The Nineteenth Annual Scientific Meeting for 
Health Science Research Trainees 
Faculty of Health Sciences 
Queen’s University 

Wednesday, May 25th, 2016 
Biosciences Complex 

Sponsored By 

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Acknowledgments

A special thank you to Katherine Brennan-Rowcliffe and Alana Korczynski for their invaluable assistance in organizing this meeting.
The Nineteenth Annual Scientific Meeting for
Health Science Research Trainees

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Biosciences Complex, Atrium and Room 1101

8:00 – 8:45am  Registration and A.M. Poster Set-Up (Odd Numbered Abstracts)
Biosciences Complex, Atrium

8:45 – 9:00am  Introductory Remarks
Dr. James Reynolds, Associate Dean, Graduate and Postdoctoral Education, Faculty of Health Sciences

Dr. Richard K Reznick, Dean, Faculty of Health Sciences and Director, School of Medicine

9:00 – 9:30am  Keynote Speaker
Dr. Gunnar Blohm
Associate Professor
Centre for Neuroscience Studies
Department of Biomedical and Molecular Sciences

"Disinhibition - a canonical cortical circuit motif?"

Cancer Research and Therapy

9:35 – 9:47am  A NOVEL ROLE OF CXCL10 IN THE TUMOUR IMMUNE MICROENVIRONMENT OF HIGH-GRADE SEROUS OVARIAN CANCER. Katrina Au (M Sc. 2016)1, Peter Truesdell2, Nichole Peterson3, Julie-Ann Francis3, Andrew Craig1,2, Madhuri Koti1,2,3 1 Department of Biomedical & Molecular Sciences, Queen’s University, Kingston, Canada 2 Cancer Biology & Genetics, Queen’s University, Kingston, Canada 3 Department of Obstetrics and Gynaecology, Kingston General Hospital, Kingston, Canada (Abstract #20)
THE UREMIC TOXIN P-CRESOL REDUCES CELL SURFACE EXPRESSION OF HUMAN ETHER-A-GO-GO-RELATED GENE (HERG) CHANNELS VIA THE UBIQUITIN LIGASE NEDD4-2. Ellen Avery, Shawn Lamothe, Jun Guo, Tonghua Yang, Wentao Li, Shetuan Zhang. Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, Ontario Canada. (Abstract # 31)

CLINICAL PHENOTYPING DOES NOT DIFFERENTIATE HUNNER’S LESION SUBTYPE OF INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME (IC/BPS): A RELOOK AT THE ROLE OF CYSTOSCOPY. R. Christopher Doiron, Victoria Tolls, Karen Irvine-Bird, Kerri-Lynn Kelly, J. Curtis Nickel, Department of Urology, Queen’s University, Kingston, Canada (Abstract #44)

A NOVEL CIS-ACTING MRNA STABILIZATION PROTEIN PROMOTES EXPRESSION OF THE MEXAB-OPRM MULTIDRUG EFFLUX OPERON IN PSEUDOMONAS AERUGINOSA Michael Fruci and Keith Poole, Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, Ontario, K7L 3N6, Canada (Abstract #57)

Coffee Break

A.M. Poster Presentations (Author Attendance)

Lunch, A.M. poster tear-down, P.M. poster set-up (Even Numbered Abstracts)

P.M. Poster Presentations (Author Attendance), Tear-down

Oral Presentations – Session 2

Chair: Dr. Charles Graham

ENHANCEMENT OF GENE THERAPY TREATMENT FOR SANDHOFF DISEASE THROUGH COMPLIMENTARY DRUG THERAPY. Evan JR. Woodley1, K. Osmon2, P. Thompson3, S. Karumuthil-Melethii4, S. J. Gray4,5 and J. S. Walla1,2,3*. 1Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, Ontario, Canada, K7L 3N6 2Centre for Neuroscience Research, Queen’s University, Kingston, Ontario, Canada, K7L 3N6; 3Medical Genetics/Departments of Pediatrics, Queen’s University, Kingston, Ontario, Canada, K7L 2V7; 4Gene Therapy Center, University of North Carolina, Chapel Hill, North Carolina, United States; 5Department of Ophthalmology, University of North Carolina, Chapel Hill, North Carolina, United States. (Abstract #72)

STRUCTURAL AND FUNCTIONAL CHARACTERIZATION OF HUMAN MITOCHONDRIAL ATYPICAL KINASES ADCK3 AND ADCK4. Sohee Yun, Brody Wheeler, and Zongchao Jia. Department of Biomedical and Molecular Science, Queen’s University, Kingston, ON, CANADA (Abstract #86)
Rehabilitation Science

