

ABSTRACTS / RESUMES

*Indicates that student presenter has entered the competition for a poster award

- Odd numbered posters will be judged and presented on Saturday (20:00 – 22:00)
- Even numbered posters will be judged and presented on Sunday (15:45 – 17:45)

LISTING BY POSTER NUMBER:

* 1. TRIAD3A INDUCES THE DEGRADATION OF EARLY NECROSOME TO LIMIT RIPK1-DEPENDENT CYTOKINE PRODUCTION AND NECROPTOTIC CELL DEATH, Presenting Author: **Norah Alturki**, University of Ottawa

* 2. RECIPROCAL MODULATION OF HELPER TH1 AND TH17 CELLS BY THE β 2-ADRENERGIC RECEPTOR AGONIST, Presenting Author: **Catalina Carvajal**, Concordia University

* 3. ELUCIDATION OF THE SIGNALING PATHWAY OF MERTK, Presenting Author: **Kyle Taruc**, Western University

* 4. IMMUNE HOMEOSTASIS IN MOUSE MODELS OF LRPPRC-DEPENDENT MITOCHONDRIAL DYSFUNCTION, Presenting Author: **Adrien Fois**, Maisonneuve-Rosemont Hospital

* 5. DIFFERENTIAL ANTIGEN PRESENTATION FOLLOWING EFFEROCYTOSIS, Presenting Author: **Elaine Liu**, Western University

6. THE ROLE OF THE INNATE IMMUNE RESPONSE REGULATORY GENE ABCF1 IN MAMMALIAN EMBRYOGENESIS AND DEVELOPMENT, Presenting Author: **Hitesh Arora**, University of British Columbia

* 7. ROLE OF ELKS1 IN MHC-II DELIVERY TO THE PHAGOSOME, Presenting Author: **Adam Tepperman**, Western University

8. ROLE OF WNT4 IN HEMATOPOIETIC STEM CELL METABOLISM, Presenting Author: **Krista Heinonen**, INRS-Institut Armand Frappier

* 9. GENERATION OF HEMAGGLUTININ IMMUNODOMINANT PEPTIDES THROUGH ENZYMATIC CLEAVAGE IS PH-SPECIFIC, Presenting Author: **Tynan Becker**, University of Alaska Fairbanks

* 10. A DEFICIENCY IN THE TUMOR SUPPRESSOR P53 IMPAIRS NK CELL FUNCTIONS, Presenting Author: **Victor Mullins-Dansereau**, Hôpital Maisonneuve-Rosemont (Université de Montréal)

* 11. T CELL-INTRINSIC DIFFERENCES SKEW THE THYMIC SELECTION THRESHOLD IN NEONATES VERSUS ADULTS, Presenting Author: **Mengqi Dong**, Université de Montréal

12. TCR- AND CYTOKINE-MEDIATED SIGNALS CONTROL INKT CELL SELECTION AND EFFECTOR DIFFERENTIATION, Presenting Author: **Thierry Mallevaey**, University of Toronto

13. AUTOIMMUNE PRE-GERMINAL CENTER B AND T CELL INTERACTIONS ARE SHORT-LIVED AND DISTINCT FROM THOSE IN RESPONSE TO A FOREIGN ANTIGEN, Presenting Author: **Kate Parham**, Western University

* 14. INVESTIGATING NAÏVE CD4 T CELL HETEROGENEITY ARISING FROM CONTINUOUS T CELL RECEPTOR INTERACTIONS WITH SELF-LIGANDS, Presenting Author: **Dakota Rogers**, McGill University

* 15. THE ROLE OF VISTA IN CD71+ ERYTHROID CELL MEDIATED IMMUNOSUPPRESSION, Presenting Author: **Shima Shahbaz**, University of Alberta

* 16. NKR-P1B IS REQUIRED FOR RESIDENT ALVEOLAR MACROPHAGE DEVELOPMENT AND FUNCTION, Presenting Author: **Michal Scur**, Dalhousie University

17. IDENTIFICATION OF CYTOKINES SECRETION MACHINERY IN TYPE 2 INNATE LYMPHOID CELLS AND ITS ROLE IN INFLAMMATORY DISORDERS, Presenting Author: **Julien Malet**, McGill

18. VACCINE-MEDIATED INDUCTION OF BROADLY-NEUTRALIZING ANTIBODIES AGAINST INFLUENZA A VIRUS IN CHILDREN, Presenting Author: **Kimberly Braz Gomes**, McMaster University

19. MUTATION OF AN L-TYPE CALCIUM CHANNEL GENE LEADS TO A NOVEL PRIMARY CELLULAR IMMUNODEFICIENCY IN MICE AND HUMANS, Presenting Author: **Franz Fenninger**, University of British Columbia

