#### NIH PHS 2009-1 SBIR Contracts Topics Opens on or about 8/8/08 – Closes 11/3/08

Following are the research topics identified in the NIH/CDC SBIR Contract Solicitation [PHS 2009-1]:

### NATIONAL INSTITUTES OF HEALTH (NIH)

#### NATIONAL CANCER INSTITUTE (NCI):

- Development of Molecular Pharmacodynamic Assays for Targeted Therapies
- System to Analyze and Support Biomarker R&D Strategies
- Development of Anticancer Agents
- Innovative Methods for Manufacturing Safe, Effective Cancer Therapeutics
- Biopsy Instruments and Devices that Preserve Molecular Profiles in Tumors
- Innovative Strategies to Protect Radiosensitive Organs and Structures During Radiation Therapy
- Quantitative Tissue Imaging For Clinical Diagnosis and Treatment
- High Level Programming Language to Expedite Development of User Interfaces
- Mobile Computing for Consumer-centered Cancer Prevention and Control
- Health Information Technology to Facilitate Patient-centered Communication in Cancerrelated Care
- Antibody Array for Cancer Detection and Diagnosis
- Novel and Improved Methods for Detecting Epigenetic Modifications
- Development of shRNA Library Screening Technology for Cancer-Related Targets
- Nanotechnology Imaging and Sensing Platforms for Improved Diagnosis of Cancer
- Multifunctional Therapeutics Based on Nanotechnology
- Novel Antibody Epitope Mapping Technologies
- Protein Expression of Glycosylated Cancer Related Proteins
- Peptide Aptamers:
- New Tools to Capture and Study Protein Interactions in Lieu of Immunological Reagents.

## NATIONAL CENTER FOR RESEARCH RESOURCES (NCRR):

• Visualizing Biomedical Research Characteristics.

## NATIONAL HEART, LUNG, AND BLOOD INSTITUTE (NHLBI):

- Ultrasonic Wave Transmitter, Transmission Line and Receiver for Interventional MRI
- Nanoprobes for Non-Invasive Detection of Atherosclerotic Plaques
- Development of Pathogen Inactivation Technologies for Blood Components
- Development of Cell-based Bioassays Using Induced Pluripotent Stem (iPS) Cell Lines
- Development of Novel Formulations for Iron Chelators to Treat Iron Overload in Patients on Transfusion Therapy
- Multiplexed Assay Platforms for Protein Biomarkers of Cardiovascular Disease
- Transcatheter Ablation Devices for Arrhythmia Treatment
- Developing Novel Anticoagulants and Synthetic Heparins
- Development of Gene Transfer Approaches for Correction of Genetic Blood Diseases
- Wireless Communications Systems for Magnetic Resonance Imaging (MRI) Guided Surgery.

## NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM (NIAAA):

- Simple, Low-Cost, Onsite Biomarker Test Kits for Alcohol-Associated Disorders
- Biological Sample Repository for Alcohol Research
- Identification of miRNAs as Biomarkers for Alcohol-Induced Disorders.

## NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES:

• Clinical Sample Collection and Processing Technologies for Infectious Disease Diagnostics.

## NATIONAL INSTITUTE ON DRUG ABUSE (NIDA):

- Innovative Technologies to Support Economic Research in the Drug Abuse Treatment System
- Instrument Development
- Rapid Assessment Tools of Sexual and Drug Use Risk Behaviors
- Electronic Drug Abuse Treatment Referral Systems for Physicians
- Virtual Reality Simulations to Train Caregivers/Providers
- Improvement of Reliability and Validity of Reporting of Sensitive Data
- Development of Therapeutic Agents for Substance Use Disorders
- Pharmaceutical Approaches for Development of Pharmacotherapies for Drug Addiction
- Design and Synthesis of Treatment Agents for Drug Abuse
- Repository for Substance Abuse Brain Imaging Data (SBIR/STTR)
- Web Based Cognitive/Neuropsychological Testing for Substance Abuse
- Development Of Science Education Materials Or Programs
- Screening, Characterization and Validation Assays for Protein Capture Reagents
- Tool Development for New or Improved Capture Reagents.

#### NATIONAL INSTITUTE OF MENTAL HEALTH (NIMH):

• Home-Based Lithium Level Testing for Bipolar Patients.

#### CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

# NATIONAL CENTER ON BIRTH DEFECTS AND DEVELOPMENTAL DISABILITIES (NCBDDD):

- Development of Web site with Modules for Study Participants and Fellow Researchers
- Development of a Publication Database and Information Retrieval System with Announcement Feature
- Development of Standardized Evaluation Software for Blood Disorder Public Health Surveillance Systems

- Animated Software depicting Iron Out of Balance
- Development and Evaluation of Web-based Applications Using Emerging Technologies and New Media
- Application of Gaming Technology to Communicate Health Messages and Promote Healthy Living among Persons with Disabilities
- Use of Cutting-edge Technology to Communicate with and Educate Health Care Professionals about Birth Defects, Developmental Disabilities, and Ways to Improve the Health and Wellness of Persons with Disabilities.

# NATIONAL CENTER FOR CHRONIC DISEASE PREVENTION AND HEALTH PROMOTION (NCCDPHP):

- Inexpensive, portable, user-friendly calibration of aneroid and electronic blood pressure devices
- Dynamic Health Promotion Decision Making for Preconception Health and Healthcare
- Development and Evaluation of a Quality and Affordable Electric-Assist Bicycle for Commuting.

## IMMUNIZATION SAFETY OFFICE (ISO):

• Novel or Enhanced Technology for Vaccination Delivery and Immunization Programs.

This is the unofficial version from Zyn System's SBIR Gateway <u>www.zyn.com/sbir</u> The official announcement can be found at: <u>https://www.fbo.gov/?s=opportunity&mode=form&id=ce2cb8910df868323d2c08d9ab66fe65&tab =core&\_cview=0</u>