

6th Annual Minority Serving Institution Research Partnership Consortium (MSIRPC) Conference

Baltimore, Maryland
April 14-17, 2010

GRADUATE & UNDERGRADUATE POSTER PRESENTATION 2010

CALL FOR ABSTRACTS!!!!

Are you conducting research reflecting your institution's research capabilities in one of the Categories listed?

(Agriculture & Food Sciences, Biology, Business, Chemistry, Computer Science, Education, Engineering, Environmental Sciences, Mathematics, Physics, Psychology & Psychobiology, Public Health, Social Sciences, Sustainability & Design)

Would you like to present your research at the national level?

If you answered yes to any of these questions, you are invited to participate in the
MSIRPC Graduate and Undergraduate Poster Presentation
Morgan State University

MARK YOUR CALENDARS !!!!
DEADLINE FOR SUBMISSIONS
(Abstracts should be submitted by Faculty/Mentor Only!)
MARCH 12, 2010

For more information, please contact
Monique Harris: 443-885-4056 | Diane Hughes: 443-885-3024
sciencesymposium@morgan.edu

*Abstract instructions can be obtained at www.morgan.edu

Sixth Annual MSIRPC Conference

Baltimore, Maryland

April 14-17, 2010

Poster Presentation

Rules & Regulations

Eligibility: The MSIRP Poster presentation is open to undergraduate and graduate students from colleges and universities who are involved in scholarly activities in Business, STEM, Behavioral and Social Sciences.

Expenses: Participants are responsible for airfare, lodging, poster materials and production and any other personal expenses associated with the presentation. MSIRP will not assume responsibility for any expenses incurred by participants.

Deadline: All abstracts must be received on or before March 12, 2010 at 4:00 pm.

Submission: Abstracts and forms must be submitted electronically in MS Word or PDF. The subject heading of the email should read: MSIRPC Abstract, presenter (your name). Abstracts should be submitted to: sciencesymposium@morgan.edu

Abstracts should be submitted by faculty/mentor Only!

Using the topic categories, indicate on the abstract form which category best describes your research area. For Computer Science abstracts, **please note if a poster or computer will be used in the presentation.**

ABSTRACTS MUST BE FORMATTED CORRECTLY (SEE ATTACHED SAMPLE).

ABSTRACTS THAT DO NOT MEET ALL SUBMISSION GUIDELINES WILL NOT BE ACCEPTED.

Review: Upon completion of the review process, those abstracts selected for presentation will be notified by email on or before March 22nd, 2010.

Presenters: Each student is allowed one presentation and must present at their scheduled time before a panel of judges. Evaluations will be based on responses to specific questions. Questions will differ based on projects. Poster presentations will be held in the Student Center at Morgan State University on Thursday & Friday, April 15-16, 2010.

Awards: The top two winners in each category will receive a cash award.

For additional information, please contact:

Dr. Cleo Hughes-Darden at (443) 885-3635 cleo.HughesDarden@morgan.edu

**6th Annual Minority Serving Institution (MSIRP) Research
Partnership Conference
Baltimore, Maryland
April 14-17, 2010**

Graduate & Undergraduate Poster Presentation 2010

ABSTRACT FORMAT

ALL ABSTRACTS MUST MEET FORMATTING REQUIREMENTS (SEE ATTACHED SAMPLE). ABSTRACTS THAT DO NOT MEET ALL FORMATTING/SUBMISSION GUIDELINES WILL NOT BE ACCEPTED!!

- Posters must not exceed 2' X 3' (24 inches x 36 inches)
- Abstracts must not exceed 260 words, excluding title, authors and institutions.
- Abstracts should be typed single space in Times New Roman, 11 point font
- Authors should be listed as follows:
*Joan A. Doe, Thomas T. Smith, and Carl E. Jones
Only one poster per student will be allowed (* indicates the student presenter)
- List department, institution, city, state, zip code (example: Department of Biology, Morgan State University, Baltimore, Maryland 21251).
- Skip one line, indent five (5) spaces and insert the abstract.
- Each abstract should contain the following: An introduction outlining the significance of the research project/area; a statement of the hypothesis tested, or objective for the research; a brief statement of research methods used; a summary of the results obtained; a statement of the conclusions.
- **All abstract submissions must contain the student and mentor information shown requested in the sample abstract form!**
- **All abstracts must be submitted electronically.**

Abstract Form: Category: I. Biology

SAMPLE ABSTRACT # 1:

IDENTIFICATION OF GAMMA-2-MELANOCYTE STIMULATING HORMONE (g-2-MSH) RESPONSIVE GENES IN MC3R TRANSFECTED BRAINSTEM CAD CELLS BY MICROARRAY ANALYSIS. *Segun Bernard, Brian Redmond, Marquita T. Broadway, James M. Wachira and Cleo A. Hughes Darden. Morgan State University, Department of Biology, 1700 East Cold Spring Lane, Baltimore, MD 21251.

