18th SNIP Scientific Conference

Hawaii Prince Hotel Waikiki, HI
April 24-28, 2012

SNIP Administrative Meetings

Tuesday, April 24, 2012

1:00 PM	Opening of Conference Office (*Boardroom*)
3:00 – 4:30 PM	SNIP Executive Committee Meeting (*President's Suite*)
5:00 – 6:30 PM	SNIP Meetings Committee Meeting (*Boardroom*)
7:00 – 9:30 PM	SNIP Council Dinner

Wednesday, April 25, 2012

(All Committee and Council meetings held in the "*Boardroom*")

8:00 – 8:30 AM	Society Awards Committee Meeting
8:30 – 9:15 AM	Young Investigator Committee Meeting
9:15 – 10:00 AM	Communications Committee Meeting
10:00 – 10:45 AM	Membership Committee Meeting
10:45 – 11:30 AM	Finance and Audit Committee Meeting
11:30 – 12:00 PM	Elections and Nominating Committee Meeting
12:00 – 1:00 PM	Lunch – on your own
1:00 – 3:00 PM	Council Meeting and Committee Reports

Scientific Sessions

*All main sessions held in the **Mauna Kea Ballroom** unless otherwise stated*

Wednesday, April 25, 2012

3:00 PM **Registration Opens** (*Mauna Kea Foyer and Boardroom*)

5:00 – 8:00 PM **POSTER SESSION I – Young Investigator Session** (*Mauna Kea Foyer*)

*Please have **ALL** posters mounted on poster boards before 5:00 PM.*

*"**A**" Posters (1A, 2A, etc.) to be presented from **5–6 PM***

*"**B**" Posters (1B, 2B, etc.) to be presented from **6–7 PM***

*"**C**" Posters (1C, 2C, etc.) to be presented from **7–8 PM***

Please remove all posters after the session

5:30 – 7:30 PM **Opening Reception during Poster Session I** (*Mauna Kea Foyer*)

Please come and enjoy some appetizers, refreshments, discussion and networking while attending the Young Investigator Poster Session!

Poster Titles listed by assigned Poster Board Numbers
(see *Journal of Neuroimmune Pharmacology* for complete abstracts)

1A. **THE INTERACTIVE ROLE OF HISTONE DEACETYLASES AND CANNABINOID GENES IN ALCOHOL ABUSERS.** Agudelo M[1], Yndart A[1], Morrison M[1], Napuri J[1], Khatavkar P[1], Nair MPN[1]; [1]Department of Immunology, Institute of Neuro-Immune Pharmacology, Herbert Wertheim College of Medicine, Florida International University, Miami, FL 33199.

1B. **ROLE OF CYP2A6 IN NICOTINE METABOLISM MEDIATED OXIDATIVE STRESS AND HIV-1 REPLICATION.** Ande A[1], Jin M[1], McArthur C[2], Kumar A[1], Kumar S[1]; [1]Division of Pharmacology & Toxicology, University of Missouri-Kansas City School of Pharmacy, Kansas City, MO 64108; [2]Department of Oral Biology, University of Missouri-Kansas City School of Dentistry, Kansas City, MO 64108.

1C. **L-DOPA INCREASES TYROSINE HYDROXYLASE EXPRESSION ON GABAERGIC NEURONS FOLLOWING 1-METHYL-4-PHENYL-1,2,3,6-TETRAHYDROPYRIDINE-INTOXICATION.** Anderson KM[1], Kuenstling MV[1], Szlachetka AM[1], Hutter-Saunders JLA[1], Mosley RL[1]; [1]Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198.

2A. **TIMP-1 ATTENUATES STAUROSPORINE- AND HIV-1-INDUCED APOPTOSIS IN HUMAN NEURONS THROUGH MODULATION OF BCL-2 FAMILY AND MITOCHONDRIAL MEMBRANE PERMEABILITY.** Ashutosh F[1], Chao C[1], Tang L[1], Borgmann K[1], Ghorpade A[1]; [1]Department of Cell Biology and Anatomy, University of North Texas Health Science Center, Fort Worth, TX 76107.

2B. **DIFFERENTIAL EFFECTS OF HIV-1B AND HIV-1C INFECTION ON SYNAPTIC PLASTICITY GENES: IMPLICATION IN HIV-ASSOCIATED NEUROCOGNITIVE DISORDERS.** Atluri, VSR[1], Pilakka-Kanthikeel S[1], Nair MPN[1]; [1]Department of Immunology, Institute of Neuro-Immune Pharmacology, Herbert Wertheim College of Medicine, Florida International University, Miami, FL 33199.

2C. **ETHANOL INCREASES THE SURFACE EXPRESSION OF AMPA RECEPTORS BY MECHANISMS THAT INVOLVE ALTERATIONS IN THE BIOPHYSICAL PROPERTIES OF**

NEURONAL MEMBRANES. Bae M[1], Tovar-Y-Romo LB[1], Bandaru VVR[1], Haughey NJ[1]; [1]Department of Neurology, Johns Hopkins Medical Institutions, Baltimore, MD 21287.

3A. PDGF-BB INDUCTION OF MCP-1: IMPLICATIONS FOR HAND. Bethel-Brown C[1], Yao H[1], Yang L[1], Buch S[1]; [1]Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198.

3B. CATECHOLAMINE PRODUCTION BY VAGINAL EPITHELIAL CELLS: A NON-NEURONAL IMMUNOMODULATORY MECHANISM? Brosnahan AJ[1], Jones BJ[1], Vulchanova-Hart L[1], Brown DR[1]; [1]Department of Veterinary and Biomedical Sciences, College of Veterinary Medicine, University of Minnesota, Saint Paul, MN 55108.

3C. STABLE EXPRESSION OF ANTI-HIV TAT SINGLE CHAIN VARIABLE FRAGMENT INTRABODY IN HUMAN NEURONAL CELLS AS A POTENTIAL THERAPY FOR NEUROAIDS. Byron MM[1], Lu Y[1]; [1]Office of Public Health Sciences, University of Hawaii at Manoa, Honolulu, HI 96822.

4A. LIPOPOLYSACCHARIDE ALTERS THE INTRACELLULAR CONCENTRATION OF SAQUINAVIR IN MACROPHAGES THROUGH ALTERED EXPRESSION LEVELS OF MRP-1 AND MDR1. Cao L[1], Silverstein PS[1], Earla R[1], Kumar A[1]; [1]Division of Pharmacology and Toxicology, School of Pharmacy, University of Missouri-Kansas City, Kansas City, MO 64108.

4B. BUPRENORPHINE DECREASE THE INFLAMMATORY RESPONSE OF MONOCYTES IN THE CONTEXT OF NEUROAIDS. Carvallo L[1], Lopez L[1], Che FY[1], Lim J[1], Eugenin E[1], Nieves E[2], Madrid-Aliste C[3], Fiser A[3], Weiss L[1], Angeletti RH[2], Berman JW[1]; [1]Department of Pathology, Albert Einstein College of Medicine, Bronx, NY 10461; [2]Department of Developmental and Molecular Biology, Albert Einstein College of Medicine, Bronx, NY 10461; [3]Department of Systems and Computational Biology & Department of Biochemistry, Albert Einstein College of Medicine, Bronx, NY 10461.

4C. INTRACELLULAR CB2 RECEPTOR AND RECEPTOR TRAFFICKING IN HUMAN IMMUNE CELLS. Castaneda JT[1], Kiertscher SM[2], Harui A[2], Roth MD[2]; [1]Molecular Toxicology, University of California Los Angeles, Los Angeles, CA 90095; [2]Pulmonary & Critical Care Medicine, David Geffen School of Medicine at UCLA, Los Angeles, CA 90095.

5A. EXERCISE ALTERS THE ABUNDANCE AND COMPOSITION OF GUT MICROFLORA AND ATTENUATES PCB-INDUCED CHANGES IN GUT MICROBIOME. Choi JJ[1], Toborek M[1]; [1]Department of Biochemistry and Molecular Biology, University of Miami, Miami, FL 33136.

5B. TRANSFORMING GROWTH FACTOR β-1 BLOCKER RESCUES HIV-1 NEF MEDIATED SPATIAL LEARNING IMPAIRMENT IN SPRAGUE DAWLEY RATS. Chompre G[1], Loucil R[1], Rivera-Amil V[3], Porter JT[2], Noel Jr R[1]; [1]Biochemistry Department, Ponce School of Medicine and Health Sciences, Ponce, 00732; [2]Pharmacology Department, Ponce School of Medicine and Health Sciences, Ponce, 00732; [3]Microbiology Department, Ponce School of Medicine and Health Sciences, Ponce, 00732.

5C. ASTROCYTE TRACE AMINE ASSOCIATED RECEPTOR-1-INDUCED CAMP REGULATES EXCITOTOXICITY: A MECHANISTIC COMMONALITY OF METH AND HIV-1-INDUCED NEUROTOXICITY. Cisneros I[1], Borgmann K[1], Ghorpade A[1]; [1]Cell Biology and Anatomy, University of North Texas Health Science Center, Fort Worth, TX 76107.

6A. HIV X4 AND X4R5 VIRUSES EXHIBIT DECREASED TOTAL ANTI-OXIDANT CAPACITY IN A PUERTO RICAN COHORT OF HIV-INFECTED WOMEN. Colon K[1], Zenon F[1], Delgado G[3], Rivera-Amill V[4], Noel R[4], Wojna V[2], Melendez LM[1]. [1]Departments of Microbiology and [2]Neurology, University of Puerto Rico Medical Sciences, San Juan, 00936; [3]Department of Biology, University of Puerto Rico Rio Piedras, San Juan, 00936; [4]Department of Microbiology, Ponce School of Medicine, Ponce, 00730.

6B. NICOTINE SUPPRESSES TLR3-MEDIATED INFLAMMATION THROUGH A CALCIUM SIGNALING MECHANISM. Cui WY[1], Chang SL[2], Polanowska-Grabowska R[3], Saucerman JJ[3], Li MD[1]; [1]Department of Psychiatry and Neurobehavioral Sciences, University of Virginia, Charlottesville, VA 22911; [2]Institute of NeuroImmune Pharmacology and Department of Biology, Seton Hall University, South Orange, NJ 07079; [3]Department of Biomedical Engineering, University of Virginia, Charlottesville, VA 22903.

6C. EFFICACY AND SAFETY TESTS OF LONG-ACTING NANOFORMULATED ANTI-RETROVIRAL DRUGS IN HIV-1 INFECTED HUMANIZED MICE. Dash PK[1], Gorantla S[1], Roy U[1], Knibbe J[1], Balkundi S[1], McMillan J[1], Gelbard HA[2], Poluektova LY[1], Gendelman HE[1]; [1]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198; [2]Center for Neural Development and Disease, University of Rochester School of Medicine and Dentistry, New York, NY 14642.

