

OFFICE OF SPONSORED PROGRAMS

2008-2009 ANNUAL REPORT



Team Dirigo at NASA after a long hot day of experimentation in front of the original weightless wonder. Flyers are in front in green and ground crew in back in orange.

The Wise Laboratory of Environmental and Genetic Toxicology at USM is engaged in three projects funded by the National Aeronautics and Space Agency (NASA). Space dusts are a significant hazard for astronauts; these dusts get everywhere and cause uncertain toxicity. The first project examined the genetic toxicity of lunar dust compared to a number of man-made dust particles. The second project tested the impact of altered gravity on DNA with the results showing a significant increase in damage. Since the flight studies could not separate the effects of hypergravity from microgravity as the plane routinely experiences both in flight, a third project will use centrifugation and a NASA-invented bioreactor to try to understand the relative contribution to the effects.



John Wise Jr. gives a thumbs up that all is a-ok during flight and holds on while preparing for another round of zero gravity.



UNIVERSITY OF
SOUTHERN MAINE

A member of the University of Maine System

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Greetings,

The past three years have proven to be very interesting. While changing Federal funding priorities and a declining economy had a negative impact on our performance in the prior two years, those same factors have been behind a turnaround this year.

With the change of administration in Washington D.C., coupled with funding to Federal agencies through the American Recovery and Reinvestment Act of 2009, we have seen an increase in awards from \$42.5 Million last year to \$45 Million this year—a 6% increase. The percentage of proposals being funded decreased slightly, however, the average individual award was larger.

Based on the lower success rate we had over the past two years, the strong proposal development and submission trend speaks to the tenacity of faculty and staff seeking funding and also contributes to the turnaround evident in the numbers outlined on Page 38.

Our School of Applied Science, Engineering and Technology continues to show growth and, being the primary focus of our Research and Development effort, continues to contribute to the development of Maine's workforce and economy by providing research opportunities for graduate and undergraduate students.

Our annual report presents a sample of the work of our faculty and staff and the impact of their dedication and expertise. Feel free to contact us, or browse our web site at www.usm.maine.edu/osp for more information.

Larry Waxler

Director, Office of Sponsored Programs

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GRANT HIGHLIGHTS

We are pleased to showcase
some of the research and scholarly projects
funded externally
at the University of Southern Maine

Maine Center for Business and Economic Research The Economic Development Administration University Center for Maine

**(A joint center of the School of Business and Muskie School of Public Service)
By Bruce Andrews and Charlie Colgan**

Funder: Economic Development Administration

Background

For over three decades, the Maine Center for Business and Economic Research (MCBER) has been serving as a conduit organization for bringing the expertise and skills of faculty from the Business School, the Muskie School of Public Service, and other academic units at the University of Southern Maine (USM), and other University of Maine System campuses, to the challenges and opportunities facing the public and private sectors in Maine. During the 2008-2009 academic year, MCBER succeeded in winning another three-year competitive grant awarded by the Economic Development Administration (EDA), Philadelphia Regional Office, which covers all of the states in the Northeast down to Virginia as well as Puerto Rico and the Virgin Islands. This grant provides much of the funding needed to support the Center's infrastructure. Other grants and contracts from the public and private sectors fund the faculty members and graduate students who work on a wide range of applied-research and technical-assistance projects.

Service Region, Target Audience and Scope of Work

Having undertaken technical-assistance projects for state and local agencies and for businesses affecting all 16 counties, the service region for the Center continues to be the entire State of Maine. MCBER enhances its capability to meet the particular needs of distressed rural counties in Maine through its ongoing partnership with the University of Maine to form the University of Maine System Center for Tourism Research and Outreach (CenTRO), a joint center of which MCBER forms the USM component. CenTRO provides a variety of technical-assistance programs to the tourism and recreation industries in Maine. MCBER has also recently established a new GIS workforce-development partnership with the University of Maine at Machias.

Professionally staffed by full-time faculty members and graduate students, MCBER's applied research/technical-assistance programs and activities for the next three years will continue to be primarily focused on providing information and analytic expertise in support of:

- a. economic-development planning and policy-making;
- b. program evaluation, performance assessment, and improved management of economic development programs; and
- c. private-sector organization efforts to enhance competitiveness.

