Pilot Grant Opportunity
COBRE on Osteoarthritis: Prevention & Treatment

Goals and Background
The NIH Center Of Biomedical Research Excellence (COBRE) awards provide funds for research infrastructure and pilot grants for investigators. The COBRE award to the Delaware Rehabilitation Institute is on Osteoarthritis Prevention and Treatment. Now in its eleventh year, investigators participating in this grant have come from the departments of Biological Sciences, Chemical Engineering, Kinesiology & Applied Physiology, Mathematics, Materials Science & Engineering, Mechanical Engineering, and Physical Therapy. Thus, this research represents a broad approach to osteoarthritis research, from sub-cellular mechanisms to tissue engineering to modeling & simulation to clinical interventions.

The COBRE pilot research projects are intended to fund research for a one-year period that will allow a research team to develop more substantial independent external support from the NIH. Meritorious projects may be renewed for a second year.

Use of one or more of the research cores at the COBRE is encouraged, but not mandatory. These include:

- **Cytomechanics Core**—for studying how cells and tissues respond to mechanical stimuli (tools include confocal microscopy).
- **Patient Specific Modeling Core**—for creating patient specific simulations and models of pathologies and interventions (tools include muscle force prediction, ultrasound and gait analysis).
- **Clinical Research Core (ResCore)**—to provide patient database and recruitment services, as well as biostatistical services.

Information about these cores can be found on the COBRE web site (www.udel.edu/dri/cobre).

Format
The proposal format (11 point, Arial) is similar to that for a normal NIH R03 proposal, except in terms of the length of the research description section. Each proposal should include the following sections:

- Title Page
- Description (Abstract) (NIH form)
- Progress from previous support on this COBRE award, if applicable (1 page maximum)
- Research Plan (3 pages maximum, excluding references)
- PI (and key investigators) Biographical Sketch(es) (NIH form)
- Budget (NIH forms, including budget justification)
- A letter of agreement to participate from a Mentor (if required)

An NIH cover page is not required, nor need the proposal be routed through the UD Research Office, but please include a title page that also shows the name and affiliation of the PI.
PIs who have had any prior support from this COBRE award support should include a short section outlining the progress on that prior work, including effort and success in leveraging that research into independent external support and explaining why further support is necessary.

Eligibility
Each proposal must be submitted by a person with a UD faculty appointment at any rank. Proposals from junior investigators without prior independent NIH grant history are encouraged. These must identify a suitable mentor, and include the proposed mentor’s agreement to participate. Mentors with prior experience as PIs on an NIH funded grants are preferred.

Timeline
Proposals should be submitted electronically as a single PDF document to the DRI office (dri-info@udel.edu), by noon on Monday, April 22. The funding period of these awards will be from May 1, 2013 to April 30, 2014. Carryover of funds beyond the end of the funding period is not allowed but proposals from PIs of active projects for continuation to a 2nd year will be considered.

Budget
Up to $50,000 per award (direct costs) may be requested. A typical pilot grant will support graduate students or staff, as well as appropriate amounts for supplies, travel, etc. PI salary is discouraged as faculty release time for this work is expected to be provided as an institutional commitment.

Evaluation
Each COBRE Pilot Project will be evaluated via 2-steps. In the first, proposals will be evaluated based on scientific merit as is done in NIH study sections. Proposals will be given five scores based on significance, investigators, innovation, approach, and environment (especially as it pertains to the type of research being proposed in relation to established Cores). They will then be given an overall impact score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, as well as its chance of being developed into a full NIH proposal with a high likelihood of success. Scores are on a 1-9 scale, following the standard NIH guidelines for reviews of individual (R-type) research grants. The scored proposals will be provided to our External Advisory Committee, which will render the final decision.

Preference will be given as follows:
- Junior investigators who do not have or have not previously had prior NIH funding as PI are given priority over funded junior faculty and more senior faculty.
- Faculty with previous funding from this COBRE award are given lower priority than those who are new investigators.

We anticipate funding two awards each cycle.

Additional Information
For additional information contact Tom Buchanan, COBRE PI and DRI Director at (302) 831-2410 or buchanan@udel.edu.