

Protecting the past in a digital world

GOING DIGITAL and ditching paper files might seem like a no-brainer in a world committed to reducing waste and addicted to the convenience of getting information Google-fast.

A major dilemma facing the federal government is guaranteeing the sanctity of important digital documents while addressing data management, storage, retrieval, analysis and policy concerns with the millions of electronic files housed in agencies like the National Archives and Records Administration or in the Library of Congress.

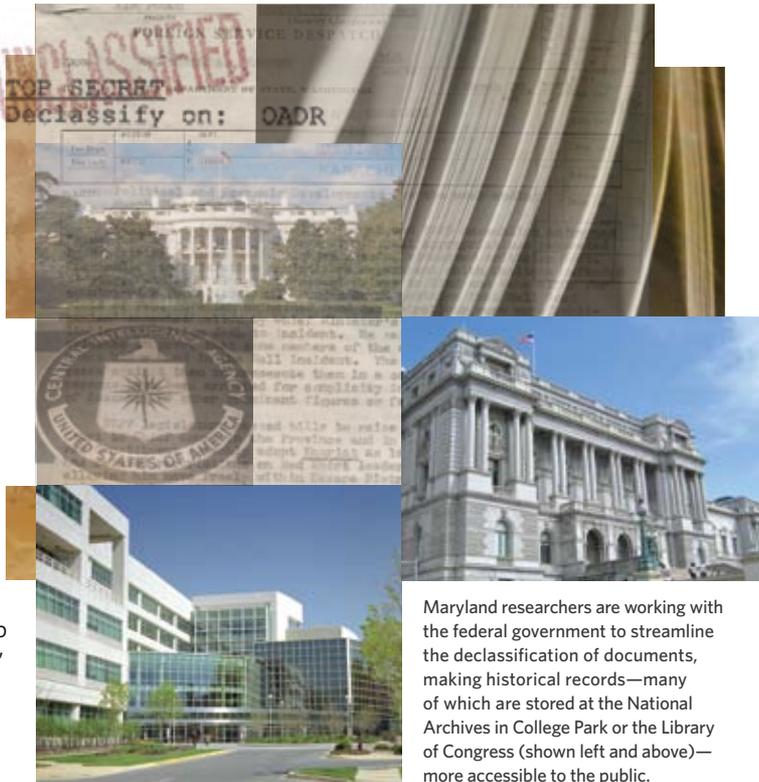
The College of Information Studies, Maryland's iSchool, along with the university's Institute for Advanced Computer Studies and the School of Public Policy, has research capabilities in each of these areas, and is working with federal entities to confront these issues.

"The university has expertise that matches up well with the federal government's data needs," says iSchool Dean **Jennifer Preece**. "Just as important, our graduate programs in areas like archives and records management are training the next generation of professionals who can meet these challenges head-on."

Maryland faculty are seeking to streamline the declassification process for the National Archives, which has a backlog of more than 262,000 cubic feet of paper documents that must be released to the public, plus millions of electronic records that need to be declassified over the next 25 years.

University researchers are developing software to flag documents that could be declassified and highlight text that might need to be redacted. The iSchool is also working on developing training initiatives for federal employees. "You can't automate the whole process," says Preece. "You will always need a combination of good tools and people who understand the policy."

Other federal agencies needing information management solutions include the Smithsonian Institution, which is making a digital record of its entire 137 million-artifact collection. And the Library of Congress is coordinating a



Maryland researchers are working with the federal government to streamline the declassification of documents, making historical records—many of which are stored at the National Archives in College Park or the Library of Congress (shown left and above)—more accessible to the public.

national strategy to collect, archive and preserve the burgeoning amounts of digital content—especially materials created only in digital formats.

Research by **Joseph JaJa**, a professor of electrical and computer engineering, will help ensure that any digital records made today are not trapped in obsolete or corrupted formats. JaJa's research group has developed a suite of tools, already tested at the National Archives in College Park, which allows users to enter data on a "loading deck" and automatically verify that the information is accurate and has not been altered.

The goal, says JaJa—who is actively involved with the Library of Congress initiative—is to enable researchers 50 or 100 years from now to find and retrieve electronic records using the best technology available to them, regardless of what hardware or software was used to create them.

Noted archivist joins iSchool

Allen Weinstein, most recently ninth Archivist of the United States, has joined the faculty of Maryland's iSchool as a visiting professor.

Weinstein retired from the federal government last year after heading the National Archives and Records Administration for almost four years. His addition to the Maryland research community should help broaden the university's partnerships in nearby Washington, D.C., says iSchool Dean Jennifer Preece.

Weinstein led the effort at the National Archives to change the way the federal government classifies and declassifies documents, so that sensitive documents are reviewed more regularly for release. He also made major progress in preserving electronic records and reduced the declassification backlog by more than 20 percent.

Weinstein received the United Nations Peace Medal and Council of Europe's Silver Medal for his leadership of the Center for Democracy, a nonprofit foundation he founded to assist developing democracies.

Allen Weinstein (below with iSchool Dean Jennifer Preece) at the March 26 "American Conversations" panel discussion on the role that higher education can play in the nation's economic recovery.



UPDATE FROM THE OFFICE OF FEDERAL RELATIONS

Science Funding Outlook Improves

The projected outlook for science in President Obama's FY10 budget should give the Maryland research community a cautious sense of optimism. The outline includes funding increases for areas of research that university faculty are actively involved with.

