

- **Full Name:** Alice Margaret Story
- **Institutional Affiliation:** Spelman College
- **Major and Year in School:** (or Major and Graduation Date): Biology, May 15, 2011
- **Gender (optional):**Female
- **Race/Ethnicity(optional):** African American
- **Postal Address:** 445 North Drive, Fayetteville, Georgia 30214
- **Country:** United States of America
- **E-mail Address:** amstory11@gmail.com
- **Telephone Number (including country code):** 1(678)525-1122
- **Academic Supervisor's Name:** Hong Qin
- **Institutional Affiliation of Academic Supervisor:** Spelman College
- **Postal Address of Academic Supervisor:** 350 Spelman Lane, Box 1183, Atlanta, Georgia 30314
- **E-mail Address of Academic Supervisor:** ghin@spelman.edu
- CV (limited to one page)
- **Plans for the Future (limited to 25 words):** In the future I plan to obtain a PhD in epidemiology to understand epidemiologic and evolutionary mechanisms of disease transmission.
- **Poster Title:** The interconnection of molecular evolution, gene network, and cellular aging
- **Poster Authors:** Alice Story, Charita Montgomery, Hong Qin
- **Poster Abstract (no longer than 250 words):**
Pleiotropic traits, such as cellular aging, are shaped by gene networks which channeled the molecular evolution of individual genes into phenotypic manifestations. We recently proposed a mathematical model and demonstrated that cellular aging is an emergent property of gene networks and the characteristics of the aging process are linked to network robustness and gene interaction patterns. In this study, we aim to dissect the interconnection of molecular evolution, interaction pattern, robustness, and life-history traits in *Saccharomyces cerevisiae*. We evaluated the causal relationship of these factors with life span using partial regressions and extracted principal components from interacting factors. We found that molecular evolution influence life span through growth fitness.

Alice M. Story

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EDUCATION

Spelman College

B.S. Biology

May 2011

AWARDS

Evolution Undergraduate Diversity Travel Award, *Oklahoma University*

March 2011

RESEARCH EXPERIENCE**Spelman College-Biology Department**

Research Assistant

January 2011-Present

Determining factors that influence robustness and cellular Aging in *Saccharomyces cerevisiae*.

Spelman College-Biology Department

Research Assistant

August 2010-Present

Analyzing the evolution of *Tribolium castaneum* social environment and reproductive traits.

Emory University Rollins School of Public Health

Research Assistant

February-August 2010

Investigated individuals with DiGeorge syndrome (deletion on chromosome 22) and assessed their risk for developing schizophrenia.

Minority Biomedical Research Support-Research Initiative for Scientific Enhancement (MBRS-RISE) Development Program

Affiliate, Spelman College

September 2009 – Present

Membership provides preparation for a career in biomedical research.

MBRS-RISE Research Training Program

Research Trainee, Spelman College

June-July 2009

Participation enhanced my skills on the fundamentals of research.

RELATED EXPERIENCE**Health Careers Connection Program, Berkeley/Oakland California**

Intern, Public Health

June-August 2010

- Worked in community outreach programs designed to promote healthier lifestyles and choices by bringing awareness to issues such as stroke, hypertension, and heart disease at health fairs and within neighborhoods.
- Mentored underserved youth to achieve higher education.
- Formulated and managed Asthma K-12 and Teen Health 6-12 modules and presentations.
- Contributed to Mentoring in Medicine Inc. annual conference through outreach to potential sponsors, organizations, and coordinated meetings with health professionals.
- Highland Hospital Emergency Department: conducted shadow shifts and didactic presentations.

Conferences

“The Benefit of Male Mate Choice in Tribolium castaneum Male Beetles”/ “Robustness and Cellular Aging in Saccharomyces cerevisiae”

Oral and poster presented at Spelman College Research Day Atlanta, Georgia

March 2011

“The Benefit of Male Mate Choice in Tribolium castaneum Male Beetles”/ “Robustness and Cellular Aging in Saccharomyces cerevisiae”

Oral and poster presented at the Southeastern Ecology and Evolution Conference Auburn, Alabama

April 2011

“Fitness Consequences of Female Mate Choice in Red Flour Beetles”/ “Influence of Female Mating Status on their Male Partners’ Behaviors in the Red Flour Beetles”/ “Do Male Flour Beetles Exhibit Alternative Mating Strategies?”

Co-author for poster presentations at Spelman College Research Day, Atlanta, Georgia

April 2011

Technological skill

Proficient with Microsoft Word, Excel, Access and Power Point, R Project for Statistical Computing