2:54 – 3:06pm  THE ACTIVITIES-SPECIFIC BALANCE CONFIDENCE SCALE FOR OLDER ADULTS WITH DIABETES: CONVERGENT, DISCRIMINANT, AND CONCURRENT VALIDITY. Patricia Hewston & Nandini Deshpande. School of Rehabilitation Therapy, Queen’s University Kingston, Ontario, Canada. (Abstract #88)

Cardiac, Circulatory, and Respiratory Sciences

3:06 – 3:18pm  THIRTY MINUTES OF HANDGRIP EXERCISE ENHANCES BRACHIAL ARTERY DILATION IN RESPONSE TO TWO DIFFERENT SHEAR STRESS PROFILES. Iain AC McPhee and Dr. Kyra Pyke, School of Kinesiology and Health Studies, Queen’s University, Kingston Ontario (Abstract # 32)

3:20 – 3:45pm  Coffee Break

Oral Presentations – Session 3

Chair: Dr. James Reynolds

Health Policy, Population Health, and Epidemiology

3:45 – 3:57pm  IMPUTING MISSING ACCELEROMETER DATA FOR PHYSICAL ACTIVITY MEASUREMENT. Lauren Paul and Dr. Michael Mclsaac, Department of Public Health Sciences, Queen’s University, Kingston, Ontario, Canada. (Abstract #45 )

Inflammation, Infection and Immunity

3:57 – 4:09pm  EPIGENETIC ROLE IN DECREASED NEUROTROPHIN AND CONTRACTILE PROTEIN EXPRESSION IN PROLIFERATING INTESTINAL SMOOTH MUSCLE CELLS. Quinn A. Bonafiglia, and M.G. Blennerhassett, GIDRU and Centre for Neuroscience Studies, Queen’s University, Kingston, ON (Abstract #58)

Neuroscience Research

4:09 – 4:21pm  DOES BRAIN TISSUE OXYGENATION (BTO2) PREDICT COGNITIVE DECLINE IN PATIENTS UNDERGOING HEMODIALYSIS? A FEASIBILITY STUDY. Jessica Vanderlinden, Dr. Stephen Scott PhD, Dr. Rachel Holden MSc, MD, and Dr. J. Gordon Boyd, MD, PhD, Centre for Neuroscience Studies, Queen’s University Kingston, Ontario Canada. (Abstract #73)

Cardiac, Circulatory, and Respiratory Sciences

4:21 – 4:33pm  THE LONG AND SHORT OF PHOSPHODIESTERASE 4D INHIBITION IN VASCULAR MYOCYTES. Nathalie S. Butler, Bibiana M. Umana and Donald H. Maurice, Department of Biomedical and Molecular Sciences, Queen’s University Kingston, ON, Canada. (Abstract # 33)

4:35 – 4:45pm  Awards and Concluding Remarks

5:00 – 7:00pm  Reception at the Grad Club
162 Barrie Street
Cash Bar/ Non-Alcoholic Punch
Hot hors d’oeuvres
EFFICIENCY OF CRISPR/CAS9‐MEDIATED GENE EDITING OF ARG1 IN CELL LINES AND PRIMARY CELLS. Garrett N. Baron, Yuan Yan Sin, and Colin D. Funk. Department of Biomedical and Molecular Sciences, Queen’s University Kingston, Ontario Canada (Abstract #1)

SCARLESS GENE CORRECTION OF ARGINASE‐1 DEFICIENCY IN MOUSE IPSCS USING CRISPR/CAS9‐MEDIATED GENE TARGETING AND PIGGYBAC TRANSPONSON. Yuan Yan Sin, Phillipe Price, Crystal McCracken, Colin D. Funk, Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, ON K7L 3N6 Canada (Abstract #2)

VITAMIN D SIGNALLING AFFECTS MARKERS OF EPITHELIAL‐MESENCHYMAL TRANSITION IN BREAST CANCER CELLS. Cara Inglese1,2, Martin Petkovich1,2,3 1Dept. of Biomedical & Molecular Sciences, 2Dept. of Pathology & Molecular Medicine, 3Cancer Biology & Genetics Division, Queen’s Cancer Research Institute, Queen’s University, Kingston, ON. (Abstract #3)

IDENTIFYING ABERRANTLY METHYLATED GENES RESPONSIBLE FOR TAMOXIFEN‐RESISTANCE IN BREAST CANCER. Catherine Crawford-Brown and Dr. Christopher R. Mueller. Department of Pathology and Molecular Medicine, Queen’s University, Kingston Ontario. (Abstract #4)