20. ANTI-HOMOTYPIC AFFINITY MATURATION IMPROVES HUMAN B CELL RESPONSES AGAINST A REPETITIVE MALARIA ANTIGEN, Presenting Author: **Jean-Philippe Julien**, The Hospital for Sick Children Research Institute

* 21. PH IMPACT ON PEPTIDE-MHCII INTERACTIONS AND DM ACTIVITY, Presenting Author: **Melissa Clark**, University of Alaska Fairbanks

22. THE HISTONE H2B DEUBIQUITINASE USP22 PROMOTES B LYMPHOPOIESIS AND ANTIBODY CLASS SWITCH RECOMBINATION BY FACILITATING DNA REPAIR, Presenting Author: **Conglei Li**, University of Toronto

* 23. HLA-DM - AN IMPORTANT FACTOR IN EPITOPE PREDICTING TOOL, Presenting Author: **Jaspreet Kaur Osan**, University of Alaska Fairbanks

* 24. THE RNA BINDING PROTEIN HNRNPL PROMOTES THE ANTIBODY RESPONSE, Presenting Author: **Poorani Ganesh Subramani**, McGill University

25. A SYNTHETIC CROSS-SPECIES CD200R1 AGONIST SUPPRESSES INFLAMMATORY IMMUNE RESPONSES IN VIVO, Presenting Author: **Amanda Sparkes**, Sunnybrook Research Institute

- * 26. NAVIGATING THE REV7 INTERACTOME IN B CELL DEVELOPMENT AND DIFFERENTIATION, Presenting Author: **John Heath**, McGill University
- * 27. THE IMPACT OF FOXO3A ON HOST SURVIVAL, Presenting Author: **Stephanie Hajjar**, University of Ottawa
- * 28. THE ROLE OF THE DEUBIQUITINASE OTUB1 IN B CELL DEVELOPMENT, Presenting Author: **Mingyi Vincent Luo**, McGill University
- 29. INDUCING REGULATORY T CELL GENERATION VIA POLYMER-MEDIATED ATTENUATION OF IMMUNE RECOGNITION, Presenting Author: **Ning Kang**, Canadian Blood Services; UBC Centre for Blood Research
- 30. DEPLETION OF DEAD CELLS FROM PRIMARY TISSUE IN 6 MINUTES, Presenting Author: **Susan de Jong**, StemCell Technologies Inc.
- * 31. MAKING A BETTER HUMANIZED MOUSE VIA POLYMER GRAFTING, Presenting Author: **Meera Raj**, Canadian Blood Services- University of British Columbia
- 32. REAL-TIME IN VIVO IMAGING OF TISSUE-RESIDENT EOSINOPHILS UNDER HOMEOSTATIC AND INFLAMMATORY CONDITIONS, Presenting Author: **Kamala Patel**, University of Calgary
- 33. GDF15 REGULATING MIRNA AND INDUCING TOLEROGENTIC DENDRITIC CELLS TO PREVENT ALLOIMMUNE REJECTION IN HEART TRANSPLANTATION, Presenting Author: **Xiufen Zheng**, Western University
- * 34. INNATE IMMUNE RESPONSES TO RECOMBINANT VESICULAR STOMATITIS VIRUS: THE ROLE OF TYPE I INTERFERON SIGNALING AND NEUTROPHILS, Presenting Author: **Maedeh (Mahi) Darzianiazizi (Azizi)**, University of Guelph
- * 35. DISRUPTION OF THE GUT MICROBIOTA WITH ANTIBIOTICS EXACERBATES ACUTE VASCULAR REJECTION, Presenting Author: **Kevin Rey**, Simon Fraser University
- * 36. ELUCIDATING THE ROLE OF NATURAL KILLER CELL DERIVED IL-10 ON T CELL ACTIVATION DURING A SUSTAINED VIRAL INFECTION, Presenting Author: **Alaa Ali**, University of Ottawa
- 37. PERSISTENCE OF TH2 CELLS IN ASTHMA: IL-2 PROMOTES GC INSENSITIVITY, Presenting Author: **THarsan Kanagalingam**, Western University
- * 38. JNK-ASSOCIATED LEUCINE ZIPPER PROTEIN SCAFFOLDING PROTEIN REGULATES NK-CELL MIGRATIONS., Presenting Author: **Rahmat Naureen Rahman**, University of Manitoba
- 39. SUPPRESSION OF MICRORNA-21 MODULATES AIRWAY REMODELING IN A CHRONIC ASTHMA MODEL THROUGH TGF- β 1/SMAD SIGNALING, Presenting Author: **Ji Young Kang**, Faculty of Medicine, University of Ottawa
- * 40. INFLAMMATION DURING PREGNANCY ALTERS PLACENTAL AND FETAL GROWTH: ROLE OF NATURAL KILLER CELLS, Presenting Author: **Kelly Baines**, Western University

