

Neurogenetics

Research Areas of Interest:

- Identification of genes and susceptibility loci for neurological diseases.
- Investigation of the pathomechanisms by which genetics variants cause or contribute to risks for neurological diseases.
- Develop gene-based assays, diagnostics and therapeutics for neurological disorders.
- Develop cutting-edge tools and resources for neurogenetic and neurodevelopment research.
- Basic and translational research in neurogenetics and genomics.
- Investigation of the genetic basis of normal neural development and function, and perturbations that could lead to neurological disorders. This includes basic developmental studies in neurogenesis and cell fate determination, cell migration, dendritic growth & plasticity, axonal guidance and neurotrophic signaling.
- Training of neuroscientists in molecular medicine.
- Education of the scientific and lay communities in the ethical, legal and social issues in Neurogenetics.
- Engagement of patient and voluntary advocacy groups in partnerships to promote research in Neurogenetics.
- Promoting resource and data sharing.
- Translational research to link results of basic research in inherited neurological disorders to medication development and clinical trials.
- Sharing of biomaterials and clinical data.

Program Directors:

Laura Mamounas (mamounal@ninds.nih.gov) Portfolio: Neurotrophic factors & signaling mechanisms; Signal transduction mechanisms in growth or repair & plasticity; Dendritic Growth and Plasticity; Genetic tools development; Rett Syndrome; Autism (genetics, molecular mechanisms, animal models); Tourette Syndrome; Genetics repository (sample banking and databasing, phenotypic data standardization).

Contracts: Gene Expression Nervous System Atlas (GENSAT); NINDS Genetics Repository at Coriell.

John Porter (porterjo@ninds.nih.gov) Portfolio: Basic, translational, and clinical studies in muscular dystrophies (Duchenne/Becker, limb girdle, facioscapulohumeral, congenital, oculopharyngeal, and myotonic dystrophy), spinal muscular atrophy, and inherited/acquired neuropathies. Inflammatory myopathies. Neuromuscular junction dysfunction in disease, including slow channel syndrome and inherited and acquired myasthenia gravis. Inherited autonomic nervous system disorders.

Robert Riddle (riddler@ninds.nih.gov) Portfolio: Developmental neuroscience, axonal guidance, CNS pattern formation, neural cell migration, lissencephaly, and cell fate determination. Fragile X Syndrome, Down Syndrome, Williams Syndrome, Mental Retardation. Developmental Disorders of the cerebellum, Hydrocephalus, spina bifida, Neural tube defects. Molecular genetics in the mouse. Zebrafish and Drosophila as model systems. miRNA. Epigenetic mechanisms in health and disease.

Danilo Tagle (tagled@ninds.nih.gov) Portfolio: Scientific Areas include Genetic Resources and Tools Development, Functional and Comparative Genomics, Proteomics, Animal Genetic Models, Gene therapy and Gene delivery, linkage and association studies for Mendelian and complex diseases, General issues for Whole Genome association studies, DNA repair diseases, Pharmacogenomics and genetic variation. Disease areas include 1) Lysosomal storage diseases including Mucopolysaccharidoses, Mucopolipidoses, Sphingolipidoses; Glycogen Storage diseases, Glycoproteinoses, Lysosomal Transport Disorders, and Neuronal Ceroid Lipofuscinoses, 2) Leukodystrophies: Canavan, Krabbe, Alexander's disease, etc., 3) Mitochondrial disorders: Leigh syndrome, Pearson syndrome, etc., 4) Other Rare metabolic or Orphan Diseases: Ataxia-telangiectasia, Wilson's disease, 5) Dystonia, 6) Leukodystrophy, 7) Ataxia (spinocerebellar, Friedreich's).

Channels, Synapses and Circuits

Research Areas of Interest:

- Molecular and cellular studies of nervous system signaling, especially in relation to electrical excitability and inter-cellular communication.
- Basic and clinical studies of Epilepsy.
- Structural and functional studies of molecules underlying neural signaling, including ion channels, neurotransmitter receptors and transporters, synaptic vesicle and synaptic scaffolding proteins, and intracellular signal transduction cascades.
- Molecular and cellular mechanisms of synaptic transmission, synaptic modulation and plasticity, synapse formation and development.
- Studies of CNS circuits, especially studies that are focused on underlying cellular and synaptic properties (overlaps with Systems and Cognitive Neuroscience).
- Technology development for research on neural signaling, including genetic models, tools for analyzing or manipulating gene expression and function, or for manipulating cell signaling. New techniques for structural studies of membrane proteins and for study of protein interactions.
- Research on channelopathies and their involvement in specific neurological disorders.
- Translational research to link results of basic research on channels and synapses to medication development and clinical trials.