Grant Highlights

Under the theme of facilitating economic-development planning and policy making, the Center will continue to provide technical assistance relating to: 1) labor force and demographics; 2) economic impact analyses and forecasting; 3) technology clusters; and 4) transportation. Under the umbrella of program evaluation, performance assessment, and improved management of economic development programs, MCBER has two ongoing projects underway. One involves the evaluation of the Maine Technology Institute (MTI) program and the other involves the measurement of the effectiveness of the Maine Tourism Marketing Partnership Program (MTMPP). Lastly, in the category of public/private sector organizational efforts to enhance competitiveness and effectiveness, MCBER expects to engage new public- and private-sector client organizations in addition to remaining actively involved with ongoing clients such as UNUM, Hannaford Bros. Company, the Corporate Library, the Society of Actuaries, the Maine Turnpike Authority, the Maine Department of Transportation, and the Maine Technology Institute.

University of Maine School of Law Cumberland Legal Aid Clinic Language Access Initiative

**by Deirdre M. Smith, Associate Professor and
Director of the Cumberland Legal Aid Clinic**

**Funding provided by: Language Access for New Americans
and Maine Bar Foundation**

In recent years, the University of Maine School of Law's Cumberland Legal Aid Clinic, through which third-year law students provide legal assistance to low-income clients, has worked with an increasing number of clients with Limited English Proficiency (LEP) (countries of origin have recently included Sudan, Somalia, Burundi, Cambodia, and Guatemala) on a wide range of legal matters. Most of our LEP clients are referrals from the Immigrant Legal Advocacy Project (ILAP) who need assistance with non-immigration legal problems, such as family, criminal, juvenile, and other matters. The Clinic also recently accepted an asylum referral from ILAP, whose heavy caseload does not enable that agency to offer representation to all who need it. Other LEP clients are referred from other agencies or self-refer. Although our overall caseload is small and we frequently do not have openings for new clients, we give priority to assisting LEP clients because it is nearly impossible to navigate the court system with neither an attorney nor fluency in English. Also, through our close work with ILAP, we recognize that there are often significant immigration status consequences and considerations in legal proceedings involving non-citizens. Our legal representation of LEP clients on a wide range of legal issues is particularly critical because Pine Tree Legal Assistance and the Volunteer Lawyers Projects are prohibited under federal regulations from providing representation to non-citizens, and therefore there are few options for low-income non-citizens in need of legal representation. We expect that our representation of LEP clients will continue to increase in the future.

The Law School obtained a small grant from the United Way's Language Access for New Americans (LANA) program and a matching grant from the Maine Bar Foundation, to be used for hiring qualified foreign-language interpreters for attorney-client meetings with our LEP clients and telephone interpretation services for phone calls with clients. The LANA grant also enabled the Clinic to undertake an overall language access initiative. With the technical support offered by LANA for its grantees, the Clinic developed a new Language Access Policy, which requires the Clinic to hire interpreters and translators for all LEP clients and provides step-by-step instructions on accessing such services. The Clinic negotiated a discounted rate with Language Line for telephone interpretation services. In October 2009, LANA's director conducted a training for Clinic students, faculty, staff, and volunteers on working with LEP clients and interpreters and translators in legal settings. The curriculum included information about immigrant populations and languages in Maine. The Clinic's language access initiative is designed not only to provide access to justice for individual LEP clients, but also to ensure that law students are well-trained on the importance of ensuring language access for the LEP clients they will serve during their legal careers.

Transforming Teaching through Collaborative Teacher Education

by Cathie Fallona, Principal Investigator; Cynthia Curry, Project Director;
& Walter Kimball, Researcher—Department of Teacher Education,
College of Education and Human Development

**Funding Provided by:
Office of Special Education Programs, US Department of Education**

The purpose of this five-year project is to improve the preparation of USM's general education and special education preservice candidates to teach students with disabilities. To achieve this, the Teacher Education Department (TED) is integrating or merging general education and special education preservice teacher education by embedding Universal Design for Learning (UDL) and culturally responsive pedagogy (CRP) principles and practices into all initial certification programs to prepare teaching candidates to teach students with high incidence disabilities more effectively. The Transforming Teaching through Collaborative Teacher Education Project has four goals. The outcomes are as follows:

1. To integrate all USM TED initial teacher certification programs according to the criteria outlined in the *Action Guide for Collaborative Programs in General and Special Education* (Blanton & Pugach, 2007). This means that the general education and special education faculty in the Teachers for Elementary and Middle Schools Program (TEAMS) and Extended Teacher Education Program (ETEP) will work together to redesign the courses in the programs so that knowledge and skills across general and special education are interdependent and result in general education teachers who are prepared to teach all students in general education classrooms from an inclusive perspective.
2. To redesign, implement, and evaluate the core teacher education curriculum to include principles and practices of UDL and CRP. The aspects of the TED curriculum that will be redesigned are (1) the seminar and internship; (2) the content methods courses; (3) the candidate assessment system; and (4) the program for induction and mentoring of program graduates.
3. To increase the shared understanding of Faculty from across general education, special education, ESL, and arts and sciences disciplines of how UDL and CRP can be used to improve the engagement of students with high incidence disabilities in general education.
4. To increase candidates' understandings and implementation of principles of UDL and CRP.

The project contributes scholarship to the national examination of teacher education in two ways: 1) establishing coherence to the preparation of teachers of students with high incidence disabilities in both general and special teacher education, and 2) including the education of English Language Learners with disabilities in both general and special teacher education.

Maine's Savvy Caregiver Project: Alzheimer Disease Supportive Services Program (ADSSP)

**By Linda W. Samia, PhD, RN; Assistant Professor,
College of Nursing and Health Professions**

**Funder: Maine's Office of Elder Services,
Department of Health and Human Services**

Background

Alzheimer's Disease (AD) is the most frequently diagnosed dementia and it affects an estimated 5.3 million Americans of all ages, including one in eight persons aged 65 and older. It is projected that 7.7 million will have the disease by 2030. In the absence of clinical breakthroughs, by 2050 up to 16 million people will have AD, and 60 percent of these individuals will be age 85 or older.¹

Unpaid family members and friends provide the majority of care to persons with AD and they are critical in preventing the premature institutionalization of persons with dementia. In 2008, family caregiving totaled 8.5 billion hours and is valued at a cost of \$94 billion.² Most caregivers are untrained and they must learn to compensate for the memory loss, behavior changes, progressive physical and emotional dependency, and safety risks of individuals with AD. Evidence suggests that caregivers experience increased stress in their roles, and about one third of family caregivers have symptoms of depression. Family caregivers may also have higher levels of stress hormones and reduced immune functioning.³ Caregiver wellbeing is dependent on learning skills to manage difficult situations that can worsen over time; to manage their emotional response to the situation; and to learn to recognize the strengths of persons with AD.

Maine's Savvy Caregiver Project

The Maine Savvy Caregiver Project (MSCP) is a three-year project (10/2009-9/2012) designed to evaluate the translation and dissemination of the Savvy Caregiver Program (SCP). The SCP is a six week evidence-based psychoeducational program for caregivers of persons with Alzheimer's Disease and Related Disorders (ADRD). The SCP was designed and tested in several randomized controlled trials.

Caregivers meet in groups of 8-12, where they engage in active learning, practice new techniques, and receive coaching throughout the training. The trainers all participate in formal education and they follow a scripted manual for each session. The program goal is to enhance the skills, knowledge, and confidence of caregivers to respond to and refocus the behaviors of care receivers.

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The project objectives are to:

- reach a representative sample of rural caregivers;
- create a statewide organizational structure for program implementation and sustainability, maintaining fidelity to the core elements of the original research;
- develop and implement a train-the-trainer model;
- develop diverse partnerships to expand training options in systems beyond those commonly defined as the aging network;
- evaluate program effectiveness including participant outcomes, cost, and sustainability beyond grant funding.

The MSCP is a partnership between Maine's Office of Elder Services, Maine's Alzheimer Association, three of Maine's Agencies on Aging, and the University of Southern Maine's College of Nursing and Health Professions. The MSCP is funded by the Administration on Aging in an award to Maine's Office of Elder Services. The plan is to reach 1,250 caregivers over three years, targeting Maine's most rural regions. The SCP will be translated from a clinically directed model to a train-the-trainer, lay leader model for broad community uptake.

A network of partnerships is essential to having adequate trainers throughout the state who can reach rural caregivers in their communities. Eventually some MSCP caregiver participants will advance to the role of trainer. Partnerships will also be expanded to the faith-based community, adult education programs, large and small employers throughout Maine, and many other organizations where caregivers can be reached.

