Tablet personal computers present a new frontier in the field of teaching and learning technology, and Lin Qiu of SUNY Oswego’s computer science faculty is one of the pioneers. He has received grants from Microsoft Research and Hewlett Packard, totaling nearly $114,000, to develop software and acquire equipment that will help computer science and software engineering students get immediate feedback on their classroom work on tablet PCs.

He is working with four computer science and human-computer interaction students on the two projects.

A tablet PC is a laptop computer with the added capability of converting into a flat tablet or notebook whose screen students and instructors can hand write and draw on with a pen-like stylus. It has a natural application in computer software design classes, where diagrams are a step in the process of creating computer programs.

In the Microsoft Research-funded project, Qiu will develop software that helps teachers and students create thread interaction diagrams in such classes as "Project-based Software Engineering" (CS 380) and "Concurrent Programming" (CS 375). A diagram on a student's or instructor's tablet PC screen can be "associated with a running program to provide dynamism to the static artifact," Qiu said.

"It's a natural way to help students engage in active learning in the classroom, the learning-by-doing paradigm," he said.

In the Hewlett Packard-funded project, the software will provide direct feedback to students on their diagrams. "My software will look at these diagrams, see the drawing, read the writing, identify common problems and provide the feedback," he said. It will also facilitate manual feedback by the instructor, he said.

The Hewlett Packard "Technology for Teaching" grant comprises $58,314 for equipment, including 20 tablet PCs for classroom use, and $15,500 for software development. Qiu's HP project is titled "Using Mobile Technology to Facilitate Learning by Doing and Critiquing in Software Engineering" (Continued on page 17)
ARTS

Theatre Communications Group, New Generations Program [64245]
Deadline: 02/23/07
Scope: The sponsor provides support to strengthen and deepen existing programs, approaches or strategies that successfully result in elective theatre participation by culturally specific groups and/or young people.
Funding: Funding is as follows: Future Leaders: Mentorships — Early-career theatre professionals in any discipline are given two-year paid ($32,500/year) mentorship positions at a theatre and are mentored by an established professional in their field. In addition, grants of $15,000 are available to repay a mentee’s student loans; Future Leaders: International Fellowships — $3,000 travel grants will be awarded; Future Audiences - The grant of up to $32,500/year is a one-to-one matching grant.
Objectives: The New Generations Program has two objectives: Future Leaders: Mentorships—Grants will be awarded to support two-year, one-on-one mentorships for early career theatre professionals in all areas of the theatre.
Future Audiences: Grants will be awarded to support the expansion of innovative and unique audience cultivation efforts designed to strengthen relationships with young, culturally specific, disabled and/or under-served audiences.
Future Collaborations: (TCG/ITI International Fellowships)—Grants will be awarded in the fall/winter and spring/summer seasons to theatres and theatre professionals for unrestricted international travel, enabling them to share ideas and techniques and/or collaborate with their colleagues around the world.

Meet the Composer, Inc., Commissioning Music/USA [70706]
Deadline: 01/26/07
Scope: Meet the Composer, Inc., in partnership with the National Endowment for the Arts, supports not-for-profit performing and presenting organizations that wish to commission new works. Grants provide support for composer and librettist commissioning fees, copying costs, as well as a range of support services (Production costs are not supported).
Funding: A single organization wishing to commission a new work can apply for up to $15,000 towards the composers’ commissioning fees and copying costs. A group of organizations wishing to co-commission a new work or works can apply for up to $30,000 towards the composers’ commissioning fees and copying costs. Please note that this program provides for commissioning fees only, no support for administration or production expenses is available.
Objectives: The sponsor designs programs that support composers writing in all styles of music. Composer projects have included classical, jazz, folk, electronic and many other styles of music. Major symphonic works, full-length operas, works for jazz ensemble, music for dance of all kinds, experimental music and theater projects, and chamber music of many instrumentation has all been created with support from the sponsor.
The 2007 round will commission new works created by a composer in any style for: Small Ensembles; Orchestra; Chorus; Jazz or Concert Band; or Vocal or Instrumental Soloists.

Commissions through Meet the Composer are available for the performance of a professional in their field. In addition, grants are given two-year paid ($32,500/year) mentorship positions at a theatre and are mentored by an established professional in their field. In addition, grants of $430,000 will be available for this year's competition. Awards may be used for creating opportunities both for raising funds and for distributing funds.
funders (corporations, foundations, government agencies and individuals), state funds, groups of state funds, regions, and groups of colleges. Matching funds must be new or increased grants either to the state fund or member colleges. Funding will be granted for the initial year of a program only, unless the case can be made that the second proposal is a discreet project from the first year program.

**Objectives:** This program was established to inspire and fund creative solutions to the needs of independent colleges and universities, and to encourage participation in such efforts by foundations, corporations, government agencies, individuals and other not for profit organizations, including the state independent college funds. Proposals are encouraged to address one or more of the following topic areas, but are not required to: Administrative Restructuring/Business Process Redesign/Cost of Education; College Preparation Programs; College/Community Engagement and Service Learning; Diverse Learning/Distance Learning; Duel Enrollment/Articulation Programs between 2-year and 4-year Institutions; Faculty Development; Learning Centered Campus; Institutional Diversity/Campus Climate; Internationalize Curriculum/Global Education; Shared Governance; Student/Faculty Research; Student Access; Student Retention; Student Learning/Essessment of Learning/Skill Development; and Technology for Teaching and Learning.

**American Honda Foundation [09372]**

**Deadline:** 11/01/06, 02/01/07, 05/01/07

**Scope:** The sponsor provides grant support for projects in the areas of youth and scientific education.

**Funding:** Average grants range from $10,000 to $75,000 per year.

**Objectives:** Programs related to youth and scientific education should be: dedicated to improving the human condition of all mankind; soundly managed and administered by enthusiastic and dedicated individuals who approach their jobs in a youthful way; look to the future or foresightful programs; and innovative and creative programs that propose untried methods which ultimately may result in providing solutions to the complex cultural, educational, scientific and social concerns currently facing the American society.

**HEALTH & WELLNESS**

**NIMH, Information Technologies and the Internet in Health Services and Intervention Delivery (R01) [87168]**

**Deadlines:** 1/2/07, 2/1/07, 5/1/07, 6/1/07, 9/1/07, 10/1/07

**Scope:** The sponsor offers support for research to study the impact of health information technology on health interventions and services. Studies related to the impact of technology on the delivery of health-related information as well as health-related clinical interventions are encouraged.

**Funding:** This program will use the NIH Research Project Grant (R01) award mechanism. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. F&A costs requested by consortium participants are not included in the direct cost limitation.

**Objectives:** While much progress has been made in developing guidelines to ease the use of Internet technologies for service intervention delivery, still relatively little is known about the impact of the Internet and other electronic research tools in delivering interventions that have been tested in a traditional care setting. Targeted research is needed to test the effectiveness of adapted "Internet-based" interventions, the effectiveness of the Internet and other technologies as a mechanism to deliver health information to consumers, and the impact of technology use on consumer health. More broadly, research is needed to develop theory-based HIT implementation, and to explore the use of Health Information Technology (HIT) as a vehicle, not a new intervention, to deliver effective health treatments to consumers. Of particular interest is the use of HIT in mental health and cancer prevention areas.

**HUMANITIES**

**Amer. Library Assoc., Ingenta Research Award (LRRT) [85653]**

**Deadline:** 03/31/07

**Scope:** The sponsor provides support for research projects about acquisition, use and preservation of digital information.

**Funding:** The grant consists of up to $6,000 for research and up to $1,000 for travel to a national or international conference to present the results of the research. Expenditures must directly support research; the award does not cover indirect costs or overhead.

**Objectives:** Examples of research areas include: the analysis of online journal usage data to develop conclusions and predictive models which may be used by libraries and publishers in determining future behavior; an investigation of the issues surrounding institutional archiving, particularly costs, preservation and securing the participation of faculty; a study of information seeking behavior of readers and/or authors; and/or the development of future models for verifying the relative usefulness of publications. Other topics related to digital publications will also be considered.

