Organization: Haverford College
Primary mentor: Bret Mulligan
Secondary mentor(s): Patricia Guardiola, Anna Lacy

Project Title	**Bridge LLOD: Integrating an OER language Learning Application with Linked Linguistic Open Data Repositories**
Description	The Bridge (bridge.haverford.edu) is a popular suite of free educational apps developed at Haverford College that supports the reading of Ancient Greek and Latin texts by providing vocabulary support and analysis to readers and instructors. In support of The Bridge project goals, the LEADING Fellow will experiment with transforming existing Bridge data, and testing interoperability with other linked data.
Problems/ Research Questions	Bridge data, which includes textual corpora and lexica in the two languages (Ancient Greek and Latin), has grown organically since the founding of the project in 2014. Data currently resides in flat files (Excel, CSV, Python). We are currently in the process of transferring the corpus files into a database. We would like to enable integration and interoperability between the Bridge corpora and important Linked Linguistic Open Data Repositories (LLOD; e.g., LiLa, LASLA, Logeion). Questions for the fellowship include: 1. What workflows could be developed to connect the growing corpora of Bridge data with existing and emergent LLOD projects? 2. What transformations in data content and structure would promote this integration?
Techniques	1. LOD 2. Data analysis 3. SPARQL service query creation and execution 4. Other techniques as project develops

Tools/ Languages used	Python, SQL, SPARQL
Data	The fellow will have access to Bridge Dictionary (Latin) and Bridge Lexicon (Ancient Greek), as well as the Bridge Corpus database of texts. Other open-access linguistic corpora will also be accessed. **Description**: locally developed Latin and Greek lexica, with morphological metadata, that support the suite of Bridge learning apps. **Data type**: CSV file **Data size**: Bridge Dictionary as ~30,000 entries, each with 16 metadata elements; Bridge Lexicon has nearly 100,000 entries. The Bridge Corpus of ancient texts comprises nearly 2.5 million words. **Description**: LLOD (Linked Linguistic Open Data) repositories (LiLa, and Logeion). **Data type**: SQL and SPARQL databases. **Data size**: varies by repository.
Outcome	Workflows for linking Bridge data with other LLOD projects, esp. LiLa and Logeion.
Milestone Timeline	**This is a sample timeline; actual timeline will be developed in consultation with the fellow and mentors.** **July-August**: LEADING Fellow bootcamp; exploration of local Bridge data and interaction with Bridge applications; exploration of LLOD repositories and technologies. **September-November**: Targeted experimentation with data alignment with LLOD repositories; possible transformation of Bridge data into more sustainable and scalable formats identified in earlier work. **December**: Share findings with Bridge team at Haverford (and perhaps Board of Advisors)
References	