Melanocortins are peptide hormones that are derived from the precursor polypeptide pro-opiomelanocortin. They mediate their effects through a family of five G-protein coupled receptors, the melanocortin receptors, by stimulating adenylate cyclase. However, some studies have implicated other signaling pathways such as the PKC, MAP kinase, and the janus kinase/signal transducer and activator of transcription (JAK-STAT) pathways. Melanocortin receptors, melanocortin-3-receptor (MC3R) and melanocortin-4-receptor (MC4R), have been implicated in the pathophysiology of obesity, insulin resistance and salt-sensitive hypertension through gene knockout studies. In order to understand the molecular mechanisms involved in MC3R signaling, we treated MC3R/GFP and GFP control transfected cells with gamma-MSH and isolated total RNA for gene transcription analysis using oligonucleotide microarrays. Total RNA isolated from the two populations of harvested cells was then amplified, labeled and co-hybridized to oligonucleotide microarrays. Using GeneSifter software, 88 genes were up-regulated and 91 genes were down-regulated with ≥ 2 ratio with a p-value of ≤ 0.05 . Several pathways were altered including signal transduction and G-protein coupled receptor protein signaling, among others. Quantitative PCR (Q-PCR) data indicate that protein tyrosine phosphatase and protein kinase nu genes are up-regulated as a result of MC3R activation by gamma-MSH. The information gathered from this study will enhance our knowledge of the molecular mechanisms involved in MC3R signaling because of its involvement in salt sensitive hypertension and cardiovascular function. This work was supported by NIH/NCRR/RCMI grant G12RR17581-05 and the RCMI funded Molecular and Cellular core facility.

(PLEASE TYPE OR PRINT THIS INFORMATION)

Name of Presenter: Segun Bernard

Undergraduate or Graduate: Biology major

If undergraduate, what year: junior

Institution: Morgan State University

Department: Biology

Student Email Address: xxxxxxxxxxx

Phone Number: xxxxxxxx

Advisor Name: Cleo A. Hughes Darden

Advisor Signature: xxxxxxxx

Advisor Email Address: xxxxxxxx

Will advisor be attending? (Yes or No) yes

**Computer Science

(PLEASE CHECK ONLY ONE) Posterboard _____ Computer _____

Abstract Form: **Category Code: XII. Public Health**



SAMPLE ABSTRACT # 2:

Topic Categories:

- I. Agriculture & Food Science
- II. Biology
- III. Business
- IV. Chemistry
- V. Computer Science
- VI. Education
- VII. Engineering
- VIII. Environmental Sciences
- IX. Mathematics
- X. Physics
- XI. Psychology&Psychobiology
- XII. Public Health
- XIII. Social Sciences
- XIV. Sustainability and Design

INCOME AND BREAST CANCER RISK REDUCTION BEHAVIOR IN AFRICAN AMERICAN WOMEN.

Nichole Nicholas and Anita M. Wells, Ph.D. Department of Psychology

Morgan State University, Baltimore, MD 21251

Breast cancer is the second leading cause of cancer death among African-American women in the United States. African-American women have the highest mortality rate from breast cancer, but not the highest incidence. Risk factors for breast cancer among African -American women include lack of screening and physical activity, and increased obesity, which is caused in part by high intake of dietary fat. Access to healthcare does not always result in early diagnosis, factors such as socioeconomic status (SES) and race influence outcome. More information is needed about the screening practices (mammogram and clinical breast exam), physical activity and dietary fat intake of African -American women. This study examined the relationship between income and energy expenditure from moderate activity, dietary fat intake and mammogram and clinical breast exam practice among African-American women from a larger breast cancer risk reduction intervention study. It was hypothesized that income would be positively correlated with physical activity and breast cancer screening behaviors and that there would be no correlation between income and dietary fat intake. Subjects included 42 African-American women ages 25-70 from a large mid-western city in the United States. No significant correlation was found. Lack of a significant relationship between income and CBE, mammogram and physical activity could be due in part to the small sample size for this analysis. More research is needed on SES and breast cancer screening practices in African-American women. Supported by: 5R25GM58904 and an Avon Foundation Breast Cancer Care and Research Program Grant.

Abstract Form: **Category Code:** _____

INSERT ABSTRACT HERE:

Be sure to include the name of your mentor in the abstract heading, following the author(s).



Topic Categories:

- I. Biology
- II. Business
- III. Chemistry
- IV. Computer Science
- V. Education
- VI. Engineering
- VII. Environmental Sciences
- VIII. Mathematics
- IX. Physics
- X. Psychology&Psychobiology
- XI. Public Health
- XII. Social Sciences
- XIII. Sustainability and Design

(PLEASE TYPE OR PRINT THIS INFORMATION)

Name of Presenter:

Undergraduate or Graduate:

Institution:

Department:

Student Email Address:

Phone Number:

Advisor Name:

Advisor Signature:

Advisor Email Address:

Will advisor be attending:

(Yes or No)

**Computer Science

(PLEASE CHECK ONLY ONE) Posterboard _____ Computer _____