**Wilbur Foundation [29183]**

**Deadline:** 12/31/06

**Scope:** The sponsor provides funding in the field of humanities, especially history, literature, religion, and philosophy, for projects that are calculated to enhance or preserve the "permanent things" of society. Eligible applicants are tax exempt organizations which reflect a concern for historical continu-
Jean Ann—Grant from Chiang Ching-kuo Foundation for International Scholarly Exchange

Occasionally, we report the activities of a SUNY Oswego faculty member who has received external funding. Dr. Jean Ann of the Curriculum and Instruction Department received a grant from the Chiang Ching-kuo Foundation for International Exchange for research on TSL (Taiwan Sign Language). This grant allowed her to travel to Taiwan during her recent sabbatical. Below is an account of her sabbatical itinerary, professional activities and accomplishments.

Itinerary:
I arrived in Taipei, Taiwan on September 17, 2005 and left Taipei, Taiwan on January 15, 2006. During this period of time, I lived in the Tzu Yuan Guest House on the National Chung Cheng University campus in Chia-yi Taiwan. I spent the western holidays of Christmas and New Year with my family in Nanjing, People’s Republic of China.

Professional activities:
I divide my professional activities into several sections as outlined below.

Research:
(a) I collaborated with linguist colleagues Dr. James Myers and Dr. Jane Tsay. Continuing our work on the corpus of TSL signs, we worked on developing a psycholinguistic experiment, running subjects and analyzing data. We required three different sets of subjects to do three tasks.

Task 1: Lexical decision task. Subjects see short videos of isolated real and fake signs in random order. They must decide quickly if they are real or not. Their reaction time (RT) and proportion correct (PC) will be measured. Both measures should tell us something about the ease of recognition.

Task 2: Repetition naming. Subjects will see the same short videos of isolated real and fake signs in random order. They must repeat back what they see as quickly and accurately as they can. RT and PC will be measured.

Task 3: Frequency judgments on short videos of signs. Subjects were asked how frequently they signed the signs in question.

(b) I collaborated with Dr. Wayne Smith and Chiangsheng Yu on a small project which examines the linguistic experiences of Deaf Taiwanese who experienced language attrition as young children. They learned Mainland China Sign Language when they attended a particular elementary school in the city of Kaohsiung, Taiwan. Later, these children learned a second sign language, Taiwan Sign Language, when they went to junior high school. Their second language supplanted their first. What are their memories and impressions of this experience? Do they shed light on any big questions in linguistics?

Program Development:
In consultation with Dr. Walter Opello (International Education, Director) and Dr. Joyce Smith (Department of Curriculum and Instruction Advisement Coordinator) and Dr. Pam Michel (Chair, Department of Curriculum and Instruction), I made efforts to explore possibilities for SUNY Oswego students at NCCU’s English Language Institute. Dr. Lin Lizhi and I had two discussions (November 1, 2006 and December 2, 2006) about the possibilities of Oswego students taking one semester of Chinese at NCU in exchange for English language tutoring. I have left all the necessary information in Dr. Lin’s hands, and hope to hear from her soon.

Auditing Classes:
I audited three classes (Taiwan Sign Language, Empirical Methods in Linguistics and Phonology and Frequency) while at NCCU, which was a very precious chance to upgrade my knowledge of Taiwan Sign Language and functional linguistics. Our reading lists were exactly the materials that I had been longing to read and had not found time for in my usual work at Oswego.

Presentation:
On December 12, 2005, I gave a talk to the NCCU Graduate Institute in Linguistics Department as a “double feature” with Dr. Gary Hsu, a psychologist with a research interest in vision. I was invited by Dr. Gladys Tang (and offered partial funding) to give a talk at Chinese University of Hong Kong on the work I am doing with Myers and Tsay. However two things prevented this: our results were not ready and I could not come up with the rest of the funding for this venture. I refused the invitation, with much disappointment.

Teaching:
I guest-lectured in two classes:
Introduction to Phonology, Sign language

Phonology
December 2, 2005

Functional Linguistics, How I ended up doing research on TSL
October 26, 2005

My work was the topic of discussion in two classes:
Phonology and Frequency
November 2, 2005

Empirical Methods in Linguistics
December 5, 2005

Accomplishments:
My Taiwan colleagues (Tsay and Myers) and I have completed the data collection process. Before I left Taiwan in January, about ¾ of our work was complete. We had designed the study and run approximately 30 subjects. We still needed another 20 at that point. Our work finding subjects was difficult for many complicated reasons, not the least of which was that the education level of many deaf people in Taiwan is quite low, and the tasks we were asking them to do were complicated for them. The last subjects were run on March 5, 2006.

We are now in the process of doing the statistical analysis of the data. (This is being done by my colleagues in Taiwan.) When we understand the results, it will be my responsibility to write the bulk of the paper. (We assume at the moment that we’ll get one paper out of our collaboration, but the possibility exists that we’ll end up with two. What will happen is, as yet, unclear to all of us.) I have submitted an abstract to Quest 2006 to discuss our questions, methods and some of the findings that we’ve been able to understand so far.

A second set of Taiwan colleagues (Smith and Yu) and I have decided to try to get a chapter into a peer-reviewed volume on sociolinguistics of deaf communities. The chapter concerns itself with the interviews we conducted on the issue of language attrition, and is currently being reviewed.

Future plans:
Research: I was trained as a formal linguist. As such, I learned to focus an inordinate amount of attention on trying to discover the constraints on language that do not arise from general cognitive constraints, sociolin
The Graduate & Undergraduate Scholarly & Creative Activity program is to support and foster student scholarly and creative activities done in collaboration with a SUNY Oswego faculty or staff sponsor.

**DEADLINE:** November 3, 2006, 4:30 p.m. The link to the on-line application form will not be active after this time.

**ELIGIBILITY:** Graduate students formally accepted into a graduate program and undergraduate students in their freshman, junior, sophomore, or senior years at SUNY Oswego may apply.

**FUNDS:** The maximum award will be $1,000. Funds may be used for supplies, books, software, equipment or other expenses directly related to the proposed scholarly and creative activity.

Guidelines are available at ORSP’s website (see link below in Campus Grants Timeline). Select ‘Campus Grants & Awards’, then ‘Students’.

**FACULTY SPONSORSHIP:** Students should immediately secure a faculty or staff sponsor and provide that person with the faculty sponsor form (available at above referenced web site). Students must secure a faculty or staff sponsor who will assist in designing and carrying out an appropriate project.

This program is designed to provide support for faculty and staff in the development of their research or creative activity programs. Projects that are expected to result in peer-reviewed output or to have significant impact on local/campus community will get priority.

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**Campus Grants Timeline**

For information and application materials for campus grants, visit our web site <http://www.oswego.edu/administration/ORSP/index.html> and look under Campus Grants & Awards.

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>DEADLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate &amp; Undergraduate Scholarly &amp; Creative Activity Grants</td>
<td>November 3, 2006</td>
</tr>
<tr>
<td>President’s Award for Scholarly &amp; Creativity and Research</td>
<td>January 31, 2007</td>
</tr>
<tr>
<td>Provost’s Award for Scholarly &amp; Creativity and Research</td>
<td>January 31, 2007</td>
</tr>
<tr>
<td>Course Innovation Grants</td>
<td>March 5, 2007</td>
</tr>
<tr>
<td>Student/Faculty Collaborative Challenge Grants</td>
<td>February 5, 2007</td>
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Generally, grants are paid quarterly mence July 1st, the year of approval. Normally, grants are paid quarterly over the ensuing twelve months. Objectives: The sponsor concentrates its funding in the field of humanities, especially history, literature, religion, and philosophy, for projects that are calculated to enhance or preserve the “permanent things” of society.

Major Grants, New York Council for the Humanities [02050]
Deadline: 11/01/06
Scope: The sponsor provides support of at least $2,500 to New York non-profit, tax-exempt organizations for humanities projects.

