



CASE

CASE WESTERN RESERVE UNIVERSITY

BioNETT

**The Center for Biomolecular Nanoscale Engineering of Targeted Therapeutics (BioNETT)**  
invites  
Applications for Exploratory/Pilot Projects in  
**Cancer Targeted Therapeutics and In Vivo Biomedical Imaging of Targeted Therapeutics**

The Case Center for **Biomolecular Nanoscale Engineering of Targeted Therapeutics (BioNETT)** invites applications for interdisciplinary pilot projects of cancer targeted therapeutics and in vivo imaging of targeted therapeutics. Pilot projects should be envisioned as foundations for future independent grant applications, and should contribute towards future applications for major BioNETT Center grants. To meet these goals, the proposed research must be distinctive and specific for developing targeted therapeutics and/or in vivo imaging. General thematic research areas that would be favorable for this RFA are listed below (but not limited to):

- Development of new drug delivery systems targeting cancer cells, angiogenesis, and/or metastasis.
- Emerging technologies to overcome challenges in current cancer targeted therapy.
- Novel cancer models for cancer targeted therapy.
- Imaging research that directly detects the targeted therapeutics.
- Imaging research that directly augments the delivery and/or efficacy of targeted therapeutics.
- Imaging research that assesses the effect of targeted therapeutics.
- Combinatory cancer targeted therapeutics and in vivo imaging.

The proposed research should demonstrate clinical applicability and utility, and projects based on research involving collaboration between engineering or science faculty members and a clinical faculty member are especially encouraged. These collaborations may be current, but also “new”, defined as collaborations between researchers who have never previously worked together on research projects. In either case, the research activities must be predominantly based at Case Western Reserve University and affiliated institutions in Northeast Ohio. The use of core research centers associated with BioNETT is strongly encouraged.

**ELIGIBILITY:** Applications will be accepted from any faculty/staff investigator who is eligible to be the PI on an NIH grant submitted from Case or other Case-affiliated institutions. The PI must be identified in the application as the person who will assume full responsibility for the conduct of the project.

**APPLICATION INFORMATION:**

The application should not exceed 5 single-spaced pages (section A through E) and should follow standard PHS 398 format guidelines. The research description should also follow the standard PHS 398 contents and include the following:

- A. **Brief Abstract and Specific Aims:** Indicate the thematic area (listed above) to which the research applies. If the proposed research represents a different thematic area, then briefly describe this new theme. Describe the specific project goals and expected outcomes. The suggested length is ½ page.
- B. **Background and Significance:** Briefly review the relevant state-of-the-art cancer targeted therapeutics and in vivo imaging. Describe how the project can contribute to further advance and how the proposed effort is truly interdisciplinary. The suggested length is 1 page.
- C. **Preliminary Studies:** Minimal preliminary data are expected for application. However, any available data can be included in this section. This section may also be used to elaborate on the concept, hypothesis and theory of the project, which should be innovative and competitive. The suggested length is 1 page.
- D. **Research Design and Methods:** Describe the experimental design and analysis plan, including the specific role of each collaborator in the project. The suggested length is 2 pages.
- E. **Future Plans:** Describe future plans for the research, including specific plans to acquire additional funding, and roles of this grant in future research direction and external funding. The suggested length is ½ page.
- F. **Literature Cited.**
- G. **Facilities / Resource Sharing:** Facilities currently available as well as those needed.

In addition, each application must include a budget and budget justification, biographical sketches of each investigator (one-two pages for each biosketch), and a completed electronic University Review Form (eURF) accessible at <http://spiderweb.case.edu> that is signed by the Co-principal Investigators and the respective department chairpersons and school/college administrators. A pdf copy should be included with the rest of the proposal per instructions below, regardless of what requirements individual management centers have set regarding the new eURF.

**FUNDING:** Proposals must include an abbreviated budget and justification. Budgets are expected to total \$50,000 in direct costs for one year. Budgets may be proposed up to \$70,000 in direct costs for one year if accompanied by a compelling budget justification. Projects may be renewed for a second year, but the budget included in the proposal must not assume that funding will be automatically available for a second year. To qualify for consideration for funding for a second year, the project must result in the submission of a manuscript for publication or submission of a RO1 grant proposal. The budget can include equipment, but it cannot exceed 25% of the overall budget. Salary support for faculty members of the research team is discouraged, but will be considered if adequately justified. If the project requires regulatory approval (e.g., IRB, IACUC, Biosafety), then the requisite protocols must be approved by the relevant internal committees before funds are granted.

**REVIEW AND AWARD:** Each proposal will be reviewed by a panel composed of faculty members selected by the BioNETT senior administration. A primary and secondary reviewer will be assigned to each proposal. Individuals who receive an award will be required to submit one-page quarterly summaries, and a final report at the completion of the project describing results and the efforts to publish and seek extramural support. If quarterly summaries and the final report are not received, the Co-Investigators will not be eligible to apply for future BioNETT support for a period of time to be determined by the BioNETT senior administration. The initial proposal, quarterly summaries, and final report will remain confidential in order to promote the development of intellectual property and commercialization.

**TIMELINE:** Applications must be submitted by 5:00 pm EST, February 7<sup>th</sup>, 2006. Please e-mail your completed application in the PDF format to [axb127@case.edu](mailto:axb127@case.edu). Applications in any other formats will not be reviewed. Applications will not be accepted by delivery methods other than e-mail. The earliest project start date for funded awards is March 1, 2006.

**ADDITIONAL INFORMATION OR QUESTIONS:**

- Further information can be obtained at the BioNETT Retreat at 10am – 12pm, Tuesday January 10, in Wickenden Building room 525. This meeting will also provide a forum for discussing potential projects and collaborations. There will also be opportunity for interested investigators to present 1-2 slides of their research.
- Inquiries regarding scientific merit can be directed to Dr. Roger Marchant ([rxm4@case.edu](mailto:rxm4@case.edu), 368-3005).
- Inquiries regarding application process can be directed to Angelica Bracanovic ([axb127@case.edu](mailto:axb127@case.edu), 368-2776).