7A. EXCESS SOLUBLE CD40L CONTRIBUTES TO BLOOD BRAIN BARRIER PERMEABILITY IN A MOUSE MODEL OF HIV-ASSOCIATED NEUROCOGNITIVE DISORDER (HAND). Davidson DC[1], Hirschman MP[1], Sun A[1], Kasischke KA[1], Schifitto G[2], Maggirwar SB[1]; [1]Department of Microbiology and Immunology, University of Rochester School of Medicine and Dentistry, Rochester, NY 14642; [2]Department of Neurology, University of Rochester School of Medicine and Dentistry, Rochester, NY 14642.

7B. THE ANTI-INFLAMMATORY α7 NICOTINIC ACETYLCHOLINE RECEPTOR IS UPREGULATED IN IMMUNE CELLS FROM HIV-INFECTED SUBJECTS: POTENTIAL IMPLICATIONS TO THE TREATMENT OF HIV-RELATED CHRONIC INFLAMMATION. Delgado-Velez M[1], Baez-Pagan C[1], Gerena-Lopez Y[6], Quesada O[2], Santiago-Perez L[1], Wojna V[5], Melendez L[4], Silva W[3], Lasalde-Dominicci J[1]; [1]Department of Biology, University of Puerto Rico, Río Piedras Campus, San Juan, PR 00931; [2]Department of Physical Sciences, University of Puerto Rico, Río Piedras Campus, San Juan, 00931; [3]Department of Physiology, University of Puerto Rico, Medical Sciences Campus, San Juan, 00936; [4]Department of Microbiology and Medical Zoology, University of Puerto Rico, Medical Sciences Campus, San Juan, 00936; [5]Internal Medicine, Neurology Division, University of Puerto Rico, Medical Sciences Campus, San Juan, 00936; [6]School of Pharmaceutical Sciences, School of Pharmacy, Medical Sciences Campus, San Juan, 00936.

7C. CANNABINOID MODULATES HIV TAT-ENGENDERED PROTEOME PROFILE OF MICROGLIAL-LIKE CELLS. Ferreira GA[1], Jamerson M[1], Cabral GA[1]; [1]Department of Microbiology and Immunology, Virginia Commonwealth University/School of Medicine, Richmond, VA 23298-0678.

8A. C/EBPβ REGULATES MULTIPLE IL-1β-INDUCED HUMAN ASTROCYTE INFLAMMATORY GENES VIA A P38 DEPENDENT PATHWAY. Fields JA[1], Ghorpade A[1]; [1]Cell Biology and Anatomy, University of North Texas Health Science Center, Fort Worth, TX 76107.

8B. MORPHINE EXACERBATED RESPONSE TO HIV-1 TAT-DEPENDENT SYNAPTODENDRITIC INJURY IS MEDIATED BY [CA2+]I STORES AND ATP DEPLETION. Fitting S[1], Zou S[2], Knapp PE[2], Hauser KF[1]; [1]Department of Pharmacology & Toxicology, Virginia Commonwealth University, Richmond, VA 23298; [2]Department of Anatomy & Neurobiology, Virginia Commonwealth University, Richmond, VA 23298.

8C. HIV-1 VIRAL PROTEIN R (VPR) MEDIATED INDUCTION OF PRO-INFLAMMATORY CYTOKINES IL-6, IL -8 AND RANTES IN THE ASTROCYTES VIA P38 MAPK AND NF-κB PATHWAY. Gangwani MR[1], Kumar A[1]; [1]Department of Pharmacology and Toxicology, University of Missouri-Kansas City, Kansas City, MO 64108.

9A. ALCOHOL MODULATES P2X RECEPTORS IN EMBYRONIC STEM CELL DERIVED MICROGLIA: POTENTIAL ROLE IN MICROGLIA IMMUNE REGULATION. Gofman L[1], Cenna J[1], Potula R[1]; [1]Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140.

9B. ALTERED BRAIN MICROSTRUCTURE IS ASSOCIATED WITH HIGHER CORTISOL LEVELS IN CHRONIC MARIJUANA USERS. Gonzales RMK[1], King GR[1], Sadino J[1], Ernst T[1], Chang L[1]; [1]Department of Medicine, John A. Burns School of Medicine, University of Hawaii, Honolulu, HI 96813.

9C. METHAMPHETAMINE INDUCES TAAR1 RECEPTOR EXPRESSION IN NAÏVE T LYMPHOCYTES: ROLE IN IMMUNOMODULATION. Haldar B[1], Cenna J[1], Fan S[1], Potula R[1]; [1]Departments of Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140.

10A. MECHANISMS BY WHICH A CB2-SELECTIVE CANNABINOID INHIBITS T-CELL FUNCTION. Hartzell RR[2], Meissler JJ[1], Adler MW[1], Eisenstein TK[1]; [1]Center for Substance Abuse Research,

Temple University School of Medicine, Philadelphia, PA 19140; [2]Department of Microbiology and Immunology, Temple University School of Medicine, Philadelphia, PA 19140.

10B. HIV TAT MEDIATES DOWN REGULATION OF β-CATENIN SIGNALING IN ASTROCYTES THROUGH ITS INTACT CYSTEINE-RICH REGION AND LOSS OF β-CATENIN LEADS TO SIGNIFICANT IMPAIRMENT OF EXCITATORY AMINO ACID TRANSPORTER 2. Henderson LJ[1], Narasipura SD[1], Min S[1], Al-Harthi L[1]; [1]Department of Immunology and Microbiology, Rush University Medical Center, Chicago, IL 60612.

10C. ALTERED RELATIONSHIP BETWEEN BRAIN GLUTAMATE/GLUTAMINE LEVEL AND BLOOD-OXYGENATION LEVEL DEPENDENT (BOLD) RESPONSE IN HIV-INFECTED INDIVIDUALS. Holt JL[1], Ernst T[1], Jiang CS[1], Chang L[1]; [1]Department of Medicine, John A. Burns School of Medicine, University of Hawaii at Manoa, Honolulu, HI 96813.

11A. MORPHINE-INDUCED CONDITIONED PLACE PREFERENCE AND REINSTATEMENT AFTER EXTINCTION IN HIV-1 TRANSGENIC RATS. Homji NF[1], Vigorito MV[1], Liu CL[1], Chang SL[1]; [1]Institute of NeuroImmune Pharmacology, Seton Hall University, South Orange, NJ 07079; [2]Department of Biological Science, Seton Hall University, South Orange, NJ 07079.

11B. CD40 LIGAND INDUCES BRAIN PERICYTE CELL DEATH: IMPLICATIONS FOR HIV-ASSOCIATED NEUROCOGNITIVE DISORDERS (HAND). Jackson JW[1], Davidson DC[1], Maggirwar SB[1]; [1]Department of Microbiology and Immunology, University of Rochester Medical Center, Rochester, NY 14642.

11C. CYP2E1-MEDIATED ALCOHOL METABOLISM INDUCES EXPRESSIONS OF CYP2A6 AND CYP2E1 THROUGH OXIDATIVE STRESS-INDUCED PKC SIGNALING CASCADES IN MONOCYTES AND ASTROCYTES. Jin M[1], Kumar A[1], Kumar S[1]; [1]Division of Pharmacology and Toxicology, School of Pharmacy, University of Missouri-Kansas City, Kansas City, MO 64108.

12A. PSYCHOLOGICAL DISTRESS AND DEPRESSED MOOD IN HIV PATIENTS AND METHAMPHETAMINE USERS. Katayama N[1], Munsaka SM[1], Jiang C[1], Nakama H[1], Chang L[1]; [1]Department of Medicine, MRI Research Program, John A. Burns School of Medicine, University of Hawaii at Manoa, Honolulu, HI 96822.

12B. METHAMPHETAMINE AND HAART AFFECT NEUROTOXICITY OF HIV GP120 IN A CONCENTRATION- AND CONTEXT-DEPENDENT FASHION. Kaul M[1], Sanchez AB[1], Kinomoto M[1], Maung R[1], Catalan I[1], Cox C[1], Sejbuk NE[1], Hoefer M[1]; [1]Infectious and Inflammatory Disease Center, Sanford-Burnham Medical Research Institute, La Jolla, CA 92037.

12C. EFFECTS OF ANTIRETROVIRAL DRUGS ON HUMAN MACROPHAGES ACTIVATION. King J[1], Akay C[1], Jordan-Sciutto K[1]; [1]Department of Pathology School of Dental Medicine, University of Pennsylvania, Philadelphia, PA 19104.

13A. MOTOR SLOWING IN HIV-INFECTED METHAMPHETAMINE USERS. Kraft-Terry SD[1], Nakama H[1], Jiang C[1], Chang L[1]; [1]Division of Neurology, Department of Medicine, John A. Burns School of Medicine, University of Hawaii at Manoa, Honolulu, HI 96813.

13B. CYCLOOXYGENASE (COX) ENZYMES AND PROSTAGLANDIN E2 (PGE2) MODULATE WEST NILE VIRUS (WNV)-INDUCED NEUROINFLAMMATION, AND REGULATE THE PRODUCTION OF NEUROINFLAMMATORY MOLECULES INCLUDING MATRIX METALLOPROTEINASES (MMPS). Kumar M[1], Verma S[1], Nerurkar VR[1]; [1]Department of Tropical Medicine, Medical Microbiology and Pharmacology, John A. Burns School of Medicine/University of Hawaii, Honolulu, HI 96813.

13C. METHAMPHETAMINE REDUCES GLUTATHIONE PEROXIDASE LEVELS. Barayuga SM[1], Raman AV[1], Rueli RH[1], Andres MA[2], Panee J[1], Berry MJ[1], Bellinger FP[1]; [1]Cell and Molecular Biology, John A. Burns School of Medicine, University of Hawaii, Honolulu, HI 96813; [2]Bekesy Laboratory of Neurobiology, Pacific Biosciences Research Center, University of Hawaii, Honolulu, HI 96822.

14A. HUMAN BRAIN ENDOTHELIAL CELLS SUPPRESS HIV REPLICATION IN MACROPHAGES. Li J[1], Wang Y[1], Ye L[1], Wang X[1], Gofman L[1], Persidsky Y[1], Ho W-Z[1]; [1]Department of Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140.

14B. EFFECT OF METHAMPHETAMINE ON LPS-INDUCED PRO-INFLAMMATORY CYTOKINE PRODUCTION IS MEDIATED BY MAPK AND NF-κB PATHWAYS. Liu X[1], Silverstein PS[1], Kumar A[1]; [1]Division of Pharmacology and Toxicology, University of Missouri-Kansas City, Kansas City, MO 64108.

14C. HIV-1 NEF EXPRESSION IN RAT HIPPOCAMPUS INDUCES SYSTEMIC INFLAMMATION AND CHANGES IN THE GASTROINTESTINAL TRACT. Loucil R[1], Chompré G[1], Cruz M[2], Hernández S[2], Ramírez A[2], Appleyard CB[2], Noel RJ[1]; [1]Department of Biochemistry, Ponce School of Medicine and Health Sciences, Ponce, 00732; [2]Department of Physiology and Pharmacology, Ponce School of Medicine and Health Sciences, Ponce, 00732.