Funding: Major Grants are for project requests of $2,500 or more. While there is no upper limit on the amount that can be requested, grants awarded rarely exceed $10,000. Appropriate project formats include: lectures; conferences, symposia, and panel discussions intended for the general public; planning or implementation of exhibitions; film screenings combined with interpretive discussion; exhibition brochures; exhibition catalogues with significant humanities scholarship; museum docent scripts or talking points developed through scholarly consultation; readings combined with interpretive discussion; walking tours; radio programs; and internet presentations such as online exhibitions and open dialogues moderated by humanities scholars.

Objectives: This program is designed to provide financial support for humanities programming, conceived and implemented by not-for-profit organizations across New York State, that brings humanities scholars and scholarship to a general public audience. Special consideration is given to projects that reach underserved populations; to projects that, without our funding, might not happen; and to organizations that need financial seed money so that they may secure long-term support from other sources.

As branches of learning, the humanities include history, literature, philosophy, ethics, jurisprudence, linguistics, comparative religion, and the history, theory, and criticism of the arts. Social sciences that employ qualitative approaches such as cultural anthropology, archaeology, political science, and interdisciplinary areas such as folklore, women’s studies, and American studies also are considered humanities disciplines.

IMLS, National Leadership Grants for Libraries and Museums [59069]
Deadline: 02/01/07
Scope: National Leadership Grants enable libraries and museums to help people gain the knowledge, skills, attitudes, behaviors, and resources that enhance their engagement in community, work, family, and society. Projects should enable libraries and museums to address current problems in creative ways, develop and test innovative solutions, and expand the boundaries within which cultural heritage institutions operate. The results of these projects will help equip tomorrow’s libraries and museums to better meet the needs of a Nation of Learners. Successful proposals will show evidence that they will have national impact and generate results—new tools, research, models, services, practices, or alliances—that can be widely adapted or replicated to extend the benefit of federal support. Proposals will reflect an understanding of current issues and needs, showing the potential for far-reaching impact throughout the museum and/or library community. Projects will provide creative solutions to issues of national importance and provide leadership for other organizations. The sponsor particularly encourages projects that meet community needs through innovative collaborations between museums and libraries and with other organizations as appropriate. Partnerships between libraries and museums are particularly encouraged under this program.

Funding: Generally, project activities supported by National Leadership Grants may be carried out for a period of up to 3 years, and range from $25,000 to $1,000,000 for museums and $50,000 to $1,000,000 for libraries. There is a matching requirement of one to one for requests over $250,000, except research projects. Cost sharing of at least one-third is encouraged for requests under $250,000 and for research projects. Demonstration projects are subject to non-research matching provisions.

Objectives: The sponsor provides support in the following categories: Advancing Learning Communities -- supports new opportunities for libraries and museums to engage with other organizations to meet the educational, economic, and social needs of learners of all ages. Projects will support learning throughout the lifetime, whether that learning takes place in communities, in schools, or in the workplace. A learning society requires a new vision, in which learning is seen as a community-wide responsibility, supported by both formal and informal educational entities. The sponsor will support programs based on current research in cognitive science; learning and literacy partnerships among early, adult, and community learning providers; development of innovative learning technologies using library and museum content; and exploration of new ways to integrate digital and physical services and programs. Building Digital Resources -- supports the creation, use, preservation, and presentation of significant digital resources, as well as the development of tools to manage digital assets. The sponsor will support projects that preserve and enhance access to valuable library and museum resources; support the development of tools to help libraries and museums manage and share digital assets; address the challenges of preserving and archiving digital media; and enhance interoperability, integration, and seamless access to digital as-
Jean Ann—(Continued from page 4)

guistic constraints etc. At one time, I was enthusiastic about the questions formal linguists worry about. Particularly after doing the research for my book, which should appear by summer 2006, I am much less so. Even if we found answers, I don’t know that they would solve any problems that people currently worry about—such as how second languages are learned.

I intended my sabbatical sojourn into psycholinguistics to assist me in my search to discover, and perhaps embrace, new ways of asking questions about language, making discoveries about language, and coming to understand language. But I discovered that just as formal linguistics did, psycholinguistics has its limits; for example, its almost maniacal reliance on and trust of statistics (numbers) to shed light on questions about language. I certainly understand the use of (and even see the beauty of) numbers in psycholinguistics, however, I am somewhat unsatisfied with the rigidities of both the data itself and how we understand it.

Since formal linguistics has not made the structure of sign languages very transparent (and some might argue that it has not been particularly helpful with spoken languages either), I want to try to use insights from other approaches to linguistics to try to get at Chomsky’s question: what do people know when they “know” a language? I am really excited about letting my research take a turn into perhaps more of an anthropological linguistics approach. To this end, first, I have been working on collecting (from my field notes of 1991 and from my most recent field notes), the stories of deaf life in Taiwan that context the actual use of this amazing language. Second, I’ve begun to try to secure funding from campus sources to invite my major consultant to New York this summer. As I find time, I will find out what funding exists from outside sources for this project. I believe that a series of interviews with my consultant, a native signer, would go a long way in trying to come up with a new approach to how to go about doing linguistics. The interviews would try to tap into my consultant’s life as a deaf man with linguistic experiences that linguists have not even tried to understand as yet, such as language attrition, and societal oppression and its effect on the development of language in an individual and the maintenance and use of a language in a community.

I have submitted two abstracts to the Theoretical Issues in Sign Language Research Conference, which will take place in Brazil in 2006. There will be a conference organized in Hong Kong by Dr. Gladys Tang in the next year or two. I hope to attend both

Eye on Funding (Continued from page 6)

sets, particularly projects that are of statewide, regional, thematic, or national scope.

Research and Demonstration -- supports basic and applied research and demonstration projects to test potential solutions to problems in a real-world environment. The sponsor will support research to improve the effectiveness of library and museum services and their impacts on users; enhance understanding of learning within and across different age groups; fulfill users’ needs and expectations; investigate or develop systems of knowledge organization, such as taxonomies and ontologies; enhance information discovery; investigate knowledge integration, data curation, or interoperability; create innovative methods of preservation of digital or analog library materials; integrate physical and digital experiences; and develop new methodologies, standards, or practices.

NEH / NFAH, We the People Challenge Grants in United States History, Institutions and Culture [77193]
Deadline: 02/01/07
Scope: Support is provided for challenge grants designed to help institutions and organizations secure long-term improvements in and support for humanities activities focused on exploring significant themes and events in American history, thereby advancing knowledge of how the founding principles of the United States have shaped American history and culture for more than two hundred years.

Funding: The requested grant amount should be appropriate to the humanities needs and the fund-raising capacity of the institution. The maximum federal portion of an We the People challenge grant is $1,000,000.

All federal challenge grant funds are

“It is the mark of an educated mind to be able to entertain a thought without accepting it.”  Aristotle
matching funds. The federal portion of a challenge grant is offered over three years, but the grantee may take up to 56 months to raise matching funds. Federal funds are released as fund-raising proceeds, according to a formula that allows donations from as early as five months prior to the application deadline and as late as one year beyond the last-released federal funds. The first year's allocation will be released as matched one-to-one. Allocations for the second and third years will be released as matched one-to-one but only after the remaining prior-year's match is completed.

**Objectives:** As part of its We the People initiative, the sponsor invites proposals for challenge grants designed to help institutions and organizations secure long-term improvements in and support for humanities activities that explore significant themes and events in American history, thereby advancing knowledge of how the founding principles of the United States have shaped American history and culture for more than two hundred years. The Endowment particularly welcomes proposals for programming at America's historic places (historic sites, neighborhoods, communities, or larger geographical regions) as well as applications that address this theme through the use of digital technologies.

**INTERDISCIPLINARY**

**Secondary Data Analyses Based on the NICHD Study of Early Child Care and Youth Development (NICHD) [83292]**


**Scope:** The sponsor offers support for research to address questions about family, child care, school, and child development through analyses of existing data sets from the NICHD Study of Early Child Care and Youth Development. In particular, the sponsor would like to see the data sets used by psychologists, sociologists, economists, statisticians, educators, policy makers, and physician scientists.