* 41. REGULATING THE ALLERGIC RESPONSE: OVERLAP BETWEEN BIRCH SAP AND BIRCH POLLEN PROTEIN CONTENT, Presenting Author: **Annie Enderle**, University of Alaska Fairbanks

42. SEX- AND AGE-LINKED VARIATION IN IMMUNE CELL COMPOSITION AND INFLAMMATORY POTENTIAL IN THE HUMAN LIVER, Presenting Author: **Deeqa Mahamed**, University Health Network

43. IDENTIFICATION OF NOVEL QUANTITATIVE TRAIT LOCI CONTROLLING INNATE AND ADAPTIVE IMMUNE CELLS, Presenting Author: **Sylvie Lesage**, Hopital Maisonneuve-Rosemont

* 44. INTERLEUKIN-27 DIFFERENTIALLY MODULATES TOLL-LIKE RECEPTOR 7 AND 8 FUNCTION IN HUMAN MONOCYTES AND MACROPHAGES, Presenting Author: **Natalya Odoardi**, Queen's University

45. MTECLOW BIAISED TISSUE RESTRICTED ANTIGEN EXPRESSION SUPPORTS PIEL DIFFERENTIATION, Presenting Author: **Marie-Ève Lebel**, Maisonneuve-Rosemont Research Center

* 46. PROTEOMIC PROFILING TO DEFINE IL-17 AND TNF MEDIATED RESPONSES IN AIRWAYS, Presenting Author: **Anthony Altieri**, University of Manitoba

* 47. HUMAN REGULATORY DENDRITIC CELL INDUCTION OF CD25+ CD127-REGULATORY T CELLS THAT SUPPRESS CAT AND PEANUT ALLERGIES IN VITRO, Presenting Author: **Christopher Rudulier**, University of Saskatchewan

48. CDC42 RHO GTPASE REGULATES HOST DEFENCE PEPTIDE LL-37-MEDIATED CHEMOATTRACTANT FUNCTIONS VIA GPCR AND JNK MAPK PATHWAY, BUT NOT ANTI-INFLAMMATORY CYTOKINE PRODUCTION, Presenting Author: **Hemshkhar Mahadevappa**, University of Manitoba

49. ESTROGEN EFFECTS ON TH2 CELL PHENOTYPE AND SURVIVAL: KEY TO SEVERE ASTHMA IN WOMEN?, Presenting Author: **Lauren Solomon**, Western University

* 50. BRAIN-SPECIFIC AND SYSTEMIC INFLAMMATORY RESPONSES FOLLOWING A SINGLE AND REPEATED CLOSED-HEAD CONCUSSIVE INJURY IN MICE, Presenting Author: **Sally (So Young) Eo**, Western University

* 51. EFFECT OF ESTROGEN AND GLUCOCORTICOID SIGNALING ON TH2 CELLS - IMPLICATIONS IN SEVERE ASTHMA, Presenting Author: **Meerah Vijeyakumaran**, Western University

* 52. MACROPHAGE RECEPTOR WITH COLLAGENOUS STRUCTURE (MARCO) POTENTIATES EXPERIMENTAL ATHEROSCLEROSIS., Presenting Author: **Felix Chiu**, University of Toronto

* 53. INHIBITION OF ALLERGEN-MEDIATED MAST CELL ACTIVATION BY TAK1 INHIBITOR 5Z-7-OXOZEAENOL, Presenting Author: **Colton Watson**, Brock University

* 54. DIVERSE MACROPHAGE RESPONSES TO DISTINCT PATHOGENS: WHEN GENETICS MATTERS, Presenting Author: **Syedmehdi Emam**, University of Guelph

55. IFN-LAMBDA RECEPTOR EXPRESSION AND DOWNSTREAM SIGNALING IS CELL TYPE SPECIFIC IN PERIPHERAL BLOOD IMMUNE CELLS, Presenting Author: **Deanna Santer**, University of Alberta

* 56. GENE EXPRESSION PROFILING OF INTIMA-INFILTRATING MACROPHAGES IN HUMAN ATHEROSCLEROSIS, Presenting Author: **Charles Yin**, Western University

* 57. PRIMING HUMAN MAST CELLS WITH IL-4 REDUCES GENE EXPRESSION OF VIRAL RECOGNITION GENES TLR2 AND MYD88, Presenting Author: **Owen Crump**, Dalhousie University

* 58. PHENOTYPIC CHARACTERIZATION OF SPLENOCYTES FOLLOWING LISTERIA INFECTION IN IL-15 DEFICIENT MICE., Presenting Author: **Sakina Orkhis**, Sherbrooke University

* 59. ANALYSING CO-STIMULATORY MOLECULE EXPRESSION ON ANTIGEN PRESENTING CELL SUBSETS AND THEIR REGULATION BY IFN-I IN MOUSE AND HUMAN, Presenting Author: **Melanie Girard**, University of Toronto

