



**SUMMARY OF  
NIH MENTORED QUANTITATIVE RESEARCH  
CAREER DEVELOPMENT GRANTS (K25)  
FOR PROGRAM ANNOUNCEMENT PA-99-087**



The following text provides a summary of grants from BECON member institutes and centers for NIH Mentored Quantitative Research Career Development Grants (K25) in response to program announcement PA-99-087 (April 13, 1999). The objective of this program is to support the career development of investigators with quantitative scientific and engineering backgrounds outside of biology or medicine who have made a commitment to focus their research endeavors on behavioral and biomedical research (basic or clinical).

Funded grants are listed below in alphabetical order by the principal investigator's (PI's) last name. Other information provided for each grant includes PI affiliation, grant title, application number, funding organization, and a brief summary of the project. Please visit <http://crisp.cit.nih.gov/> for additional information about funded grants, including project abstracts.

1. **PRINCIPAL INVESTIGATOR: AYAPPA, INDU A**  
**AFFILIATION:** NEW YORK UNIVERSITY SCHOOL OF MEDICINE  
**PROJECT TITLE:** AUTOMATED (AI) ANALYSIS OF SLEEP DISORDERED BREATHING  
**GRANT NUMBER:** 5-K25-HL-4420-2-
2. **PRINCIPAL INVESTIGATOR: BARRETO, ERNEST**  
**AFFILIATION:** GEORGE MASON UNIVERSITY  
**PROJECT TITLE:** EMERGENCE AND SYNCHRONOUS ACTIVITY IN NEURONAL DYNAMICS  
**GRANT NUMBER:** 5-K25-MH-1963-2-
3. **PRINCIPAL INVESTIGATOR: BECERRA, LINO R**  
**AFFILIATION:** MASSACHUSETTS GENERAL HOSPITAL  
**PROJECT TITLE:** TEMPORAL QUANTIFICATION OF CNS ACTIVATION (FMRI) TO PAIN  
**GRANT NUMBER:** 1-K25-NS-41290-1-A1
4. **PRINCIPAL INVESTIGATOR: BERLOFF, NATALIA G**  
**AFFILIATION:** UNIVERSITY OF CALIFORNIA LOS ANGELES  
**PROJECT TITLE:** GENETIC NETWORK INFERENCE FROM GENE EXPRESSION DATA  
**GRANT NUMBER:** 1-K25-HG-2411-1-
5. **PRINCIPAL INVESTIGATOR: BRYCE, CINDY L**  
**AFFILIATION:** UNIVERSITY OF PITTSBURGH AT PITTSBURGH  
**PROJECT TITLE:** END-STAGE LIVER DISEASE/PREVALENCE & TREATMENT VARIATION  
**GRANT NUMBER:** 5-K25-DK-2903-2-
6. **PRINCIPAL INVESTIGATOR: CHANG, CHUNG-CHOU H**  
**AFFILIATION:** UNIVERSITY OF PITTSBURGH AT PITTSBURGH  
**PROJECT TITLE:** A GENERALIZED MODEL FOR POST-TRANSPLANT SURVIVAL  
**GRANT NUMBER:** 1-K25-DK-59928-1-
7. **PRINCIPAL INVESTIGATOR: CHEN, KONG Y**  
**AFFILIATION:** VANDERBILT UNIVERSITY  
**PROJECT TITLE:** AUTONOMIC CONTRIBUTION TO ENERGY METABOLISM IN HUMANS  
**GRANT NUMBER:** 5-K25-DK-2973-2-
8. **PRINCIPAL INVESTIGATOR: CHEUNG, KEI-HOI**  
**AFFILIATION:** YALE UNIVERSITY