**Funds:** This PA will use the NIH Research Project Grant (R01) and the NIH Small Grant (R03) award mechanisms. Applicants for an R01 may request a period of support of up to five years. Applicants for an R03 award may request a project period of up to two years and a budget for direct costs of up to two $25,000 modules or $50,000 per year. Small grant support is for new projects only; competing continuation applications will not be accepted. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. Facilities and administrative costs requested by consortium participants are not included in the direct cost limitation.

**Objectives:** This initiative is aimed at encouraging scientists to answer their research questions pertaining to family, child care, school and child development by analyzing the detailed, comprehensive and well-documented longitudinal data sets from the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care and Youth Development (SECCYD). The sponsor expects that the use of data sets from the NICHD SECCYD will lead to original papers by scientists with different interests, trained in different disciplines. Research questions that may be answered with data from the NICHD SECCYD pertain to many topics including, but not limited to the following: family demographic characteristics and their stability over time; family social/psychological processes and their stability over time; social processes among the sub-sample of African American families; social processes in White families; patterns of mothers' employment when their children are infants, toddlers, preschoolers and at school; the tapestry of childcare arrangements used for infants, toddlers and older children; child-adult interaction from infancy onwards; peer interaction; specific aspects of the child-rearing environment in the family context, in childcare and at school as predictors of theoretically relevant aspects of child development at one developmental period or over time; the quality of academic instruction; the quality physical education; the after-school experiences of children; developmental patterns of social, cognitive, language, achievement and health outcomes; the relations between different outcomes (e.g., attention and sociability) as they unfold over time; and/or mediators and moderators of children's developmental outcomes.

**NYSERDA. Developing a Biofuels and Bioproducts Industry in New York State [89878]**

**Deadline:** 01/10/07

**Scope:** The sponsor seeks proposals to support the development, demonstration, and commercialization of innovative bioproducts that will lead to manufacturing opportunities in New York State and provide New York with energy, environmental, and economic benefits.

**Funding:** The sponsor's share of funding for any project will be limited to a maximum of $250,000. Proposals requesting more than $75,000 in funding must have a private sector prime contractor to lead the effort and contract with NYSERDA. For proposals requesting less than $75,000, a private sector team member is desired but not required. For projects requesting $75,000 or more in sponsor funding, the sponsor will require.

**Objectives:** The following are examples of project activities: development of existing or new technologies to convert biomass to bioproducts, including integrated biorefinery concepts; preliminary process design and engineering for a site-specific manufacturing facility; pilot plant experiments with site-specific feedstocks; and, research and development of bioproducts or equipment for specific end-uses or by-products.
Preference will be given to proposals that anticipate commercializing and/or developing a bioproduct that will be manufactured in New York and demonstrate that there is potential for future economic development in New York State. Preference will be given to those proposals that have a significant portion of the proposed development/demonstration activities occurring within New York State. Projects with a commercialization schedule of three years or less will be favored. Proposers that project commercialization schedules greater than three years should explain why the project is worthy of funding despite the extended time to commercialization. By the completion of the project, a project should have verifiable results to determine commercial viability with a high degree of certainty.

**SCIENCES**

**NSF, Mathematical Biology [89416]**

**Deadline:** 01/13/07

**Scope:** The sponsor provides funding to support research in areas of mathematics with relevance to the biological sciences, except statistics and probability. For research in statistics and probability see the respective program descriptions. This part of the Applied Mathematics program interacts with every division in the NSF Directorate of Biological Sciences and its interests overlap those of the biology programs. Mathematical Biology regularly seeks joint reviews of proposals with biology programs.

**NSF, Power, Controls and Adaptive Networks (PCAN) [89415]**

**Deadline:** 02/07/07

**Scope:** The sponsor provides funding to support creative research and education underlying the analysis and design of intelligent engineering networks for control, communications, computation and energy.

**Objectives:** The program supports creative research and education underlying the analysis and design of intelligent engineering networks for control, communications, computation and energy. Proposals leading to improved methods for multi-scale modeling, learning, optimization, reliability, security and robustness of complex dynamical systems are of interest. Distributed networks occur in telecommunications, Internet, power and energy, transportation and manufacturing. Adaptive, learning and self-organizing principles offer potential for improved performance of networks with uncertain models and changing characteristics. Topics of interest include adaptive dynamic programming, reinforced learning, pattern recognition, and intelligent agents to develop brain-like networked architectures performing real-time learning using sensors and actuators. The program also invites proposals dealing with control theory in bioelectronics, including molecular biology, genomics, biotechnology and robotics. In addition, areas of interest include computational video and imaging, integrated sensor networks, autonomic communication networks, quantum computing, embedded control, and measurement and control of micro-scale and nano-scale devices and systems. The program: covers all aspects of transmission, distribution and generation of electric power, including operations, communications, reliability, electric machines, power electronics and drives; further includes integration of renewable and distributed energy systems, such as fuel cells, solar cells, wind power and micro-turbines into large power networks; and supports the development of innovative architectures for multi-scale modeling.

**American Institute of Physics, Grants-in-Aid for History of Modern Physics and Allied Fields [84996]**

**Deadline:** 11/15/06, 04/15/07

**Scope:** The sponsor provides grants-in-aid for research in the history of modern physics and allied sciences (such as astronomy, geophysics and optics) and their social interactions.

**Funding:** Grants can be up to $2,000 each. Grants can be used only to reimburse direct expenses connected with the work: expenses for travel and subsistence to use the Neils Bohr Library, or travel and subsistence to tape-record oral history interview or microfilm archival materials, with a copy for deposit in the Library.

**Objectives:** The sponsor provides grants-in-aid for research in the history of modern physics and allied sciences (such as astronomy, geophysics and optics) and their social interactions. Grants will be given to reimburse expenses to use the resources of the sponsor's Neils Bohr Library in College Park, Maryland, or expenses to tape-record oral history interviews or microfilm archival materials.

**NSF, Integrative, Hybrid and Complex Systems (IHCS) [89413]**

**Deadline:** 02/07/07

**Scope:** The program supports innovative research in areas that integrate device concepts and systems principles in the design, development and implementation of new nano/micro/macro hybrid and complex systems with engineering solutions for domain specific applications. Hybrid systems incorporating both continuous and discrete representations are of increasing interest in the study of distributed networks.

**Objectives:** Proposals are sought that address fundamental research issues associated with modeling, design, simulation and development of engineering systems with applications in telecommunications, homeland security, bio-technology and manufacturing. Examples include: miniature implantable devices that combine sensors, actuators, computational algorithms and...
microcircuits for biomedical applications ranging from drug delivery to microsurgery; wireless networks of handheld or wearable computing devices that incorporate microsystem transmitters, receivers, antennas and sensors, and constitute a complex distributed network with high bandwidth and high information-transfer rates; optoelectronic and photonic integrated circuits, scalable in density and functionality, for chip-based wavelength division multiplexing; power grids and systems designed to be reliable, efficient and environmentally sustainable; control methods for image-guided therapy and surgery; and cyberengineering systems that integrate the physical layer (devices, sensors) with the informational layer (communication networks, computational intelligence, decision/control) to optimize the performance of distributed systems. Such integrative systems offer new challenges in basic research and promise for future applications.

Areas of current interest include: hybrid and complex systems at the nano, micro and macro scales. Some of the technology areas include: Cyberengineering Systems; Diagnostic and Implantable Systems; Optical, Wireless and Hybrid Communications Systems; Organic and Silicon-based Hybrid Systems; System-in-a-package; and System-on-a-chip.

**NSF, Division of Chemistry Research Programs [34596]**

**Deadline:** 01/12/07

**Scope:** The sponsor funds research and related activities in the following areas:

- **Analytic and Surface Chemistry--** Supports fundamental chemical research directed toward the characterization and analysis of all forms of matter. Studies of elemental and molecular composition and of the microstructure of both bulk and surface domains are included. The program supports projects that develop the fundamentals of measurement science, new sensors and new instruments, and innovative approaches to data processing and interpretation. Investigations designed to probe the chemical structure and reactivity of the interface between different forms of matter also are supported.