Program Directors:

Brandy Fureman (furemanb@ninds.nih.gov) Portfolio: Basic, translational and clinical studies of epilepsy and epileptogenesis (including clinical trials).

Edmund Talley (talleye@ninds.nih.gov) Portfolio: Research on synaptic transmission, plasticity, and structure, including studies on synapse development and regeneration.

Shai Silberberg (silberbs@ninds.nih.gov) Portfolio: Basic research on the structure, function, and regulation of channels, transporters, and pumps (CTP); Physiology and pathophysiology of ion channels and transporters; Channelopathy

Randall Stewart (stewartr@ninds.nih.gov) Portfolio: Basic structure, function, and biophysics of channels, transporters, and pumps; Channelopathy; Structural biology; Basic studies of epilepsy; Seizure prediction; Study of epileptogenesis utilizing proteomics and DNA microarrays.

Systems & Cognitive Neuroscience

Research Areas of Interest:

- Research on higher brain functions that underlie complex behaviors such as learning, memory, attention, language, cognition, emotion, movement, and response to pain.
- Research in homeostatic regulation of cyclic and appetitive behaviors such as sleep, activity, feeding, and drinking.
- Identify risk factors for developmental cognitive disorders.
- Develop better methods for assessing behavior and other neurological functions in animal models as a useful model for human conditions.
- Analysis of neural circuits and systems that mediate motor control, sensory processing, nociception and cognitive activities, especially circuits and systems with known medical consequences.
- Application of novel tools and methodologies for system approaches, including optical recording, neuroimaging, neuroinformatics, advanced in vivo recording and stimulation techniques, and methods for analysis of complex neural signals.
- Research on peripheral and central mechanisms of neuropathic pain and pain perception and development of strategies to alleviate chronic pain.
- Computational and quantitative studies of neurophysiological processes related to perception, motor control and neurological dysfunction.

Program Directors:

Debra Babcock (dbabcock@ninds.nih.gov) Portfolio: (1) Neural mechanisms of cognition, (2) Integrative approaches in behavioral and cognitive neuroscience, neurobehavioral disorders and all aspects of central nervous system plasticity, (3) Neuroimaging, (4) Systems Neuroscience research, (5) Clinical Neurophysiology.

Daofen Chen (chend@ninds.nih.gov) Portfolio: (1) Neural circuits at system level, (2) Sensorimotor functions, and adaptive and rehabilitative strategies for movement disorders and stroke sequelae, (3) Imaging and device-based technologies for systems neuroscience.

James Gnad (gnadtjw@ninds.nih.gov) Portfolio: (1) Circuit-level experimental neurophysiology, especially sensory systems; (2) Neuroendocrine systems; (4) Comparative neural systems and neuroethology; (5) Computational studies of network/circuit/perceptual function.

Merrill Mitler (mitterm@ninds.nih.gov) Portfolio: (1) CNS homeostatic regulation of sleep, circadian rhythms, feeding and body weight (2) Sleep in neurological disorders such as Parkinson's disease and stroke, (3) Neurobiology of obesity and complications of obesity-related disorders such as diabetes and sleep-disordered breathing (4) Neuroendocrinology.

Linda Porter (porterl@ninds.nih.gov) Portfolio: (1) Peripheral and central mechanisms of chronic pain, (2) Anatomy and physiology of pain signaling and pathways, (3) Analgesic and instrumentation development for pain management, (4) Neuroimaging in pain research, (5) Painful conditions and pain associated with disease states, (6) Genomic and proteomic approaches to pain research, (7) Neural plasticity related to chronic pain conditions, and (8) cognitive aspects of pain perception.

Repair & Plasticity

Research Areas of Interest:

- Mechanisms contributing to injury and repair of the brain and spinal cord.
- Neural plasticity in the adult nervous system.
- Restoration of function in neurologically disabled individuals.
- Stem and progenitor cell biology in the development and repair of the nervous system.

