



## CMOP Undergraduate Intern Mentoring Opportunity

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**Project Title:** Development of an interactive data flagging interface and annotation explorer

**Context for Project:** This project will take a working prototype interface developed by last years' intern for interactively flagging data quality, and develop it into a operational interface deployed in multiple contexts within the CMOP web-site. This project will also develop a prototype tool for exploring annotation of data quality.

**Brief Description.**

This project is intended to provide an improved method for data quality experts to flag CMOP data as bad, preventing the dissemination of erroneous data to researchers and educational users. It is also intended to provide a way for researchers and educational users to participate in the data quality process (crowd-sourcing data quality assessment, in the manner of the Solar Stormwatch project: <http://www.solarstormwatch.com/> ) and to flag interesting features of data in a public manner. This project will enhance CMOP as a collaboratory, providing a channel for feedback between CMOP data quality experts, researchers, educational users, and the general public. This directly serves CMOP projects I.4.1, I.4.2, and III.3.3, and is useful across a broad range of CMOP projects.

**Proposed Outcomes/Broader Impact:**

This project will develop a useful tool for data quality flagging and for marking data of interest. This tool will be incorporated into the CMOP web site and will be used by CMOP data quality experts to prevent the dissemination of bad and suspect data, and will facilitate collaboration by allowing a wide variety of users to publicly comment on CMOP data.

**Proposed timeline (within a 10 week span):**

Week 1: Develop familiarity with CMOP database and existing interface

Week 2-3: Resolve issues preventing deployment of prototype

Week 4-5: Work with users to design annotation explorer interface

Week 6-7: Implement annotation explorer interface

Week 8-9: Incorporate interface into development version of data explorer or station pages

Week 10: Documentation and presentation