CHARACTERIZATION OF VARIANTS OF UNKNOWN SIGNIFICANCE (VUS) IN BRCA1. Daniel M. Kim1, Ricardo D.S. Vidal1, Harriet Feilotter1, Scott K. Davey1,2. 1Department of Pathology and Molecular Medicine, Queen’s University, Kingston, ON. 2Cancer Biology & Genetics Division, Queen’s Cancer Research Institute. (Abstract #5)

ENGINEERING A NOVEL INHIBITORY ANTI‐TRBII ANTIBODY TO BLOCK TGFβ1‐INCDUBCED EMT AND CANCER CELL INVASION. Daniel Newsted1, Peter Truesdell1, Sachdev Sidhu2, Andrew Craig1, 3Queen’s University; 3University of Toronto (Abstract #6)

DESIGN AND CHARACTERIZATION OF A PEPTIDE DISRUPTOR TO THE E2A‐PBX1:CBP/P300 COMPLEX. David N. Langelaan1, Marina R. Lochhead1, David P. LeBrun2 and Steven P. Smith1, Dept. of Biomedical & Molecular Sciences1, Cancer Biology & Genetics Division, Queen’s Cancer Research Institute2, Queen’s University, Kingston, ON (Abstract #7)

PPARγ LOSS INCREASES METASTASIS OF HER2+ BREAST TUMOURS. Elizabeth Lightbody D.1, Newton, Hailey T.2, O’Connell Katie M.2, Rubino Rachel E.2, Apostoli Anthony J.2, SenGupta Sandip K.1, and Nicol Christopher JB.1,3. 1Departments of Pathology and Molecular Medicine; 2Cancer Biology and Genetics, Cancer Research Institute; and 3Biomedical and Molecular Sciences, Queen’s University, Kingston, ON, Canada (Abstract #8)

INTERFERON INDUCED STAT1 ASSOCIATES WITH DIFFERENTIAL CHEMOTHERAPY RESPONSE IN HIGH‐GRADE SEROUS OVARIAN CANCER. Gillian Reid-Schachter, Runhan Ren, Katrina Au, Peter Truesdell, Nichole Peterson, Charles Graham, Andrew Craig, Julie-Ann Francis, Madhuri Koti, Department of Biomedical and Molecular Sciences/Cancer Biology and Genetics Division/Queen’s Cancer Research Institute/Queen’s University, Department of Pathology and Molecular Medicine & Department of Obstetrics and Gynecology/Kingston General Hospital (Abstract #9)

GLUCOCORTICOID RECEPTOR PROMOTER METHYLATION AS A MARKER OF TAMOXIFEN RESISTANCE. Hilary E. Snider, Kirsten A. Nesset, Amelia M. Perri, Andrew G. Robinson, and Christopher R. Mueller. Department of Pathology & Molecular Medicine, Queen’s University Kingston, Ontario Canada (Abstract #10)
CREATING AN INBUILT SUICIDE SYSTEM IN AAV CONSTRUCTS AS A SAFETY CHECK FOR TREATMENT OF POSSIBLE TUMOR DEVELOPMENT IN LONG-TERM GENE THERAPY STUDIES. Imtiaz Ahmad1, Evan Woodley1, Patrick Thompson2 and Jagdeep S Walia3, 4Department of Biomedical and Molecular Sciences and 5Medical Genetics/Department of Pediatrics, Queen's University, Kingston, Ontario, Canada, K7L 2V7.(Abstract # 11)

EVALUATING EZRIN EXPRESSION DURING BREAST TUMOUR PROGRESSION: A POTENTIAL BIOMARKER OF BREAST CANCER METASTASIS. Jennifer Fish1, 3, Abdi Ghaffari1, Victoria Hoskin1, Kevin Ren1, Yolanda Madarnas2, Sandip SenGupta1, Stephen Pang3, Bruce Elliott1. 1Department of Pathology and Molecular Medicine, Queens University; 2Department of Oncology, Queens University; 3Department of Biological and Medical Sciences, Queens University Kingston, Ontario, Canada (Abstract #12)

THE ENDOTHELIAL CELL ROLE OF PPARγ DURING BREAST TUMOUR ANGIOGENESIS. Jia Yue (Amelia) Shi1, 2, Anthony J. Apostoli2, Rachel E. Rubino3 and Christopher J.B. Nicol1, 3 1Depts. of Biomedical & Molecular Sciences, 2Pathology & Molecular Medicine, and 3Division of Cancer Biology & Genetics, Cancer Research Institute; Queen’s University, Kingston, ON, Canada K7L 3N6 (Abstract #13)

DEFINING GENE NETWORKS REGULATED BY MIR-206 THAT DRIVE TUMOUR PROGRESSION AND METASTASIS IN LUNG ADENOCARCINOMA. Kathleen Watt1, Elena Voorand1, Peter Truesdell1, Neil Renwick2, Andrew W.B. Craig1 1Department of Biomedical and Molecular Sciences; 2Department of Pathology and Molecular Medicine, Queen’s University, Kingston ON, Canada (Abstract #14)

