

## **Response Paper to *Recommendations on Interdisciplinary Education, Research and Creative Works*: CRDDS as a Model for Interdisciplinary Collaboration on Campus**

One of the key recommendations from the recent report brings interdisciplinary research front and center by designating a champion and creating an Operational Interdisciplinary Network to develop infrastructure and address campus challenges.

Data-intensive research requires new cyberinfrastructure, new organizational forms, and new types of people for success (see [http://msdse.org/files/Creating\\_Institutional\\_Change.pdf](http://msdse.org/files/Creating_Institutional_Change.pdf)). The Center for Research Data and Digital Scholarship (CRDDS) has developed a new organizational model that brings together faculty and research infrastructure experts in support of data-intensive research and education. This model may be of interest to campus in exploring further how interdisciplinary efforts can fill gaps between and extend opportunities for existing programs/departments/institutes/colleges and individual researchers, as well as the administrative challenges these efforts face.

CRDDS is a partnership between the University Libraries and OIT's Research Computing that supports data-intensive research across campus and disciplines. We provide researcher support and infrastructure development and operations to creatively meet pressing research and teaching needs that fall into campus interstices, drawing upon both faculty and technical expertise to do so. In addition to research support and partnerships, we offer interdisciplinary educational opportunities from informal training to for-credit options, often in collaboration with other additional campus entities such as the Laboratory for Interdisciplinary Statistical Analysis (LISA), EarthLab, and the Graduate Teacher Program.

Our directors and staff come from both sides of the house, as do our infrastructural offerings. We are supported in our work by an advisory committee with members representing a variety of disciplines and schools/colleges as well as academic statuses. Our executive board is similarly cross-college, with representation from A&S, Engineering, and RIO. We approach issues from a functional perspective, and the discipline neutrality of our offerings allows us to create virtual and physical spaces that foster intellectual collisions between disciplines. Two outcomes are fostering interdisciplinary research teams and providing an administrative home for programs involving multiple disciplinary groups.

Among our successes: expanding infrastructure supporting campus teaching and research, such as cloud-based offerings like Jupyter Notebooks; providing an administrative home for the Digital Humanities Graduate Certificate, which was proposed by a multi-college group of faculty, and an academic home for its core courses; robust training on interdisciplinary methods (e.g., geospatial analysis) and programming languages; interdisciplinary data consults in partnership with partners like LISA; two active external grants supporting data-intensive research and education; and current collaborations with faculty on large grants requiring leadership in data management or cyberinfrastructure development. Cross-disciplinary communication and collaboration is key to our work together.

Our challenges include: sustainable long-term funding to expand data curation and publication infrastructure and our educational offerings in the interstice between workshop series and credit courses (e.g., weeklong boot camps on skills for data-intensive research for graduate students); publicity and promotion of our offerings across schools and colleges; and staffing interdisciplinary courses. Based on the needs expressed by faculty and students for expanded support and infrastructure for data-intensive research on campus, our growth is only limited by resources and personnel.