



## Emory Alcohol and Lung Biology Center

### Call for Pilot Project Research Proposals

Up to \$50,000 per year for 1 or 2 years

Deadline: LOI is due Friday, July 2, 2010  
Proposal is due Friday, August 27, 2010  
Sponsor: **Emory Alcohol and Lung Biology Center and NIAAA**

#### **Purpose:**

The Emory Alcohol and Lung Biology Center has received funding from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to award multiple pilot project grants for alcohol-related research. Through this funding, the NIAAA seeks to expand our knowledge of how alcohol affects the biology of the lung as well as to extend our center's collaborations with other investigators.

Although we are particularly interested in funding investigators new to alcohol research, all researchers are welcome to submit. Projects are encouraged to investigate the effects of alcohol on the lung and vasculature, but many other topics will be considered. Pilot studies may include basic, epidemiologic, translational and clinical research on the etiology, pathogenesis, prevention, and management of the effects of alcoholism on the lung.

#### **Eligibility:**

- Senior investigators with established independent programs as well as junior investigators on a pathway to independence (as reflected by a tenure track position and/or career development funding such as a K award from NIH or foundation support such as the American Lung Association) are encouraged to apply. In all cases, an important goal of the Pilot Program is to encourage ongoing collaborations with Center investigators.
- Investigators may only submit one application per cycle as Principal Investigator.
- Human and/or animal research requires institutional approval before receiving funding.

#### **Budgetary Details:**

- Total direct costs maximum of \$50,000/year.
- One or two years of research support will be provided; for 2-year awards, funding in the second year is contingent on evidence of satisfactory progress as documented in a progress report.
- Principal Investigator salary is allowed.
- Personnel salary is allowed.

- Laboratory supplies and patient costs directly related to the research project are allowed.
- Travel and equipment are not allowed.

**Letter of Intent:**

- Interested applicants are strongly encouraged to contact the Center Director (Dr. David Guidot) to discuss possible submissions before preparing a proposal.
- All applicants must submit a one-page letter of intent (LOI) that includes the fundamental hypothesis, proposed specific aims, and a brief description of the experimental approach.
- An NIH biosketch or CV must be submitted with the LOI.
- Each investigator and their LOI will be considered by the Center faculty and applicants will then be encouraged to either submit a complete proposal or, in some cases, asked to modify their LOI based on feed-back provided to the applicant.

**Proposal: (5-page limit)**

- Title
- Duration of project (minimum 6 months, maximum 24 months)
- Requested level of support (maximum budget of \$50,000/year, PI salary cap of \$25,000/year)
- Hypothesis
- Specific Aims
- Background
- Preliminary Data (optional depending on nature of project)
- Research Design and Methods
- Summary including future plans for extending pilot into an independent project for extramural funding
- References cited (not included in 5-page limit)
- NIH biosketch of applicant (not included in 5-page limit)
- Letter of support from applicant's department chair (not included in 5-page limit)
- Applications must be received by 5:00 PM August 27, 2010 to be considered for funding.

**Selection Criteria:**

In general, the major criteria used in making recommendations for funding of pilot projects are: scientific merit, relevance to center goals, need for conducting project, progress (renewals) and the likelihood that findings will lead to submission of an R-type grant application. Previously funded pilot projects that show promising progress will be given preference during the review process.

Each proposal will be reviewed by at least two members of our external scientific advisory board. Based on these reviews and their own reviews, Center Director David Guidot and Scientific Director Lou Ann Brown will make recommendations to the Emory

Alcohol and Lung Biology Center Executive Committee for funding with a target starting date of January 1, 2011. Notifications of funding will be sent out as soon as possible.

Please contact the Center Director, David Guidot (dmguidot@emory.edu, 404-321-6111 ext 6935), or Scientific Director, Lou Ann Brown (lou.ann.brown@emory.edu, 404-727-5739), with questions. Also, please share this announcement with faculty colleagues who may be interested in submitting a proposal. All LOI and final projects must be sent to David Guidot via email as well as the Center Administrator Dean Kleinhenz (dkleinh@emory.edu). Mr. Kleinhenz will verify via email that the LOI or application has been received.

Center Web Page:

[http://medicine.emory.edu/divisions/pulmonology/clinical\\_research\\_programs/ARC/](http://medicine.emory.edu/divisions/pulmonology/clinical_research_programs/ARC/)

NIAAA Webpage:

<http://www.niaaa.nih.gov/>

### **Example of Currently Funded Pilot Proposal:**

**Pilot Project:** The impact of donor alcohol use on allograft dysfunction following lung transplantation

Andres Pelaez, MD – In collaboration with the Clinical Core

#### **Introduction and Specific Aims:**

The fundamental hypothesis driving this pilot project is that previously unidentified donor risk factors, specifically donor alcohol abuse and the consequent oxidative stress, increase the risk of graft failure following lung transplantation. Primary graft dysfunction (PGD) is the major cause of acute mortality following lung transplantation, whereas bronchiolitis obliterans syndrome (BOS) is the main obstacle to long-term survival following transplantation. It has been assumed that the factors predisposing to PGD and BOS pertain to the surgical procedure or the allograft recipient. However, there is at least some evidence that donor-related risks such as sex, race, age and smoking contribute to poorer outcomes. Unfortunately, there are currently no means to prospectively identify which recipients will develop PGD or BOS, both of which are essentially untreatable conditions. Investigators in the Emory Alcohol and Lung Biology Center have identified that alcohol abuse increases the risk of the acute respiratory distress syndrome (ARDS) ~4-fold. As PGD is clinically and pathologically identical to ARDS, it is plausible to hypothesize that alcohol abuse by the donor, which causes the susceptible “alcoholic lung” phenotype, would increase the risk of PGD. Further, PGD is a major risk factor for the subsequent development of chronic lung allograft rejection (i.e., BOS), and pre-clinical data from our Center show that alcohol ingestion increases the development of BOS in a relevant animal model. Finally, our Center has determined in both experimental models and in human subjects that alcohol-induced oxidative stress renders the lung susceptible to acute edematous injury. Therefore, there are compelling reasons to implicate donor alcohol abuse as a previously unrecognized factor that could increase the risk of lung allograft dysfunction even if the recipient does not abuse alcohol.

**Aim 1:** Determine the association between donor alcohol use history and the development of primary graft dysfunction (PGD) following lung transplantation.

**Aim 2:** Determine if donor alcohol use increases oxidative stress in the lung allograft that persists post transplantation and thereby could contribute to the risk of primary graft dysfunction.