- **Inorganic, Bioinorganic and Organometallic Chemistry:** Supports research on the synthesis, properties, and reaction mechanisms of molecules composed of metals, metalloids, and nonmetals with elements covering the entire periodic table. Included are fundamental studies that underscore bioinorganic reactions, homogeneous catalysis and organometallic reactions, photochemical and charge transfer processes, and studies aimed at the rational synthesis of new inorganic molecular substances, self-assemblies, and nano-size materials with predictable chemical, physical, and biological properties. Objectives are to provide the basis for understanding the function of metal ions in biological systems, the behavior of new inorganic materials and new industrial catalysts, and the systematic chemistry and behavior of most of the elements and compounds in the environment.

- **Organic and Macromolecular Chemistry--** Organic Chemical Dynamics supports research that will advance the knowledge of carbon-based molecules, metallo-organic systems, and organized molecular assemblies. Experimental, computational, and theoretical projects that illuminate chemical structures, reactivity, and properties and that provide organic mechanistic, structural, and kinetic foundations for the understanding of biological processes are all considered. Organic Synthesis supports research on the synthesis of carbon-based molecules, organometallic systems, and organized molecular assemblies. Research includes the development of new reagents and methods for organic synthesis and characterization, and the investigation of natural products and new organic materials. Such research provides the basis for designed syntheses of new materials and natural products important to the chemical and pharmaceutical industries.

- **Experimental Physical Chemistry--** Supports experimental research directed at the molecular level of understanding of the physical properties of chemical systems. Experimental methodologies employed include frequency domain and time domain spectroscopic techniques covering the entire range of the electromagnetic spectrum, time-resolved dynamical studies of state-selected and mass-selected systems, and reactive scattering in molecular beams. Chemical systems studied range from single isolated molecules or ions to clusters, liquids, and solids. Chemical properties of interest include molecular structure and the shape of the ground and excited electronic-state potential energy surfaces, chemical dynamics of unimolecular and bimolecular chemical processes, time-resolved internal energy redistribution and state-to-state dynamics in molecular systems, and solute/solvent interactions in clusters and liquids.

- **Theoretical and Computational Chemistry--** Supports theoretical and computational research in areas of electronic structure, statistical mechanics, computer simulations, and chemical dynamics. The program also supports some areas of experimental thermodynamics and condensed phase dynamics of chemical systems that rely heavily on theoretical interpretation of experimental data. Areas of application span the full range of chemical systems, from small molecules to macromolecules; and degrees of aggregation, from clusters to macroscopic systems. The
goal of projects supported in this program is to provide a molecular-level interpretation for chemical properties and reactivity.

**NASA, Virtual Observatories for Heliophysics Data [88390]**

**Deadline:** 11/29/06, 01/30/07

**Scope:** This program solicits proposals to develop, demonstrate, and enhance prototypes of software applications generally known as virtual observatories. This program particularly targets the integration of the many data services for solar and space physics data necessary to the conduct of research in the Heliophysics field. A secondary part of this program permits holders of Heliophysics data to propose for small grants to upgrade their data services in order to participate in one of the several VxOs either in existence or proposed.

**Funding:** The following support will be provided for Virtual Observatory proposals: Periods of performance from one to three years may be proposed as appropriate to the nature of the contemplated investigation. It is expected that approximately $1 million will be available in Fiscal Year 2006 to support on the order of two to three investigations. VxO activities currently in progress are welcome to propose for a continuation of their efforts, but will be considered on an equal basis with other proposals for entirely new activities. In addition, funds are also available to support about eight small (approximately $30,000 to $50,000), short term (one year) awards to improve the accessibility of data sets relevant to the Heliophysics research, in general, and specifically could become a data provider for a VxO. Note that priority will be given to those proposals from data providers of NASA-sponsored data sets.

**Objectives:** Virtual Observatories—A proposed VxO should focus on a specific research community and target that community’s data repositories and services. The construction of a VxO is to provide for significant enhancement to the abilities to conduct research by members of that community. More specifically, a VxO should: Provide coordinated discovery and access to data and service resources for a specific scientific discipline by: Identifying relevant data sources and appropriate repositories, Allowing queries that yield data granules or pointers to them, Providing a user interface to access resources both through an application program interface (API) (or equivalent machine access) and a web browser application, and Being able to accommodate a wide range of provider types as needed; Understand the data needs of its discipline area by: Recruiting potential new providers, Providing support and "cookbooks" for easy incorporation of providers, Helping to assure high data quality and completeness of the product set, and Resolving issues of multiple versions of datasets; Provide documentation for metadata that: Sets standards for metadata and query items, Assists providers and review metadata, Maintains a global knowledge of data availability, and Possibly maintains collection-catalog metadata; Provide an API or other means for the VxO to appear to others as a single provider; Potentially provide value-added services for data handling and manipulation (can be done by providers or elsewhere) such as: Data Subsetting, Averaging, Filtering, Merging, and Format Conversion; Provide access to event lists and ancillary data; and Collect statistical information and community comments to assess success. The VxO should access data from the sponsor’s science missions, including those with which the sponsor has international partnerships. The Heliophysics data program strives to foster collaboration and communication amongst the several nascent VxOs. While it is the responsibility of a selected VxO team to serve the science needs of its focused community, the teams should also plan on participating in one technical meeting and/or workshop per year to develop cross-VxO coordination and technical linkage. These meetings and workshops will share the status of VxO investigations and exchange ideas and lessons learned.

Data Services Upgrades—Also solicited by this program are proposals designed to upgrade existing Heliophysics data repositories to improve the accessibility of data sets relevant to the Heliophysics research, in general, as well as to become a data provider to a VxO. Relevant tasks could include (but are not limited to) placing data sets on-line, translating data sets into more readily accessible formats, improving the data quality, providing data access and interpretation tools, improving metadata, and otherwise improving the interface of the data service to an existing or proposed VxO. Note that the term data set can apply not only to data products derived directly from NASA-funded instruments or other instrumentation but also to higher-level data sets derived from the results of data analyses, data assimilation, and modeling. This program seeks improvements to the Heliophysics data environment through specific activities.

**NSF, Petrology and Geochemistry [61274]**

**Deadline:** 12/01/06

**Scope:** The sponsor supports basic research on the formation and chemical composition of Earth materials in the crust, mantle, and core.

**Funding:** Approximately $13.9 million is available to fund fifty to sixty awards annually.

**Objectives:** Proposals in this program generally address the petrology and geochemistry of igneous and metamorphic rocks, mineral physics, and volcanology. This program also supports projects that study chemical properties of natural minerals at high pressures and temperatures. Most projects will use methods such as major and trace element geochemistry; stable and radiogenic isotope geochemistry and geochronology; experimental mineralogy, petrology, and volcanology; thermody-
dynamic modeling of high temperature geochemical and mineral-forming processes; spectroscopy and crystallography; physical and chemical volcanology. Proposals to study extraterrestrial materials will be considered only if applicable to understanding processes that led to the formation and evolution of Planet Earth.

**NSF, Hydrologic Sciences [61275]**

**Deadline:** 12/01/06  
**Scope:** Support is provided for research focusing on terrestrial processes that comprise the hydrologic cycle including evapotranspiration, precipitation, infiltration, overland and streamflow, subsurface percolation and the transport of solutes, nutrients, and particles by these fluxes.  
**Funding:** Approximately $7.4 million is available to fund thirty to forty awards.  
**Objectives:** This program encourages studies probing the spatial and temporal heterogeneity of water and chemical fluxes and storages from local to global scales – including residence times, interfacial fluxes, pathways among system compartments, and research in geolimnology and hydrologic impacts on microbial communities. The program also supports research in aqueous geochemistry directly connected to hydrologic processes and the physical, chemical, and biological processes taking place as water bodies change. Since the study of hydrologic processes requires expertise from many basic sciences and mathematics, the sponsor encourages interdisciplinary proposals and joint review with related programs.