Program Directors:

Ramona Hicks (hicksra@ninds.nih.gov) Portfolio: (1) Basic, translational and clinical studies that relate to traumatic brain injury (TBI) or neonatal hypoxic-ischemic injury (HI), including mechanisms of injury in the acute and chronic stages; (2) Cognitive/emotional domains affected by TBI or HI; (3) Use of imaging technology and other measurement tools to assess cognitive/behavioral changes after TBI or HI.

Naomi Kleitman (kleitmann@ninds.nih.gov) Portfolio: Spinal cord injury/disease (SCI) and peripheral nerve repair: (1) Cell transplantation to stimulate regeneration, using trophic factors, providing a bridge for regenerating axons, replacing lost neurons; (2) Delivering factors to promote regeneration or block inhibition; (3) Recovery of function by preserving or regenerating specific cord tracts; (4) Schwann cell myelination; (5) De/remyelination related to loss or recovery of function after SCI and glial cell transplantation.

(Vacant)* Portfolio: (1) Neural engineering, neural prostheses, neural technology; (2) Neural repair, plasticity in neural systems, machine interfaces and implanted devices, novel biomaterials for repair; (3) Bioengineering applied to the nervous system, nanotechnology for the nervous system, neural control and processing of neural information.

*Please contact either Dr. Naomi Kleitman (kleitman@ninds.nih.gov) or Ms. Stephanie Fertig (fertigs@ninds.nih.gov) to determine your new point of contact for discussing aspects of a grant proposal or project. For help with a specific grant please visit the ERA commons at <https://commons.era.nih.gov/commons/> For general information please visit the NINDS website at <http://www.ninds.nih.gov/>

David Owens (owensd@ninds.nih.gov) Portfolio: Stem cells in the nervous system including: (1) Understanding the basic biology of stem and progenitor cells in the normal nervous system, and following damage or disease; (2) Application of stem cells in developing treatments for the repair of the nervous system; (3) Endogenous neurogenesis in development and adulthood; (4) Tissue engineering approaches to repair the CNS.

If Dr. Pancrazio had assignment of grant/application and you need to discuss aspects of your proposal or project with a NIH Program Director,

Neurodegeneration

Research Areas of Interest:

- Parkinsonian Diseases (PD), including early onset forms, corticobasal degeneration, progressive supranuclear palsy.
- Alzheimer's disease (AD), as well as frontotemporal dementias(FTDs), and Lewy body dementias(LBD)
- Amyotrophic Lateral Sclerosis (ALS), as well as other adult-onset motor neuron disease including ALS-dementia complex of Guam.
- Huntington's disease (HD), as well as adult onset trinucleotide repeat disorders and ataxias.
- Other adult onset neurodegenerative disorders such as Multiple System Atrophy, Pick's Disease, Hallevorden-Spatz disease, tauopathies, synucleinopathies and amyloidopathies, hereditary spastic paraplegia (HSP).

Program Directors:

Beth-Anne Sieber (sieberb@ninds.nih.gov) Portfolio: (1) Parkinson's disease molecular biology, neurochemistry, cell biology and clinical studies; (2) Gene therapy studies targeted toward Parkinson's disease treatment. (3) Deep Brain Stimulation- basic and clinical research examining underlying circuitry and mechanism of action; (4) Motor and nonmotor manifestations of Parkinson's disease (5) Translational and clinical studies relevant to the neuroprotection and treatment of Parkinson's disease; (6) Basic science and pathology of Essential Tremor, Multiple System Atrophy, Progressive Supranuclear Palsy and orphan diseases; (7) AD: animal modeling, pathogenesis of AD including basic research encompassing neurotrophic factors, neurotransmitters, beta-amyloid, APP, Presenilins, ApoE and discovery of new pathways for AD pathogenesis; (8) Vascular Cognitive Impairment (VCI), basic and translational studies. Co-Chair, NINDS Parkinson's Disease Working Group (PDWG). Manages Morris K. Udall Centers of Excellence for Parkinson's Disease Research program. Point of contact, Parkinson's disease, Alzheimer's disease, VCI.

