## National Geospatial-Intelligence Agency and Washington College Pilot Research Project on Open Source Anticipatory Intelligence

Washington College (WC) has entered into an informal, no cost agreement, with the National Geospatial-Intelligence Agency (NGA), to engage an energetic multidisciplinary team of undergraduate students, supervised by a dedicated team of WC faculty, to conduct research using open source materials on a variety of topics that are hoped to provide sufficient information needed for anticipatory intelligence analysis needs in foreign countries that are not high on the watch list for NGA. Another phrase for this is "peripheral vision".

This pilot project sprang from conversations between Stewart Bruce, GIS Program Coordinator at WC, and Ted Cope, Director of Research at NGA, due to their joint membership on the United States Geospatial Intelligence Foundation (USGIF) Academic Advisory Board led by Dr. Max Baber at USGIF. How can we involve undergraduate students in research projects that are of interest to NGA was the fundamental question?

With the assistance of Dr. Beth Driver at NGA, a series of issues and questions were postulated to engage this team of students. WC has recruited a team of nine talented undergraduate students from WC whose majors include political science, anthropology, international studies, history, environmental studies, planetary sciences, biology, and economics to address these questions. Four members of this team are working in the Center for Environment and Society's Geographic information System (GIS) Program at the College as apprentices. Supporting the research team are several other apprentices in the GIS Program providing technical mapping, social media exploitation, and web server support to the research team. In addition, this team is working on learning more about open source IT solutions that can benefit NGA.

The country selected for the pilot project is Peru. The three research teams are working on issues of water resources, energy resources, and demographics. Leading the teams are Professor Andrew Oros (Political Science and International Studies), Professor Aaron Lampman (Anthropology) and Professor Stewart Bruce (GIS). Project deliverables will be completed by February 2012 with preliminary results available by December 2011. A dedicated web site, to include an ArcGIS Silverlight web mapping server along with other web-enabled products, are being developed to provide easy access to the team's research results.

Seven members of our student research team, along with one of our faculty leaders, will be present at the USGIF GEOINT Symposium in San Antonio in October. Here the students plan to meet with staff from NGA as well as various corporate sponsors such as Digital Globe, SAIC, Nvidia, and Geoweb3D to discuss the project and learn as much as they can to improve the quality of the final deliverable project. It is also hoped that more corporate sponsorships and useful advice can be garnered to help the students in their efforts to help NGA.

Ultimately Washington College wants to serve as an example for other universities and colleges across America to follow our lead and join us in engaging their students in effective and meaningful research projects to assist NGA in keeping the world safe. To support this outreach effort, Washington College is willing to work with other universities and colleges so they too can join our efforts to provide meaningful research to NGA. We also hope to plan ways we can engage K-12 students in this effort and get these young men and women excited about careers in geospatial intelligence.