**NSF, Geophysics [61287]**

**Deadline:** 12/01/06  
**Scope:** This program supports basic research in the physics of the solid earth to explore its composition, structure, and processes.  
**Funding:** Approximately $14.6 million is available to fund seventy to eighty standard or continuing grants.  
**Objectives:** The sponsor supports basic research in the physics of the solid earth to explore its composition, structure, and processes. Laboratory, field, theoretical, and computational studies are supported. Topics include seismicity, seismic wave propagation, and the nature and occurrence of earthquakes; the earth's magnetic, gravity, and electrical fields; the earth's thermal structure; and geodynamics. Supported research also includes geophysical studies of active deformation, including GPS-based geodesy, and studies of the properties and behavior of earth materials in support of geophysical observation and theory.

**Keck (W. M.) Foundation [01692]**

**Deadline:** 12/01/06, 06/01/07  
**Scope:** Grants are provided for studies and programs in the areas of science, engineering and medical research. Eligible institutions in these fields are accredited four-year colleges and universities, medical schools, and major, independent scientific and medical research institutions located in the United States. The sponsor also funds programs designed to promote innovative instruction and research at leading liberal arts colleges across the nation.  
**Funding:** Requests for more than $5.0 million will be designated as a Special Project and considered separately from other inquiries.  
**Objectives:** The sponsor makes grants designed to provide far-reaching benefits for humanity in the fields of science, engineering, and medical research. The sponsor is particularly interested in significant programs and projects that: focus on emerging areas of research at the forefront of science, engineering and medicine, or have the potential to lead to breakthrough technologies in these areas; or establish new directions and utilize creative approaches in education and research for the liberal arts and sciences at predominantly undergraduate institutions.

**NSF, Integrative, Hybrid and Complex Systems (ENG--ECS) [61538]**

**Deadline:** 02/07/07  
**Scope:** Support is provided to universities and colleges, nonprofit, nongovernmental organizations, for-profit organizations, state and local governments, and unaffiliated individuals for research in integrative systems.  
**Objectives:** The program supports innovative research in areas that integrate device concepts and systems principles in the design, development and implementation of new nano/micro/macro hybrid and complex systems with engineering solutions for domain specific applications. Hybrid systems incorporating both continuous and discrete representations are of increasing interest in the study of distributed networks. Proposals are sought that address fundamental research issues associated with modeling, design, simulation and development of engineering systems with applications in telecommunications, homeland security, biotechnology and manufacturing.  
Areas of current interest include: hybrid and complex systems at the nano, micro and macro scales. Some of the technology areas include: Cyberengineering Systems; Diagnostic and Implantable Systems; Optical, Wireless and Hybrid Communications Systems; Organic and Silicon-based Hybrid Systems; System-in-a-package; and System-on-a-chip.

**NSF, Control, Networks and Computational Intelligence (ENG--ECS) 61535**

**Deadline:** 02/07/07  
**Scope:** The sponsor supports creative research and education underlying the analysis and design of intelligent engineering systems for control, communications, computation and energy. Proposals leading to improved methods for multi-scale modeling, learning, optimization, reliability, security and robustness of complex dynamical systems are of interest.  
**Objectives:** Distributed networks occur in telecommunications, Internet, power...
and energy, transportation and manufacturing. Adaptive, learning and self-organizing principles offer potential for improved performance of networks with uncertain models and changing characteristics. Topics of interest include adaptive dynamic programming, reinforced learning, pattern recognition, and intelligent agents to develop brain-like networked architectures performing real-time learning using sensors and actuators.

The program also invites proposals dealing with control theory in bioelectronics, including molecular biology, genomics, biotechnology and robotics. In addition, areas of interest include computational video and imaging, integrated sensor networks, autonomic communication networks, quantum computing, embedded control, and measurement and control of micro-scale and nano-scale devices and systems. The program also covers all aspects of transmission, distribution and generation of electric power, including operations, communications, reliability, electric machines, power electronics and drives. The program further includes integration of renewable and distributed energy systems, such as fuel cells, solar cells, wind power and micro-turbines into large power networks.

Understanding of regulatory and economic structures for power grids and critical infrastructures is needed to support the 21st Century economy. The program supports the development of innovative architectures for multi-scale modeling.

**NSF, Marine Geology and Geophysics [61292]**
**Deadline:** 02/15/07, 08/15/07  
**Scope:** Support is provided for research on all aspects of geology and geophysics of the ocean basins and margins, as well as the Great Lakes.  
**Objectives:** The sponsor supports research on all aspects of geology and geophysics of the ocean basins and margins, as well as the Great Lakes. The program includes: structure, tectonic evolution and volcanic activity of the ocean basins, the continental margins, the mid-ocean ridges, and island arc systems; processes controlling exchange of heat and chemical species between seawater and ocean rocks; genesis, chemistry, and mineralogic evolution of marine sediments; processes controlling deposition, erosion and transport of marine sediments; past ocean circulation patterns and climates; and interactions of continental and marine geologic processes.

**NSF, Petrology and Geochemistry (GEO--EAR) [61274]**
**Deadline:** 12/01/06  
**Scope:** The sponsor supports basic research on the formation and chemical composition of Earth materials in the crust, mantle, and core.  
**Funding:** Approximately $13.9 million is available to fund fifty to sixty awards annually.  
**Objectives:** Proposals in this program generally address the petrology and geochemistry of igneous and metamorphic rocks, mineral physics, and volcanology. This program also supports projects that study chemical properties of natural minerals at high pressures and temperatures. Most projects will use methods such as major and trace element geochemistry; stable and radiogenic isotope geochemistry and geochronology; experimental mineralogy, petrology, and volcanology; thermodynamic modeling of high temperature geochemical and mineral-forming processes; spectroscopy and crystallography; physical and chemical volcanology. Proposals to study extraterrestrial materials will be considered only if applicable to understanding processes that led to the formation and evolution of Planet Earth.

**Leakey (Louis S.B.) Foundation [09328]**
**Deadline:** 12/15/06  
**Scope:** The sponsor provides support for projects related to understanding human origins. Advanced doctoral students as well as established scientists are eligible for general research grants.  
**Funding:** The majority of the sponsor's General Research Grants to doctoral students are in the $3,000 to $13,500 range; however, larger grants, especially to post-doctoral students and senior scientists, may be funded up to $22,000.  
**Objectives:** Recent priorities include research into the environments, archaeology, and human paleontology; into the behavior, morphology, and ecology of the great apes and other primate species; and into the behavioral ecology of contemporary hunter-gatherers. Other areas of study are rarely considered.
An Eye on Funding (Continued from page 13)

NSF, Pathways to Revitalized Undergraduate Computing Education [NSF 06-608]
Deadline: 01/23/07

Scope: Computing has permeated and in many cases transformed almost all aspects of our everyday lives. As computing becomes more important in all sectors of society, so does the preparation of a globally competitive U.S. workforce with knowledge and understanding of critical computing concepts, methodologies, and techniques. Unfortunately, despite the deep and pervasive impact of computing and the creative efforts of individuals in a small number of institutions, undergraduate computing education today often looks much as it did several decades ago.

Through the CISE Pathways to Revitalized Undergraduate Computing Education (CPATH) program, NSF's Directorate for Computer and Information Science and Engineering (CISE) is challenging its partners – colleges, universities and other stakeholders committed to advancing the field of computing and its impact - to transform undergraduate computing education on a national scale, to meet the challenges and opportunities of a world where computing is essential to U.S. leadership and economic competitiveness across all sectors of society.

The CPATH vision is of a U.S. workforce with the computing competencies and skills imperative to the Nation’s health, security and prosperity in the 21st century. This workforce includes a cadre of computing professionals prepared to contribute to sustained U.S. leadership in computing in a wide range of application domains and career fields, and a broader professional workforce with knowledge and understanding of critical computing concepts, methodologies and techniques. To achieve this vision, CISE is calling for colleges and universities to work together, and with other stakeholders in undergraduate computing education including industry, professional societies and other types of organizations, to formulate and implement plans to revitalize undergraduate computing education in the United States. The full engagement of faculty and other individuals in CISE disciplines will be critical to success. Common challenges - such as fluctuating enrollments in traditional computer science programs, changes and trends in workforce demographics, the imperative to integrate fast-paced computing innovations into the curriculum, and the need to integrate computing concepts and methodologies into the undergraduate curriculum at large – must be identified, and goals and strategies developed to address them. Successful CPATH projects will be systemic in nature, address a broad range of issues, and have significant potential to contribute to the transformation and revitalization of undergraduate computing education on a national scale.

