# APPLICATION FOR THE 2015 RANDOLPH COLLEGE SUMMER RESEARCH PROGRAM

## Names of Applicants:

Richard D. Barnes, Ph.D., Mary Sabel Girard Professor of Psychology Sarah Ballard-Abbott '17, psychology major

### Title: Exploring Early Psychological Tests: Researching the Randolph College collection

### Abstract:

Randolph College has a unique collection of psychological laboratory equipment and psychological tests dating back to the early years of psychology as a discipline. Previous studies have researched and cataloged the physical laboratory equipment, but the extensive collection of psychological tests has never been researched. The goal of this project is to investigate the origin, authors, and use of each of the tests in the collection and to preserve the collection by improving the physical storage conditions and creating a digital catalog available to other scholars of the history of psychology. Researching these tests will provide a window into early attempts by psychologists to measure individual differences, including intelligence and personality, and how these tests relate to the cultural biases of the time. Results of the research will be disseminated through conference presentations and an online catalog of the collection.

# **Project Description and Goals:**

The Randolph-Macon Woman's College psychology program has a notable position in the early history of psychology. As a discipline, psychology was founded in 1879 in Leipzig, Germany, and the RMWC laboratory was established just 14 years later when the College opened in 1893. In fact, the psychology laboratory at RMWC was one of the first 20 psychology labs in the United States, and the first psychology lab in the South (Murray & Rowe, 1979; Rowe & Murray, 1979). Celestia Parrish, one of the original faculty members at the College and founder of the psychology lab, was a student of Edward. B. Titchener at Cornell, a significant figure in the early spread of psychology in the United States. Ms. Parrish, whose portrait hangs in the psychology building, left RMWC in 1902 to take a position as chair of psychology and pedagogy at the State Normal School in Athens, Georgia (Rowe & Murray, 1979). Later she became an avid promoter of public education in the remote mountains of north Georgia. She was so revered in Georgia that upon her death in 1917 the Georgia state legislature adjourned to attend her funeral, and her grave marker in Clayton, Georgia reads "Georgia's Greatest Woman" (Thomas, 2006).



l Photo courtesy of Mary Martin Bowen, alumna and former trustee of the College.

Although Ms. Parrish was a faculty member at RMWC for less than ten years, her founding of the psychology lab established a tradition of experimental psychological research at the College. Early students at the College performed psychophysical studies to measure individual differences in strength and sensory acuity (Moorman, 1902; Rowe, 1992). In order to equip the demonstration laboratory for these studies, Ms. Parrish and other faculty members acquired a wide range of laboratory instruments for the study of human sensation and perception. Much of this equipment is still on display at the College and has been described in an earlier study (Rowe, Barnes, & LaFleur, 1995). In 2006 as part of a summer research project, Sheila Waritu, '07 and I researched the origin and use of the equipment and created an online digital catalog that can be used by scholars interested in early psychology labs. A copy of the digital catalog was presented to the Center for the History of Psychology at the University of Akron. <u>The Center for the History of Psychology</u> is an affiliate of the Smithsonian Institution.



2 Randolph-Macon Woman's College Psychology Laboratory, c. 1900

In addition to the psychological instruments, the psychology department also possesses a large collection of psychological tests dating to the early years of the psychology lab. Based on an initial examination of the collection, some of the tests are intelligence tests, some are personality tests, and some are tests of specific skills such as fine motor coordination. Many of the tests are examples of early attempts at psychological testing and some are controversial, reflecting the cultural biases and prejudices of the time. These tests have been in unprotected storage for decades and have never been fully researched. Some of the tests have started to deteriorate from age and water damage over the years.

The goal of the proposed summer research is to investigate the origin, authors, and use of each of the psychological tests, and to preserve the tests by scanning them into a digital archive. The research will take place in three phases:

(1) <u>Initial inventory and sorting of the tests</u>. Currently the tests are in unlabeled boxes and a filing cabinet in the ground floor psychology lab (PS 003) and an adjacent storage room. The first step is to find out what we have by creating a spreadsheet inventory.

(2) <u>Researching the tests</u>. In this phase each test will be researched to uncover information about the authors and publishers of the tests, the intended uses of the tests, and any information about research conducted using the tests. We also will be looking for research on the reliability and validity of the tests, and any articles that may critique the use of the tests. Some of this information may be available through searches of existing online psychological databases, and also through the archives of the Center for the History of Psychology.
(3) <u>Scanning and preserving the tests</u>. Some of the tests in the collection are flat paper-and-pencil tests, and other tests include three dimensional items (such as mazes or blocks to manipulate). In this phase we will digitally preserve the tests by scanning the flat paper-and-pencil tests, and by taking digital photographs of the tests that include three-dimensional items. The tests will be cataloged using an online cataloging software such as <u>eHive</u>. We also will improve the storage conditions of the physical tests by moving them to acid-free archival storage containers.

It is not likely that this project can be completed within the eight weeks of summer research. The primary focus during summer research will be investigating the origin and use of the tests and improving the physical storage conditions. If time allows, we will begin scanning the tests into a digital catalog and creating a web page for the collection. The project can continue into the fall with an Independent Study.