The evaluation consists of measuring participant reach; pre/post outcomes at baseline, and five and twelve months post training; participant satisfaction; and change in services utilization. A formative evaluation is planned to explore fidelity to core program elements, and barriers and facilitators to program uptake and sustainability.

Participants' experience to date is positive. Caregivers and persons with dementia are reshaping their relationships. Caregivers describe feeling more at ease with the person with dementia. They can better communicate and understand the changing behavior of the person with dementia. Caregivers are also making more time to care for themselves and many report that they have rediscovered their sense of humor.

Information on Savvy Caregiver Training dates can be found at <http://www.maine.gov/dhhs/oes/events.htm>.

¹ Alzheimer's Association 2009 Alzheimer's Disease Facts and Figures. Washington, DC: Public Policy Office.

² Ibid

³ Ibid

Arsenic disruption of neuron development

**by Douglas A. Currie, Assistant Professor, Department of Biological Sciences,
College of Arts and Sciences**

Funding from National Institutes of Health (NIH) R15 grant

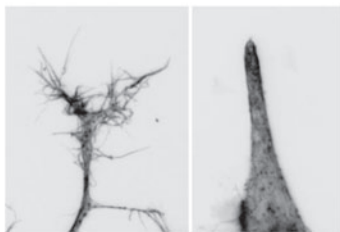
Many people in Maine are exposed to levels of arsenic above the government specified limit of 10 parts per billion in their household water supply. This is primarily because a significant proportion of Mainers get their water from private wells, many of which lie on granite bedrock which can leach out arsenic into the water. Outside of Maine, arsenic contamination of water supplies is a problem in a number of other US states and in other countries, with Bangladesh having millions of people exposed. Work in our lab focuses on the question “what are the potential consequences for the developing brain when children have long-term exposure to elevated levels of arsenic?” Links between arsenic exposure and cancer have been established but very little is known about the effects on the developing brain which is often more sensitive than the mature brain. With a new grant from the National Institutes of Health, my lab is conducting research into the effects of arsenic on developing neurons, which are the building blocks of the brain. Initial studies, performed by other research groups on children in Bangladesh and elsewhere, indicate a link between arsenic exposure and reduced cognitive performance although it is not at all clear how arsenic produces these effects.

Building a brain is a delicate process. During development billions of nerve cells produce long extensions which grow through the brain and make connections with other nerve cells, thus building the “wiring” of your brain. Just like building an inter-state telephone system, each of the wires and each of the connections are important and if they are not established correctly this leads to “dropped calls” and missing information. In the brain, reduced wiring or connectivity results in lowered mental function.

Drawing on my background in developmental neurobiology, work in my lab focuses on the effects that arsenic has on the developing “wiring” of the brain. Using individual nerve cells, also called neurons, grown in tissue culture dishes, we are able to tightly control levels of arsenic exposure and perform detailed analysis at the single cell level. We are initially using this culture system because looking for effects amidst the complexity of an intact brain would be too difficult until we have identified the types of changes we should be looking for. Initial experiments, conducted by talented undergraduates in my lab, showed that exposure to relatively low levels of arsenic resulted in the development of “stunted” neurons which had shorter, thicker extensions and also lacked the elaborate branching of normal neurons. This has obvious potential negative consequences for subsequent brain function.

What is happening at the cell and molecular level to drive this stunting of growth? These questions are the focus of our current research. One clue came from recent research at multiple universities investigating the role of arsenic as an anti-cancer treatment (intriguingly arsenic can cause cancer but is also used in hospitals as an anti-cancer agent for specific types of cancers). Arsenic can block the uncontrolled division of cancer cells by disrupting tiny structural elements called microtubules which act as a scaffolding for the dividing cell. These same microtubules are also critically important in

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Actin distribution in a normal (left) and a stunted, arsenic exposed (right) neuron

brain development where they provide scaffolding for the wiring of the brain. When Sam Frankel, a master's student in my lab, analyzed our arsenic exposed stunted neurons he found that the organization of this microtubule scaffolding inside the neurons was severely disrupted. When he looked at another structural molecule, called actin, he again found significant disruptions of organization due to arsenic. Current research in the lab focuses on identifying and manipulating the molecular pathways by which arsenic can disrupt these structural elements. Students are using multiple molecular and imaging techniques to investigate pathways that regulate both microtubule and actin production and maintenance.

