GCOB Grant Programs

The research grants program administered by the Grants and Contracts Operations Branch (GCOB) supports all aspects of preclinical anticancer drug discovery and treatment strategies, including drug design, selective targeting of therapeutic agents, development of new preclinical models for drug discovery, biomarker development for assessing treatment response, and understanding, preventing and overcoming drug resistance. Applications are accepted in the following drug research categories: synthesis and chemistry, natural products, screening and experimental therapeutics, pharmacology, toxicology, biochemistry and mechanism of action. Research on biological agents and immunological concepts for cancer treatment is supported by the **Biological Resources Branch** http://web.ncifcrf.gov/research/brb/ Grant applicants with applications that include clinical trials and/or studies of patient outcome are referred to the **Cancer Therapy Evaluation Program.** http://ctep.info.nih.gov/

GCOB resides in a unique situation in relation to the extramural grant community and the internal, non-grant drug discovery/development activities of the Developmental Therapeutics Program (DTP). Through management of a large grant and cooperative agreement portfolio, GCOB staff maintains extensive interactions with the external research community and can provide advice to foster the drug discovery mandate of the DTP. Such activities include assisting grantees to access the NCI drug and natural product repositories, inviting scientists to participate in a DTP seminar series, and arranging for compound testing and identification of molecular targets in the 60 cell line screen. Staff provides information to grantees and other investigators regarding availability of NCI resources for extramural scientists for development of their agents to clinical trial.

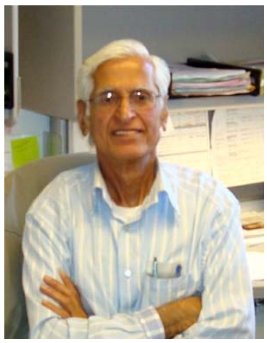
GCOB Staff

Grantees and applicants are encouraged to discuss any questions they might have with Dr. Wolpert or the other Program Directors. The areas of responsibility of the GCOB staff are indicated below to help you select the staff member who best represents the subject matter of your research.

Mary K. Wolpert, Ph.D., Chief (Pharmacology/General Questions)
Wolpertm@exchange.nih.gov

biological studies involving metal complexes; host-tumor interactions; mechanistic drug studies on traditional chemotherapeutic agents; polyamines; other topics not addressed above.

Suresh K. Arya, Ph.D., Program Director (Molecular Targets)
aryas@mail.nih.gov



molecular target identification and characterization; systems biology; stem cells; oncogenes; tumor suppressor genes; genetic mutation; epigenetic alterations; signal transduction; cell cycle control; apoptosis; authophagy; gene expression – transcription, translation and RNA processing; gene therapy; viral therapy; gene transfer; vector design; si/shRNA, miRNA, telomeres and telomerase; topoisomerases; therapeutic uses of stem cells; bacterial therapy; pharmacogenetics; pharmacogenomics; systems biology studies involving drugs; individualized therapies;

Suzanne Forry-Schaudies, Ph.D., Program Director (Biochemistry)
forryscs@mail.nih.gov

folate biochemistry; drug resistance, including multidrug resistance; signaling; growth factor receptors; extracellular matrix; non-mammalian organisms; angiogenesis; metastasis; adhesion; motility, invasion; gene therapy, including lentiviral vectors; combination chemotherapy; mechanism(s) of drug action; tumor-stroma interactions; drug development; drug safety and efficacy biomarkers; toxicogenomics; proteomics; metabolomics; predicative ADME/Tox; toxicology; pharmacology; pharmacokinetics; pharmacodynamics; drug metabolism; assay technologies for drug discovery and development; drug safety/toxicity models; drug efficacy models (high-throughput drug screening); exploratory IND studies

Yali Fu, Ph.D., Program Director (Natural Products)
fuyali@mail.nih.gov

drug formulations; drug delivery; nanotechnology in drug delivery (nanoparticles); liposomes; controlled release; biosynthesis/bioengineering; natural products drug discovery and mechanism of action; microbes, marine, plants, animals; targeted therapies; genetically engineered organisms for production; tubulin interacting agents; herbal and traditional medicines;

Robert Lees, Ph.D., Program Director (Chemistry)
Leesro@mail.nih.gov

chemistry; synthetic and structural chemistry; NMR; x-ray crystallography; drug design; medicinal chemistry; total synthesis; library synthesis (combinatorial/parallel chemistry); computer modeling; structure-based drug design; chemical biology; bioorganic and bioinorganic chemistry;

GCOB Support Staff

Ms. Suzanne Stack
Stacksl@mail.nih.gov

Extramural Program Specialist