15A. CHRONIC MORPHINE INHIBITS WOUND HEALING BY MODULATING TLR4 SIGNALING. Ma J[1], Roy S[2]; [1]Department of Surgery, University of Minnesota, Minneapolis, MN 55455; [2]Departments of Surgery and Pharmacology, University of Minnesota, Minneapolis, MN 55455.

15B. MODULATION OF HUMAN NEURAL PRECURSOR CELL PROLIFERATION AND DIFFERENTIATION BY HIV-1 TRANSACTIVATING PROTEIN, TAT AND DRUGS OF ABUSE. Malik S[1], Saha R, Seth P[1]; [1]Department of Cellular & Molecular Neuroscience, National Brain Research Centre, Manesar, Gurgaon, 122050, India.

15C. COCAINE ACCENTUATES HIV DISEASE PROGRESSION BY DOWN REGULATING ANTI-HIV MIRNA "MIR-125B" IN CD4+ T CELLS. Mantri C[1], Pandhare J[1], Dash C[1]; [1]Laboratory of Retrovirology and Epigenetics, Center for AIDS Health Disparities Research, Vanderbilt Meharry Center For AIDS Research, Meharry Medical College, Nashville, TN 37221.

16A. PROTEOMIC PROFILING OF MONOCYTE DERIVED MACROPHAGES DURING NANOART TREATMENT. Martinez-Skinner A[1], Veerubhotla R[1], Balkundi S[1], Liu H[1], Xiong H[1], McMillan J[1], Gendelman HE[1]; [1]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68105.

16B. MORPHINE INCREASES INFLAMMATORY ACTIVITY IN THE INTESTINES BY INHIBITING MIR155 AND MIRNA146A. Meng J[1], Yu H[2], Banerjee S[1], Roy S[1]; [1]Department of Pharmacology, University of Minnesota, Minneapolis, MN 55455; [2]Department of Surgery, University of Minnesota, Minneapolis, MN 55455.

16C. ENHANCED COCAINE SENSITIZATION IN ADULT FEMALE HIV-1 TRANSGENIC RATS. Moran LM[1], Booze RM[1], Webb KM[1], Mactutus CF[1]; [1]Department of Psychology, University of South Carolina, Columbia, SC 29208.

17A. MARIJUANA USE MAY INCREASE SUSCEPTIBILITY TO HIV INFECTION AND NEUROINFLAMMATION. Munsaka SM[1], Feger U[1], Nerurkar V[2], Chang L[1]; [1]University of Hawaii, John A. Burns School of Medicine, Department of Medicine, Honolulu, HI 96813; [2]University of Hawaii, John A. Burns School of Medicine, Department of Tropical Medicine, Medical Microbiology and Pharmacology, Honolulu, HI 96813.

17B. MORPHINE SUPPRESSES MIR-155 AND FACILITATES HIV-1 INFECTIVITY IN MONOCYTE DERIVED DENDRITIC CELLS. Napuri J[1], Sudheesh PK[1], Nair MPN[1]; [1]Department of Immunology, Institute of NeuroImmune Pharmacology, Herbert Wertheim College of Medicine, Florida International University, Miami, FL 33199.

17C. CHRONIC MORPHINE TREATMENT DIFFERENTIALLY MODULATES MACROPHAGE PHAGOCYTIC AND BACTERICIDAL MECHANISMS FOLLOWING TLR2 AND TLR4 ACTIVATION. Ninkovic J[1], Roy S[1]; [1]Department of Surgery, Division of Basic and Translational Research, School of Medicine, University of Minnesota, Minneapolis, MN 55455.

18A. ALTERED ANTIOXIDANT AND OXIDATIVE STRESS STATUS IN RAT THALAMUS CAUSED BY HIV-1 TRANSGENESIS AND METHAMPHETAMINE TREATMENT. Pang X[1], Panee J[1], Liu X[2], Berry MJ[1], Chang SL[2], Chang L[3]; [1]Department of Cell and Molecular Biology, John A. Burns School of Medicine, University of Hawaii at Manoa, 651 Ilalo Street BSB 222, Honolulu HI 96813; [2]Institute of NeuroImmune Pharmacology, Seton Hall University, South Orange, NJ 07079; [3]Department of Medicine, John A. Burns School of Medicine, The Queen's Medical Center, Honolulu HI 96813.

18B. SINGLE NUCLEOTIDE POLYMORPHISMS WITHIN THE HIV-1 LTR CORRELATE WITH USE OF DRUGS OF ABUSE IN THE DREXELMED HIV/AIDS GENETIC ANALYSIS COHORT.

Parikh N[1], Williams J[1], Wojno A[1], Pirrone V[1], Nonnemacher MR[1], Aiamkitsumrit B[1], Passic S[1], Blakey B[1], Ku J[4], Moldover B[2], Feng R[3], Servance L[4], Downie D[4], Lewis S[4], Jacobson JM[4], Wigdahl B[1]; [1]Department of Microbiology and Immunology and Institute for Molecular Medicine and Infectious Disease, Drexel University College of Medicine, Philadelphia, PA 19102; [2]Private Company , B-Tech Consulting, Ltd, Philadelphia, PA 19130; [3]Department of Biostatistics and Epidemiology, Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania School of Medicine, Philadelphia, PA 19104; [4]Department of Medicine, Division of Infectious Diseases and HIV Medicine, Drexel University College of Medicine, Philadelphia, PA 19102.

18C. DIFFERENTIAL EFFECTS OF HIV-1 CLADE B AND CLADE C ON THE EXPRESSION OF SILENT INFORMATION REGULATOR2 HOMOLG-1 (SIRT1). Pichili VB[1], Nair MPN[1]; [1]Department of Immunology, Institute of NeuroImmune Pharmacology, Herbert Wertheim College of Medicine, Florida International University, Miami, FL 33199.

19A. COCAINE DOWN REGULATES MICRORNA-146A WITH A RECIPROCAL UPREGULATION OF CXCR-4: IMPLICATIONS IN HIV IMMUNOPATHOGENESIS. Pilakka-Kanthikeel S[1], Napuri J[1], Nair MPN[1]; [1]Department of Immunology, Institute of NeuroImmune Pharmacology, Herbert Wertheim College of Medicine, Florida International University, Miami, FL 33172.

19B. INVOLVEMENT OF GLIAL CCR5 IN MORPHINE AND TAT-MEDIATED NEURODEGENERATION. Podhaizer EM[1], Zhang Y[2], Knapp PE[3], Hauser KF[1]; [1]Pharmacology & Toxicology, Virginia Commonwealth University, Richmond, VA 23298; [2]Medicinal Chemistry, Virginia Commonwealth University, Richmond, VA 23298; [3]Anatomy & Neurobiology, Virginia Commonwealth University, Richmond, VA 23298.

19C. N-FORMYL-METHIONINE-LEUCINE-PHENYLALANINE (FMLP) COATED NANOART. Puligujja P[1], Meyer J[1], McMillan J[1], Gendelman HE[1], Liu X[1]; [1]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68128.

20A. CANNABINOIDS INHIBIT HIV TAT-ENHANCED ADHESION OF HUMAN U937 MACROPHAGE-LIKE CELLS TO THE EXTRACELLULAR MATRIX. Raborn ES[1], Jamerson M[1], Marciano-Cabral F[1], Cabral GA[1]; [1]Department of Microbiology and Immunology, School of Medicine/Virginia Commonwealth University, Richmond, VA 23298-0678.

20B. DETERMINING THE ROLE OF A UNIQUE POPULATION OF ACTIVATED CD8+ T CELLS IN THE BRAIN AFTER HIV INFECTION. Richards MH[1], Poluektova L[2], Al-Harthi L[1]; [1]Department of Immunology and Microbiology, Rush University Medical Center, Chicago, IL 60612; [2]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198.

20C. CYSTATIN B INHIBITS THE IFN-β RESPONSE BY PREVENTING STAT-1 TRANSLOCATION AND DECREASING LEVELS OF STAT-1PY: IMPLICATION OF HIV REPLICATION IN MACROPHAGES. Rivera-Rivera L[1], Colón K[1], Meléndez LM[1]; [1]Department of Microbiology and NeuroAIDS Program, University of Puerto Rico-Medical Sciences Campus, San Juan, 00935.

21A. DEPRESSION MANAGEMENT RESULTS IN INCREASED TREATMENT ADHERENCE AND IMPROVED IMMUNE SYSTEM FUNCTION IN HIV-1 INFECTED PUERTO RICANS. Rivera-Rivera Y[1], Toro V[1], Cappas-Ortiz N[1], Rivera-Amill V[1]; [1]Microbiology Department, Ponce School of Medicine & Health Sciences, Ponce, 00717.

21B. THE ANTIRETROVIRAL DRUGS EFAVIRENZ AND LOPINAVIR ALTER MITOCHONDRIAL MEMBRANE POTENTIAL AND CAUSE NEURONAL DAMAGE IN PRIMARY NEURONS IN VITRO. Rivera-Vergara RM[1], Akay C[1], Jordan-Sciutto KL[1]; [1]Department of Pathology, School of Dental Medicine, University of Pennsylvania, Philadelphia, PA 19104.

21C. IN VIVO WEST NILE VIRUS INFECTION MODULATES THE MARKERS OF BLOOD-BRAIN BARRIER INTEGRITY. Roe K[1], Kumar M[1], Lum S[1], Orillo B[1], Nerurkar VR[1], Verma S[1]; [1]Department of Tropical Medicine, Medical Microbiology and Pharmacology, University of Hawaii at Manoa, Honolulu, HI 96813.

22A. GLYCOGEN SYNTHASE KINASE 3β (GSK3β) INHIBITION PREVENTS MONOCYTE (MO) MIGRATION ACROSS BLOOD BRAIN BARRIER (BBB) VIA SUPPRESSION OF RAC1-GTPASE AND FUNCTIONAL ACTIVATION OF β-INTEGRIN. Rom S[1], Reichenbach NL[1], Fan

S[1], Dykstra H[1], Ramirez S[1], Persidsky Y[1]; [1]Department of Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140.

22B. IMAGING DENDRITIC CELL TRAFFICKING INTO THE CENTRAL NERVOUS SYSTEM DURING STEADY-STATE AND UNDER NEUROINFLAMMATION. Sagar D[1], Lamontagne A[1], Foss C[2], Khan Z[1], Pomper M[2], Jain P[1]; [1]Department of Microbiology and Immunology, PA Biotech Center, Drexel University College of Medicine, Doylestown, PA 18902; [2]Department of Radiology, Johns Hopkins University, Baltimore, MD 21231.