**PROJECT TITLE:** INTEROPERATION OF GENOME DATABASES AND TOOLS  
**GRANT NUMBER:** 1-K25-HG-2378-1-

9. **PRINCIPAL INVESTIGATOR:** **DUNN, ANDREW K**  
**AFFILIATION:** MASSACHUSETTS GENERAL HOSPITAL  
**PROJECT TITLE:** INVIVO SPATIO TEMPORAL OPTICAL IMAGING OF FOCAL ISHEMIA  
**GRANT NUMBER:** 1-K25-NS-41291-1-
10. **PRINCIPAL INVESTIGATOR:** **FARHI, LEON S**  
**AFFILIATION:** UNIVERSITY OF VIRGINIA CHARLOTTESVILLE  
**PROJECT TITLE:** DYNAMIC FEEDBACK CONTROL OF THE GH AXIS  
**GRANT NUMBER:** 1-K25-HD-1474-1-
11. **PRINCIPAL INVESTIGATOR:** **FREDERICK, BLAISE D**  
**AFFILIATION:** MC LEAN HOSPITAL (BELMONT, MA)  
**PROJECT TITLE:** FMRI TECHNIQUE DEVELOPMENT FOR SUBSTANCE ABUSE RESEARCH  
**GRANT NUMBER:** 1-K25-DA-14013-1-
12. **PRINCIPAL INVESTIGATOR:** **GELASCO, ANDREW K**  
**AFFILIATION:** MEDICAL UNIVERSITY OF SOUTH CAROLINA  
**PROJECT TITLE:** CELLULAR EFFECTS OF INDOXYL SULFATE-A UREMIC TOXIN  
**GRANT NUMBER:** 1-K25-DK-59950-1-
13. **PRINCIPAL INVESTIGATOR:** **GRANT, GREGORY R**  
**AFFILIATION:** UNIVERSITY OF PENNSYLVANIA  
**PROJECT TITLE:** MENTORED QUANTITATIVE RESEARCH CAREER DEVELOPMENT AWARD  
**GRANT NUMBER:** 5-K25-HG-52-2-
14. **PRINCIPAL INVESTIGATOR:** **GRAY, JEFFREY J**  
**AFFILIATION:** UNIVERSITY OF WASHINGTON  
**PROJECT TITLE:** COMPUTATIONAL PREDICTION OF PROTEIN-PROTEIN DOCKING  
**GRANT NUMBER:** 1-K01-HG-2316-1-
15. **PRINCIPAL INVESTIGATOR:** **GRIEVE, PHILIP G**  
**AFFILIATION:** COLUMBIA UNIVERSITY HEALTH SCIENCES  
**PROJECT TITLE:** SPATIOTEMPORAL EEG QUALIFICATION IN INFANT DEVELOPMENT  
**GRANT NUMBER:** 5-K25-HD-1381-2-
16. **PRINCIPAL INVESTIGATOR:** **GUSTAFSON, KENNETH J**  
**AFFILIATION:** CASE WESTERN RESERVE UNIVERSITY  
**PROJECT TITLE:** CAREER TRAINING IN BLADDER CONTROL NEURAL PROTHESES  
**GRANT NUMBER:** 1-K25-HD-40298-1-
17. **PRINCIPAL INVESTIGATOR:** **HOH, JOSEPHINE**  
**AFFILIATION:** ROCKEFELLER UNIVERSITY  
**PROJECT TITLE:** STATISTICAL METHODS TO INTERPRET GENOMIC DATA  
**GRANT NUMBER:** 1-K25-HG-60-1-A1
18. **PRINCIPAL INVESTIGATOR:** **INDURKHYA, ALKA**  
**AFFILIATION:** MICHIGAN STATE UNIVERSITY  
**PROJECT TITLE:** STATISTICAL METHODS FOR ECONOMIC ANALYSIS IN PREVENTION  
**GRANT NUMBER:** 1-K25-MH-1880-1-A1
19. **PRINCIPAL INVESTIGATOR:** **IZU, LEIGHTON T**  
**AFFILIATION:** UNIVERSITY OF MARYLAND BALT PROF SCHOOL  
**PROJECT TITLE:** CALCIUM WAVES IN ATRIAL CELLS  
**GRANT NUMBER:** 1-K25-HL-68704-1-
20. **PRINCIPAL INVESTIGATOR:** **LEMAY, MICHEL A**  
**AFFILIATION:** MCP HAHNEMANN UNIVERSITY