* 60. IL-27 AMPLIFIES CYTOKINE RESPONSES TO GRAM NEGATIVE BACTERIAL PRODUCTS AND SALMONELLA TYPHIMURIUM INFECTION, Presenting Author: **Carlene Petes**, Queen's University

* 61. REGULATION OF B CELL ANTIGEN RECEPTOR SIGNALING BY INOSITOL POLYPHOSPHATE 4-PHOSPHATASE, Presenting Author: **Marie Ashley Ste-Croix**, Department of Immunology, University of Manitoba

62. DIFFERENCES IN SELF-REACTIVITY MARK CD4 T CELL POPULATIONS WITH DISTINCT EFFECTOR FUNCTIONS, Presenting Author: **Aditi Sood**, Université de Montréal

* 63. FUNCTION OF P13K DELTA (P110 δ) ENZYME AND TAPP ADAPTOR PROTEINS IN PROTECTIVE IMMUNITY TO *TRYPANOSOMA CONGOLENSE*, Presenting Author: **Folayemi Olayinka-Adefemi**, University of Manitoba

* 64. ROLE OF CX3CR1 IN A GITRL-DEPENDENT SIGNAL 4 CHECKPOINT DURING CHRONIC LCMV INFECTION, Presenting Author: **Yu-Han Chang**, University of Toronto

* 65. DRIVER MUTATIONS IN JANUS KINASES LEADS TO B CELL ACUTE LYMPHOBLASTIC LEUKEMIA ASSOCIATED WITH THE LACK OF SPI-B AND PU.1 TRANSCRIPTION FACTORS, Presenting Author: **Carolina Batista**, Western University

* 66. GITR/GITRL INTERACTION IN THE LUNG PROVIDES SIGNAL 4 FOR T CELL EXPANSION AND TRM FORMATION, Presenting Author: **Kuan Lun Chu**, University of Toronto

* 67. CONTROL OF LYMPHOCYTIC LEUKEMIA THROUGH REGULATION OF TRAF1 PROTEIN DEGRADATION, Presenting Author: **Maria Edilova**, University of Toronto

68. ALTERNATIVE BCG VACCINATION ROUTE CONFERS PROTECTION, Presenting Author: **Joseph Zeppa**, University of Pittsburgh

* 69. THE MITOGEN-ACTIVATED PROTEIN KINASE (MAPK) PATHWAY LINKS EPIGENETIC MODIFIERS TO MAST CELL DIFFERENTIATION, Presenting Author: **Danja Den Hartogh**, Brock University

* 70. AUTOREACTIVE T CELLS PREFERENTIALLY DRIVE DIFFERENTIATION OF NON-RESPONSIVE MEMORY B CELLS AT THE EXPENSE OF GERMINAL CENTER MAINTENANCE, Presenting Author: **Rajiv Jain**, Western University

* 71. COORDINATION OF CELL CYCLE, METABOLISM, AND MYELOID DIFFERENTIATION BY PU.1, Presenting Author: **Jess Rhee**, Western University

* 72. OPPOSING ROLES FOR THE RELATED ETS-FAMILY TRANSCRIPTION FACTORS SPI-B AND SPI-C IN REGULATING ANTIBODY-FORMING RESPONSES, Presenting Author: **Anne-Sophie Laramee**, Western University

73. SOLUBLE CD93 ACTS AS AN APOPTOTIC CELL OPSONIN RECOGNISED BY $\alpha X\beta 2$ INTEGRIN, Presenting Author: **Bryan Heit**, Western University

* 74. ELUCIDATING THE ROLE OF SENATAXIN ON CLASS SWITCH RECOMBINATION AND SOMATIC HYPERMUTATION, Presenting Author: **Jonathan Mapletoft**, McMaster University

75. FIZZ1/RELM α IS INDUCED IN ONCOSTATIN M -MEDIATED LUNG INFLAMMATION, Presenting Author: **Carl Richards**, McMaster University

76. GENERATIONAL DIFFERENCES IN ENVIRONMENTAL EXPOSURE CAUSED BY MIGRATION: IMPACT ON INCIDENCE OF INFLAMMATORY DISEASES, Presenting Author: **Ikbel Naouar**, University of Toronto

77. IL-33 MEDIATES LUNG INFLAMMATION INDUCED BY ONCOSTATIN M, Presenting Author: **Carl Richards**, McMaster University

78. RAPAMYCIN SUPPRESSES T CELL RESPONSES IN RECOVERIN-INDUCED AUTOIMMUNE RETINOPATHY AND PREVENTS DISEASE PROGRESSION IN THE EYES, Presenting Author: **Enayat Nikoopour**, University of Michigan

79. HEMATOPOIETIC CELL-INTRINSIC FRIZZLED-6 PROTECTS STEM CELLS DURING STRESS HEMATOPOIESIS, Presenting Author: **Krista Heinonen**, INRS-Institut Armand Frappier