22C. AGE AND ETHANOL CONCENTRATION-DEPENDENT EFFECTS OF ACUTE BINGE DRINKING IN THE HIV-1 TRANSGENIC RAT. Sarkar S[1], Mao X[1], Liu C[1], Chang SL[1]; [1]Institute of NeuroImmune Pharmacology, Seton Hall University, South Orange, NJ 07079.

23A. MODULATION OF EXPERIMENTAL HERPES ENCEPHALITIS-ASSOCIATED NEUROTOXICITY THROUGH SULFORAPHANE TREATMENT. Schachtele SJ[1], Hu S[1], Lokensgard JR[1]; [1]Center for Infectious Disease & Microbiology Translational Research, University of Minnesota, Minneapolis, MN 55455.

23B. SIGNALING MECHANISMS INVOLVED IN METHAMPHETAMINE-MEDIATED INCREASE IN THE EXPRESSIONS OF IL-6/IL-8 IN ASTROCYTES. Shah A[1], Kumar A[1]; [1]Pharmacology & Toxicology, University of Missouri-Kansas City, Kansas City, MO 64108.

23C. EVALUATION OF IMMUNOMODULATORY EFFECTS OF MORPHINE IN A MURINE HIV MODEL. Sharma U[1], Banerjee S[1], Volsky DJ[2], Roy S[1]; [1]Department of Surgery, University of Minnesota, Minneapolis, MN 55455; Molecular Virology Division , St. Luke's-Roosevelt Hospital Center, New York, NY 10019.

24A. MORPHINE AND HIV-1 TAT AS COMORBIDITIES ADDITIVELY REDUCE GUT BARRIER FUNCTION. Sindberg G[1], Meng J[2], Molitor T[1], Roy S[3]; [1]Veterinary Population Medicine, College of Veterinary Medicine, University of Minnesota, Saint Paul, MN 55108; [2]Department of Pharmacology/Medical School, University of Minnesota, Minneapolis, MN 55455; [3]Basic and Translational Research Division/Department of Surgery/Medical School, University of Minnesota, Minneapolis, MN 55455.

24B. DETECTION OF CIRCULATING PLATELET-MONOCYTE COMPLEXES IN HUMAN IMMUNODEFICIENCY VIRUS TYPE-1 INFECTED INDIVIDUALS. Singh MV[1], Davidson DC[1], Kiebala M[1], Maggirwar SB[1]; [1]Department of Microbiology and Immunology, University of Rochester Medical Center, Rochester, NY 14642.

24C. FUNCTIONAL PROPERTIES OF AN IN VITRO MODEL OF THE BLOOD-BRAIN BARRIER FOLLOWING CHRONIC MORPHINE EXPOSURE. Strazza M[1], Pirrone V[1], Wigdahl B[1], Nonnemacher MR[1]; [1]Department of Microbiology and Immunology and Institute for Molecular Medicine and Infectious Disease, Drexel University College of Medicine, Philadelphia, PA 19102.

25A. NEUROINFLAMMATION AND DEPRESSIVE SYMPTOMS IN HIV PATIENTS AND METHAMPHETAMINE USERS. Tanizaki N[1], Munsaka S[2], Nerurkar V[2], Jiang C[3], Chang L[3]; [1]Biomedical Science (Clinical Research), John A. Burns School of Medicine, University of Hawaii, Honolulu, HI 96813; [2]Department of Tropical Medicine, Microbiology and Pharmacology, John A. Burns School of Medicine, University of Hawaii, Honolulu, HI 96813; [3]Department of Medicine, John A. Burns School of Medicine, University of Hawaii, Honolulu, HI 96813.

25B. GENERATION OF INDUCED NEURAL PROGENITOR CELLS (INPCS) BY DIRECT REPROGRAMMING AND THEIR POTENTIAL THERAPEUTIC IMPACTS IN HIV-1 ASSOCIATED DEMENTIA (HAD). Tian CH[1], Ambroz RJ[1], Sun LJ[1], Wang YX[1], Ma KM[1], Chen Q[1], Zhu B[1], Zheng JL[1]; [1]Laboratory of Neuroimmunology and Regenerative Therapy, Department of Pharmacology & Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198-5930.

25C. LONGITUDINAL ANALYSIS OF INTRA-HOST HIV-1 ENVELOPE SPECIES DURING THE COURSE OF HAND. Vazquez-Santiago FJ[1], Melendez LM[2], Plaud-Valentin M[2], Noel RJ[1], Wojna V[2], Rivera-Amill V[1]; [1]Microbiology Department, Ponce School of Medicine and Health Sciences, Ponce, 00730; [2]Medical Sciences Campus, University of Puerto Rico, San Juan, 00936.

26A. RIG-I SENSES HIV-1 INFECTION AND MEDIATES TYPE I INTERFERON RESPONSE IN HUMAN MACROPHAGES: RELEVANT TO HIV-1-ASSOCIATED NEUROCOGNITIVE

DISORDERS. Wang M[2], Huang Y[1], Huang J[3], Zheng JL[1]; [1]University of Nebraska Medical Center, Department of Pharmacology and Experimental Neuroscience, Omaha, NE 68198-5930; [2]Shanghai Jiaotong University, School of Medicine, Shanghai, 200025; [3]Chinese Academy of Sciences, Graduate University, Beijing, 100049.

26B. FOXO3A IS INVOLVED IN THE PROPER GENERATION OF INDUCED PLURIPOTENT STEM CELL (IPSC). Wang YX[1], Tian CH[1], Zheng JL[1]; [1]University of Nebraska Medical Center, Department of Pharmacology and Experimental Neuroscience, Omaha, NE 68198-5930.

26C. HUMAN HEPATIC STELLATE CELLS SUPPRESS HEPATITIS C VIRUS REPLICATION IN HUMAN HEPATOCYTES. Wang YZ[1], Ye L[1], Wang X[1], Li JL[1], Song L[1], Ho WZ[1]; [1]Department of Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140.

27A. THE EFFECTS OF DOPAMINE ON LEUKOCYTE TRANSMIGRATION ACROSS THE HUMAN BLOOD BRAIN BARRIER AND ITS ROLE IN THE PATHOGENESIS OF NEUROAIDS. Williams DW[1], Calderon TM[1], Coley JS[1], Gaskill PJ[1], Carvallo L[1], Eugenin EA[1], Berman JW[1]; [1]Pathology, Albert Einstein College of Medicine, Bronx, NY 10461.

27B. SELENOGLYCOPROTEINS ATTENUATE TUMOR CELL ADHESION AND MIGRATION THROUGH HUMAN BRAIN ENDOTHELIUM. Wrobel J[1], Choi JJ[1], Xiao R[2], Kwiatkowski S[2], Power R[2], Toborek M[1]; [1]Department of Biochemistry and Molecular Biology, University of Miami School of Medicine, Miami, FL 33136; [2]Nutrigenomics Research Centre, Alltech, Nicholasville, KY 40356.

27C. CONSTRUCTION AND CHARACTERIZATION OF LENTIVIRAL VECTOR-MEDIATED EXPRESSION OF TNFR AS A POTENTIAL PROTECTIVE MOLECULE IN HUMAN NEURONAL CELLS. Wu C[1], Cao S[1], Maggirwar S[2], Dewhurst S[2], Lu Y[1]; [1]Department of Public Health Sciences, University of Hawaii at Manoa, Honolulu, HI 96822; [2]Department of Microbiology & Immunology, University of Rochester, Rochester, NY 14642.

28A. COCAINE-MEDIATED UPREGULATION OF GLIAL FIBRILLARY ACIDIC PROTEIN: IMPLICATION FOR ASTROCYTE ACTIVATION IN HAND. Yang L[1], Yao H[1], Bethel-Brown C[1], Buch S[1]; [1]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198.

28B. TLR3 ACTIVATION EFFICIENCY BY LOW AND HIGH MOLECULAR WEIGHT POLY I:C. Zhou Y[1], Wang X[1], Li JL[1], Wang YZ[1], Ye L[2], Guo M[2], Song L[1], Ho WZ[1]; [1]Department of Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140; [2]State Key Laboratory of Virology, the Center for Animal Experiment/Animal Biosafety Level III Laboratory, Wuhan University, Wuhan, 430070.

28C. CORTICAL AND WHITE MATTER DEVIATIONS RELATE TO COGNITIVE DEFICITS IN VERY-LOW-BIRTH-WEIGHT (VLBW) YOUNG ADULTS. Skranes J[1], Loehaugen GCC[2], Eikenes L[3], Bjuland KJ[1], Haberg A[4], Brubakk A-M[1]; [1]Department of Laboratory Medicine, Children's and Women's Health, Norwegian University of Science and Technology, 7489 Trondheim; [2]Department of Pediatrics, Sorlandet Hospital, Arendal, Norway; [3]Department of Circulation and Medical Imaging, Norwegian University of Science and Technology, Trondheim, Norway; [4]Department of Neuroscience, Norwegian University of Science and Technology, Trondheim, Norway.

Please remember to take down all posters immediately after the session

Thursday, April 26, 2012

*All main sessions held in the **Mauna Kea Ballroom** unless otherwise stated*

7:00 – 8:00 AM **Continental Breakfast** (*Mauna Kea Ballroom*)

Reminder - Put up Posters for Poster Session II during the lunch break

8:00 – 8:15 AM **INTRODUCTION TO THE MEETING**

Welcome from the Society on NeuroImmune Pharmacology

8:00 – 8:10 AM **Guy A. Cabral, Ph.D.** - **SNIP President**
(Virginia Commonwealth University School of Medicine, Richmond, VA)

8:10 – 8:15 AM **Sulie L. Chang, Ph.D.** - **Chair, SNIP Meetings Committee**
(Seton Hall University, South Orange, NJ)

8:15 – 9:05 AM **PLENARY LECTURE I: Ming D. Li, Ph.D.**
– University of Virginia, Charlottesville, VA

8:15 – 8:20 AM Introduction by **Guy A. Cabral, Ph.D.** – SNIP President

8:20 – 9:05 AM **Lecture:** *"Genetics and Pharmacogenetics of Addiction and Their Implications for Personalized Medicine"*

9:10 – 11:30 AM **SYMPOSIUM I: HIV Latency and HIV Reservoirs in the Post-HAART Era**

Session Co-Chairs: **Albert Avila, Ph.D.** – National Institute on Drug Abuse, Bethesda, MD
Guy A. Cabral, Ph.D. – Virginia Commonwealth University School of Medicine, Richmond, VA

9:10 – 9:15 **Introductory Remark: Albert Avila, Ph.D. –** National Institute on Drug Abuse, Bethesda, MD

9:15 – 9:45 **Symposium Lecture: Jonathan Karn, Ph.D. –** Case Western Reserve University, School of Medicine, Cleveland, OH
"Distinct Epigenetic Control Mechanisms Regulating HIV Silencing in T-Cells and Microglial Cells"

