

# The Digital Humanities & Literary Cognition Lab

## Researcher Application

Please return completed form and resume/CV to Karah Smith at [smit2047@msu.edu](mailto:smit2047@msu.edu), Dr. Natalie Phillips at [nmp@msu.edu](mailto:nmp@msu.edu), and Sal Antonucci at [antonuc8@msu.edu](mailto:antonuc8@msu.edu) by *Thursday, September 14, 2017*.

### Applicant Information

Full Name: \_\_\_\_\_ Date: \_\_\_\_\_  
*Last First M.I.*

Year: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

In the space below, list the days and times you are available during the semester M-F between 8am and 8pm.

\_\_\_\_\_

\_\_\_\_\_

Have you ever worked at Michigan State University? YES  NO  If yes, how many hours per week? \_\_\_\_\_

### Education

Major(s): \_\_\_\_\_

Minor(s): \_\_\_\_\_

Current overall GPA: \_\_\_\_\_

Are you currently a student? YES  NO  From: \_\_\_\_\_ Until: \_\_\_\_\_

## Skills/ Experience

Please put a check mark next to any skills, training, and/or prior experiences you could bring to the lab.

*NOTE, it is not necessary to have any of these skills. These skills are mostly relevant for upperclassman. Having any of these is a plus, but not required. We strongly recommend freshman and sophomores apply:*

- |  |   |
|--|---|
| <input type="checkbox"/> Article or Manuscript writing           | <input type="checkbox"/> Interdisciplinary Grant Writing        |
| <input type="checkbox"/> Editing or copyediting                  | <input type="checkbox"/> Experiment Design                      |
| <input type="checkbox"/> Close Reading Literary Analysis         | <input type="checkbox"/> Neuroimaging Analysis (FSL, SPM, etc.) |
| <input type="checkbox"/> Coding (e.g. MATLAB, Python, C++, etc.) | <input type="checkbox"/> Music (playing, reading, or writing)   |
| <input type="checkbox"/> Poetry (reading or writing)             | <input type="checkbox"/> Film Studies                           |
| <input type="checkbox"/> Statistics (R, SPSS, SAS, STATA, etc.)  | <input type="checkbox"/> Running Participants                   |
| <input type="checkbox"/> Digital Humanities                      | <input type="checkbox"/> Educational/Literacy Studies           |
| <input type="checkbox"/> Web Design or Blogging                  | <input type="checkbox"/> Linguistics                            |
| <input type="checkbox"/> Social Media                            |   |
- Do you have prior research experience? If so, please describe it in between the lines below in 300 words or less. If you have more than one, choose the one that you think is most relevant:
-

## Skills You Would Like to Learn

*NOTE, few students in the lab will learn all of these skills. Please mark the ones you have the strongest interest in learning.*

- |  |   |
|--|---|
| <input type="checkbox"/> Article or Manuscript writing           | <input type="checkbox"/> Interdisciplinary Grant Writing        |
| <input type="checkbox"/> Editing or copyediting                  | <input type="checkbox"/> Experiment Design                      |
| <input type="checkbox"/> Close Reading Literary Analysis         | <input type="checkbox"/> Neuroimaging Analysis (FSL, SPM, etc.) |
| <input type="checkbox"/> Coding (e.g. MATLAB, Python, C++, etc.) | <input type="checkbox"/> Music (playing, reading, or writing)   |
| <input type="checkbox"/> Poetry (reading or writing)             | <input type="checkbox"/> Film Studies                           |
| <input type="checkbox"/> Statistics (R, SPSS, SAS, STATA, etc.)  | <input type="checkbox"/> Running Participants                   |
| <input type="checkbox"/> Digital Humanities                      | <input type="checkbox"/> Educational/Literacy Studies           |
| <input type="checkbox"/> Web Design or Blogging                  | <input type="checkbox"/> Linguistics                            |
| <input type="checkbox"/> Social Media                            |   |