* 80. HB7-H4.COMP: AN ENGINEERED IMMUNE CHECKPOINT RECEPTOR AGONIST TO SUPPRESS T CELL-MEDIATED IMMUNE RESPONSES, Presenting Author: **Mays Alwash**, University of Toronto

* 81. SENATAXIN REGULATES THE ANTIVIRAL TRANSCRIPTIONAL RESPONSE DURING HSV-1 INFECTION, Presenting Author: **Yu Fan (Peter) Zeng**, McMaster University

* 82. A REDUCED INTENSITY CONDITIONING PROTOCOL INDUCES TRANSIENT CHIMERISM AND TRANSPLANT TOLERANCE TO FULLY ALLOGENEIC ISLETS IN AUTOIMMUNE DIABETIC NOD MICE, Presenting Author: **Jiixin Lin**, University of Alberta

* 83. INFLUENZA-SPECIFIC CD8+ T CELL RESPONSES ARE AUGMENTED BY ADMINISTRATION OF BACTERIAL SUPERANTIGENS, Presenting Author: **Courtney Meilleur**, Western University

* 84. MACROPHAGE DEPLETION TRIGGERS RESOLUTION OF PSORIATIC ARTHRITIS LIKE INFLAMMATION, Presenting Author: **Madelaine Hahn**, University Hospital Erlangen, Germany

85. NOTCH SIGNALING INHIBITS THE GENERATION OF RESIDENT MEMORY CD8+ T CELLS, Presenting Author: **Jean-François Daudelin**, Maisonneuve-Rosemont Hospital Research Center

* 86. ICOS SIGNALING CONTROLS INDUCTION AND MAINTENANCE OF COLLAGEN-INDUCED ARTHRITIS, Presenting Author: **Vincent Panneton**, IRCM

* 87. MITOPHAGY IS ESSENTIAL FOR ANTIGEN-SPECIFIC MEMORY CD8 T CELL ACCUMULATION FOLLOWING RE-INFECTION, Presenting Author: **Stefanie Valbon**, McGill University

* 88. CHARACTERIZING B AND T CELL INFILTRATES IN THE INFLAMED CENTRAL NERVOUS SYSTEM OF AN ANIMAL MODEL OF MULTIPLE SCLEROSIS, Presenting Author: **Yodit Tesfagiorgis**, Western University

89. PRIMING OF CD8 T CELLS IN ESTABLISHED CHRONIC VIRAL INFECTION DIRECTS A DISTINCT DIFFERENTIATION AND FUNCTIONAL PROGRAM FOR LONG-TERM IMMUNITY, Presenting Author: **Laura Snell**, Princess Margaret Cancer Centre

90. NATURAL KILLER CELLS REGULATE TH17 CELLS AFTER AUTOLOGOUS HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR RELAPSING REMITTING MULTIPLE SCLEROSIS, Presenting Author: **Peter Darlington**, Concordia University

91. A NOVEL ROLE FOR CYCLOPHILIN D IN CD8 T CELL-MEDIATED ANTIVIRAL IMMUNITY, Presenting Author: **Stephanie Condotta**, McGill University

92. NLRX1 PREVENTS THE DEVELOPMENT OF SPONTANEOUS EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS IN MICE, Presenting Author: **Denis Gris**, University of Sherbrooke

* 93. M(IL-4) TISSUE MACROPHAGES SUPPORT EFFICIENT INTERFERON- γ PRODUCTION IN ANTIGEN-SPECIFIC CD8+ T CELLS WITH REDUCED PROLIFERATIVE CAPACITY, Presenting Author: **Andra Banete**, Queen's University

94. PERINATAL PROGRAMMING OF MUCOSAL STROMAL CELL IDENTITY BY THE LYMPHOTOXIN PATHWAY REGULATES ADULT IMMUNE RESPONSES, Presenting Author: **Conglei Li**, University of Toronto

95. ELUCIDATING THE ROLE OF VIRAL INFECTION ON THE PATHOGENESIS OF AMYOTROPHIC LATERAL SCLEROSIS, Presenting Author: **Neda Barjesteh**, McMaster University

* 96. IGA IMMUNE COMPLEXES STIMULATE NETOSIS DURING VIRAL INFECTION AND AUTOIMMUNITY, Presenting Author: **Hannah Stacey**, McMaster University

97. A ROLE FOR SENATAXIN IN HSV-1 REPLICATION AND PATHOGENESIS, Presenting Author: **Braeden Cowbrough**, McMaster University

* 98. SALIVARY IMMUNOGLOBULIN-A INDIVIDUAL RESPONSE PATTERNS TO COLD PRESSOR TEST, Presenting Author: **Ghazal Mohammadi**, Concordia University