9:50 – 10:10 AM **Coffee Break** (Ballroom Foyer)

10:10 – 10:30 **Lecture 1: Shweta Hakre, Ph.D.** – University of California, San Francisco, CA
"Molecular Characterization and Regulation of HIV Latency at the Epigenetic Level"

10:35 – 10:55 **Lecture 2: David Margolis, M.D.** – University of North Carolina at Chapel Hill, NC
"HIV Latency, Persistence, and Reservoirs: Making Progress Towards an ART-less Future"

11:00 – 11:20 **Lecture 3: Patricia Molina, M.D., Ph.D.** – Louisiana State University, New Orleans, LA
"Systems Approach to Unraveling Mechanisms of Chronic Δ-9-THC Modulation of Simian Immunodeficiency Virus Infection"

11:25 – 11:30 **Conclusions: Guy A. Cabral, Ph.D.** – Virginia Commonwealth University School of Medicine, Richmond, VA

LUNCH ON YOUR OWN

– or –

11:30 – 12:50 PM **Meet the Mentors Luncheon** (*Mauna Kea Ballroom*)
Hosted by the Young Investigator Committee

*For Young Investigators who are presenting their work at the Conference and who have **Confirmed their Reservation** with the Young Investigator Committee*

1:00 – 2:00 PM **SNIP Annual Business Meeting** (*Mauna Kea Ballroom*)

All Society Members are requested to attend and all attendees welcome

2:00 – 4:00 PM **POSTER SESSION II – General Poster Session** (*Ballroom Foyer*)
(see next page for list of poster titles and authors)

*Please have **ALL** posters mounted on poster boards by 2:00 PM.*

Odd numbered posters (G1, G3, etc.) to be presented from 2:00 – 3:00 PM
Even numbered posters (G2, G4, etc.) to be presented from 3:00 – 4:00 PM

2:45 – 3:15 PM **Coffee Break during the Poster Session**

4:00 – 6:35 PM **SYMPOSIUM II**: **Alcohol and NeuroAIDS**

Session Co-Chairs: **Changhai Cui, Ph.D.** – National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD

Yuri Persidsky, Ph.D. – Temple University School of Medicine, Philadelphia, PA

4:00 – 4:10 **Introductory Remarks: Abraham P. Bautista, Ph.D.** – National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD

4:10 – 4:40 **Symposium Lecture: Adolf Pfefferbaum, M.D.** – SRI International, Menlo Park, CA

"Neuroimaging in HIV Infection and Alcoholism Comorbidity"

4:45 – 5:05 **Lecture 1: Jon Levine, M.D., Ph.D.** – University of California, San Francisco, CA

"Alcohol and the Pain of AIDS"

5:10 – 5:30 **Lecture 2: Norman Haughey, Ph.D.** – Johns Hopkins University School of Medicine, Baltimore, MD

"Fluid Movements: Neural Membranes and Receptor Trafficking in Alcohol and HIV"

5:35 – 5:55 **Lecture 3: Maria Jose Miguez, M.D., Ph.D.** – Florida International University School of Integrated Science and Health, Miami, FL

"The Impact of Alcohol Use on Markers of Inflammation, and Cognitive Functioning on Antiretroviral Treated Individuals"

6:00 – 6:20 **Lecture 4: James Haorah, Ph.D.** – University of Nebraska Medical Center, Omaha, NE

"Oxidative Injury and Bio-fuel Imbalance as Unifying Mechanisms for Neurological Disorders in Alcohol and NeuroAIDS"

6:25 – 6:35 **Conclusion: Changhai Cui, Ph.D.** – National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD

Yuri Persidsky, Ph.D. – Temple University School of Medicine, Philadelphia, PA

General Poster Session titles listed by assigned Poster Board Numbers
(see *Journal of Neuroimmune Pharmacology* for complete abstracts)

Please remember to take down all posters immediately after the session

G1. **BRAIN IMMUNOPHILIN IN HIV-ASSOCIATED NEUROCOGNITIVE DISORDERS.** Achim CL[1], Vinters HV[2], Tatro ET[1], Moore DJ[1], Soontornniyomkij B[1], Gospodarev V[1], Gouaux B[1], Masliah E[1], Grant I[1], Soontornniyomkij V[1]; [1]HIV Neurobehavioral Research Program, School of Medicine, University of California San Diego, San Diego, CA 92093; [2]Neuropathology and Neurology, Geffen School of Medicine, University of California Los Angeles, Los Angeles, CA 90095.

G2. **THE ROLE OF EARLY ENDOSOMAL SIGNALING IN HIV-1 INDUCED AMYLOID BETA ACCUMULATION IN BRAIN ENDOTHELIAL CELLS.** Andras IE[1], Toborek M[1]; [1]Biochemistry and Molecular Biology, University of Miami School of Medicine, Miami, FL 33136.

G3. **MOLECULAR MECHANISM OF HIV-1 TAT INDUCED NEURONAL DYSFUNCTION.** Bagashev, A[1], Sawaya, BE[1]; [1]Neurology Department, Temple University, Philadelphia, PA 19140.

G4. **PATHOGENS, TLRS, IL-17 SIGNALING AND THEIR CROSSTALK IN BRONCHIAL MUCOSA.** Banerjee S[1], Ninkovic J[1], Ma J[1], Meng J[2], Roy S[1]; [1]Surgery, University of Minnesota, Minneapolis, MN 55455; [2]Pharmacology, University of Minnesota, Minneapolis, MN 55455.

G5. **REGULATION OF MIR-146A BY IL-1β IN ASTROCYTES.** Banerjee S[1]; Dejos M[1]; Datta PK[1]; [1]Neuroscience/Center for Neurovirology, Temple University, Philadelphia, PA 19140.

G6. **MORPHINE ALTERS GLOMERULAR FILTRATION BARRIER BY COMPROMISING PODOCYTE INTEGRITY.** Lan X[1], Kumar D[1], Malhatra A[1], Singhal PC[1]; [1]The Feinstein Institute for Medical Research, North Shore LIJ Health System, Great Neck, NY 11021.

G7. **PLATELET-DERIVED GROWTH FACTOR RESTORES HIV TAT AND COCAINE-MEDIATED IMPAIRMENT OF NEUROGENESIS: ROLE OF TRPC 1 CHANNELS.** Buch S[1], Yao HH[1]; [1]Pharmacology, University of Nebraska Medical Center, Omaha, NE 689198.

G8. **DOPAMINE INCREASES CXCL12-MEDIATED T CELL TRANSMIGRATION ACROSS THE BLOOD BRAIN BARRIER.** Calderon TM[1], Gaskill PJ[1], Lopez L[1], Eugenin EA[1], Berman JW[2]; [1]Department of Pathology, Albert Einstein College of Medicine, Bronx, NY 10461; [2]Departments of Pathology and Microbiology and Immunology, Albert Einstein College of Medicine, Bronx, NY 10461.

G9. **MINOCYCLINE PROTECTS MICE AGAINST WEST NILE VIRUS (WNV)-ASSOCIATED SEVERE DISEASE.** Chapagain ML[1], O'Connell M[1], Lazaga NB[1], Kumar M[1], Volper EA[1], Verma S[1], Nerurkar VR[1]; [1]Department of Tropical Medicine, Medical Microbiology and Pharmacology, John A. Burns School of Medicine, Honolulu, HI 96817.

G10. **INFECTION OF CHINESE MACAQUES BY A NEUROTROPIC SIVMAC251/CNS WITHOUT AND WITH TETRAHYDROCANNABINOL (THC).** Chen Z[1], Qiang W[2], Cong Z[2], Liu L[1], Qin C[2], Molina P[3]; [1]AIDS Institute of Li Ka Shing Faculty of Medicine, The University of Hong Kong, Hong Kong, China; [2]Institute of Laboratory Animal Science, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China; [3]Department of Physiology, Louisiana State University Health Sciences Center, New Orleans, LA 70119.

G11. **DANGER SIGNAL HMGB1 MEDIATES ETHANOL-INDUCED NEUROINFLAMMATION THROUGH TLR AND RAGE RECEPTORS.** Crews FT[1], Vetreno R[1]; [1]Bowles Center for Alcohol Studies, University of North Carolina, Chapel Hill, NC 27599.

G12. **EPIGENETIC MECHANISMS INVOLVED IN THE INDUCTION OF THE COMPLEMENT C3 GENE IN ASTROCYTIC CELLS IN RESPONSE TO IL-1β.** Datta PK[1]; Rappaport J[1]; [1]Neuroscience, Temple University, Philadelphia, PA 19140.

G13. **ENHANCED PULMONARY VASCULAR REMODELING IN MORPHINE TREATED SIV-INFECTED MACAQUES: IMPLICATION IN HIV-ASSOCIATED PULMONARY ARTERIAL HYPERTENSION.** Dhillon N[1], Cheney P[2], Tawfik O[3], O'Brien-Ladner A[1]; [1]Department of Medicine, Division of Pulmonary and Critical Care Medicine, University of Kanas Medical Center,

Kansas City, KS 66160; [2]Department of Molecular and Integrative Physiology, University of Kanas Medical Center, Kansas City, KS 66160; [3]Department of Pathology, University of Kansas Medical Center, Kansas City, KS 66160.

G14. MORPHINE TREATMENT IN THE CONTEXT OF OPPORTUNISTIC INFECTION INDUCES DIFFERENTIAL IMMUNE CELL TRAFFICKING INTO THE CNS BY MODULATING TLR AND CHEMOKINE RECEPTOR EXPRESSION. Dutta R[1], Yu H[1], Charboneau R[2], Barke R[2], Roy S[1,2]; [1]Department of Surgery, University of Minnesota, Minneapolis, MN 55455; [2]Department of Surgery, Veterans Affairs Medical Center, Minneapolis, MN 55417.

G15. METHAMPHETAMINE ALTERS BLOOD BRAIN BARRIER FUNCTIONS FACILITATING CENTRAL NERVOUS SYSTEM INFECTION. Eugenin EA[1], Nosanchuk JD[2,3], Martinez LR[3,4]; [1]Departments of Pathology, Albert Einstein College of Medicine, Bronx, NY 10461; [2]Department of Medicine (Division of Infectious Diseases), Albert Einstein College of Medicine, Bronx, NY 10461; [3]Department of Microbiology and Immunology, Albert Einstein College of Medicine, Bronx, NY 10461; [4]Department of Biomedical Sciences, Long Island University, C. W. Post Campus, Brookville, NY 11548.

G16. IDENTIFICATION OF INTRACELLULAR TOXIC SIGNALS REQUIRED FOR BYSTANDER KILLING THROUGH GAP JUNCTIONS FROM HIV INFECTED ASTROCYTES TO UNINFECTED ASTROCYTES. Eugenin EA[1], Berman JW[1,2]; [1]Departments of Pathology, Albert Einstein College of Medicine, Bronx, NY 10461; [2]Department of Microbiology and Immunology, Albert Einstein College of Medicine, Bronx, NY 10461.