**PROJECT TITLE:** SPINAL PLASTICITY EFFECTS ON NEURAL CIRCUITS  
**GRANT NUMBER:** 1-K25-NS-41975-1-

21. **PRINCIPAL INVESTIGATOR:** **MANDUCHI, ELISABETTA**  
**AFFILIATION:** UNIVERSITY OF PENNSYLVANIA  
**PROJECT TITLE:** MENTORED QUANTITATIVE RESEARCH CAREER DEVELOPMENT AWARD  
**GRANT NUMBER:** 1-K25-HG-2296-1-
22. **PRINCIPAL INVESTIGATOR:** **MENON, VINOD**  
**AFFILIATION:** STANFORD UNIVERSITY  
**PROJECT TITLE:** LONGITUDINAL FMRI STUDY OF COGNITIVE DEVELOPMENT  
**GRANT NUMBER:** 5-K25-HD-40761-2-
23. **PRINCIPAL INVESTIGATOR:** **MILLER, PAUL**  
**AFFILIATION:** BRANDEIS UNIVERSITY  
**PROJECT TITLE:** NETWORK REQUIREMENTS FOR PARAMETRIC WORKING MEMORY  
**GRANT NUMBER:** 1-K25-MH-64497-1-
24. **PRINCIPAL INVESTIGATOR:** **MOURAD, PIERRE D**  
**AFFILIATION:** UNIVERSITY OF WASHINGTON  
**PROJECT TITLE:** BLOOD BRAIN BARRIER PERMEABILIZATION USING ULTRASOUND  
**GRANT NUMBER:** 5-K25-NS-2234-2-
25. **PRINCIPAL INVESTIGATOR:** **MUSCHOL, MARTIN**  
**AFFILIATION:** UNIVERSITY OF PENNSYLVANIA  
**PROJECT TITLE:** EXCITATION-SECRETION COUPLING PEPTIDERGIC NERVE TERMINAL  
**GRANT NUMBER:** 5-K25-NS-2176-3-
26. **PRINCIPAL INVESTIGATOR:** **OLBRICH, KEVIN C**  
**AFFILIATION:** DUKE UNIVERSITY  
**PROJECT TITLE:** CELL VIABILITY IN IMPLANTABLE DIFFUSION CHAMBERS  
**GRANT NUMBER:** 5-K25-DK-2893-2-
27. **PRINCIPAL INVESTIGATOR:** **PETERS, DAWN**  
**AFFILIATION:** KAISER FOUNDATION RESEARCH INSTITUTE  
**PROJECT TITLE:** DAWN PETERS QUANTITATIVE RESEARCH DEVELOPMENT  
**GRANT NUMBER:** 1-K25-DE-14093-1-
28. **PRINCIPAL INVESTIGATOR:** **RAO, JONNAGADDA S**  
**AFFILIATION:** CASE WESTERN RESERVE UNIVERSITY  
**PROJECT TITLE:** MODELS FOR THE MOLECULAR CLASSIFICATION OF TUMORS  
**GRANT NUMBER:** 1-K25-CA-89867-1-
29. **PRINCIPAL INVESTIGATOR:** **REISFELD, BRADLEY**  
**AFFILIATION:** COLORADO STATE UNIVERSITY  
**PROJECT TITLE:** BIOLOGICALLY BASED REACTION NETWORK MODELING OF P4502E1  
**GRANT NUMBER:** 1-K25-ES-11146-1-
30. **PRINCIPAL INVESTIGATOR:** **ROUZINE, IGOR M**  
**AFFILIATION:** TUFTS UNIVERSITY BOSTON  
**PROJECT TITLE:** SEARCH FOR WORKING MODELS OF HIV PERSISTENCE & EVOLUTION  
**GRANT NUMBER:** 5-K25-AI-1811-2-
31. **PRINCIPAL INVESTIGATOR:** **SCHNITZLER, MARK A**  
**AFFILIATION:** WASHINGTON UNIVERSITY  
**PROJECT TITLE:** MENTORED STUDY OF RENAL TRANSPLANT ALLOCATION EFFICIENCY  
**GRANT NUMBER:** 1-K25-DK-2916-1-
32. **PRINCIPAL INVESTIGATOR:** **SPARTO, PATRICK J**  
**AFFILIATION:** UNIVERSITY OF PITTSBURGH AT PITTSBURGH

**PROJECT TITLE:** AGING AND VESTIBULAR DISEASE ON POSTURAL CONTROL  
**GRANT NUMBER:** 1-K25-AG-1049-1-A1

33. **PRINCIPAL INVESTIGATOR:** **STERLING, JAMES D**  
**AFFILIATION:** KECK GRADUATE INSTITUTE  
**PROJECT TITLE:** MICROFLUIDIC SYSTEMS FOR THE APPLIED LIFE SCIENCES  
**GRANT NUMBER:** 1-K25-GM-63837-1-
34. **PRINCIPAL INVESTIGATOR:** **STOCKMAN, CAROL K**  
**AFFILIATION:** UNIVERSITY OF PITTSBURGH AT PITTSBURGH  
**PROJECT TITLE:** RISK AND PREFERENCES: RACIAL DISPARITIES IN CARDIAC CARE  
**GRANT NUMBER:** 1-K25-HL-69880-1-
35. **PRINCIPAL INVESTIGATOR:** **TERUEL, MARY N**  
**AFFILIATION:** STANFORD UNIVERSITY  
**PROJECT TITLE:** SINGLE CELL ASSAYS TO UNDERSTAND SIGNALING NETWORKS  
**GRANT NUMBER:** 5-K25-HG-57-2-
36. **PRINCIPAL INVESTIGATOR:** **WEIER, JINGLY F**  
**AFFILIATION:** UNIVERSITY OF CALIFORNIA SAN FRANCISCO  
**PROJECT TITLE:** MOLECULAR/GENETIC STUDIES ON HUMAN PLACENTAL DEVELOPMENT  
**GRANT NUMBER:** 1-K25-HD-41425-1-
37. **PRINCIPAL INVESTIGATOR:** **YOST, MICHAEL J**  
**AFFILIATION:** UNIVERSITY OF SOUTH CAROLINA AT COLUMBIA  
**PROJECT TITLE:** TISSUE ENGINEERED ARTIFICIAL MYOCARDIUM  
**GRANT NUMBER:** 5-K25-HL-67097-2-