99. A BATF3-DEPENDENT CD103+ CDC SURVEILLANCE SYSTEM PREVENTS PROGRESSION OF SUBCLINICAL VIRAL MYOCARDITIS TO OVERT HEART FAILURE, Presenting Author: **Javier Clemente Casares**, UHN

* 100. NKT CELL-DEFICIENT MICE HARBOR AN ALTERED MICROBIOTA THAT FUELS INTESTINAL INFLAMMATION DURING CHEMICALLY INDUCED COLITIS, Presenting Author: **Qiaochu Lin**, University of Toronto

* 101. COMPENSATORY BATF3-INDEPENDENT PATHWAY FOR CD103+ DENDRITIC CELL DEVELOPMENT IN VIRAL MYOCARDITIS, Presenting Author: **Laura Aronoff**, UHN

* 102. CHROMOFUNGIN REGULATES COLITIS AND DENDRITIC CELL-RELATED MARKERS, Presenting Author: **Kunal Kapoor**, University of Manitoba

103. INFLUENZA VIRUS INFECTION INDUCES CHANGES IN LIGAND EXPRESSION TO UNDERMINE NK CELL RESPONSES, Presenting Author: **Mir Munir Rahim**, Dalhousie University

* 104. INTESTINAL EPITHELIAL AUTOPHAGY DEFICIENCY DELAYS RECOVERY FROM ACUTE SMALL INTESTINAL INJURY, Presenting Author: **Elisabeth Gabriele Foerster**, University of Toronto

* 105. MAIT CELLS ENHANCE THE PRO-INFLAMMATORY CD8+ T CELL RESPONSE TO INFLUENZA A VIRUS, Presenting Author: **Christine Wardell**, Western University

* 106. DECIPHERING THE ROLE OF NEUTROPHILS IN FEMALE GENITAL TRACT EPITHELIAL BARRIER REMODELING IN VIVO AND HIV SUSCEPTIBILITY., Presenting Author: **Atta Yazdanpanah**, University of Manitoba

107. IRF-5 PROMOTES CELL DEATH IN IFN- γ + CD4 T CELLS DURING CHRONIC INFECTION, Presenting Author: **Simona Stager**, INRS-Institut Armand-Frappier

108. THE ROLE OF MTOR, TRAF1, AND LOCAL ANTIGEN IN 4-1BB-DEPENDENT ESTABLISHMENT OF TRM IN THE LUNG, Presenting Author: **Nathalia Vieira Batista**, University of Toronto

109. GITR DOWNREGULATES DR6 BY MIR-17-95 IN CD8+ T LYMPHOCYTES, Presenting Author: **Anh Tran**, University of Toronto

* 110. USING DESIGNER BIOMATERIALS TO PROMOTE THE SURVIVAL OF REPARATIVE CARDIAC MACROPHAGES IN ISCHEMIC INJURY, Presenting Author: **Candice Tang**, University Health Network

111. CHRONIC VIRAL INFECTION INDUCES LONG TERM MALFUNCTION OF HEMATOPOIETIC STEM CELLS, Presenting Author: **Krista Heinonen**, INRS-Institut Armand Frappier

112. NOVEL HALF-LIFE EXTENDED ANTI-MIF NANOBODIES PROTECT AGAINST ENDOTOXIC SHOCK, Presenting Author: **Amanda Sparkes**, Sunnybrook Research Institute

* 113. REGULATION OF TYPE I INTERFERON SIGNALING DURING CHRONIC VIRAL INFECTION, Presenting Author: **Jaclyn Law**, University of Toronto

* 114. CD73-A2A ADENOSINE RECEPTOR AXIS PROMOTES INNATE B CELL ANTIBODY RESPONSES TO PNEUMOCOCCAL POLYSACCHARIDE VACCINATION, Presenting Author: **David Allard**, Université de Montréal

* 115. PROLONGED INFECTION AND REDUCED IMMUNE ACTIVATION DURING BRAZILIAN ZIKA VIRUS INFECTION IN WILD-TYPE MICE, Presenting Author: **Ryan Pardy**, McGill University

* 116. IL-18 UPREGULATES NUTRIENT TRANSPORTERS AND FACILITATES AMINO ACID-INDUCED MTORC1 ACTIVATION IN NATURAL KILLER CELLS, Presenting Author: **Saeedah Almutairi**, University of Ottawa

117. TOWARDS A “UNIVERSAL” UNDERSTANDING OF PROTECTION MEDIATED BY BROADLY-NEUTRALIZING ANTIBODIES AGAINST INFLUENZA VIRUS: SPECIFICITIES, ISOTYPES AND EFFECTOR CELLS, Presenting Author: **Matthew Miller**, McMaster University

* 118. EVALUATING THE EFFICACY AND THE IMMUNOGENICITY OF A PROPHYLACTIC CANCER VACCINE, Presenting Author: **Kyle Seaver**, Queen's University