G17. MOTOR FUNCTION AND NEUROMETABOLITES IN CHILDREN WITH PRENATAL METHAMPHETAMINE OR NICOTINE EXPOSURE. Fukaya E[1], Chang L[1], Loehaugen G[2,3], Skranes J[2,3], Alicata D[1], Cunningham E[1], Jiang C[1], Ernst T[1]; [1]Department of Medicine, John A. Burns School of Medicine, University of Hawaii Manoa, Honolulu, HI 96813; [2]Department of Laboratory Medicine, Children's and Women's Health, Norwegian University of Science and Technology, Trondheim, Norway; [3]Department of Pediatrics, Sorlandet Hospital, Arendal, Norway.

G18. DOPAMINE MEDIATED INCREASES IN HIV REPLICATION IN MACROPHAGES ARE DUE IN PART TO INCREASED VIRAL ENTRY. Gaskill PJ[1], Berman JW[1]; [1]Department of Pathology, Einstein, Bronx, NY 105302; Department of Microbiology and Immunology, Einstein, Bronx, NY 10530.

G19. HUMANIZED MICE TO ASSESS THE HIV-1 CLADE-SPECIFIC DIFFERENCES: APROPOS OF VIRAL VIRULENCE AND NEUROPATHOLOGY. Gorantla S[1], Makarov E[1], Akther S[1], Wood C[2], Gendelman HE[1], Poluektova L[1]; [1]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198; [2]Nebraska Center for Virology, University of Nebraska at Lincoln, Lincoln, NE 68588.

G20. PURINERGIC RECEPTORS ARE REQUIRED FOR HIV-1 INFECTION OF PRIMARY HUMAN MACROPHAGES. Hazleton JE[1], Berman JW[1,2], Eugenin EA[1]; [1]Departments of Pathology, Albert Einstein College of Medicine, Bronx, NY 10461; [2]Department of Microbiology and Immunology, Albert Einstein College of Medicine, Bronx, NY 10461.

G21. TCF4 BINDS DIRECTLY TO THE HIV LTR AND ASSOCIATES WITH NUCLEAR MATRIX PROTEIN SMAR1 TO REPRESS HIV TRANSCRIPTION IN ASTROCYTES. Henderson LJ[1], Narasipura SD[1], Adarichev V[2], Kashanchi F[3], Al-Harthi L[1]; [1]Department of Immunology and Microbiology, Rush University Medical Center, Chicago, IL 60612; [2]Department of Medicine, Division of Rheumatology, and Department of Microbiology & Immunology, Albert Einstein College of Medicine, New York City, NY 10461; [3]National Center for Biodefense and Infectious Diseases, George Mason University, Manassas, VA 20110.

G22. EXECUTIVE FUNCTIONING AND CORTISOL RESPONSES IN YOUNG CHILDREN WITH PRENATAL STIMULANT EXPOSURE. Hernandez AB[1], Cloak CC[1], Dowland S[1], Carlson S[2], Ernst TM[1], Chang L[1]; [1]Department of Medicine, University of Hawaii, Manoa , John A. Burns School of Medicine, Honolulu, HI 96813; [2]Institute of Child Development, University of Minnesota, Minneapolis, MN 55455.

G23. PERSISTENT HUMORAL IMMUNE RESPONSES IN THE CNS LIMIT RECOVERY OF REACTIVATED MURINE CYTOMEGALOVIRUS. Hu S[1], Mutnal MB[1], Lokensgard JR[1]; [1]Center

for Infectious Diseases and Microbiology Translational Research, University of Minnesota Medical School, Minneapolis, MN 55455.

G24. FOXO3A REGULATES INFLAMMATORY MONONUCLEAR PHAGOCYTE ACTIVATION IN HIV-ASSOCIATED NEUROCOGNITIVE DISORDERS. Huang Y[1], Zheng J[1]; [1]Department of Phamacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198 5930.

G25. PHAGOCYTIC UPTAKE OF HIV-1-INFECTED APOPTOTIC T CELL BODIES FACILITATES HIV-1 ENTRY INTO RENAL TUBULAR CELLS. Husain M[1], Lan X[1], Goel H[1], Singh P[1], Malhotra A[1], Singhal PC[1]; [1]Department of Medicine/Nephrology, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY 11021.

G26. ANTIRETROVIRAL ACTIVITY AND BRAIN PENETRANCE OF FOLATE-COATED NANOFORMULATED ANTIRETROVIRAL DRUGS. Kanmogne GD[1], Roy U[1], Liu Z[1], McMillan J[1], Gorantla S[1], Balkundi S[1], Smith N[1], Alnouti Y[2], Gautam N[2], Poluektova L[1], Kabanov A[2], Bronich T[2], Gendelman HE[1]; [1]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE, 68198-5215; [2]Department of Pharmaceutical Sciences, University of Nebraska Medical Center, Omaha, NE, 68198-6025.

G27. MONONUCLEAR PHAGOCYTE INTERCELLULAR CROSSTALK FACILITATES TRANSMISSION OF CELL TARGETED NANOFORMULATED ANTIRETROVIRAL DRUGS TO HUMAN BRAIN ENDOTHELIAL CELLS. Kanmogne GD[1], Liu X[1], McMillan J[1], Balkundi S[1], Zhou Y[2], Gendelman HE[1], Singh S[1]; [1]Departments of Pharmacology and Experimental Neuroscience , University of Nebraska Medical Center, Omaha, NE 68198-5215; [2]Center for Biotechnology, University of Nebraska-Lincoln, Lincoln, NE 68588.

G28. POTENTIATING DENDRITIC CELLS TO TARGET HYPOXIC ENVIRONMENT OF BRAIN TUMOR. Khan ZK[1], Masih S[1], Karatas E[1], Sagar D[1], Jain P[1]; [1]Department of Microbiology and Immunology, Drexel University College of Medicine, Doylestown, PA 18902.

G29. MCP-1 EXHIBITS PROFOUND EFFECT ON THE TRAFFICKING OF DENDRITIC CELLS INTO THE CENTRAL NERVOUS SYSTEM. Khan ZK[1], Sagar D[1], Rahman S[1], Manuel S[1], Jain P[1]; [1]Department of Microbiology and Immunology, Drexel University College of Medicine, Doylestown, PA 18902.

G30. NEUROIMMUNE INTERACTION IN THE ADRENAL GLAND OF HUMANIZED MICE: A POSSIBLE ROLE DURING HIV-1 INFECTION. Knibbe J[1], Makarov E[1], Gutti T[1], Dash PK[1], Gorantla S[1], Poluektova L[1]; [1]Pharmacology Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68168.

G31. ACCELERATED CAUDATE ATROPHY IN HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART)-TREATED HIV SUBJECTS OVER THREE YEARS. Kogachi S[1], Chang L[1], Sadino J[1], Jiang CS[1], Ernst TM[1]; [1]Department of Medicine, John A. Burns School of Medicine, University of Hawaii at Manoa, Honolulu, HI 96813.

G32. CENTRAL ROLE OF CYTOCHROMES P450 (CYP) IN ALCOHOL-MEDIATED OXIDATIVE STRESS AND ALCOHOL-ANTIRETROVIRAL THERAPY (ART) INTERACTIONS. Kumar S[1], Jin M[1]; [1]University of Missouri-Kansas City, School of Pharmacy, Kansas City, MO 64108.

G33. IMPULSIVENESS AND RISKY BEHAVIOR IN HIV-INFECTED AND NICOTINE SMOKING INDIVIDUALS. Lau EK[1], Chang L[1], Holt J[1], Jiang CS[1], Lum M[1]; [1]Department of Medicine, John A. Burns School of Medicine, University of Hawaii, Honolulu, HI 96813.

G34. FUNCTIONAL ROLE OF MICRORNAS IN HIV-ASSOCIATED NEPHROPATHY. Malhotra A[1], Rai P[1], Singhal PC[1]; [1]Feinstein Institute for Medical Research, Hofstra North Shore-LIJ School of Medicine, Great Neck, NY 11021.

G35. HIV-1 LTR SINGLE NUCLEOTIDE POLYMORPHISMS (SNPS) CORRELATE WITH DISEASE PARAMETERS. Nonnemacher MR[1], Pirrone V[1], Aiamkitsumrit B[1], Shah S[1], Wojno A[1], Passic S[1], Blakey B[1], Zhong W[1], Moldover B[3], Feng R[4], Randazzo C[4], Downie D[2], Lewis S[2], Jacobson J[2], Wigdahl B[1]; [1]Department of Microbiology and Immunology, Institute for Molecular Medicine and Infectious Disease, Drexel University College of Medicine, Philadelphia, PA 19102; [2]Department of Medicine, Division of Infectious Diseases and HIV Medicine, Drexel University College of Medicine, Philadelphia, PA 19102; [3]B-Tech Consulting, Ltd, N/A, Philadelphia, PA 19130;

[4]Department of Biostatistics and Epidemiology, Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania School of Medicine, Philadelphia, PA 19104.

G36. PANNEXIN1 HEMICHANNELS ARE CRITICAL FOR HIV INFECTION OF HUMAN PRIMARY CD4+ T LYMPHOCYTES. Orellana JA[1], Williams DW[2], Sáez JC[3], Berman JW[2,4]; Eugenin EA[2]. [1]Departamento de Neurología, Facultad de Medicina, Pontificia Universidad Católica de Chile, Santiago, Chile; [1]Departments of Pathology, Albert Einstein College of Medicine, Bronx, NY 10461; [3]Departamento de Fisiología, Pontificia Universidad Católica de Chile, Santiago, Chile. [4]Department of Microbiology and Immunology, Albert Einstein College of Medicine, Bronx, NY 10461.

G37. CEREBROSPINAL FLUID MIRNA PROFILE IN HIV-ASSOCIATED NEUROLOGICAL DISORDERS. Pacifici M[1], Delbue S[4], Ferrante P[2], Jeansonne D[1], Kadri F[1], Nelson S[3], Peruzzi F[1]; [1]Lousianna State University Health Sciences Center, Neurological Cancer Center and Stanley Scott Cancer Center, School of Medicine, New Orleans, LA 70112; [2]Department of Public Health and Microbiology-Virology, University of Milan, Milan, 20123; [31]Lousianna State University Health Sciences Center and Alcohol Research Center, School of Medicine, New Orleans, LA 70112; [4]Ettore Sansavini Health Science Foundation, University of Milan, Milan, 20123.

G38. COCAINE INDUCED ALTERATIONS IN THE METABOLIC SIGNATURES OF CD4+ T CELLS: IMPLICATIONS IN HIV/AIDS AND DRUG ABUSE BIOLOGY. Pandhare J[1], Mantri C[1], Dash C[1]; [1]Laboratory of Retrovirology and Epigenetics, Center For AIDS Health Disparities Research, Vanderbilt-Meharry Center for AIDS Research (CFAR), Meharry Medical College School of Medicine, Nashville, TN 37221.

