8th MEETING OF THE CANADIAN OXIDATIVE STRESS CONSORTIUM 2014

FINAL AGENDA

Wednesday, June 11th, 2014	
8:00 – 8:20 AM	**On-Site Registration (River Building Atrium)**
8:20 – 8:40 AM	**Opening Remarks (River Building 2200)** **Bill Willmore**
Symposia: Oxidative Stress and Aging (River Building 2200) **(Sponsored by CIHR Institute of Aging)** **Chairs: Bill Willmore and Rania Agil**	
8:40 – 9:00 AM	**Brian Bandy** Redox activities of flavonoids at the membrane interface: Implications for mitochondrial oxidative stress.
9:00 – 9:20 AM	**Ann English** Mitochondrial H_2O_2 signalling involving heme transfer between proteins.
9:20 – 9:40 AM	**Louise Winn** Increased DNA double strand break repair as a consequence of exposure to oxidative stress.
9:40 – 10:00 AM	**Gurmit Singh** Oxidative stress in oncodynamics.
10:00 – 10:30 AM	**Coffee and Tea Break**
10:30 – 10:50 AM	**Bulent Mutus** Testing the sulfhydration of peptides and proteins with sulphide.
10:50 – 11:10 AM	**Spencer Gibson** The role of ROS in autophagy in cancer.
11:10 – 11:30 AM	**Michel Lebel** The impact of vitamin C on the premature aging disorder Werner syndrome.
11:30 – 11:50 AM	**New Investigator: Jim Uniacke** Cancer cells exploit hypoxia-activated eIF4E2-directed protein synthesis to drive tumor progression.
11:50 AM – 2:00 PM	**Lunch/Exhibits/Open Poster Viewing**
2:00 – 3:00 PM	**Keynote Speaker: Seigfried Hekimi** **Chair: Bill Willmore** Pro-longevity mitochondrial ROS signaling.
Symposium: Oxidative Stress and Cardiovascular Disease (River Building 2200) **Chairs: Bill Willmore and Dawn Jin**	
3:00 – 3:20 PM	**Richard Austin** TDAG51 as a modulator of oxidative stress in atherosclerosis.
3:20 – 3:40 PM	**Rania Agil** Triticale bran alkylresorcinols enhance resistance to oxidative stress in obesity-induced mice.
3:40 – 4:00 PM	**Sheldon Magder** Complex stabilization and destabilization of cytokines mRNA by NADPH oxidase production of O_2^-.
4:00 – 4:20 PM	**Elissavet Kardami** Distinct roles high and low molecular weight FGF-2 in heart pathology; an overview.
4:20 – 4:50 PM	**Coffee and Tea Break**
4:50 – 5:10 PM	**Grant Pierce** Differential influence of fatty acids on ischemic reperfusion injury in cardiomyocytes.
5:10 – 5:30 PM	**Robert Tanguay** Changes in *Drosophila* mitoproteome during aging and following chaperone-mediated lifespan extension.
5:30 – 5:50 PM	**Chet Holterman** Examining the interaction between Nox5 and the AngII/AT1R pathway in podocytes.
6:00 – 8:30 PM	**Reception (Cash Bar)** **River Building Atrium**

Thursday, June 12th, 2014	
8:00 – 8:30 AM	**Opening Remarks (River Building 2200)**
Symposia: Graduate Student Trainees (River Building 2200) **Chairs: Bill Willmore and Steffany Bennett**	
8:30 – 8:45 AM	**Jonathon Lee** Lipid peroxidation-linked mitochondrial facets of neuronal aging in an invertebrate model of normal aging.
8:45 – 9:00 AM	**Ahmed Abou Hadeed** Protection by ascorbate and catechin against myocardial ischemia-reperfusion injury in an isolated rat heart model.
9:00 – 9:15 AM	**Ritesh Daya** Free radical trapping agents as adjunct therapy to antipsychotic drugs for the treatment of schizophrenia.
9:15 – 9:30 AM	**Hilary Groom** Enzyme-specific inhibition of recombinant human glutathione transferases by naphthalene analogues of 1-chloro-2,4-dinitrobenzene.
9:30 – 9:45 AM	**Naif Aljuhani** Possible role for superoxide dismutase in phenylbutazone cytotoxicity in HT-29 colorectal cancer cells.
9:45 – 10:15 AM	**Coffee and Tea Break**