For example, the Environmental Protection Agency is expected to receive a \$3 billion increase to focus on climate change research and programs to reduce greenhouse gas emissions. NASA would receive \$18.7 billion to focus on research related to space-based climate research, research and development of human and robotic space exploration and aeronautics

research. Substantial increases for the National Science Foundation's Graduate Research Fellowship and Faculty Early Career Development programs are also proposed.

The president's outline for the Department of Energy includes substantial increases for the Office of Science and an impetus for research and development on biofuels, renewable energy and energy efficiency. We will be carefully watching the FY10 numbers; indications are that the increased support for the nation's research agenda will continue under the Obama administration.

Look to the Federal Corner for more information regarding higher education and the federal government. If you have a specific matter you would like to see discussed in this column, please contact Rae Grad, director of federal relations, at rgrad@umd.edu.

REMINDER:

Second Annual Celebration of Scholarship and Research

DATE: Tuesday, April 28

TIME: 4 to 6 p.m.

LOCATION: Reckord Armory

Sponsored by the Provost's Office and the Office of the Vice President for Research, this annual event is a celebration of the scholarly and research accomplishments of the Maryland research community.

For more information: gernoimo@umd.edu



Join us for an informal event that highlights Maryland's outstanding scholars and researchers, particularly those recognized by their peers for their achievements during the past year.

In the coming months, we will continue to introduce you to new faculty and research scientists in the Maryland research community.



Stacey Daughters is an assistant professor and the director of the health and addictions laboratory. She specializes in the neurobiological and behavioral determinants of addiction and HIV risk behavior and how to create effective prevention and intervention programs.



Marianna Landa is an assistant professor of Russian. She specializes in the literature, culture and visual experience of Russian modernism, also called the Silver Age of Russian literature, from the 1880s to the 1920s.



Brian McKenzie is an assistant professor of government and politics. His research focuses on black civic and political involvement in the post-civil rights era; models of opinion formation for minority groups; and the influence of religion on politics.



Nneka Ifeoma Ofulue is an assistant professor of communication. Her research focuses on the intersection of gender, ethnicity and class in American evangelical culture.



Yunfeng Zhang is an associate professor of civil engineering. He recently won a National Science Foundation grant to test how well new types of sensor technology can be combined to detect structural distress in steel bridges.

Report on Chinese Americans Reveals Economic Disparities

Chinese Americans consistently make less than their white peers, despite their level of education, according to a groundbreaking study led by **Larry Shinagawa**, associate professor and director of the university's Asian American Studies Program.

The two-year study, "A Portrait of Chinese Americans," was conducted with assistance from the Organization of Chinese Americans, a national group that advocates for the well-being of all Asian Pacific Americans.

On average, the earnings of Chinese American professionals in the legal and medical fields lag behind their white counterparts by as much as 44 percent, according to the report. "Time and hard work simply haven't been enough for Chinese Americans to fully enter into mainstream social and professional circles," says Shinagawa.

Language barriers, cultural differences and the public's perception of Chinese Americans all might play a role in the pay disparity. Shina-

gawa thinks that increased mentoring and leadership opportunities can help. "You need a pipeline, a network to help young professionals rise to their potential, and increase Chinese American participation in top positions," he says.

Based on extensive census data and personal interviews, the report also challenges stereotypes that Chinese Americans are the so-called "model minority"—a monolithic population of overachievers. The nation's approximately 3.5 million Chinese Americans are split nearly evenly between poorly educated recent immigrants from China and a more settled, educated and prosperous group of older immigrants and second-generation Americans.



Larry Shinagawa

FACULTY AWARDS & HONORS



JEONG KIM, professor of the practice in the Clark School of Engineering, received the 2009 Distinguished Lifetime Achievement Award from the Chinese Institute of Engineers. The award recognizes Asian-American engineering professionals with a record of significant personal achievements and contributions to academia, public service and industry. Kim is president of Alcatel-Lucent Bell Labs, a source of groundbreaking solutions that shape the communications industry.



SANDRA GORDON-SALANT, director of the doctoral program in clinical audiology, received the 2009 Jerger Career Award for Research in Audiology from the American Academy of Audiology. This award is given to an academy member who has done at least 25 years of research and has made significant contributions to the practice or teaching of audiology.



NEIL GEHRELS, an adjunct professor of astronomy, will receive the 2009 Henry Draper Medal and a \$15,000 prize from the National Academy of Sciences for his pioneering contributions to gamma ray astronomy. The academy recognized his work with NASA's Swift Mission, which led to insights into the extreme physics of active galactic nuclei and power stellar explosions known as gamma ray bursts.

Mel Bernstein, vice president for research, was recently named to the Oak Ridge Associated Universities (ORAU) board of directors. The board provides policy and fiduciary oversight of ORAU operations for its membership, a consortium of 100 major research institutions that advances science and education by partnering with national laboratories, government agencies and private industry.



PHOTO BY RHODA BAER

UPCOMING EVENTS & CONFERENCES

DIVISION OF RESEARCH SEMINAR SERIES Strategic Directions and Initiatives for Engineering at NSF

Featured speaker is Michael Reischman, deputy assistant director for engineering, National Science Foundation

Thursday, May 7, 11 a.m. to noon
Benjamin Banneker Room, Stamp Student Union
RSVP to vpr@umd.edu by May 4
For more information: geronimo@umd.edu



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