* 119. NEURAMINIDASE INHIBITORS ENHANCE FC-DEPENDENT EFFECTOR FUNCTIONS ELICITED BY HEMAGGLUTININ STALK-BINDING BROADLY-NEUTRALIZING ANTIBODIES, Presenting Author: **Ali Zhang**, McMaster University

120. GSK-3 INHIBITION IS AS EFFECTIVE AS ANTI-PD-1 BLOCKADE AND OVERCOMES ICB RESISTANCE AS COMBINED CANCER THERAPY, Presenting Author: **Janna Krueger**, University of Montreal/Hospital Maisonneuve-Rosemont

121. PROGRESSIVE LEISHMANIA AMAZONENSIS INFECTION IS DRIVEN BY IFN-GAMMA-MEDIATED RECRUITMENT OF INOS-CCR2+ INFLAMMATORY MONOCYTES TO THE SKIN, Presenting Author: **Nathan Peters**, University of Calgary

122. PD-L1 ENHANCES THE EFFICACY OF THE ONCOLYTIC VIRUS VSV Δ 51, Presenting Author: **Jonathan Hodgins**, University of Ottawa

* 123. THE CRITICAL ROLE OF PHOSPHOENOLPYRUVATE CARBOXYKINASE (PEPCK) IN IMMUNOPATHOGENESIS OF CUTANEOUS LEISHMANIASIS, Presenting Author: **Aida Feiz Barazandeh**, University of Manitoba

124. COMBINING DECITABINE WITH ONCOLYTIC VIRUSES TO KILL ACUTE LEUKEMIAS BY OXIDATIVE STRESS, Presenting Author: **Megan Whaley**, University of Guelph

* 125. CELLULAR DYNAMICS OF IMMUNE EVASION DURING LEISHMANIA MAJOR INFECTION, Presenting Author: **Romaniya Zayats**, University of Manitoba

* 126. ELUCIDATING INFECTION OF STIMULATED LEUKOCYTES BY ONCOLYTIC VIRUSES, Presenting Author: **Ashley Ross**, University of Guelph

127. HELMINTH COINFECTION ALTERS THE LOCAL IMMUNE AND METABOLIC ENVIRONMENT TO PROMOTE SALMONELLA COLONIZATION, Presenting Author: **Lisa Reynolds**, University of Victoria

* 128. STRATEGIES TO ENHANCE THE THERAPEUTIC POTENTIAL OF ONCOLYTIC NEWCASTLE DISEASE VIRUS, Presenting Author: **Thomas McAusland**, University of Guelph

* 129. SEMAPHORIN-3E DEFICIENCY IMPROVES RESISTANCE TO LEISHMANIA MAJOR INFECTION IN MICE BY ENHANCING CD4+ TH1 CELL RESPONSES, Presenting Author: **Nnamdi Ikeogu**, University of Manitoba

* 130. USING INTRAVITAL MICROSCOPY TO ELUCIDATE THE ROLE OF INFECTED PERICYTES IN ONCOLYTIC VIRAL THERAPY, Presenting Author: **Madison Turk**, University of Calgary

* 131. CRYPTIC BACTERIAL SUBPOPULATIONS RETAIN THEIR VIRULENCE DURING CHRONIC INFECTIONS, Presenting Author: **David Cai**, University of Ottawa

* 132. TARGETING CD5 AND FAS RECEPTOR ON CD8+ T CELLS TO IMPROVE ANTI-TUMOUR IMMUNITY, Presenting Author: **Faizah Alotaibi**, Western University

133. MYELOID-DERIVED SUPPRESSOR CELLS MAINTAIN THE BALANCE BETWEEN PROTECTIVE AND INFLAMMATORY RESPONSES IN NEONATAL INFECTIONS, Presenting Author: **Afshin Namdar**, University of Alberta

* 134. A SYSTEMATIC ANALYSIS OF THE FUNCTIONAL UTILITY OF BONE MARROW-DERIVED DENDRITIC CELLS AS A VACCINE: COMPARING SEVERAL COMMON CULTURING PROTOCOLS, Presenting Author: **Rob Mould**, University of Guelph

135. MAGNETIC ENRICHMENT OF TUMOR INFILTRATING T CELLS REDUCES EXPERIMENTAL TIME AND PREVENTS BIASED FUNCTIONAL CHARACTERIZATION, Presenting Author: **Annegret Taubner**, Miltenyi Biotec Inc

* 136. EFFECT OF CYTOMEGALOVIRUS-INDUCED NATURAL KILLER CELLS SUBSET IN ANTIBODY MEDIATED CANCER THERAPY, Presenting Author: **Jun Oh**, University of Ottawa