DEVELOPMENT OF A BLOOD-BASED SCREEN FOR DETECTION OF BRCA1-ASSOCIATED BREAST CANCER. Katrina L. Cristall and Christopher R. Mueller. Department of Pathology & Molecular Medicine, Queen’s University Kingston, Ontario Canada. (Abstract # 15)


PROTEIN-PROTEIN INTERACTIONS INVOLVING LYMPHOPOIETIC TRANSCRIPTIONAL REGULATORS IN ACUTE LYMPHOBLASTIC LEUKEMIA. Marina R. Lochhead, David N. Langelaan, Kyster Nanan, Steven P. Smith, David P. LeBrun, Division of Cancer Biology and Genetics, Cancer Research Institute, Queen’s University, Department of Biomedical and Molecular Sciences, Queen’s University (Abstract # 17)

MACROLIDE TOXIN MYCALOLIDE B IS A POTENT INHIBITOR OF HER2 CANCER CELL INVASION AND IS THE BASIS OF ACTIN TARGETED THERAPY FOR METASTATIC CANCERS. Rodette N Williams1, 2, Andrew WB Craig1, 2, and John S Allingham1 1Department of Biomedical and Molecular Sciences; 2Cancer Biology & Genetics Division, Cancer Research Institute (Abstract # 18)

ALGORITHM DEVELOPMENT FOR THE PREDICTION OF POTENTIALLY LETAL PROSTATE CANCER USING PRETREATMENT CLINICO-PATHOLOGICAL VARIABLES. Tamara Jamaspishvili (1,2), Palak Patel (1,2), Kathrin Tyrshkin (2), John Okello (1,2), David M. Berman (1,2), (1) Cancer Biology & Genetics Division, Queen’s Cancer Research Institute, (2) Department of Pathology and Molecular Medicine, Queen’s University (Abstract # 19)

RETROSPECTIVE POPULATION-BASED COHORT STUDY OF THE USE OF DOCETAXEL-BASED CHEMOTHERAPY FOR METASTATIC PROSTATE CANCER. Lyndsay Harrison, Christopher M. Booth, Will D. King, William J. Mackillop. Department of Public Health Sciences, and Division of Cancer Care & Epidemiology, Queen’s University, Kingston, Canada. (Abstract # 21)

THE ROLE OF CALPAINS-1/2 IN PROMOTING MAMMARY TUMORIGENESIS. James A. MacLeod, Stacy Visser-Grieve, and Peter A. Greer. Department of Pathology & Molecular Medicine, Queen’s University, Kingston, Ontario, Canada. (Abstract # 22)
DIFFERENTIAL PHOSPHORYLATION OF STAT3A AND THE DOMINANT-NEGATIVE SPLICE VARIANT, STAT3B, IN CELL-TO-CELL ADHESION VS ONCOGENE EXPRESSION, Zaid Taha, Rozanne Arulanandam, Adina Vultur, Leda Raptis (Abstract #104)

Cardiac, Circulatory, and Respiratory Sciences

LEUKOCYTES IMPAIR EXPRESSION AND FUNCTION OF THE hERG K⁺ CHANNEL. Gianluca Sampieri, Shawn Lamotehe, Jun Guo, Wentao Li, Stephen C. Pang, Shetuan Zhang. Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, Ontario Canada (Abstract # 23)

LEADING THE CHARGE IN SPROUTING ANGIogenesis: THE ROLES OF PDE4D IN REGULATING TIP CELL INVASION. Jodi MacKeil, Department of Biomedical and Molecular Science, Queen’s University, Canadian Institutes of Health Research (Abstract # 24)

UTILITY OF BRACHIAL AND FEMORAL HUMAN CADAVERIC ARTERIES IN ASSESSING CALCIUM AND PHOSPHATE MINERAL PROFILES. Devon E. Stride M.Sc*; Jason G.E. Zelt M.Sc* & Dr. Michael A. Adams PhD. Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, ON, Canada. (Abstract # 25)

INVESTIGATING THE MECHANISM OF AUTOIMMUNE-RELATED LQTS; ANTI-RO52 REDUCES hERG FUNCTION. John Szendrey, Shetuan Zhang. Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, Ontario Canada. (Abstract # 26)

β-ARRESTIN-MEDIATED REGULATION OF THE hERG K⁺ CHANNEL. Matt Sangoi, Shawn Lamotehe, Jun Guo, Tonghua Yang, Wentao Li, John Fisher, Shetuan Zhang. Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, Ontario Canada. (Abstract # 27)