Margaret Sutherland (sutherlandm@ninds.nih.gov) Portfolio: (1) Parkinson's disease including epidemiology, GWA studies, genetics, biomarkers, PD pathogenesis involving mitochondrial dysfunction, bioenergetics, protein processing, protein misfolding, synuclein and translational studies aimed at developing small molecule therapeutics; (2) Huntington's disease including epidemiology, genetic modifiers; basic mechanisms, mitochondrial dysfunction, transcription and epigenetics, protein trafficking, protein modification; translational research, clinical trials (3) Transporter and receptor signaling associated with neurodegeneration; (4) Stem cell clinical and applied research studies, involving the use stem cells for drug and environmental toxin screening and for cell replacement therapies; (5) Animal modeling for neurodegenerative diseases; (6) Pathogenesis, epidemiology and translational studies of ALS and ALS-dementia complex of Guam; (7) FTDs: basic and translational studies. Manages HD Roster, and CINAPS (contract for compound testing in standardized models of Parkinson's Disease). Point of contact, Huntington's Disease, ALS, FTDs.

Neural Environment

Research Areas of Interest:

- Development and normal functions of glial cells including myelin formation, microglial function, astrocyte function and cell-cell communication among the diverse cell populations of the nervous system.
- Cellular, infectious, immune, and inflammatory mechanisms in nervous system disorders such as multiple sclerosis, prion diseases, brain tumor, stroke, CNS and PNS tumors, and neuroAIDS.
- Identify the molecular mechanisms of cell injury and death in the nervous system.
- Vascular mechanisms of neurological disorders, CNS vascular development and the role of microvascular endothelia, extra-cellular matrix and cells of hematopoietic origin within the central nervous system.
- Development of diagnostics and of therapies that will prevent, arrest or reverse autoimmune neurological disorders such as multiple sclerosis.
- Mechanisms of blood-brain and brain-CSF barrier functions and of cell migration (and/or trafficking) into the CNS in stroke, immune disorders and CNS infections.
- Development of animal models for infectious and immune disorders and stroke (e.g. transgenic or knockout/in models, viral models).
- Study of normal glial or progenitor/stem cell populations and their role in the development or treatment of CNS and PNS tumors.
- Study of biomarkers for vascular, and immune diseases of the nervous system.
- Bi-directional translational research that transfers insights gained from basic research and clinical investigations.

Program Directors:

Jane Fountain (fountain@ninds.nih.gov) Portfolio: (1) Brain Tumor, (2) Tuberous Sclerosis (3) Basic Glial Cell Biology (Stem cells, cell growth and differentiation), (4) Neurofibromatosis

Tom Jacobs (jacobst@ninds.nih.gov) Portfolio: (1) Ischemic Stroke; (2) Blood-brain barrier; (3) Neuron-Glial-Endothelial Interactions; (4) Cerebrovascular Biology; (5) Neuronal mechanisms in stroke; (6) Hemorrhagic and ischemic Stroke (7) Apoptosis and cell death mechanisms in the nervous system; (8) Neuroprotection and brain hypoxia/ischemia; (9) Regulation of cerebral blood flow; (10) Mechanisms of functional recovery after stroke (11) Brain vascular malformations (12) Stroke and brain vascular malformations genetics.

Ursula Utz (utzu@ninds.nih.gov) Portfolio: (1) Multiple Sclerosis (including clinical trials, translational research, animal models of MS, e.g., EAE, TMEV and others); (2) Neuroimmunology; (3) Systemic lupus erythematosus, and other autoimmune diseases with CNS involvement; (4) Glial cell biology (Oligodendrocytes; Myelin formation and repair; Myelin mutants; Glial mediated inflammation).

May Wong (wongm@ninds.nih.gov) Portfolio: (1) Neuro-AIDS; (2) Infectious diseases of the nervous system, including bacterial, fungal and parasitic infections; (3) Neurovirology; (4) Creutzfeldt Jacob Disease and other transmissible spongiform encephalopathies

Office of Clinical Research

Research Areas of Interest:

- Development of clinical interventions for neurological disorders and stroke.
- Translation of findings in the laboratory to clinical research and clinical interventions.
- Innovation in clinical research methodology and protection of human subjects

Program Directors:

Robin Conwit (conwitr@ninds.nih.gov) Portfolio: Clinical trials involving neuroprotection and intervention studies; ALS and other neuromuscular diseases; emergency clinical trials; clinical trials in myopathies, neuropathies, neuromuscular diseases.

Janice Cordell (cordellj@ninds.nih.gov) Portfolio interests: Clinical trials and epidemiological studies, clinical trial design and monitoring, clinical research methodology, and recruitment and retention issues related to clinical research.

(Vacant) Portfolio: NINDS Clinical Research Collaboration (CRC); health services research; cell and other biologic therapies; prevention research; clinical research ethics and regulatory policy.