G39. BLOOD BRAIN BARRIER DISRUPTION BY METHAMPHETAMINE IS REGULATED BY CAVEOLAE-DEPENDENT ENDOCYTOSIS AND ACTIN CYTOSKELETON REARRANGEMENT. Park M[1], Lim B[2], Wylegala A[1], Toborek M[1]; [1]Department of Biochemistry and Molecular Biology, University of Miami School of Medicine, Miami, FL 33136; [2]Department of Biology, Centre College, Danville, KY 40422.

G40. MICRORNA-124 DEACTIVATES HUMAN HIV-1-INFECTED AND CLASSICALLY ACTIVATED MACROPHAGES/MICROGLIA: IMPLICATION FOR NEUROGENESIS. Peng H[1], Jia B[1], Zhu B[1], Chen Q[1], Wang M[1], Yunlong H[1], Zheng J ; [1]Department of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68105.

G41. POLY(ADP-RIBOSE) POLYMERASE (PARP) INHIBITION IN BRAIN ENDOTHELIUM PROTECTS THE BLOOD BRAIN BARRIER (BBB) UNDER PHYSIOLOGIC AND NEURO-INFLAMMATORY CONDITIONS. Persidsky Y[1], Rom S[1], Fan S[1], Reichenbach N[1], Dykstra H[1], Ramirez SH[1]; [1]Department of Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140.

G42. ACTIVATION OF CANNABIOID RECEPTOR 2 (CB2) ATTENUATES LEUKOCYTE-ENDOTHELIAL INTERACTIONS AND BLOOD-BRAIN BARRIER (BBB) DYSFUNCTION UNDER INFLAMMATORY CONDITIONS. Persidsky Y[1], Haskó J[2], Skuba A[3], Fan S[1], Dykstra H[1], Rechenbach N[1], Krizbai I[2], Zhang M[1], Tuma R[4], Son Y[3], Ramirez SH[1]; [1]Department of Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140; [2]Institute of Biophysics, Biological Research Center, Szeged, Hungary; [3]Shriners Hospitals Pediatric Research Center and Department of Anatomy and Cell Biology, Temple University School of Medicine, Philadelphia, PA 19140; [4]Department of Physiology, Temple University School of Medicine, Philadelphia, PA 19140.

G43. NEUROCHEMICAL COMPOSITION CORRELATED WITH VARIANCE IN ATTENTION AND HYPERACTIVITY/IMPULSIVITY SCORES: A MULTIVOXEL SPECTROSCOPY STUDY. Pritchett A[1], Chang L[1], Saito A[1], Keating B[1], Alicata D[1], Jiang CS[1], Cloak C[1], Lohaugen G[3], Skranes J[2], Ernst T[1]; [1]Department of Medicine, University of Hawaii John A. Burns School of Medicine, Honolulu, HI 96813; [2]Department of Laboratory Medicine, Children's and Women's Health, Norwegian University of Science and Technology, Trondheim, Norway; [3]Department of Pediatrics, Sorlandet Hospital, Arendal, Norway.

G44. EFFECTS OF APOE-EPSILON4 ALLELE AND HIV ON CORTICAL BRAIN STRUCTURES. Sadino J[1], Chang L.[1], Andres MA[2], Ernst TM[1]; [1]Department of Medicine, John A. Burns School of

Medicine, University of Hawaii at Manoa, Honolulu, HI 96826; [2]Pacific Biosciences Research Center, University of Hawaii at Manoa, Honolulu, HI 96826.

G45. A COMBINED OPIATE AGONIST AND ANTAGONIST TRETMENT REDUCES ALCOHOL INHIBITORY EFFECTS ON OPIATE RECEPTOR DIMERIZATION AND CYTOLYTIC FUNCTIONS OF NK CELLS AND REDUCES MAMMARY TUMOR GROWTH. Sarkar DK[1], Sengupta A[1], Zhang C[1], Boyadjieva N[1]; [1]Endocrine Program, Rutgers University, New Brunswick, NJ 08901.

G46. CANNABINOID RECEPTOR EXPRESSION IN HUMAN FETAL NEURAL PRECURSOR CELLS. Sheng WS[1], Hu S[1], Rock RB[1]; [1]The Center for Infectious Diseases & Microbiology Translational Research, University of Minnesota Medical School, Minneapolis, MN 55455.

G47. CORTICAL AND WHITE MATTER DEVIATIONS RELATE TO COGNITIVE DEFICITS IN VERY-LOW-BIRTH-WEIGHT (VLBW) YOUNG ADULTS. – *Note: poster moved to Wed, poster #28C*.

G48. WNT SIGNALING IN NEUROAIDS. Tang S-J[1], Gelman B[1], Shi Y[1], Li B[1]; [1]Department of Neuroscience and Cell Biology, University of Texas Medical Branch, Galveston, TX 77555.

G49. NEUROPATHOGENIC MECHANISMS BY HIV-1 CLADE B AND C: ROLE OF LIPID RAFTS. Thangavel S[1], Santiago EM[1], Nair MPN[1]; [1]Institute of NeuroImmune Pharmacology (NIP), College of Medicine, Florida International University, Miami, FL 33199.

G50. EFFECTS OF COCAINE ON HIV INFECTION OF QUIESCENT T CELLS. Vatakis DN[1], Kim SG[1], Zhuo J[1], Baldwin GC[1], Zack JA[1]; [1]Department of Medicine, Division of Hematology and Oncology, David Geffen School of Medicine at UCLA, Los Angeles, CA 90095.

G51. ALCOHOL INHIBITS INTRACELLULAR HIV RESTRICTION FACTORS AND ENHANCES HIV INFECTION OF CORD BLOOD MONOCYTE-DERIVED MACROPHAGES (CBMDM). Wang X[1], Mastrogiannis DS[2], Dai M[1], Ye L[1], Li JL[1], Wang YZ[1], Song L[1], Sakarcan S[1], Ho WZ[1]; [1]Department of Pathology and Laboratory Medicine, Temple University School of Medicine, Philadelphia, PA 19140; [2]Department of Obstetrics, Gynecology and Reproductive Sciences, Temple University School of Medicine, Philadelphia, PA 19140.

G52. POTENTIATION OF NMDA RECEPTOR-MEDIATED EPSCS BY D-SERINE: IMPLICATIONS FOR HIV-1-ASSOCIATED NEUROTOXICITY. Xia JX[1], Xiong H[1]; [1]Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE 68198.

G53. NONMUSCLE MYOSIN LIGHT-CHAIN KINASE MEDIATES MICROGLIAL MIGRATION INDUCED BY HIV TAT: INVOLVEMENT OF B1 INTEGRINS. Yao HH[1], Buch S[1]; [1]Department of Pharmacology, University of Nebraska Medical Center, Omaha, NE 68198.

G54. DIFFERENTIAL REGULATION OF IL-33 BY HIV-1 B AND C CLADE INFECTION IN HUMAN ASTROCYTES (HA): ROLE IN NEUROPATHOGENESIS. Yndart A[1], Agudelo M[1], Nair MPN[1]; [1]Department of Immunology, Institute of Neuro-Immune Pharmacology, Herbert Wertheim College of Medicine, Florida International University, Miami, FL 33199.

G55. ADENOSINE DEAMINASES AS DRUG CANDIDATES FOR THE TREATMENT OF HIV INFECTION. Zavialov A[1], Lu Y[1]; [1]Department of Public Health, John A. Burns School of Medicine, University of Hawaii, Honolulu, HI 96822.

Please remember to take down all posters immediately after the session

Friday, April 27, 2012

7:00 – 8:00 AM **Continental Breakfast**

8:00 – 10:10 AM **SYMPOSIUM III: Rodent Models of the Interaction of Substances of Abuse and HIV-associated Neurocognitive Disorders**

Session Co-Chairs: **Abraham P. Bautista, Ph.D.** – National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD

Pooja Jain, Ph.D. – Drexel University College of Medicine, Philadelphia, PA

8:00 – 8:30 **Symposium Lecture: Rosemarie Booze, Ph.D.** – University of South Carolina, Columbia, SC

"Translational Rodent Models of HIV-Associated Neurocognitive Disorders and Psychostimulants"

8:35 – 8:55 **Lecture 1: Michael Vigorito, Ph.D.** – Seton Hall University, South Orange, NJ

"Experience- and Substance-Induced Behavioral Plasticity in the HIV-1 Transgenic Rat"

9:00 – 9:20 **Lecture 2: David Volsky, Ph.D.** – Columbia University, New York, NY

"Molecular Markers of Neurocognitive Deficits in People with HAND and Mice Infected with Chimeric HIV"

9:25 – 9:45 **Lecture 3: Johnny He, Ph.D.** – University of North Texas, Fort Worth, TX

"HIV-1 Tat and HIV/NeuroAIDS: From Mechanistic Studies to Biomarker Discovery"

9:50 – 10:10 **Lecture 4: Jianuo Liu, M.D., Ph.D**. – University of Nebraska Medical Center, Omaha, NE

"Co-morbid Effects of HIV-1gp120 and Meth on Neuronal Physiology and Animal Behavior: Role of Voltage-gated K Channels"

10:15 – 10:30 AM **Coffee Break** (*Ballroom Foyer*)

10:30 – 12:40 AM **SYMPOSIUM IV: Neuroimmunity and Neurodegenerative Diseases**

Session Co-Chairs: **Phil Peterson, M.D.** – University of Minnesota School of Medicine, Saint Paul, MN

Michal Toborek, M.D., Ph.D. – University of Miami School of Medicine, Miami, FL

10:30 – 11:00 **Symposium Lecture: Howard Gendelman, M.D.** – University of Nebraska Medical Center, Omaha, NE

"Cell-Based Targeted Brain Delivery of Therapeutic Nanoparticles"

11:05 – 11:25 **Lecture 1: Xiaoxia Li, Ph.D. –** Lerner Research Institute, Cleveland, OH

"IL-17-Induced ACT1-Mediated Signaling is Critical for Cuprizone-Induced Demyelination."

