  |
| 15:50            | Damian Gruszka                | Semi-dwarf barley mutants defective in the brassinosteroid metabolism  |
| 16:15            | Agata Daszkowska-Golec        | Mutations in barley genes encoding negative regulators of ABA signaling as a promise for drought-resistant crops         |
| 16:40            | Seth Davis                    | The barley circadian clock is profoundly different than <i>Arabidopsis</i>   |
| 17:05            |                               | <b>End of Session and Buses to James Hutton Institute</b>  |
| 17:30            |                               | Hog Roast, Germplasm Tour and Prize Giving   |
| 20:30            |                               | <b>Buses Return to City Centre Hotels</b>  |

**Wednesday 27th June 2018****Session 3 Dalhousie Building University of Dundee**

|       |   |
|-------|---|
| 09:00 | Natural and Induced Variation: what next? Facilitated by Robbie Waugh |
| 10:30 | Coffee  |
| 11:15 | Optional Tour   |
| 19:00 | Buses Return to City Centre Hotels from Optional Tour                 |

