

## MEMORANDUM

**To:** ANS Faculty, ANS Graduate Students, and ANS Undergraduate Students  
**From:** Dr. Bill Campbell  
Associate Dean for Graduate Studies and Research  
**Date:** January 28, 2011  
**Subject:** *ANS Research Symposium 2011 - Call for Abstracts*

The College of Applied and Natural Sciences is preparing for the annual ANS Research Symposium, scheduled for Thursday, March 31, 2011, in the Student Center. This memo serves as a **Call for Abstracts** for presentations at the Research Symposium. *We request that faculty help publicize this opportunity by making this announcement known to undergraduate and graduate students.* The Research Symposium will be combined with ANS Day, and all events will take place March 31<sup>st</sup>.

Presentations describing current research projects as well as ongoing research programs are appropriate. The Research Symposium will include both poster and oral presentations. Each oral presentation (PowerPoint) will be scheduled for a total of 15 minutes; this includes time for the presentation plus a question/answer period. A limited number of oral presentation time slots will be available. If requests for oral time slots exceed time slot availability those requesting, but not receiving, oral presentation time slots will be offered poster display space instead. Poster presentations should be set up before the beginning of the poster session on March 31<sup>st</sup>. Tables will be provided, but presentation boards for posters are the responsibility of the presenters. Because of space limitations **posters will be restricted to a maximum width of four feet.** During the poster session presenters are requested to be available for discussing their work. Additional details for oral and poster presenters will be provided at a future date. Be sure to provide contact information (email) when submitting your abstract.

The College of Applied and Natural Sciences requests the submission of abstracts from Applied and Natural Sciences faculty and students. The **deadline for abstract submission is 4:30 PM, Friday, March 11, 2011.** To submit an abstract, please follow the guidelines on the attached pages. Bound copies of all abstracts will be distributed to symposium participants.

*ANS Research Symposium - March 31, 2011*  
*Deadline for submission of abstracts - 4:30 PM, March 11, 2011*

# *ANS Research Symposium – March 31, 2011*

## *Call for Abstracts*

*Abstracts are required for both poster and oral presentations at the Research Symposium. The following guidelines should be followed when preparing abstracts.*

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- Abstracts may be submitted by faculty, graduate students, and undergraduate students from the College of Applied and Natural Sciences. Collaborators from other units are welcome, but should not be listed as first author on an abstract or presentation.
  - Abstracts should provide an overview/summary of the research to be presented. Keep in mind Research Symposium attendees will likely not be experts in your area of research. Abstracts are limited to one page (single-spaced, 12-point font, 1-inch top, bottom, and right margins, 1.25-inch left side margin). Abstracts will be assembled into a Research Symposium booklet and abstracts not conforming to format guidelines will be edited.
  - Use the format of the attached example abstract when preparing abstracts. (Be sure to include title, author(s) name and ANS unit.)
  - Abstracts should be submitted electronically, as well as by hard copy.
    - electronic submission should be sent by email to: ***[campbell@latech.edu](mailto:campbell@latech.edu)***  
(Include **ANS abstract** in email subject line. Indicate poster or oral presentation.)
    - hard copy should be one page, single-spaced, 12-point font, 1-inch top, bottom, and right margins, 1.25 inch left side margin
  - In addition to the abstract, complete and submit the attached **Application for Presentation** form (form also available on ANS web page).
  - Submit hard copies of abstracts to the office of the Associate Dean for Research and Graduate Studies, 913 Prescott Library.
  - To be accepted, a complete abstract submission must include:
    - 1) an electronic version of the abstract, indicating oral or poster presentation (email to [campbell@latech.edu](mailto:campbell@latech.edu))
    - 2) a hard copy of the abstract
    - 3) a completed *Application for Presentation* form
  - The deadline for abstract submission is **4:30 PM, Monday, March 11, 2011.**
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*College of Applied and Natural Sciences  
Louisiana Tech University*

**Research Symposium 2011 - Application for Presentation**

**Abstract submission deadline - 4:30 PM, March 11, 2011**

**Title of**

**Presentation:**

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**Authors & Unit:**

*(If more than one author, clearly indicate academic unit affiliation of each author and clearly indicate author making presentation.)*

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**Contact Information:**

*(email of presenting author)*

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**Format:** *(Check one)*

presentation\*

\_\_\_\_\_ poster presentation\*

\_\_\_\_\_ oral

*Note: For oral presentations, computer and projector equipment will be provided for PowerPoint.*

\* Details for oral and poster presentations will be provided at a future date.

# ***ANS Research Symposium 2011***

## ***Example abstract***

### **Thermal Respiratory Acclimation in Leaves of Fertilized and Non- Fertilized Soybeans (*Glycine max* (L.) Merr)**

Jessica G. LaGrone<sup>1</sup>, Dylan N. Dillaway<sup>2</sup>, Michael C. Tyree<sup>2</sup>

<sup>1</sup>*Undergraduate Student, School of Forestry, Louisiana Tech University*

<sup>2</sup>*Assistant Professor, School of Forestry, Louisiana Tech University*

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Temperature is among the largest drivers of respiration rates. This has led to growing concern over the effects of increasing global temperatures on plant respiration. A plant unable to acclimate to temperature may result in a net loss of carbohydrate, disrupting plant carbon balance. We measured leaf dark respiration of fertilized and non-fertilized soybeans (*Glycine max*) grown at “hot” (29, 22°C) and “cold” (21, 13°C) temperatures. Leaf dark respiration was measured over a three-day period to account for possible differences in light levels in the four treatment houses. In the fertilized plants there was no significant difference in the temperature response of respiration ( $E_O$ ) between hot and cold grown plants, however, basal respiration ( $R_{13}$ ) was significantly different, indicating type 2 thermal respiratory acclimation. In contrast, non-fertilized plants exhibited type 1 thermal respiratory acclimation, with hot and cold grown plants having a similar  $R_{13}$ , but a different  $E_O$ , leading to slower increase in respiration rates with increasing temperatures in the hot grown plants. Our findings indicate that fertilization can alter the type of thermal respiratory acclimation plants express. As temperatures increase either seasonally or in the face of climate change, a plant’s ability to thrive depends on its ability to adjust its respiratory rates.

***Please use the above abstract from last year  
as a guide for formatting your abstract.***