DEVELOPMENT OF A STANDARD CAROTID ARTERY ULTRASOUND PHANTOM TO CHARACTERIZE PLAQUE VULNERABILITY. Olivia Yau and Amer Johri. Department of Biomedical and Molecular Science, Queen’s University, Kingston, Ontario, Canada. (Abstract # 28)

THE INTERPLAY OF CAMP AND CALCIUM SIGNALING IN THE REGULATION OF PDE1C IN HUMAN VASCULAR SMOOTH MUSCLE CELLS. Paulina Brzezinska, Hao Xiao, Andrew J. Ross, Fabien Hubert, M. Bibiana Umana, Darrin M. Payne, Donald Maurice (Abstract # 29)

ACTIVATION OF SKELETAL M3 MUSCARINIC DESIGNER RECEPTOR EXCLUSIVELY ACTIVATED BY DESIGNER DRUG (DREADD) ALTERS HEART RATE AND ACTIVITY LEVELS IN THE MOUSE. Sandra G. Vincent, Jurgen Wess¹ and John T. Fisher². Department of Biomedical and Molecular Sciences, Queen’s University ² Kingston, ON, Canada and NIH-NIDDK¹. Supporting agency: Queen’s Spear Endowment², CIHR² and NIH-NIDDK¹ (Abstract # 30)

THE INFLUENCE OF ACUTE HYPERGLYCEMIA ON ENDOTHELIUM DEPENDENT FLOW MEDIATED VASODILATION IN HEALTHY, SEDENTARY MALES. Jennifer Williams, Trevor King, Laura Sawula, Dr. Kyra Pyke. School of Kinesiology & Health Studies, Queen’s University, Kingston, Ontario Canada. (Abstract # 34)

Health Policy, Population Health, and Epidemiology

THE ROLE OF NATURE IN THE EMOTIONAL HEALTH OF CANADIAN ADOLESCENTS. Caroline Piccininni, Valerie Michaelson, William Pickett, Department of Public Health Sciences (Abstract #35 )
IS THERE A MEASURABLE ASSOCIATION OF EPIDURAL USE AT CYSTECTOMY AND POST-OPERATIVE OUTCOMES? A POPULATION BASED STUDY. R. Christopher Doiron,1 Melanie Jaeger,2 Christopher M. Booth,3,4,5 Xuejiao Wei,5 D. Robert Siemens1,3,5 Departments of Urology,1 Anesthesiology and Perioperative Medicine,2 Oncology,3 Public Health Sciences,4 Queen’s University, Division of Cancer Care and Epidemiology, Queen’s University Cancer Research Institute5, Kingston, Canada (Abstract #36)

SHIFTWORK, SLEEP DURATION AND THE METABOLIC SYNDROME AMONG FEMALE HOSPITAL EMPLOYEES. Jill Korsiak, Joan Tranmer, Michael Leung, Andrew Day, Michael M Borghese, Kristan J Aronson, Department of Public Health Sciences, Queen’s University (Abstract #37)

ROUTINE FOLLOW-UP CARE AFTER CURATIVE TREATMENT OF HEAD AND NECK CANCER: PRELIMINARY RESULTS FROM THE PERSPECTIVE OF THE PATIENT. Kelly Brennan, Dr. Stephen Hall, Dr. Yingwei Peng, & Dr. Deb Feldman-Stewart, Department of Public Health Science, & Division of Cancer Care and Epidemiology(Supporting Agencies: Queen’s University, CIHR, CCSRI) (Abstract #38)

DEVELOPING A CUSTOM GEOGRAPHY TO MAP CHLAMYDIA RATES. Liam W. Rémillard, Paul Belanger, Kieran Moore, Will Pickett, and Anna Majury, Public Health Sciences, Queen’s University; KFL&A Public Health (Abstract #39)

MISPERCEIVED DRINKING NORMS AND HAZARDOUS DRINKING BEHAVIOURS IN UNIVERSITY FIRST-YEAR UNDERGRADUATE STUDENTS AND THE EFFECTS OF GENDER. Tasha A. Narain and Heather Stuart. Department of Public Health Sciences, Queen’s University, Kingston, Ontario, Canada. (Abstract #40)

APPLICATION OF EMPIRICAL BAYES SMOOTHING TECHNIQUES TO BETTER INTERPRET CHLAMYDIA RATES IN ONTARIO. Liam W. Rémillard, Paul Belanger, Kieran Moore, Will Pickett, and Anna Majury, Public Health Sciences, Queen’s University; KFL&A Public Health (Abstract #41)