- CPATH will support four types of projects:
  - Community Building (CB) Grants;
  - Evaluation, Adoption, and Extension (EAE) Grants;
  - Transformation (T) Grants; and
  - CISE Distinguished Education Fellow (CDEF) Grants.

NSF, Continental Dynamics [04-512]
Deadline: 11/15/06

Scope: The Division of Earth Sciences (EAR) will consider proposals for multidisciplinary research that focuses on an improved understanding of the processes governing the origin, structure, composition, and dynamical evolution of the continents and continental building blocks. The program is particularly oriented toward projects whose scope and complexity require a cooperative or multi-institutional approach and multi-year planning and execution. The intent of the program is to fund only relatively large projects that do not fit easily within other Earth Sciences programs and that have broad support of major sections of the Earth Science community.

Objectives: An effective organizational schema for the mobilization of scientific creativity and project implementation for continental dynamics research involves the concept of a field laboratory. Each field area would become an outdoor laboratory, in which techniques such as sampling, mapping, geophysical studies, and drilling are combined, over a number of years and a number of investigators. Data and samples that originate in the field laboratory then go indoors where many participating investigators engaged in sample analysis, computer modeling, and data processing work together to develop quantitative synthesis. In this context, research projects supported by the Continental Dynamics Program will normally be characterized by many of the following criteria:
- Be interdisciplinary, requiring coordination of efforts in geophysics, geology, and geochemistry;
- Be critically dependent on the ability to mobilize high technology tools for acquisition of data in the field, for study of materials in the laboratory, and for modeling systems on the computer; and
- Often involve increased coordination and collaboration among scientists from universities and other government agencies as well as from industry;
- Be of such a scope that they will require a multiple year effort to complete;
- Be focused projects of finite duration; and
- Involve an initial screening by means of a preliminary proposal process (see section on "Preliminary Proposals").

SOCIAL / BEHAVIORAL

NSF, Political Science (SBE--SES) [61372]
Deadline: 01/15/07

Scope: Support is provided to universities and colleges, nonprofit, nonacademic organizations, for-profit organizations, state and local govern-
An Eye on Funding (Continued from page 14)

ments, and unaffiliated individuals for research in political science.

**Objectives:** The sponsor supports scientific research that advances knowledge and understanding of citizenship, government, and politics. Research proposals are expected to be theoretically motivated, conceptually precise, methodologically rigorous, and empirically oriented. Substantive areas include, but are not limited to, American government and politics, comparative government and politics, international relations, political behavior, political economy, and political institutions. In recent years, program awards have supported research projects on bargaining processes; campaigns and elections, electoral choice, and electoral systems; citizen support in emerging and established democracies; democratization, political change, and regime transitions; domestic and international conflict; international political economy; party activism; political psychology and political tolerance. The Program also has supported research experiences for undergraduate students and infrastructural activities, including methodological innovations, in the discipline.

**NSF, Physical Anthropology (SBE--BCS) [61319]**

**Deadline:** 12/03/06

**Scope:** Support is provided to universities and colleges, nonprofit, non-academic organizations, for-profit organizations, state and local governments, and unaffiliated individuals for research in physical anthropology.

**Objectives:** The sponsor supports basic research in areas related to human evolution and contemporary human biological variation. Research areas supported by the program include, but are not limited to, human genetic variation, human adaptation, human osteology and bone biology, human and nonhuman primate paleontology, functional anatomy, and primate socioecology. Grants supported in these areas are united by an underlying evolutionary framework, and often a consideration of adaptation as a central theoretical theme. Many proposals also have a biocultural orientation.

**NIH, Methodology and Measurement in the Behavioral and Social Sciences (R03) [87761]**

**Deadline:** 2/1/07, 6/1/07, 10/1/07, 2/1/08

**Scope:** The sponsor offers support for research that will improve the quality and scientific power of data collected in the behavioral and social sciences, relevant to the missions of the participating NIH Institutes and Centers. Research that addresses methodology and measurement issues in diverse populations, issues in studying sensitive behaviors, issues of ethics in research, issues related to confidentiality and the protection of research subjects, and issues in developing interdisciplinary, multimethod, and multilevel approaches to behavioral and social science research is particularly encouraged, as are approaches that integrate behavioral and social science research with biological, physical, or computational science research or engineering.

**Funding:** This program will use the NIH Small Research Grant (R03) award mechanism. Applications submitted in response to this announcement must be submitted electronically through Grants.gov, using the SF424 Research and Related (R&R) forms and SF424 (R&R) Application Guide. Applicants may request a project period of up to two years and budget for direct costs of up to $50,000 per year. Because the nature and scope of the proposed research will vary from application to application, it is anticipated that the size and duration of each award will also vary. F&A costs requested by consortium participants are not included in the direct cost limitation.

**Objectives:** This program announcement encourages applications addressing four general areas of methodology and measurement research in the social and behavioral sciences. These areas, discussed in detail below, include research design, data collection techniques, measurement, and data analysis. Within the broad spectrum of research defined by these areas, applicants are particularly encouraged (but are not required) to consider studies that address one or more of the following key issues:

- **Methodology and measurement issues** in developing innovative interdisciplinary, multimethod, and multilevel research designs for use in behavioral and social science research, with special emphasis on both developing new technologies and addressing the analytical complexities associated with the integration of behavioral, social, and biological data.

- Methodology and measurement issues in research relating to diverse populations, for example, populations that are distinctive by virtue of age, gender, sexual orientation, ethnicity, culture, including culture-specific medical systems, socio-economic status, literacy, language, or disability.

- Methodology and measurement issues in studying how dramatic changes in economic, social, environmental, physical, or political context affect human health and well-being, including developing new methods if older ones are no longer valid in the face of significant changes in populations and societies over the last several decades.

- Methodology and measurement issues in studying potentially sensitive behaviors, such as sexual behavior and abortion, and covert or illegal behaviors such as drug use, abuse, and violence.

- Methodology and measurement issues concerning ethics in research, with emphasis on the topics of informed consent, assessment of risk and benefit, and selection and retention of subjects, and ensuring subjects’ confidentiality.

**NSF, Linguistics (SBE--BCS) [61301]**

**Deadline:** 01/15/07, 07/15/07

**Scope:** The sponsor provides support for scientific research of all types that
An Eye on Funding (Continued from page 15)

focus on natural human language as an object of investigation.

Objectives: The program supports research on the syntactic, semantic, phonetic, and phonological properties of individual languages and of language in general; the psychological processes involved in the use of language; the development of linguistic capacities in children; social and cultural factors in language use, variation, and change; the acoustics of speech and the physiological and psychological processes involved in the production and perception of speech; and the biological bases of language in the brain.

NSF, Perception, Action and Cognition (SBE--BCS) [61300]
Deadline: 01/15/07, 07/15/07
Scope: Support is provided for research in perception, action and cognition.
Objectives: The sponsor supports research on perception, action and cognition including the development of these capacities. Emphasis is on research strongly grounded in theory. Research topics include vision, audition, haptics, attention, memory, reasoning, written and spoken discourse, motor control, and developmental issues in all topic areas. The program encompasses a wide range of theoretical perspectives, such as symbolic computation, connectionism, ecological, nonlinear dynamics, and complex systems, and a variety of methodologies including both experimental studies and modeling. Research involving acquired or developmental deficits is appropriate if the results speak to basic issues of perception, action, and cognition.

NSF, Sociology (SBE--SES) [25922]
Deadline: 01/15/07, 02/15/07
Scope: Support is provided to universities and colleges, nonprofit, non-academic organizations, for-profit organizations, state and local governments, and unaffiliated individuals for research in sociology.
Objectives: The sponsor supports basic research on all forms of human social organization -- societies, institutions, groups and demography -- and processes of individual and institutional change. The program encourages theoretically focused empirical investigations aimed at improving the explanation of fundamental social processes. Included is research on organizations and organizational behavior, population dynamics, social movements, social groups, labor force participation, stratification and mobility, family, social networks, socialization, gender roles, and the sociology of science and technology.