11:30 – 11:50 **Lecture 2: R. Lee Mosley, Ph.D.** – University of Nebraska Medical Center, Omaha, NE

"T Cell-Mediated Immunity in Neurodegeneration and Parkinson's Disease"

11:55 – 12:15 **Lecture 3: Kalipada Pahan, Ph.D.** –Rush University Medical Center, Chicago, IL

"*Switching Glia from Neuroinflammatory to Neurotrophic in the Nigrostriatum of Hemiparkinsonian Monkeys"*

12:20 – 12:40 **Lecture 4: Jenny S. Henkel, Ph.D.** – Methodist Neurological Institute, Houston, TX

"T Cells Manage the Game in Lou Gehrig's Disease"

12:45 – 1:00 PM **PICK-UP LUNCHES FOR NIH WORKSHOP** (*Ballroom Foyer*)

1:00 – 2:00 PM **NIH WORKSHOP:**

Session Co-Chairs: **Jag Khalsa, Ph.D.** – Chief, Medical Consequences Branch, Division of Pharmacotherapies and Medical Consequences of Drug Abuse (NIDA/NIH)

Abraham P. Bautista, Ph.D. – Director, Office of Extramural Activities (NIAAA/NIH)

Jeymohan Joseph, Ph.D. – Chief, HIV Pathogenesis, Neuropsychiatry, and Treatment Branch/Division of AIDS Research (NIMH/NIH)

Invited Participants

***Jag Khalsa, Ph.D.**, Chief, Medical Consequences Branch, Division of Pharmacotherapies and Medical Consequences of Drug Abuse (NIDA/NIH)*

***Albert Avila, Ph.D.**, Program Director, Division of Basic Neuroscience and Behavioral Research (NIDA/NIH)*

***Woody Lin, M.D., Ph.D.**, Health Scientist Administrator, Div. of Clinical Neuroscience and Behavioral Research (NIDA/NIH)*

***Abraham P. Bautista, Ph.D.**, Director, Office of Extramural Activities (NIAAA/NIH)*

***Ranga Srinivas, Ph.D.**, Chief, Extramural Project Review Branch, OEA (NIAAA/NIH)*

***Changhai Cui, Ph.D.**, Program Director, Div. of Neuroscience and Behavior (NIAAA/NIH)*

***Jeymohan Joseph, Ph.D.**, Chief, HIV Pathogenesis, Neuropsychiatry, and Treatment Branch/Div. of AIDS Research (NIMH/NIH)*

***Eduardo A. Montalvo, Ph.D.**, Scientific Review Officer, AIDS Initial Review Group, Center for Scientific Review (NIH)*

2:00 – 3:30 PM **YOUNG INVESTIGATOR'S SYMPOSIUM**

Session Co-Chairs: **Sylvia M. Kiertscher, Ph.D.** – David Geffen School of Medicine at UCLA, Los Angeles, CA

Ranga Srinivas, Ph.D. – National Institute on Alcohol Abuse and Alcoholism, Bethesda, MD

Pre-Doctoral Presentations:

2:00 – 2:10 **Donna C. Davidson** – Dept. of Microbiology and Immunology, University of Rochester School of Medicine and Dentistry, Rochester, NY

"Excess Soluble CD40L Contributes to Blood Brain Barrier Permeability in a Mouse Model of HIV-Associated Neurocognitive Disorder (HAND)"

2:15 – 2:25 **Jerel A. Fields** – Dept. of Cell Biology and Anatomy, University of North Texas Health Science Center, Forth Worth, TX

"C/EBPβ Regulates Multiple IL-1β-induced Human Astrocyte Inflammatory Genes via a P38 Dependent Pathway"

2:30 – 2:40 **Divya Sagar** – Dept. of Microbiology and Immunology, Drexel University College of Medicine, Philadelphia, PA

"Imaging Dendritic Cell Trafficking into the Central Nervous System during Steady-State and under Neuroinflammation"

Post-Doctoral Presentations:

2:45 – 2:55 **Sylvia Fitting, Ph.D.** – Dept. of Pharmacology and Toxicology, Virginia Commonwealth University, Richmond, VA

"Morphine Exacerbated Responses to HIV-1 TAT-Dependent Synaptodendritic Injury is Mediated by [CA2+]i Stores and ATP Depletion"

3:00 – 3:10 **Jana Ninkovic, Ph.D.** – Dept. of Surgery, Division of Basic and Translational Research, University of Minnesota School of Medicine, Minneapolis, MN

"Chronic Morphine Treatment Differentially Modulates Macrophage Phagocytic and Bactericidal Mechanisms Following TLR2 and TLR4 Activation"

3:15 – 3:25 **Prasanta K. Dash, Ph.D.** – Dept. of Pharmacology and Experimental Neuroscience, University of Nebraska Medical Center, Omaha, NE

"Efficacy and Safety Tests of Long-Acting Nanoformulated Anti-Retroviral Drugs in HIV-1 Infected Humanized Mice"

3:30 PM **FREE TIME –**

YES! – THE AFTERNOON AND EVENING ARE FREE

7:30 – 9:30 PM **Journal of Neuroimmune Pharmacology Editorial Board Meeting**

Saturday, April 28, 2012

7:00 – 8:00 AM **Continental Breakfast**

8:00 – 8:50 AM **PLENARY LECTURE II: Jeffrey Samet, M.D.** – Boston University, Boston, MA

8:00 – 8:05 Introduction of speaker by **Sulie L. Chang, Ph.D.** – Chair, SNIP Meetings Committee

8:05 – 8:50 **Lecture: "***The Impact of Alcohol and Substance Use on the Prevention and Treatment of HIV/AIDS*"

8:55 – 10:45 AM **SYMPOSIUM V: AIDS and Substances of Abuse - A Global Scenario**

Session Co-Chairs: **Mahendra Kumar, Ph.D.** – Miller School of Medicine, Miami, FL

Pankaj Seth, Ph.D. – National Brain Research Centre, Manesar, India

8:55 – 9:15 **Lecture 1: Elinore F. McCance-Katz M.D. Ph.D** – San Francisco General Hospital, San Francisco, CA

"Blood Alcohol Concentrations in HIV: Effect of Antiretroviral Treatment"

9:20 – 9:40 **Lecture 2: Madhavan P. N. Nair, Ph.D.** – Florida International University, Miami, FL

"Drug Abuse and NeuroAIDS in HIV Clades"

9:45 – 10:00 AM **Coffee Break** (*Ballroom Foyer*)

10:00 – 10:20 **Lecture 3: Brian Wigdahl, Ph.D.** – Drexel University College of Medicine, Philadelphia, PA

"HIV-1 Molecular Complexity and Subtype B and C Infection"

10:25 – 10:45 **Lecture 4: Victor Valcour, M.D.** – University of California San Francisco, San Francisco, CA

"Defining the Earliest CNS Events of HIV Infection Through International Collaborations"

10:50 – 11:40 Noon **Opendra "Bill" Narayan Lecture:**

10:50 – 11:00 Introduction of speaker by **Howard Gendelman, M.D.** – Chief Editor of JNIP

11:00 – 11:40 **Lecture: Tony Wyss-Coray, Ph.D** – Stanford University Medical Center, Stanford, CA

"*Can Young Blood Make Brains Younger?"*

11:45 – 12:45 PM **Lunch on your own**

12:50 – 2:15 PM **SYMPOSIUM VI: NeuroImmune Pharmacology Research in Hawaii**

Session Co-Chairs: **Linda Chang, M.D.** – JABSOM, University of Hawaii, Honolulu, HI

Woody (Yu) Lin, Ph.D. – National Institute on Drug Abuse, Bethesda, MD

12:50 – 1:00 **Lecture 1: Bruce Shiramizu, M.D**. – JABSOM, University of Hawaii, Honolulu, HI
"Exploiting Unique Monocyte Phenotypes for Treatment Strategies for HIV-Associated Neurocognitive Disorders"

1:00 – 1:10 **Lecture 2: Marilou Andres, Ph.D.** – JABSOM, University of Hawaii, Honolulu, HI
"Methamphetamine Inhibits L-type Calcium Channels in SH-SY5Y Cells"

1:10 – 1:20 **Lecture 3: Christine Cloak, Ph.D.** – JABSOM, University of Hawaii, Honolulu, HI
"What is happening in the Brains of Adolescent Marijuana Users?"

1:20 – 1:30 **Lecture 4: Yuanan Lu, Ph.D.** – JABSOM, University of Hawaii, Honolulu, HI
"Cell Mediated Novel Gene Therapy for NeuroAIDS"

1:30 – 1:40 **Lecture 5: George King, M.D.** – JABSOM, University of Hawaii, Honolulu, HI
"Cortisol and Behavioral Regulation in Chronic Active Cannabis Users"

1:40 – 1:50 **Lecture 6: Kazuma Nakagawa, M.D. –** JABSOM, University of Hawaii & the Queen's Medical Center, Honolulu, HI
" Racial Disparities Among Native Hawaiians and Other Pacific Islanders With Intracerebral Hemorrhage: Effect of Methamphetamine and Untreated Hypertension"

1:50 – 2:00 **Lecture 7: Vivek Nerurkar, Ph.D. –** JABSOM, University of Hawaii, Honolulu, HI
"Immunobiology of WNV-Induced Neuroinflammation"

2:00 – 2:15 **Discussion**

2:15 – 2:35 PM **Coffee Break** (*Ballroom Foyer*)

2:35 – 4:40 PM **SYMPOSIUM VII: Spice and Bath Salts – An Emerging Health Risk in the United States**

Session Co-Chairs: **Zhiwei Chen, Ph.D., DVM** – The University of Hong Kong LKS Faculty of Medicine, Pokfulan, Hong Kong
Alexandros Makriyannis, Ph.D. – Northeastern University, Boston, MA

2:35 – 2:40 **Introductory remark: Alexandros Makriyannis, Ph.D.** – Northeastern University, Boston, MA

2:40 – 3:10 **Lecture 1: Aron Lichtman, Ph.D.** – Virginia Commonwealth University School of Medicine, Richmond, VA
"Synthetic Marijuana: Pharmacology and Toxicology"

3:15 – 3:35 **Lecture 2: Anu Mahadevan, Ph.D.** – Organix, Inc, Boston, MA
"Synthetic Cannabinoids as Designer Drugs: A Structural Overview "

3:40 – 4:00 **Lecture 3: Brian Thomas, Ph.D.** – Research Triangle International, Research Triangle Park, NC
"The Surveillance and Detection of Designer Drugs: A New Challenge in Substance Abuse and Forensic Sciences"

4:05 – 4:25 **Lecture 4: Mahmoud ElSohly**, **Ph.D.** – University of Mississippi, Oxford, MS
"Methylhexylamine, a Stimulant Additive in Some Dietary Supplements: Is It Really a Component of Pelargonium oil?"

4:30 – 4:40 **Summary, Discussion and Future Considerations**
Alexandros Makriyannis, **Ph.D.** – Northeastern University, Boston, MA

6:45 – 10:00 PM **EVENING BANQUET AND AWARDS CEREMONY** (Mauna Kea Ballroom)
Hosted by **Sabita Roy, Ph.D.** – incoming SNIP President
Special Dinner Presentation: **Bryan Yamamoto, Ph.D.,** University of Toledo School of Medicine, Toledo, OH
"Breaking the Ice: Beyond Biogenic Amines"

Meeting Adjourned!

☼☼☼

Sunday, April 29, 2012 – Departure Day

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Join us for the 19th SNIP Scientific Conference currently planned for: San Juan, Puerto Rico April, 2013

(Details to be announced)