EXAMINATION OF BODY IMAGE AMONG CANADIAN ADOLESCENTS: RELATIONS WITH PHYSICAL ACTIVITY LEVELS AND SCREEN TIME. Nicole Roberts, William Pickett. Department of Public Health Sciences, Queen's University. (Abstract #42)

EXPLORING AUTOCORRELATION TRENDS TO IDENTIFY CLUSTERS OF CHLAMYDIA IN ONTARIO. Liam W. Rémillard, Paul Belanger, Kieran Moore, Will Pickett, and Anna Majury, Public Health Sciences, Queen’s University; KFL&A Public Health (Abstract #43)

VARIATIONS IN THE AVAILABILITY AND UTILIZATION OF COLONOSCOPY RESOURCES IN ONTARIO. Webber C, Flemming J, Birtwhistle R, Rosenberg M, Groome P. Department of Public Health Sciences (Abstract #46)

PREVALENCE AND PATTERNS OF SUGAR-SWEETENED BEVERAGE CONSUMPTION IN CANADIAN YOUTH: A FOCUS ON NUNAVUT Laura E. Davis, MSc1, Colleen M. Davison, PhD, MPH1 1Queen’s Department of Public Health Sciences, 62 Fifth Field Company Lane, Queen's University, Kingston, Ontario, Canada K7L 3N6 (Abstract #47)

INVESTIGATING THE INFLUENCE OF COMPUTER-MEDIATED COMMUNICATION ON THE HEALTH OF CANADIAN YOUNG PEOPLE: A MIXED-METHODS STUDY Lindsay Favotto, MSc1,3, William Pickett, PhD1, Valerie Michaelson, DMin2, Colleen Davison, PhD1,3 1Department of Public Health Sciences, Queen’s University, Kingston, Ontario, Canada 2School of Religion, Queen’s University, Kingston, Ontario, Canada 3Kingston General Hospital Research Institute(Abstract #48)

Inflammation, Infection and Immunity

INTERLEUKIN-30 MEDIATES CYTOKINE PRODUCTION IN HUMAN IMMUNE CELLS Carlene Petes1, Melissa Mariana2, Yawen Yang3, Nathalie Grandvaux3, and Katrina Gee1 1 Department of Biomedical and Molecular Sciences, Queen’s University, Kingston ON, Canada, K7L3N6; 2 Department de biochimie et médecine moléculaire, Université de Montréal, Centre de Recherche du CHUM (CRCHUM), Montréal PQ, Canada, H2X 0A9 (Abstract #49)
BACTERIAL GLYCOSYLTRANSFERASES THAT REQUIRE DIPHOSPHATE LIPID IN THEIR ACCEPTOR SUBSTRATES. Diana Czuchry, Walter A. Szarek, Inka Brockhausen, Department of Biomedical and Molecular Sciences and Department of Chemistry, Queen’s University, Kingston, Ontario, Canada (Abstract #50)

EVALUATING THE ACTIVATION STATE AND TUMOUR-PROMOTING FUNCTIONS OF MACROPHAGES EXPOSED TO TUMOUR-DERIVED FACTORS. Kelly MacIsaac, Andra Banete, Rylend Mulder and Sam Basta, Department of Biomedical and Molecular Sciences, Queen’s University Kingston, Ontario Canada (Abstract #51)

COMPARATIVE OUTCOMES OF THE NASAL ALLERGEN CHALLENGE (NAC) MODEL OF THE ALLERGIC RHINITIS CLINICAL INVESTIGATOR COLLABORATIVE (AR-CIC) VERSUS THE ENVIRONMENTAL EXPOSURE UNIT (EEU). Mark W. Tenn, Jenny Thiele, Daniel E. Adams, Lisa M. Steacy, Anne K. Ellis, Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, Ontario, Canada, Allergy Research Unit, Kingston General Hospital, Kingston, Ontario, Canada (Abstract #52)

MAST CELLS PROMOTE AUTOINFLAMMATORY DISEASE PROGRESSION IN A CHRONIC MULTIFOCAL OSTEOMYELITIS MODEL. Jae Hoon Peter Lee, Stephanie Young, Namit Sharma, Violeta Chitu, E. Richard Stanley and Andrew W.B. Craig, Department of Biomedical and Molecular Sciences, Queen’s University; Department of Developmental and Molecular Biology, Albert Einstein College of Medicine (Abstract #53)

CALCIFEDIOL ADMINISTRATION SUPPRESSES MARKERS OF INFLAMMATION AND FIBROSIS IN A MOUSE UNILATERAL URETERAL OBSTRUCTION MODEL OF KIDNEY FIBROSIS. Sara Hadi D., Tracie Pennimpe, Donald Cameron, Andrew Winterborn, Martin Petkovich, Dept. of Pathology and Molecular Medicine, Dept. of Biomedical and Molecular Sciences, University of Guelph, Canada, N1G 2W1, Department of Obstetrics and Gynecology, University of North Carolina, USA, 27514, Department of Obstetrics and Gynecology, Greenville Health System, USA, 29605 (Abstract #54)