---

**In between the lines below, please explain why you would like to be a part of the DHLC and which of the projects (see appendix) are you excited to contribute to the most?**

---

---

*I certify that my answers are true and complete to the best of my knowledge. I also agree to attach a copy of my current CV/resume, and that this resume is an accurate representation of my work history, education, training, and experience. Please email applications to [smit2047@msu.edu](mailto:smit2047@msu.edu), [nmp@msu.edu](mailto:nmp@msu.edu), and [antonuc8@msu.edu](mailto:antonuc8@msu.edu).*

*If this application leads to employment, I understand that false or misleading information in my application or interview may result in my release.*

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## APPENDIX THE DIGITAL HUMANITIES & LITERARY COGNITION LAB (DHLC)

The DHLC lab is a hub for interdisciplinary research and teaching at MSU. Our mission is to cultivate projects at the intersection of literature, cognitive science, and digital humanities: pioneering new experiments in literary neuroscience, leading innovative research in history of mind, and conducting cutting-edge work in digital humanities.

The Brain Data group's primary goal is to analyze neuroimaging data (fMRI) to discover neural mechanisms i.e. networks, regions controlling processes, comparing results to current models, behind questions around reading and aesthetics. We use FSL (a software tool used to analyze fMRI data), R (a coding based statistics tool), and MATLAB (a powerful coding program that can be used to run models or create stimulus designs) to accomplish these goals. Generally, experiments start as behavioral investigations and then are transitioned to a neuroimaging study. One of our jobs is to assist in the transition of behavioral studies to the neuroimaging stage to make sure the study fits the parameters needed to be sent to a scanner. After the experiment is said and done, we then used the tools described above to draw conclusions on the study e.g. reading, aesthetic pleasure, based on experimental results.

### 1. **Literary Attention & Austen: An Interdisciplinary fMRI Study of Close Reading** (MSU, Stanford)

This interdisciplinary study of students reading Jane Austen, the DHLC lab's first major experiment. It integrated neuroscientific tools for brain imaging (fMRI and eye tracking) with literary methods to investigate two types of attention done during reading: analytical and pleasure reading. Early results point toward the cognitive intricacy of close reading, a core skill in the liberal arts (see OUP, MIT Press). Simultaneously, our incorporation of humanistic methods—i.e. literary essays—within a traditional neuroscientific experiment is allowing us to explore both subtle patterns within and individual differences between the styles of literary attention in neural networks *Mansfield Park* (see Routledge, forthcoming 2017).

### 2. **The Pleasures of Poetry Reading: An Interdisciplinary Study of Sonnets** (MSU, NYU)

This new study, *Poetry and Aesthetic Pleasure*, emerged from our invitation to participate in *Neuroaesthetics*, a global initiative at NYU meant to advance new experiments in the neuroaesthetics of art, music, and literature. Collaborating with NYU's team in literary cognition, we are leading an experiment at MSU on reading poetry, exploring cognitive similarities and differences in how English majors describe the experience of aesthetic pleasure while reading sonnets. This behavioral pilot will be translated into an fMRI study. It is paired with a study of haikus at NYU, led by Gabrielle Starr, Dean of the College of Arts and Science at NYU, as well as experiments in music cognition and the neuroscience of art.

### 3. **Narrative Listening: The Stories We Tell About Music** (MSU, U. Arkansas)

Our newest study, *Narrative Perceptions of Music*, explores when and why we use narratives to understand music, as well as how these music-inspired narratives relate to cultural training. This project builds on a study begun at the University of Arkansas, which revealed 1) that a majority of students listening to orchestral music (without lyrics) imagined a story, or narrative, while listening; and 2) that these storylines often converged or aligned across individuals (with up to 88% shared themes). Bringing humanistic tools to the analysis of these narratives and a cross-cultural framework, the DHLC is also broadening the study to explore how these stories converge or diverge across cultures, comparing results from participants at MSU and U. Arkansas to those from participants in rural China, as well as reversing the music chosen so that all subjects listen to both Western and Chinese musical samples.