

International Association of Plant Biotechnology (IAPB) – May 5 – 8, 2008

Tentative Program:

Monday May 5, 2008 – Plant Biotechnology Institute

7:00 – 9:00 Welcome reception and registration

Tuesday May 6, 2008 – Physics building, University of Saskatchewan campus

8:00 Registration

8:50 – 9:00 Welcome (A. Ferrie)

The “Past” and “Present” of Biotechnology

Chair: Alison Ferrie, NRC/PBI, Saskatoon, SK

9:00 – 9:45 Pioneers of plant tissue culture and their contributions
T. Thorpe, U of Calgary, Calgary, AB

9:45 – 10:10 What would the plant tissue culture pioneers think of this?
P. Polowick, NRC/PBI, Saskatoon, SK

10:10 – 10:30 Break

siRNA and miRNA Plant Biotechnology

Chair: Lining Tian, Agriculture and Agri-Food Canada, London, ON

10:30 – 11:15 Small RNA technologies: siRNA, miRNA, target mimicry, and miRNA profiling
G. Tang, U of Kentucky, Lexington, KY

11:15 – 11:35 Expression of specific siRNA in plants for Plant Pox virus resistance
L. Tian, Agriculture and Agri-Food Canada, London, ON

11:35 – 11:55 Arabidopsis ribosomal proteins RPL23aA and –B are disparately required for normal plant development.
R.F. Degenhardt*, University of Saskatchewan, Saskatoon, SK

12:00 – 1:30 Lunch

Aspects of embryogenesis

Chair: Wilf Keller, NRC-PBI, Saskatoon, SK

- 1:30 – 2:15 Understanding the physiological and genetic determinism of acquisition of embryogenesis competence from haploid and diploid cells
S. Ochatt, INRA, Dijon, France
- 2:15 – 2:35 Haploidy technology in the apiaceae.
T. Bethune, NRC-PBI, Saskatoon, SK
- 2:35 – 2:55 Progress towards androgenesis from intact anther culture in chickpea
R. Grewal, Crop Development Centre, Saskatoon, SK
- 2:55 – 3:30 Break
- 3:30 – 3:50 Isolation of an embryogenic line from non-embryogenic *Brassica napus* cv. Westar through microspore embryogenesis.
J. Krochko, NRC-PBI, Saskatoon, SK
- 3:50 – 4:10 TBA
- 4:10 – 6:00 Poster session and reception

Wednesday May 7, 2008

8:00 Registration

Bridging tissue culture and molecular biology

Chair: Dan Brown, Agriculture and Agri-Food Canada, London, ON

- 9:00 – 9:45 Plant genes involved in *Agrobacterium*-mediated plant genetic transformation
S. Gelvin, Purdue University, West Lafayette, IN
- 9:45 – 10:05 Effect of *Agrobacterium* strain and binary vector replication origin on *Agrobacterium*-mediated transformation frequency, transgene copy number and vector backbone integration.
L-Y. Lee, Purdue University, West Lafayette, IN
- 10:05 – 10:30 Break

10:30 – 10:50 Cell-penetrating peptides: Trojan horse for macromolecule delivery in plants too?
F. Eudes, Agriculture and Agri-Food Canada, Lethbridge, AB

10:50 – 11:10 Phenotypic evaluation of wheat transgenic line.
A. Badea, Agriculture and Agri-Food Canada, Lethbridge, AB

11:10 – 11:30 Ecological, genetic and genomic analysis of oil content in *Brassica napus*.
H. Wang, Oil Crops Research Institute, Wuhan, China

11:30 – 11:50 Transcriptional analyses of host-and non-host interactions between wheat and barley and the barley smut pathogen *Ustilago hordei*.
C.R. Penniket*, Agriculture and Agri-Food Canada, Lethbridge, AB.

11:50 – 12:00 IAPB Annual General Meeting

12:00 – 1:30 Lunch

Bioproducts and Biotechnology

Chair:

1:30 – 2:15 TBA
S. Webb, Dow AgroSciences, Indianapolis, IN

2:15 – 2:35 Microarray analysis of fibre bearing tissues in flax (*Linum usitatissimum*).
S. Mitra*, University of Saskatchewan, Saskatoon, SK

2:35 – 2:55 Characterization of the lipid profiles of *Brassica* and *Lesquerella* cell cultures.
O. Kharenko, NRC-PBI, Saskatoon, SK

2:55 – 3:30 Break

3:30 – 3:50 Isolation and characterization of seed coat-specific promoters in canola.
L.Wu, Alberta Research Council, Vegreville, AB

3:50 – 4:10 Repression of seed maturation genes in Arabidopsis
M-J. Gao, Agriculture and Agri-Food Canada, Saskatoon, SK

6:00 – Banquet

Thursday May 8, 2008

8:00 Registration

Applications of Biotechnology

Chair: Kutty Kartha, NRC-PBI, Saskatoon, SK

- 9:00 – 9:45 Harvesting the sun for food and fuel
David Dennis, Performance Plants, Kingston, ON
- 9:45 – 10:05 Micropropagation protocol development of *Sorbaronia* for the horticulture industry
R. Young*, Nova Scotia Agricultural College, Truro, NS
- 10:05 – 10:30 Break
- 10:30 – 10:50 Survival of strawberry and pea meristems cryopreserved for 28 years.
K. Caswell, NRC-PBI, Saskatoon, SK
- 10:50 – 11:10 Biotechnology resources in the island societies of Micronesia.
D. Nandwani, Northern Marianas College, Saipan, Northern Mariana Islands
- 11:10 – 11:30 The “Future” in biotechnology/recap
- 12:00 – 1:30 Lunch

* student competition