EXCHANGE OF PTGS GENES IN MURINE MODELS TO DISTINGUISH THE INDIVIDUAL PHYSIOLOGICAL FUNCTIONS OF CYCLOOXYGENASE ISOFORMS. Xinzhi Li, Vivienne Hsu, Laurel L. Ballantyne, Colin D. Funk, Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, ON, Canada, K7L 3N6 (Abstract #55)

EVALUATING THE ROLE OF IL-33 IN THE PATHOGENESIS OF ENDOMETRIOSIS. Stephany P. Monsanto, Jessica Miller, SooHyun Ahn, Steven L. Young, Bruce A. Lessey, and Chandrakant Tayade, Department of Biomedical and Molecular Sciences, Queen’s University, Canada, K7L 3N6, Department of Biomedical Sciences, Ontario Veterinary College, University of Guelph, Canada, N1G 2W1, Department of Obstetrics and Gynecology, University of North Carolina, USA, 27514, Department of Obstetrics and Gynecology, Greenville Health System, USA, 29605 (Abstract #56)

EVALUATING CYTOKINE PRODUCTION BY DIFFERENT MACROPHAGE SUBSETS IN RESPONSE TO VIRUS INFECTION. Torki Alothaimeen, Sam Basta and Katrina Gee, Department of Biomedical and Molecular Sciences, Queen’s University Kingston, Ontario Canada (Abstract #59)

HISTOLOGICAL ANALYSIS OF PLACENTAL SALMONELLA ENTERICA SEROVAR TYPHIMURIUM INFECTION. S Mohammad, KLC Wachholz, L Krishnan, SP Murphy, B.A Croy, Department of Biomedical and Molecular Sciences, Queen’s University, Kingston, ON; Department of Biochemistry, Microbiology and Immunology, University of Ottawa, Ottawa, ON; Department of Obstetrics and Gynecology & Microbiology and Immunology, School of Medicine and Dentistry, University of Rochester, Rochester, NY (Abstract #60)

CEREBRAL VASCULAR PATHOLOGIES AND EXECUTIVE DYSFUNCTION IN A NEW ANIMAL MODEL OF AGE-RELATED COGNITIVE IMPAIRMENT. Ahmed Elharram, R. David Andrew and Brian M Bennett, Department of Biomedical and Molecular Sciences and Centre for Neuroscience Studies, Queen’s University, Kingston Ontario Canada K7L 3N6 (Abstract #61)
COGNITIVE BEHAVIOURAL THERAPY BASED GUIDED SELF-HELP IN COMBINATION WITH COGNITIVE REMEDIATION FOR PATIENTS WITH PSYCHOSIS. Dr. Farooq Naeem, Alyssa Hirji, & Natasha Alliston. Department of Psychiatry, Queen’s University, Kingston, ON, Canada. (Abstract #62)

THE EFFICACY, SAFETY, AND TOLERABILITY OF PROBIOTICS ON THE MOOD AND COGNITION OF DEPRESSED PATIENTS. Caroline Wallace and Roumen Milev. Centre for Neuroscience Studies, Queen’s University, Kingston, Ontario. (Abstract #63)

GROSS ANATOMICAL AND HISTOLOGICAL CHARACTERIZATION OF SOFT-EMBALMED NEURAL TISSUE. Diane Tomalty¹, Randy Ellis¹,²,³, Stephen C. Pang¹. ¹Department of Biomedical and Molecular Sciences, Queen’s University; ²School of Computing, Queen’s University; ³Human Mobility Research Centre, Queen’s University (Abstract #64)

THE EFFECTS OF TRANSCRANIAL MAGNETIC STIMULATION ON Olfactory DEFICITS ASSOCIATED WITH DEPRESSION. Hannah C. Taalman,¹, Roumen Milev,², Yu Qing Liu, Elaine Choi.¹, ¹Centre for Neuroscience Studies, Queen’s University, Kingston, ON, ²Department of Psychiatry, Queen’s University, Kingston, ON (Abstract #65)

USING PUPIL RESPONSE TO ASSESS COGNITIVE FUNCTION ACROSS THE HEALTHY LIFESPAN. Jeff Huang, Matthew L. Smoreenburg, Brian C. Coe, Chin-An Wang, and Douglas P. Munoz; Centre for Neuroscience Studies, Queen’s University, Kingston, Ontario, Canada (Abstract #66)