NSF, Standard Grants [20359]
Deadline: 02/01/07
Scope: Grants are awarded for research, infrastructure, or education projects in areas involving the societal dimensions of engineering, science and technology.
Funding: The maximum award, excluding indirect costs, is $300,000 for an award of two to three years' duration.
Objectives: Support is provided under four program components: Ethics and Values in Engineering, Science, and Technology (EVS): This component studies the ethical and value dimensions in interactions of science, engineering, technology, and society. Projects appropriate for this component examine normative issues in the conduct of science and engineering as well as the way in which ethics and values in the wider society influence science and engineering, and how norms and values institutionalized in science and engineering influence society. History and Philosophy of Science, Engineering, and Technology (HPS): This component uses the traditions and tools of the history and philosophy of science and technology to examine the intellectual, theoretical, social-cultural, and material dimensions of science, technology and engineering. This program component is designed to support proposals that are primarily reflective, analytical, and interpretive about the scientific and engineering enterprise today and as it has existed in the past. Social Studies of Science, Engineering, and Technology (SSS): The social studies component includes research drawing on those areas of the social and behavioral sciences, including science and technology studies, that examine the influence of society on engineering, science and technology and the influence of science, engineering and technology on society. Supported research will bring the tools and theories of the social sciences to bear on such issues as how science and technology function in different societies, and how culture and society and science, technology, and engineering shape each other. Studies in Policy, Science, Engineering, and Technology (SPS): The policy component includes research on social and strategic choices, especially policy choices, that influence knowledge production and innovation and their effects, and on the influences of scientific and technical knowledge and innovation on policy. It includes qualitative and interpretive research as well as research using quantitative approaches.

Sage (Russell) Foundation [00548]
Deadline: 03/15/07
Scope: Support for scholars for research projects in the basic social sciences.
Funding: Major awards range between $50,000 and $500,000. The sponsor mainly provides support for analyzing data and writing up results, but occasionally considers larger awards for data acquisition projects highly relevant to its program goals. In no case can more than $10,000 be allocated to equipment. The sponsor will pay for travel to conduct the proposed research and provide limited support for travel to scholarly conferences for the presentation of research findings. The sponsor will consider requests for summer salary for time devoted specifically to research on the proposed project, but it sharply restricts the amounts allocated for release time during the academic
An Eye on Funding (Continued from page 16)

year. The sponsor allows overhead for indirect costs of up to fifteen percent only on awards above $35,000.

Objectives: The sponsor's awards are restricted to support for basic social science research within its announced programs.

NSF, Human and Social Dynamics

[73467]
Deadline: 01/23/07, 02/07/07, 02/21/07
Scope: This program aims to foster breakthroughs in understanding the dynamics of human action and development, as well as knowledge about organizational, cultural, and societal adaptation and change. HSD aims to increase our collective ability to understand the consequences of change; understand the dynamics of human and social behavior at all levels, including that of the human mind; better understand the cognitive and social structures that create and define change; and to manage profound or rapid change, and make decisions in the face of changing risks and uncertainty.

Funds: It is anticipated that $55 million will be available.

Objectives: This program will support research and education within and across three topical emphasis areas which are: Agents of Change; Dynamics of Human Behavior; and Decision Making, Risk, and Uncertainty.

Agents of Change: AOC research focuses on the dynamics that underlie, are part of, or result from large-scale transformational changes. Examples include globalization, population migration, infectious disease transmission, democratization, economic transformations, scientific and technological advances, and the development of human societies over time. AOC projects may also focus on processes and outcomes associated with such phenomena as human evolution and the evolution of culture; the interaction of culture with climate, geography, and environment in settings ranging from high-density cities to sparsely populated polar regions; the implications of human and social differences for conflict, cooperation, and assimilation; the implications of large-scale transformational changes for diversity and equality; and adaptation and resistance to technological change and new knowledge.

Dynamics of Human Behavior: Research in this area focuses on multidisciplinary examinations of dynamics--change in human behavior over time. Examples include the dynamics through which individuals and organizations (including families and other informal organizations) create, grow, learn, change, and act under the impulse of internal and external stimuli; the influence organizational, community, and environmental structures and processes have on these dynamics; the interplay of evolutionary forces and human behavioral change; and individual cognitive, computational, linguistic, developmental, social, biological, and other processes as dynamic evolving systems. These processes include systems of coordination and control in the behavior of individuals, the dynamics of coordination between individuals, and the dynamics of change across the lifespan of individuals and organizations.

Decision Making, Risk, and Uncertainty: This emphasis area is concerned with the dynamics of human and societal attempts to identify, characterize, evaluate, and manage situations that call for choices and decisions, and involve changing perceptions of uncertainty and risk. Risks and uncertainties may be strategic—that is, dependent upon a judgment about what others will do—or may result from incomplete information about a situation, either unknown or unknowable. Risks and uncertainties can also arise from the objectives, priorities, desires and needs of individuals, groups, organizations, and institutions. Decision arenas of HSD interest include not just individual judgment but also governmental, industrial or corporate decisions, and multiple levels of group collective decisions.

Teaching Tablets (Continued from page 1)

Classes.

Qiu said he expects the new equipment to be used first in the "System Design and Analysis" course (CS 458) next spring.

He received the $40,000 grant from Microsoft Research as part of its program for enhancing the computing curriculum for higher education by integrating tablet PC technology. His Microsoft project is titled "Developing Tablet-based Tools for Teaching Concurrent Programming."

Qiu's was one of just 11 projects chosen for funding from among more than 165 proposals from 18 countries reviewed, said Doreen O'Skea, speaking for Microsoft Research. The rigorous review process encompassed 40 reviewers across a wide variety of disciplines who examined each proposal, she said. The winning proposals focused on using the tablet PC to enrich the classroom experience for instructors and students across all disciplines.

"The purpose of these projects is to share examples of how new technology can be used to promote learning," Qiu said.

He joined Oswego's computer science faculty in 2004 to help start the college's master's degree program in human-computer interaction.

- END -
(Posted Aug 23, 2006 in Campus News)
The Office of Research and Sponsored Programs (ORSP) is responsible for the development, coordination and financial management of all contracts and grants at the College. All externally sponsored projects for research, scholarly/creative activity, curriculum development or services utilizing SUNY Oswego facilities and/or personnel must be processed and administered through ORSP.

A project is externally sponsored if a grant or contract is awarded to the College in support of a specific activity. For example, external sponsors consist of federal and state agencies, private foundations, business and industrial enterprises, local and state governments and professional organizations. Sponsored projects include, but are not limited to, research, conferences, curriculum development, workshops, meetings, special events and scholarly and creative activities.

ORSP Pre-Award Services Available

1) Maintain a faculty/staff profile of research and special projects interests
2) Match faculty/staff projects with potential sponsors
3) Notify faculty/staff of funding opportunities appropriate to their interests
4) Maintain a current resource collection of funding sources
5) Obtain guidelines and application forms
6) Assist with interpret guidelines and preparation of agency forms
7) Provide technical and editorial critique of proposals
8) Discuss budget categories and provide assistance with the development of an appropriate inclusive budget
9) Assist with the development of competitive proposals
10) Submit assurance reports and policies to maintain an approved institutional animal care and use committee and human subject committee in compliance with state and federal procedures
11) Review of final application
12) Obtain administrative approvals
13) Submit proposals by mail or electronically per sponsor specifications
14) Negotiate grant awards and contracts
15) Establish a Research Foundation project account

ORSP Pre-Award works in conjunction with other campus resources such as Penfield Library, Instructional Computing Center, Learning Resources, Center for Excellence in Learning and Teaching to provide necessary services to project activity and appropriate reimbursements. It is essential that Project Directors discuss their anticipated needs during budget development prior to proposal submission to ensure adequate funds are allocated for these campus services.

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