CSPB-SCBV CBA-ABC Joint Western Regional Meeting Winnipeg 2017 December 10-12





Canadian Society of Plant Biologists Societé Canadienne de Biologie Végétale

Canadian Botanical Association

L'Association Botanique du Canada



| Sunday December 10, 2017 | | | |
|--------------------------|-------------------------------------------------------------------------------------------------------------------|--|--|
| 8 am -5 pm | RNAseq workshop. Room 113 Machray Hall, University of Manitoba | | |
| 5:30 – 7:30 pm | Mixer meet and greet at Browns Socialhouse, 311 Portage Ave. Sponsored by Life Science Association of Manitoba | | |

| Monday December 11, 2017 | | | | |
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| Violet Fuscia Room, ALT Hotel Winnipeg 310 Donald St, Winnipeg, MB Chair: Mark Belmonte | | | | |
| 8:00 – 9:00 am | Breakfast and Registration | | | |
| 9:00 - 10:00 am | Keynote speaker: Jill Hamilton "Teasing apart the genetic basis of adaptation in a changing climate" | | | |
| 10:00 - 10:15 am | Cassandra Hammond* Phytoglobin over-expression alleviates drought stress in maize seedlings | | | |
| 10:15 – 10:30 am | Xiaojing Wei* Genetic variation of drought-resistance traits and growth in lodgepole pines and white spruces | | | |
| 10:30 – 10: 45 am | Networking Break | | | |
| 10:45 – 11:00 am | Tran Nguyen* Probing the molecular basis of lignin biosynthesis in wheat biomass | | | |
| 11:00 – 11:15 am | Cary Hamel and Melissa Grantham Orchid monitoring and management in Manitoba tall-grass prairie: lessons learned | | | |
| 11:15 – 11:30 am | Michael Becker* Sounding the alarm: characterization of early defense signaling in the canola- <i>L. maculans</i> pathosystem using dual RNA-seq and laser microdissection | | | |
| 11:30 – 11:45 am | David Bird | | | |

| | The effect of naringenin chalcone on cuticular wax loads in <i>Arabidopsis thaliana</i> | | | |
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| 11:45 – 1:00 pm | Lunch | | | |
| Chair: Jake Stout | | | | |
| 1:00 – 1:30 pm | Plenary speaker: Bruce Ford Sedges of Vietnam: species discoveries and insights into the evolution of <i>Carex</i> (Cyperaceae) | | | |
| 1:30 – 1:45 pm | Shuanglong Huang Phytoglobin is an important factor in soybean (<i>Glycine max</i>) flooding tolerance | | | |
| 1:45 – 2:00 pm | Haoran Chen* The effect of <i>Frankia</i> spp. and ectomycorrhizal fungi on <i>Alnus viridis</i> ssp. <i>crispa</i> growing in low fertility and saline soil | | | |
| 2:00 – 2:15 pm | Jeremy Morris* Identification and characterization of an <i>Ephedra sinica N</i> - methyltransferase involved in ephedrine biosynthesis | | | |
| 2:15 – 2:30 pm | Geoff Wasteneys COBRA's complicated journey to modulate cellulose production in plants | | | |
| 2:30 – 2: 45 pm | Networking Break | | | |
| Chair: Diana Robson | | | | |
| 2:45 – 3:15 pm | Integrated DNA Technologies CRISPR genome editing technologies | | | |
| 3:15 – 3:30 pm | Maryam Nourimand* Ureide metabolism in response to cadmium treatment in <i>Arabidopsis</i> <i>thaliana</i> | | | |
| 3:30 – 3:45 pm | Austein McLoughlin* The application of RNAi biotechnology to control fungal necrotrophs Sclerotinia sclerotiorum and Botrylis cinerea | | | |
| 3:45 – 4:00 pm | Joey Wan* | | | |

| | Transcriptome analyses of canola (<i>Brassica napus</i>) treated with the plant growth promoting rhizobacterium <i>Pseudomonas chlororaphis</i> PA23 identifies differential expression of growth and defense related genes | | | |
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| 4:00 – 4:15 pm | Diana Robson Pollination ecology in mixed grass prairies | | | |
| 4:15 – 4:30 pm | Mohammed Mira Expression of <i>Arabidopsis</i> class 1 Phytoglobin (<i>AtPgb1</i>) delays death and degradation of the root apical meristem during severe PEG-induced water deficit | | | |
| 4:30 – 6:00 pm | Poster Session Sponsored by Canadian Science Publishing | | | |
| | Azizah Alharthy* Role of RAE1 in Arabidopsis thaliana heat tolerance Paige Anderson* Effects of low soil nitrogen and salinity on the nitrogen fixing species Shepherdia Canadensis Matthew Doering* Identification of candidate genes operating in the piperine biosynthetic pathway of Piper nigrum L. Nathalie Hoffmann* Spatial regulation of laccases and peroxidases during lignification in Arabidopsis thaliana Pawanpuneet Rehal* Allelic diversity and expression analysis of abscisic acid insensitive 5 with respect to seed dormancy in wheat Jatinder Singh Sangha Physiological mechanisms in near isogenic spring wheat sister lines contributing to differences in grain yield and grain proteins Kenny So* Genetic modulation of cruciferin for the improvement of meal quality in Brassica napus | | | |
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| | Anne Worley Short-term limits to reproduction in two species of rewardless slipper orchids (<i>Cypripedium</i>): resources, pollinator abundance, or pollinator preference? |
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| 6:00 – 9:00 pm | Reception and Banquet – ALT Hotel Sponsored by the University of Manitoba |

| Tuesday December 12, 2017 | | | | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Chair: John Markham | | | | |
| 8:00 – 9:00 am | Breakfast | | | |
| 9:00 – 9:30 am | Plenary Speaker: Belay Ayele Molecular aspects of traits of economic importance in wheat | | | |
| 9:30 – 9:45 am | Steven Anderson* Latitudinal trends in pollination success of the rewardless orchid, <i>Cypripedium candidum</i> , and associated changes in the plant and insect community | | | |
| 9:45 - 10:00 am | Steve Whyard Controlling crop pests using RNA interference technologies | | | |
| 10:00 -10:15 am | Deirdre Khan* Profiling the gene expression landscape of canola seed: transcriptional and methylomic analysis of <i>Brassica napus</i> seed development | | | |
| 10:15 -10:30 am | Ian Willick* Discovery of an extraorgan freezing strategy in cold acclimated winter wheat and rye crowns | | | |
| 10:30 -10:45 am | Networking Break | | | |
| 10:45- 11:00 am | Sreedevi Ramachandran* The influence of soil nitrogen level on tomato defense in whiteflies | | | |
| 11:00 -11:15 am | Laryssa Halat* Creating links among signalling pathways: the connection between microtubules and hormones in sustaining cell proliferation | | | |
| 11:15 -11:30 am | Eman Elkhateeb* | | | |

| | Phytoglobins maintain root meristem function and integrity during hypoxic conditions | | | | |
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| 11:30 - 11:45am | John Markham | | | | |
| | Do high diversity tallgrass prairie plant communities rely on niche partitioning? | | | | |
| 11:45 – 1 pm | Lunch and Awards Presentation | | | | |
| | Sponsored by the Canadian Society of Plant Biologists, Canadian | | | | |
| | Botanical Association, and Plant Canada | | | | |
| 1 pm | Tours | | | | |
| | University of Manitoba | Winnipeg | Manitoba Museum | | |
| | Vascular Plant | microbrewery | collection tour | | |
| | Herbarium | | | | |

*student presentation

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