IMPROVED PHENOTYPE IN ADULT SANDHOFF DISEASE MICE FOLLOWING INTRAVENOUS ADMINISTRATION OF SELF-COMPLEMENTARY ADENO-ASSOCIATED VIRAL VECTOR EXPRESSING A NOVEL HEXOSAMINIDASE ENZYME. Karlaina JL. Osmon¹, E. Woodley², P. Thompson³, S. Karumuthil-Meletih⁴, S.J. Gray⁵,⁶ and J.S. Walia⁷. ¹Dept of Biomedical and Molecular Sciences, and ²Medical Genetics/Departments of Pediatrics, Queen's University, Kingston, Ontario, Canada, K7L 3N6; ³Gene Therapy Center and ⁴Dept of Ophthalmology, University of North Carolina, Chapel Hill, North Carolina, USA (Abstract #67)

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CORRECTION OF AB VARIANT GM2 GANGLIOSIDOSES WITH AAV9 GENE THERAPY IN A MOUSE MODEL. Meera Vyas¹, K. Osmon², P. Thompson³, J.S. Walia¹,²,³. ¹Center for Neuroscience Studies, ²Dept of Biomedical and Molecular Sciences, and ³Medical Genetics/Department of Pediatrics, Queen’s University, Kingston, Ontario, Canada, K7L 3N6 (Abstract #69)

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CHARACTERIZATION OF HEMATOPOIESIS IN MOUSE PLACENTA: TEMPORAL ASSESSMENT AND DISTRIBUTION PROFILE OF IMMATURE HEMATOPOIETIC CELLS OVER MID-GESTATION. Nathalia A Portilho1,2 (Ph.D. Candidate), Priscila T Guedes2, Marcelo Pelajo-Machado2, B Anne Croy1. 1Department of Biomedical and Molecular Research, Queen’s University and 2Laboratory of Pathology, Oswaldo Cruz Institute/ Fiocruz. (Abstract #91)

RECOMBINANT HUMAN OVIDUCTIN BINDS TO HUMAN SPERM AND ENHANCES SPERM FERTILIZING COMPETENCE. Yuewen Zhao, Xiaojing Yang, Zongchao Jia, Robert L. Reid, Tamer M. Said, Alfonso P. Del Valle, Pierre Leclerc and Frederick W. K. Kan. Queen’s University, Kingston, ON; The Toronto Institute for Reproductive Medicine, Toronto, ON; Laval University, Quebec City, QC. (Abstract #92)

THE EFFECTS OF VALPROIC ACID EXPOSURE ON P300, EGR1 AND STAT3 PROTEIN EXPRESSION IN P19 EMBRYONAL CARCINOMA CELLS Jordan K. Bricker1 and Louise M. Winn1,2 1Department of Biomedical and Molecular Sciences, Graduate Program in Reproductive and Developmental Sciences, Queen’s University, Kingston, Ontario. 2School of Environmental Studies, Queen’s University, Kingston, Ontario. (Abstract #93)

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COMPOSITION OF HUMAN BREAST MILK IN AN ACUTE KIDNEY INJURY. Adam Chruscicki PhD, Christine White MD FRCP, 1Faculty of Medicine, Queen’s University, 15 Arch Street Kingston, Ontario, K7L 3N8, Canada, 2Division of Nephrology, Department of Medicine, Queen’s University, 76 Stuart Street Kingston, Ontario, K7L 2V7, Canada (Abstract #98)

USE OF AN ADSFLT-1-INDUCED MOUSE MODEL OF PRE-ECLAMPSIA TO EXPLORE THE POTENTIAL OF CARBON MONOXIDE AS A GASEOUS THERAPEUTIC. Karalyn E McRae1, Richard Casselman1, Nichole Peterson1 and Graeme N Smith1,2,1Department of Biomedical and Molecular Sciences, Queen's University, Kingston, Ontario, Canada and 2Department of Obstetrics and Gynecology, Kingston General Hospital, Kingston, Ontario, Canada. (Abstract #99)

IMPACT OF COMPUTER AIDED ANIMATIONS (CAA) AND RETRIEVAL PRACTICE (RP) ON STUDENT LEARNING IN DEVELOPMENTAL ANATOMY. Sidra Shafique, Ron A. Easteal, Conrad Reifel Department of Biomedical and Molecular Sciences, Faculty of Health Sciences, Queen’s University, Kingston, Ontario, Canada. (Abstract #100)

LIVER-DIRECTED KNOCKOUT AND TRANSGENE DELIVERY OF ARGINASE-1 IN MICE. Colin D Funk*, Laurel L Ballantyne*, Andreas Schulze. *Department of Biomedical and Molecular Sciences, Queen’s University, Kingston ON (Abstract #101)