With our research well underway, we are beginning to build a more complete picture of the actions and effects of arsenic on developing neurons. What are the possible consequences at the level of the whole brain? Dr. Vincent Markowski in the Psychology Department at USM was awarded a similar NIH grant to investigate the effects of arsenic exposure during development on behavior, learning and memory in mice. So, excitingly, at USM we are currently focusing on the neurotoxic effects of arsenic all the way from the cellular and molecular level to the end consequences for brain function and behavior. Although the levels of arsenic we are currently using in our studies are somewhat above environmental levels, we hope that a clearer understanding of arsenic effects will help indicate possible interventions and be used to raise public awareness in order to reduce exposure.

NIH only awards grants once a significant amount of research has been completed, thus proving the validity and competitiveness of a research program. This initial work in my lab was conducted by talented undergraduate and graduate students and was supported by the Biology Department Masters Program, the Maine Center for Toxicology and Environmental Health, the Maine ScienceCorps grant (NSF funded), and USM Faculty Senate Grants for Research, Scholarship & Creative Activity.



USM Student Researchers

Misuse and Overuse of Prescription Drugs by Maine Residents: Epidemiological Analysis of the Maine Prescription Monitoring Program Data

By: Susan M.C. Payne, Research Professor, Muskie School of Public Service

When used correctly—the right drug at the right dose for the right length of time—prescription drugs can dramatically improve health and well being — curing disease, managing long-term health problems, and easing pain. However, some prescription drugs, even when used correctly, can increase the risk of side effects, injury, and dependency. Drugs that pose a risk of addiction, dependency, and health or psychological risks are controlled by the US Drug Enforcement Agency (DEA). Many commonly used prescription medications are “controlled substances,” including pain relievers, tranquilizers, sedatives, stimulants, and hormones.

Through the popular press, problems with the theft or illegal distribution of controlled substances to “get high” or enhance athletic performance are well known. However, the significant and growing national problem in the misuse of *legally* prescribed controlled substances is less familiar.

Prescription drug misuse is a major public health problem in Maine. The number of drug-related deaths in Maine increased from 34 in 1997 to 154 in 2007. The proportion of drug-related deaths in which pharmaceuticals were the cause or a contributor increased from 78% in 2001 to 94% in 2003. In 2008, 39% of Maine DEA arrests were related to pharmaceutical drugs, up from 26% in 2006. Misuse can occur when a patient is prescribed the wrong drug for his or her condition, a drug that interacts with another drug, a drug that is ineffective; overuse can occur if the patient takes too much of the drug or takes it for too long.

Susan Payne, Judy Tupper, and Deborah Thayer of the Muskie School of Public Service (Cutler Institute for Health and Social Policy), in collaboration with staff of the Maine Department of Health and Human Services, are working to understand this problem in Maine and to reduce its impact on Maine residents.

The goal of the project featured here, “Epidemiological Analysis of the Maine Prescription Monitoring Program (PMP) Data,” is to support management, policy development, and quality improvement initiatives of the Maine Office of Substance Abuse (OSA). The aims are to measure trends from 2005-2008 in the use of prescription drugs tracked by the PMP and to identify problem areas for monitoring and intervention. The focus is on patient characteristics (age, rural/urban/suburban residence, and payer) and on use rates over time, by geographic area (county and public health district), and by type of drug (pain relievers, sedatives, tranquilizers, and stimulants).

The Maine PMP is maintained by the Maine Office of Substance Abuse and supported through state and federal (Department of Justice) funding. The Maine PMP collects information from all pharmacies on all prescriptions filled in Maine for Schedule II-IV drugs. Schedule II drugs are highly addictive and very

Grant Highlights

risky if taken improperly, Schedule III drugs are slightly less addictive and less likely to be risky if taken improperly, and Schedule IV drugs have a lower risk of physical addiction but may be psychologically addictive. There are 35 state-based PMPs in the US.

From 2005 to 2008 in Maine the number of prescriptions for the PMP medications increased by 24.4% (to 2.3 million), the percent of patients increased by 11.0%, and the number of prescriptions per patient increased by 12.1%, to 4.0 per patient. Use rates differed by geographic area. Small town/rural areas had the highest number of prescriptions per patient (4.4 in 2008). The number of prescriptions increased fastest in small town/rural areas (by 33.1%) and in urban core areas (by 32.5%). The number of prescriptions written for sedatives, stimulants, and hormone replacements increased by 40% or more from 2005 to 2008. Use increased most (by 34.0%) for Schedule II drugs, which are considered by the US DEA to be highly addictive and very risky if taken improperly.