Symposia: Postdoctoral Fellow Trainees (River Building 2200) **Chairs: Bill Willmore and Steffany Bennett**	
10:15 – 10:30 AM	**Ashim Bagchi** Differential role of toll-like receptors in the elicitation of cardiac innate response to IL-10.
10:30 – 10:45 AM	**Navid Koleini** FGF-2 isoforms and doxorubicin-induced cardiac dysfunction.
10:45 – 11:00 AM	**Maria Florian** A comparison of transient transfection methods to enhance eNOS expression in human endothelial progenitor cells (EPCs).
11:00 – 11:15 AM	**Cristina Bosoi** Systemic oxidative stress induction leads to brain edema in hyperammonemic portacaval-shunted rats.
11:15 – 11:30 AM	**Martine Hagen** Effects of caloric and non-caloric soft drink intake on consumption of nutrients and lipoperoxidation in rats fed the cafeteria diet.
11:30 – 11:45 AM	**Brianne Thrush** Skeletal muscle mitochondrial respiration is increased in obese diet sensitive compared to obese diet resistant women.
11:45 AM – 12:05 PM	**New Investigator: Christopher Perry** Altered mitochondrial bioenergetics and cellular redox conditions link high fat diets to the etiology of skeletal muscle insulin resistance.
12:05 – 12:25 PM	**New Investigator: Ryan Mailloux** S-Glutathionylation reactions are essential for the control of mitochondrial function.
12:25 AM – 1:30 PM	**Lunch/Exhibits/Open Poster Viewing**
1:30 – 2:30 PM	**Keynote Speaker: Rafael Radi** **(Sponsored by the Society of Free Radical Biology and Medicine)** **Chair: Bill Willmore** Nitroxidative stress: molecular mechanisms and biological consequences.
Symposium: Oxidative Stress, the Environment and Health and Nutrition (Session 1) (River Building 2200) **Chairs: Farah Hosseinian, Shana Cameron and Mehri Hadinezhad**	
2:30 – 2:50 PM	**Farah Hosseinian** Bioactive dietary fibre and phenolics in flaxseed are carriers of antioxidants- an essential physiological function in oxidative stress.
2:50 – 3:10 PM	**Jean-Claude Lavoie** Ascorbylperoxide generated in parenteral nutrition induces oxidative stress and loss of alveoli in the lung of newborn guinea pig, a characteristic of human bronchopulmonary dysplasia.
3:10 – 3:30 PM	**Luoxis (Alessandro Orlando)** RedoxSYS™ Diagnostic Systems: The first and only clinical test to provide a complete measure of redox in a biological system.
3:30 – 3:50 PM	**Diana Averill-Bates** Induction of ER stress and apoptosis by acrolein, a lipid peroxidation-derived aldehyde.
3:50 – 4:20 PM	**Coffee and Tea Break**
4:20 – 4:40 PM	**Apollinaire Tsopmo** Bioactive molecules in oat and their relation to oxidative stress.
4:40 – 5:00 PM	**Sandeep Raha** Understanding oxidative stress in pregnancy.
5:00 – 5:20 PM	**Barbara Hales** Teratogens induce oxidative and embryonic stress responses in the organogenesis-stage embryo.
5:20 – 5:40 PM	**Nathalie Grandvaux** NADPH-oxidase dependent mechanisms that determine the fate of the innate immune response to respiratory viruses.
5:40 – 6:00 PM	**Kenneth Storey** Oxidative stress and the marine environment - "radical" management.
7:15 – 11:00 PM	**Banquet: Hellenic Centre** **Bus leaving from Carleton University at 7:00 PM Please arrive 15 minutes before departure time.**

Friday, June 13th, 2014	
8:00 – 8:30 AM	**Opening Remarks (River Building 2200)**
Symposia: Oxidative Stress and Neurodegeneration (River Building 2200) **(Sponsored by CIHR Institute of Neurosciences, Mental Health and Addiction)** **Chairs: Steffany Bennett and Yichen Du**	
8:30 – 8:50 AM	**Ram Mishra** Anti-psychotic drug induced oxidative stress involves translocation of apoptosis inducing factor.
8:50 – 9:10 AM	**Christopher Rose** The role of oxidative stress in the pathogenesis of hepatic encephalopathy.
9:10 – 9:30 AM	**Peter Wells** Embryonic and fetal reactive oxygen species formation, oxidative DNA damage and repair and nuclear factor-E2-related factor 2 (Nrf2) in teratogenesis and postnatal neurodevelopmental deficits.
9:30 – 10:00 AM	**Coffee and Tea Break**

10:00 – 10:20 AM	**Derek Pratt** Mechanisms of natural products antioxidants: a case study with garlic-derived organosulfur compounds.
10:20 – 10:40 AM	**Willem Wildering** *Lymnaea stagnalis*: a platform for system-wide investigations of neuronal aging and age-associated memory impairment – lipid peroxidation and PLA2 activation as instruments of age-associated memory impairment.
10:40 – 11:00 AM	**New Investigator: Scott Ryan** NO-problem, Oxidative stress in a stem cell model of Parkinson's Disease.
11:00 AM – 12:00 PM	**Keynote Speaker: Richard Schulz** **Chair: Bill Willmore** Why inhibitors of matrix metalloproteinase-2 (MMP-2) are next generation drugs to treat diseases of oxidative stress injury.
12:00 – 1:00 PM	**Lunch** **COSC Executive Meeting (River Building Boardroom 2211)**
Symposium: Oxidative Stress, the Environment and Health and Nutrition (Session 2) (River Building 2200) **Chairs: Derek Pratt and Magdalena Bugno**	
1:00 – 1:20 PM	**Volker Blank** The transcription factor Nrf3 (NFE2L3): role in detoxification and cancer.
1:20 – 1:40 PM	**Prem Kumarathasan** Impact of air pollutant exposure on oxidative stress and endothelial dysfunction.
1:40 – 2:00 PM	**Po-Yin Cheung** Novel interventions in the resuscitation of asphyxiated neonates: combating oxidative stress.
2:00 – 2:20 PM	**Arno Siraki** Proteomic changes in response to arylamine free radical formation in HL-60 cells.
2:20 – 2:40 PM	**Alison Fox-Robichaud** Oxidative stress in sepsis: necessary or harmful?
2:40 – 3:00 PM	**David Josephy** Glutathione-dependent metabolism of xenobiotics.
3:00 – 3:30 PM	**Coffee and Tea Break**
3:30 – 3:50 PM	**James Friel** Iron and complementary feeding of breast-fed infants.
3:50 – 4:10 PM	**Dawn Jin** Redox balance and non-alcoholic fatty liver disease and non-alcoholic steatohepatitis.
4:10 – 4:30 PM	**Silvina Bartesaghi** Tyrosine nitration in membranes: role of lipid-derived radicals and modulatory action of tocopherols.
4:30 – 4:50 PM	**New Investigator: Nikolai Chepelev** Toxicogenomics analysis of the potent carcinogen dibenzo[def,p]chrysene (DBC) provides mechanistic and quantitative insights into its immunotoxicity.
4:50 – 5:00 PM	**Closing Remarks/Conference Evaluation/Wrap-Up**