The instruments and psychological tests from Randolph College's early psychology lab are a valuable asset for the College and an irreplaceable collection of original artifacts from the earliest years of psychology. It is important that the College exercise stewardship of these collections by preserving them and making them available to researchers. By researching the Randolph College collection of psychological tests we will uncover interesting clues about how early psychologists studied mental activity and individual differences, and also how their research was influenced by the attitudes and values of the time.

### **Dissemination Goals:**

- **1.** The results of this project will be disseminated both locally and to wider audiences:
- 2. We will submit a poster for the Spring 2016 Symposium of Arts and Scholars
- **3.** We also will present a poster or presentation at the spring conference of the Virginia Psychological Association in April, 2016.
- **4.** We will submit a poster for the June, 2016 conference of Cheiron: The International Society for the History of the Behavioral and Social Sciences.
- 5. If we find interesting connections to early psychologists or movements, we will submit an article

to the Journal of the History of the Behavioral Sciences.

6. Results of the study will be made available online through the College's website as a resource for scholars of the history of psychology.

# **External Funding:**

No external funding for this project has been sought. However some funding for materials and travel will be available though resources of my Mary Sabel Girard Chair in Psychology, and also from psychology department funds.

# **Budgetary Needs:**

The primary budgetary needs for this project are for the eHive software to construct the online catalog, and materials for archival storage of the paper tests and materials (see attached itemized budget). Depending on where our research on the individual tests leads us, we may need to make a trip to the Center for the History of Psychology at the University of Akron, Ohio. However, if such a trip is necessary it will be funded outside of the Summer Research Program budget. It is expected that most of the research can be conducted online.

## Past Outcomes:

- In the summer of 2006, I participated in the Summer Research Program with Sheila Waritu '07. This project involved researching the origins and use of the psychology department's antique laboratory equipment and creating digital images of the equipment for a website. A copy of the digital catalog was presented to the Center for the History of Psychology and is now in their <u>archives</u>.
- 2. In 2010, Erinn Sudol ('12), Louise Searle ('12) and I carried out a Summer Research Project to create a Geographic Information Systems tool for evaluating the suitability of vacant land in Lynchburg for conservation or development. The project was conducted in collaboration with Dr. David Perault of Lynchburg College and the City of Lynchburg Department of Community Development. The results of this project were presented in a report to the Lynchburg Department of Community Department of Community Development, and a poster of the project was presented at a conference of the Association for the Advancement of Sustainability in Higher Education in Denver, Colorado. I also have given presentations on this project to local community groups.

# Statement about Student Researcher:

Through her skills, experience, and interests, Sarah Ballard-Abbott is especially qualified to take on this project. From the second semester of her first year at the College, Sarah has volunteered and done work-study with the biology department's Natural History Collections Project. Her work with the NHCP has involved labeling and organizing of the specimens, and also research to insure that the labeling of the specimens is accurate. She is well acquainted with the work involved in creating and organizing an extensive historical collection, and she has had experience using the eHive cataloging software. Sarah also is enrolled in Professor Tatum's Tests and Measurements class this semester, so she will have a good background in methods of constructing and evaluating psychological tests by the time summer research starts.

Sarah has the motivation and work ethic to carry out this project. As she states below, her ultimate goal is to pursue graduate work in clinical psychology toward a doctoral degree. The project combines her

career interest in psychology with her experience in researching historical collections. Working on the project will give Sarah a deeper understanding of the historical roots of psychology, and will further develop her skills in conducting systematic research. Sara is reliable, conscientious, and well-organized. She also is a very good writer, a skill that will be valuable in creating clear, concise descriptions of the psychological tests.

Through her semester project for the History of Psychology course in Fall 2014, Sarah already has a head start working on this project. Along with her partner Chris Hollingsworth, '15, Sarah inventoried 107 tests in an Excel file, recording the name of the test, date, author, publisher, and a short description of the tests and materials. Sarah worked diligently on this project throughout the fall semester and is excited about the possibility of continuing work on it full time in the Summer Research Program.

#### Statement from the Student:

I began inventorying the tests in the Psychology lab in the fall of 2014 as part of a semester project for Dr. Barnes' History of Psychology course. The project helped me gain a stronger appreciation for not only the history of the field, but also the history of the department at Randolph College. It has added to my interest in psychological testing and Clinical Psychology, as the two are closely intertwined. By the time research begins for the summer I also will have completed the Testing and Measurements course as well, meaning I will be even more educated on the subject of psychological testing. The Summer Research Project will allow me to apply my knowledge of the history of psychological testing, the history of the department, and continue to develop an easily understood organization system for the inventory – a task I have already begun.

After I graduate I plan on attaining a Ph.D. in Clinical Psychology and I believe that this project will help me prepare for graduate school in several ways (1) it will increase my understanding of psychological testing, (2) it will strengthen and enforce my knowledge relating to psychological history, and (3) I will be more prepared for the scope of graduate work and research. This widening of the breadth of my knowledge in psychological testing may also help me this coming year when I have to design, execute, and present my own research experiment. I have never participated in a Summer Research project before.

### References

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## 2015 Summer Research Program Barnes & Ballard-Abbott Itemized Budget

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Acid-free archival storage boxes	10	15.00	150.00	www.uline.com
Acid-free archival file folders	500	0.40	200.00	www.uline.com
eHive online cataloging membership fee	1	99.00	99.00	ehive.com/pricing
Printing of conference poster	1	100.00	100.00	Pip Printing
Total			549.00	