Medication problems can affect all ages. Older people, however, are more vulnerable to medication problems due to the physiological changes associated with aging, functional and cognitive limitations, psychiatric and physical co-morbidities, and difficulties in complying with complicated drug regimens. The table below shows the ten most frequently prescribed Schedule II - IV medications for all ages and for the elderly.

**Ten highest-volume drugs by number of prescriptions, all ages and older people
(age 60 and older), PMP data, SFY 2008**

Drug	Number of prescriptions, all ages	Number of prescriptions, older people	Percent of prescriptions, older people
Hydrocodone/acetaminophen (Vicodin)	484,889	129,630	26.7%
Oxycodone (OxyContin)	340,428	100,048	29.4%
Lorazepam (Ativan)*	190,207	90,526	47.6%
Clonazepam (Klonopin)	165,097	34,630	21.0%
Alprazolam (Xanax)*	144,141	51,823	36.0%
Zolpidem tartrate (Ambien)	131,943	53,339	40.4%
Propoxyphenen/Acetaminophen (Darvon, Dolene)*	99,993	51,124	51.1%
Diazepam (Valium, Diastat)*	79,906	24,172	30.2%
Methylphenidate (Concerta)*	78,000	2,253	2.9%
Total, top 10	1,714,604	537,545	31.4%
Total, all PMP drugs	2,311,324	690,296	29.9%

Source: Muskie School analysis of PMP data, June, 2009.

Among Maine residents age 60 and older, from 2005 to 2008 the number of prescriptions for the study medications increased by 31.5%, compared to a 21.6% increase among residents 59 and younger. The number of older patients increased by 17.5%, compared to an increase of 8.6% for younger patients. Pain relievers and tranquilizers were used most frequently, by 66.8% and 37.0% of the older patients, respectively. Use increased by 48.4% for Schedule II drugs. Older people received 31.4% of the total PMP prescriptions filled in 2008 and 29.9% of the top 10 PMP medications. They received 40% or more of three of the medications. Several of the high-volume drugs, asterisked above, are contra-indicated for older people because the risk of side effects or dependence does not outweigh the expected benefits and safer drugs are available.

The Muskie researchers are working with staff of Maine Medicaid (MaineCare) on a more detailed study of problems with the use of specific medications by older MaineCare members to target physician outreach and quality improvement programs, and have applied for a two-year project through the National Institute on Drug Abuse to extend their work through 2011 and develop educational materials and quality improvement programs to improve prescribing for the elderly.

The Maine PMP was developed to provide information for use in surveillance, monitoring inappropriate prescribing practices, and identifying individuals who may be receiving dangerous levels of prescription drugs or “doctor shopping.” Through the Muskie School projects, the PMP data are being used for a new purpose—for population-based research to promote better quality and patient safety.

Making College a Reality: College Connection Strategies

By: Jan Phillips, Associate Dean for Community Relations & LearningWorks, and Joan Macri, Associate Director of LearningWorks (USM LAC)

Funder: Jane's Trust

How do we change the culture of one of the most populated regions in this state, so that the question people ask is, "Where am I going to college?" rather than "How could I possibly ever go to college, at any point in my life?" College for ME-Androscoggin's answer is to strike at the very heart of some important barriers, opening access points and pathways for education and providing support for increased college attainment.

A broadly and deeply educated citizenry—the new minimum requirement for this state's economic and civic well-being—remains an ambitious goal rather than an achievement in Maine. But the picture is not all bleak. Androscoggin County residents have a work ethic and pride that give them both the will and the drive to change the present circumstances. And they have already started efforts toward creating a region in which education is prized and viewed as an essential component of the area's 21st-century economy. Indeed, Androscoggin County is at the forefront of the state's drive to increase the educational level of its residents, with USM's Lewiston-Auburn College (USM LAC) playing a key leadership role.