Wendy Galpern (galpernw@ninds.nih.gov) Portfolio: Clinical trials and epidemiology studies in neurodegenerative disorders and movement disorders, including Parkinson's disease, Huntington's disease, ataxias, dystonia; experimental therapeutics.

Peter Gilbert (gilbertp@ninds.nih.gov) Portfolio: Research grants in biostatistics and clinical trial design, monitoring and analysis.

Deborah Hirtz (hirtzd@ninds.nih.gov) Portfolio: Clinical studies (trials, epidemiology, etc.) related to cerebral palsy prevention, stroke in infants and children, and other pediatric clinical research: autism, pediatric epilepsy, pediatric head trauma.

Scott Janis (janiss@ninds.nih.gov) Portfolio: Clinical trials and epidemiology studies in stroke and traumatic brain injury; SPOTRIAS acute stroke network; clinical trial design and monitoring; and clinical research methods.

Claudia Moy (moyc@ninds.nih.gov) Portfolio: Clinical trials and epidemiology studies in stroke, cerebrovascular disease, and other neurological disorders; quality of life and other patient-reported outcome measures in clinical trials; determinants of stroke risk and stroke disparities; clinical trial design and monitoring; clinical research methods; clinical trials training; ethical issues in clinical research.

Joanne Odenkirchen (odenkirchenj@ninds.nih.gov) Portfolio interests: Clinical studies, clinical trial design, methodology, and monitoring, recruitment and retention issues, community and public health disease prevention and dissemination, international clinical research, regulatory and ethical issues in clinical research, and pediatric trials.

Office of Translational Research

Research Areas of Interest:

The mission of the Office of Translational Research is to facilitate the preclinical discovery and development of new therapeutic interventions for neurological disorders by:

- Supporting and conducting preclinical development from discovery of candidate therapeutics through Investigational New Drug (IND) and Investigational Device Exemption (IDE) applications to the FDA
- Supporting translational research projects and networks
- Supporting the design, implementation, and management of research infrastructure activities that apply advanced research technologies to problems in neuroscience and neurology

Ongoing Research Programs include:

- NINDS Translational Research Program
- NIH Molecular Libraries Initiative: High Throughput Screening Network and Assay Development Support
- NIH RAID: Resources for Preclinical Testing and Manufacture
- Countermeasures Against Chemical Threats (CounterACT)
- Anticonvulsant Screening Program
- The SMA Project for Spinal Muscular Atrophy Therapeutics Development
- NINDS P30 Institutional Center Core Grants to Support Neuroscience Research

Program Directors:

Jill Heemskerck (heemskej@ninds.nih.gov) Portfolio: The SMA Project Therapy Development Program; Medicinal Chemistry Service for Neurotherapeutics (in development); High Throughput Drug Screening Facility for Neurodegeneration; CTSA Translational Subcommittee; co-chair of Blueprint Coordinating Committee, Translational Research Oversight Committee (TROC)

David A. Jett (jett@d@ninds.nih.gov) Portfolio: Counterterrorism (CounterACT) Program and Neurotoxicology; CounterACT Research Centers of Excellence and Research Projects; CounterACT SBIRs; Preclinical Development Contract; CounterACT ASP Component; InterAgency Collaboration with DoD (IAA); Neurotoxicology grants

Yuan Liu (liuyuan@ninds.nih.gov) Portfolio: Computational Neuroscience and Neuroinformatics Programs & Initiatives :

- Interagency: Modeling and Analysis Group (IMAG) & Predictive Multiscale Models of the Physiome in Health and Disease
- NIH-NSF Collaborative Research in Computational Neuroscience (CRCNS)
- Roadmap National Centers for Biomedical Computing (NCBC)
- Bioinformatics Science & Technology Initiative Consortium (BISTI)
- BioMedical Informatics Coordinating Committee (BMIC)
- Clinical & Translational Science Award (CTSA) Informatics Subcommittee
- Blueprint: Information Framework (NIF); Neuroimaging Informatics Tools and Resources Clearing House (NITRC)
- Neuroimaging Informatics Technology Initiative (NIFTI)

Thomas Miller (millert@ninds.nih.gov) Portfolio: Preclinical Development of Therapeutics

- NINDS Translational Research Program; NIH RAID Research Infrastructure
- Microarray Centers; P30 Center Core Grants.