* 137. USING MASS CYTOMETRY TO PROFILE THERAPEUTIC RESPONSES IN HIGH-RISK B-ALL, Presenting Author: **Alicia Kilfoy**, University of Toronto

* 138. EXPANSION CONVERTS IMMUNOSUPPRESSED OVARIAN CANCER PATIENT NK CELLS TO A NOVEL CD56BRIGHT/BRIGHTCD16+ CYTOTOXIC SUBSET THAT REDUCES ESTABLISHED AUTOLOGOUS TUMOUR, Presenting Author: **Sophie Poznanski**, McMaster University

* 139. HYPERSPECTRAL CELL SOCIOLOGY FOR INVESTIGATING CELL-CELL INTERACTIONS FROM IHC IMAGES, Presenting Author: **Spencer Martin**, University of British Columbia

* 140. AN ORF VIRUS-INFECTED CELL VACCINE ELICITS LONG-TERM SURVIVAL IN AN OSTEOSARCOMA LUNG METASTASIS MODEL THROUGH NK CELL ACTIVITY, Presenting Author: **Jacob van Vloten**, University of Guelph

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- * 116. IL-18 UPREGULATES NUTRIENT TRANSPORTERS AND FACILITATES AMINO ACID-INDUCED MTORC1 ACTIVATION IN NATURAL KILLER CELLS, Presenting Author: **Saeedah Almutairi**, University of Ottawa

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37. PERSISTENCE OF TH2 CELLS IN ASTHMA: IL-2 PROMOTES GC INSENSITIVITY, Presenting Author: **Tharsan Kanagalingam**, Western University

39. SUPPRESSION OF MICRORNA-21 MODULATES AIRWAY REMODELING IN A CHRONIC ASTHMA MODEL THROUGH TGF- β 1/SMAD SIGNALING, Presenting Author: **Ji Young Kang**, Faculty of Medicine, University of Ottawa

* 41. REGULATING THE ALLERGIC RESPONSE: OVERLAP BETWEEN BIRCH SAP AND BIRCH POLLEN PROTEIN CONTENT, Presenting Author: **Annie Enderle**, University of Alaska Fairbanks

94. PERINATAL PROGRAMMING OF MUCOSAL STROMAL CELL IDENTITY BY THE LYMPHOTOXIN PATHWAY REGULATES ADULT IMMUNE RESPONSES, Presenting Author: **Conglei Li**, University of Toronto

* 96. IGA IMMUNE COMPLEXES STIMULATE NETOSIS DURING VIRAL INFECTION AND AUTOIMMUNITY, Presenting Author: **Hannah Stacey**, McMaster University

* 98. SALIVARY IMMUNOGLOBULIN-A INDIVIDUAL RESPONSE PATTERNS TO COLD PRESSOR TEST, Presenting Author: **Ghazal Mohammadi**, Concordia University

* 100. NKT CELL-DEFICIENT MICE HARBOR AN ALTERED MICROBIOTA THAT FUELS INTESTINAL INFLAMMATION DURING CHEMICALLY INDUCED COLITIS, Presenting Author: **Qiaochu Lin**, University of Toronto

* 102. CHROMOFUNGIN REGULATES COLITIS AND DENDRITIC CELL-RELATED MARKERS, Presenting Author: **Kunal Kapoor**, University of Manitoba

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* 106. DECIPHERING THE ROLE OF NEUTROPHILS IN FEMALE GENITAL TRACT EPITHELIAL BARRIER REMODELING IN VIVO AND HIV SUSCEPTIBILITY, Presenting Author: **Atta Yazdanpanah**, University of Manitoba

108. THE ROLE OF MTOR, TRAF1, AND LOCAL ANTIGEN IN 4-1BB-DEPENDENT ESTABLISHMENT OF TRM IN THE LUNG, Presenting Author: **Nathalia Vieira Batista**, University of Toronto

LATE ABSTRACTS

RETINOIC ACID AND LYMPHOTOXIN-DERIVED SIGNALS COLLABORATE IN THE MAINTENANCE AND FUNCTION OF A SUBSET OF SPLENIC DENDRITIC CELLS, Presenting Author: **Albert Nguyen**, University of Toronto

LEUPAXIN IS RECRUITED TO THE IMMUNOLOGICAL SYNAPSE AND REGULATES MICROTUBULE ORGANIZING CENTER (MTOC) REORIENTATION IN CYTOTOXIC T LYMPHOCYTES (CTL), Presenting Author: **Shugang Yao**, University of Alberta

CHARACTERIZATION OF THE IMPLICATION OF THE *IDD2* LOCUS IN TYPE 1 DIABETES DEVELOPMENT, Presenting Author: **Félix Lombard-Vadnais**, McGill University

ROLE OF MYSM1 IN GROUP 2 INNATE LYMPHOID CELL BIOLOGY, Presenting Author: **Claudia Duerr**, Institute of Microbiology – Charité Berlin