

# **National Cancer Institute: IGI Funding Opportunities**

**Gary S. Dorfman, M.D.**

**National Cancer Institute,  
Cancer Imaging Program  
Imaging Guided Intervention Branch**

# NIH Funded IGI Research

- NIH structure previously presented
  - Review and funding / grant management are separate functions
  - IGI funding is not confined to one center / institute, e.g.,
    - NIBIB
    - NHLBI
    - NCI
- Multiple divisions and programs within NCI
  - Division of Cancer Treatment and Diagnosis, e.g.,
    - RRP
    - CIP
    - CTEP
- There is a choice, you may and should participate in making the choice
  - No one at NIH (including CSR) is a practicing clairvoyant
  - Provide “directing” information and request assignment

# CIP (BIP) Funded IGI Research

- The mission of the CIP is to promote and support:
  - Cancer-related basic, translational and clinical research in imaging sciences and technology; and
  - integration and application of these imaging discoveries and developments to the understanding of cancer biology and to the clinical management of cancer and cancer risk.
- CIP works with academic institutions, researchers, cooperative groups, and industry to:
  - Improve current oncologic imaging technologies
  - Assess the value of current imaging technologies
  - Develop new imaging technologies and novel agents
- Imaging technologies include:
  - Imaging for planning, guidance, monitoring, and outcomes of IGI
  - IGI interventions themselves
  - Integrated IGI systems
- CIP supports pre-clinical and clinical testing optimization, and validation of IGI technologies and Rx



# CIP Structure and Function

- **Four Branches:**
  - **Diagnostic Imaging Branch**
  - **Molecular Imaging Branch**
  - **Imaging Technology Development Branch**
  - **Imaging Guided Intervention**
    - **Gary S. Dorfman (Acting Branch Chief / Special Assistant to the Associate Director)**
    - **Gary J. Becker (Branch Chief effective 6/04)**
    - **Keyvan Farahani (Program Director)**
- **All four branches have relevance to oncologic IGI research**

# Branch Strategies and Tactics to Support IGI

- Interagency workgroups
- Convening workshops and advisory panels
- Engaging the IGI community
- Issuing RFAs & PAs (solicitations)
- Participation in the grant process
  - “Ombudsman” role to PI
  - Exception process
  - Grant oversight

# NCI Funding Opportunities

- R01 – Research Project Grant for a discrete specified research project by single PI
- P01 – Research Program Grant for an integrated, multi-project research program for several independent PIs
- R03 – Small Research Grant for preliminary short-term project (non-renew)



# NCI Funding Opportunities

- R21 – Exploratory / Developmental Grant for development of new research activity in categorical program area
- R33 – Phase II of above
- R41/42 – Small Business Technology Transfer Phase I/II Grant for cooperative R&D between small domestic for-profit organizations and research institutions (\$100K; 1 Yr / \$500K; 2 Yr)

# NCI Funding Opportunities

- R43/44 – Small Business Innovation Research Phase I/II Grant for small domestic business to demonstrate technical merit and feasibility and subsequent R&D (\$100K; 6 mo / \$750K; 2 Yr)
- Cancer Center and SPOREs
  - P20, P30, P50
- Other awards
  - K01 (Mentor), K07 (Career dev.), K12 (Mentor dev.), R25 (CA ed.), Training grants



# Specific CIP PAs

**PAR -03-124; PAR-03-125**

- Phased innovation award R21/33 (R33)
- Small business analog R41/42; R43/44
- Development / delivery of novel ...methods for biomedical imaging and image-guided interventions & therapy
- May incorporate ltd. pilot / clinical feasibility evaluations
- May use pre- or clinical studies
- Proof of feasibility, development, delivery
- Biopsy, therapy, interventions included
- \$125K / \$500K direct; \$100K / Unltd. total

# Specific CIP PAs

## PAR -03-005 (Quick-trials)

- Exploratory/developmental grants for quick trials for novel cancer therapies
- Phase I / II cancer clinical trials
- Translation research in new agent or device development
- Do not require extensive preliminary data
- Up to 2 years of support with a maximum of \$250K direct

# Specific CIP PAs

## PA -04-063

- R41/42 & R43/44 mechanisms
- Integration of component technologies to support IGI (development and/or clinical optimization and validation)
- Integration of interventions, imaging with interventions, or multi-modality imaging
- Not for development of the components themselves
  - PA-02-011; NOT-CA-02-023; PAR-03-157; PAR-03-005
- \$150K/Yr (2 max.) / \$750K/Yr (3 max) non-clinical / \$1M/Yr (3 max) clinical total



# Specific CIP PAs

## PA-04-046 (CTEP)

- R01 mechanism
- Translational, clinical, therapeutic, and preventative studies / trials
- Encourages collaboration among clinical and basic scientists
- Clinical trials w/wo correlative studies
- Correlative laboratory studies linked to clinical trials
- Single or multi-institutional studies

# NCI Cooperative Groups

- CIP – ACRIN
- CTEP – all others
- Multi-institutional clinical trials
- Protocols in progress / proposed
  - RF of Painful Bone Metastases
  - RF of HCC
  - RF of CRC Hepatic Metastases
  - Prostate Bx and Rx
  - Intraoperative Use of MRI in Neurosurgery
  - RF (w/wo XRT) in NSCLC

# CIP IGI Branch

## Contact Information

- Dr. Farahani – [farahank@mail.nih.gov](mailto:farahank@mail.nih.gov)
- Dr. Dorfman – [dorfmanq@mail.nih.gov](mailto:dorfmanq@mail.nih.gov)
- Dr. Becker – TBD
  
- CIP phone – (301)496-9531
- IGI Branch – Danielle Fenwick
  - [fenwickd@mail.nih.gov](mailto:fenwickd@mail.nih.gov)
  - (301)496-2535 phone
  - (301)480-4631 FAX