

Call for Proposal

SEED GRANT PROGRAM FOR CARDIOVASCULAR NANOMEDICINE

Summary

Cardiovascular disease remains the leading cause of death in the US, and there is an un-met need to inform the state and activity of atherosclerotic plaques, to deliver therapeutics directly to lesions, and to guide the evaluation of therapy. Nanotechnology has the potential to address these challenges. We have recently been awarded a Program of Excellence in Nanotechnology (PEN) by the NIH/NHLBI, and established the Center for Translational Cardiovascular Nanomedicine (CTCN). The broad and long-term vision of the CTCN is to develop and apply nanotechnology and biomolecular engineering tools and approaches to address the compelling medical needs in the detection and treatment of atherosclerosis and the repair of damaged vasculature and heart tissue. Currently the CTCN has four major research theme areas: (1) nanoparticle based PET and dual-modality PET/MR contrast agents for in vivo imaging of atherosclerotic plaques, (2) fluorescence imaging probes and gold-nanoparticle sensors for in vitro detection of atherosclerosis, (3) nanocarriers for targeted delivery of siRNA and drug molecules to lesions in vivo, and (4) nanotools in stem cell research for personalized repair of damaged tissue. The goals of the CTCN are to establish the nano-toolbox and nano-cardiology knowledge-base, to translate the nano-scale tools and technologies to clinical applications in the detection and treatment of cardiovascular disease, and to train the next generation of leaders in cardiovascular nanomedicine.

To help achieve the goals of the CTCN, explore new ideas in cardiovascular nanomedicine, and facilitate the development of new collaborations between Georgia Tech and Emory University in cardiology and molecular imaging, with support from Georgia Tech College of Engineering and Emory University School of Medicine, we have established a seed grant program associated with the CTCN. This year we intend to fund three seed grants, starting Nov. 1st, 2010, with a budget of \$50,000 direct cost per year. A seed grant may be renewed on a competitive basis for a second year. No renewal will be granted after funding for two years.

Requirements

All faculty members at Georgia Institute of Technology and Emory University are welcome to submit proposal(s) to this seed grant program. However, the following requirements must be met: (1) The proposed research should be consistent with the vision and goals of the CTCN; (2) two investigators, one from Georgia Tech and the other from Emory, should serve as co-PIs of the proposed project; (3) the proposed research project should have a high probability of receiving NIH funding for subsequent studies.

A CTCN Seed Grant proposal should consist of: (1) a cover page with title of project, names and affiliation of the co-PIs, a summary (up to 300 words), and signature of the department/school chair of each of the co-PIs; (2) a technical proposal of up to three pages (excluding References), using NIH format (proposal continuation page of Form PHS398, single-space, 0.5" margin and Arial 11 point font size) with Specific Aims, Research Strategy (including Significance, Innovation, and Approach) and References sections; (3) two NIH-format budget pages (PHS398, Form Page 4 from each co-PI); (4) NIH-format biosketches of the co-PIs.

Budget

The maximum total budget of a seed grant is \$50,000 direct cost per year, equally divided by the co-PIs (\$25,000 direct cost for each co-PI). The seed grant funds can only be used for supporting trainees (graduate students or postdocs) and providing materials and supplies. No other expenses, such as faculty salary, equipment and travel expenses should be proposed.

Seed Grant Selection and Management

Review of the proposals for the CTCN Seed Grant program will be organized by the CTCN Internal Managing Committee (IMC), which will make the decision for funding. Selection for funding is based on the technical merit, track record of the co-PIs, and the expected outcome. Each seed grant project team is required to submit a final progress report (2-3 pages) after one year of funding, and the progress report will be reviewed by the CTCN. Instructions for the progress report will be distributed at a later date.

Seed Grant Proposal Submission

Please submit a PDF file of the entire proposal (including all sections) for the CTCN Seed Grant program by 5pm on Friday, Oct. 1st, 2010 via e-mail to amy.tang@bme.gatech.edu.

Question concerning this Call for Proposal should be directed to:

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