Mark Scheideler (scheidelerm@ninds.nih.gov) Portfolio: Optimization of Small Molecule Probes for the Nervous System Program

- Roadmap Molecular Libraries Initiative
 - Assay Development for HTS Program
 - ML Probe Production Centers Network (MLPCN) Management Team.
 - Project Team, Implementation Group (MLIIG), and Science Officers Work Group.
- Roadmap Clinical and Translational Science Awards (CTSA) Initiative
 - Consortium Oversight Committee Member
 - Coordinator, Public-Private Partnership Key Function Committee
- Neuroscience Blueprint Translational Project Team

James Stables (stablesj@ninds.nih.gov) Portfolio: Anti-Convulsant Screening Program, drug screening libraries/databases, pre-clinical testing and toxicology; Translational activities; Model Validation in resistance and Epileptogenesis; Seizure models for pediatric and geriatric populations, CounterACT efforts to identify neuro-protectants.

Office of Minority Health and Research

Research Areas of Interest:

- Health disparities-related research (Stroke, NeuroAIDS, NeuroDiabetes, Epilepsy, Brain Injury, etc.)
- Basic, clinical, translational studies to support new, and/or ongoing neuroscience programs leading to diversity in the scientific workforce and the reduction of disease through research.
- Increase extramural community awareness of research and health information gained from NINDS-sponsored programs and activities
- Foster innovative and effective partnerships and collaborations between minority institutions and established neuroscience laboratories; at federal and non-federal research institutions.

Program Directors:

Alfred Gordon (gordona@ninds.nih.gov) Director, Office of Minority Health and Research. Associate Director for Minority Health and Research. Portfolio: (1) Center Grants in Health Disparities and Disease Prevention (2) Diversity Capacity Building and Education (3) Clinical Trials (4) Educational Outreach

Courtney Ferrell (cferrell@ninds.nih.gov) Portfolio: (1) Specialized Center Cooperative Agreements (SNRPs), (2) Collaborative Neurological Sciences Awards (S11) (3) Underrepresented Minority Capacity Building and Education (4) Educational outreach.

Michelle D. Jones-London (jonesmiche@ninds.nih.gov) Portfolio: (1) Specialized Neuroscience Research Programs (Emphasis on Basic and Translational Programs) (2) Diversity (Underrepresented Minority, Disadvantaged and Disability) Supplements (3) Re-Entry Supplements (4) R25 Education Programs (including Neuroscience Scholars Program) (5) Career Development Award (Diversity K01) (6) Predoctoral (F31) Diversity NRSA (7) SCORE Individual Awards (8) Diversity Outreach Conferences

Salina Waddy (waddysp@ninds.nih.gov) Portfolio: (1) Health Disparities Research and Disease Prevention (2) Stroke Research (3) Specialized Center Cooperative Agreements (SNRPs) (4) Underrepresented Minority Capacity Building and Education (5) Clinical Trials (6) Educational outreach.

Training and Career Development Office

Research Areas of Interest:

All scientific areas of the Institute. The Training Office is responsible for the development, implementation and maintenance of programs for training and career development of neuroscience researchers.

Stephen Korn (korns@ninds.nih.gov) Portfolio: All inquiries about Institutional Training Programs (T32s, K12) as well as the NINDS Research Education Programs for Residents and Fellows in Neurology and Neurosurgery (R25); All inquiries about individual training mechanisms [fellowships (Fs), career awards (Ks). The Pathway to Independence Award (K99/R00)]. All inquiries related to training, career development and research education. Inquiries about transitioning to independent, non-mentored funding mechanisms. Inquiries about the Loan Repayment Program (LRP) and Academic Research Enhancement Awards (AREA, R15).

Office of International Activities

Research Areas of Interest:

- Develop creative approaches to promote international research in the neurosciences
- Stimulate international activities with other NIH ICs, other domestic and foreign governmental agencies and non-governmental organizations
- Encourage international neuroscience collaborations, training and capacity building through grants, short-term travel supplements and international conferences

Yuan Liu (liuyuan@ninds.nih.gov) Portfolio: Trans-NIH and NINDS International Programs and Initiatives including:

- IC International Representatives Group (Trans-NIH)
- International Neuroscience Fellowship Program (F05)
- Brain Disorders in the Developing World
- Fogarty International Research Collaboration Awards (FIRCA)
- Global Health Research Initiative Program for New Foreign Investigators (GRIP)
- Millennium Promise Awards: Non-communicable Chronic Diseases Research Training Program (NCoD)
- US-Japan Brain Research Cooperative Program (BRCP)