Four years ago, USM LAC called together a group of concerned citizens to consider how to address the challenge of increasing educational attainment in the region. Since that time, a great deal of energy has moved the effort forward. Now called **College for ME-Androscoggin**, the group has united more than two dozen organizational partners across K-16 and Adult education, business, government, and community agencies in bold efforts to make college aspirations not only tangible but contagious. Specifically, the collaborative has adopted the ambitious goal to: **Double the number of residents in Androscoggin County who hold two- or four-year degrees by 2015.**

Though barely out of its infancy, College for ME-Androscoggin already has formulated a multi-pronged strategic plan; carried out three annual Higher Education Awards Luncheons honoring best practices and showcasing people who have battled the odds to enroll in or complete college (nearly 200 people attended the 2008 Awards Luncheon); designed and distributed two posters portraying multiple entry

points and routes available within the county to earn a degree; launched an informational website (www.collegeformeandroskoggin.org) that soon will be further developed into an even more complete web-based tool; and offered various workshops and educational fairs to provide informational resources to Human Resource personnel, incumbent workers, and students. In addition, a new signature LearningWorks facility at USM LAC provides a permanent home for College for ME-Androskoggin's collaborative efforts and a hub for strategic activities extending throughout the county. In short, College for ME-Androskoggin has already demonstrated that many stand ready to raise the area's educational bar.

Now, with the help of a three-year grant from Jane's Trust, College for ME-Androskoggin will be able to create even more widespread educational success. Specifically, the grant will support:

- dramatically expanding college "preview" opportunities for underserved youth and adults in Androskoggin County who have never experienced college and who might otherwise not see themselves as college students;
- turning the activated aspirations of these now successful higher education learners (once they've taken a class) toward college matriculation by way of "aspiration labs" (resource centers) and micro "aspirations kits" (portable Tool Kit resources), as well as print- and web-based information;
- providing these same youth and adult learners, once they have actually enrolled in college, technical assistance, academic advising, and unique forms of mentoring that will help them ultimately complete their education;
- recognizing higher education attainment on a regional virtual monument that celebrates degree holders once they have completed their education; and
- championing activities that continue to grow regional aspirations through such avenues as Awards Luncheons, posters, and community-wide campaigns.

PROPOSALS & AWARDS

All Proposals Submitted or Funded During FY09

Proposals and Awards

Proposals/Awards College of Arts & Sciences

Bampton, Matthew, “*Creating and Implementing a Concept Inventory - Based Diagnostic Tool to Improve Undergraduate GIS Education*,” National Science Foundation (R&D)

Bampton, Matthew, “*USM/MMC Geospatial Data Management and Analysis Project*,” Maine Medical Center w/NIH Funding (R&D)

Benedict, Lucille, “*Expanding research opportunities into the analytical and first semester general chemistry laboratory courses*,” National Science Foundation (R&D)

Benedict, Lucille, “*MRI: Acquisition of XRF and Hg analysis instrumentation for collaborative faculty and student environmental research at USM*,” National Science Foundation (R&D), (joint submission with ASET)

Champlin, David, “*NSF REU Supplement 7*,” National Science Foundation (R&D)

Conforti, Joseph, “*Writing A Woman’s Life*” - *A Public Lecture*,” Maine Humanities Council

Currie, Doug, “*Arsenic disruption of neuron development*,” National Institutes of Health/ NIEHS (R&D)

Fineran, Susan, “*Campus Interpersonal Violence Safety Program*,” US Department of Justice, Office of Violence Against Women, (joint submission with MSPS)

Ford, James, “*USM Robert Noyce Teacher Scholarship Program*,” National Science Foundation (R&D), (joint submission with CEHD)

Kegl, Judy, “*Educational Interpreter Distance Training*,” Maine Department of Education

Markowski, Vincent, “*DecaBDE Exacerbates and Developmental Neurotoxicity of Maternal Hypothyroidism*,” National Institutes of Health (R&D)

Markowski, Vincent, “*Effects of Polybrominated Diphenyl Ether (PBDE) Flame Retardant Exposure*,” University of New England w/NIH Funding (R&D)

Markowski, Vincent, “*Role of N-methyl-D-aspartate receptors (NMDAr) in the development of alcohol addiction and recovery from alcoholism*,” US Department of Army (R&D), (joint submission with ASET)

McDaniel, Dana, “*Collaborative Research: RUI: Children’s Planning and Production of Filler-gap Constructions*,” National Science Foundation

Moore, Lisa, “*RUI: High throughput culturing and ecophysiological analyses of low light adapted Prochlorococcus ecotypes*,” National Science Foundation (R&D)

Moore, Lisa, “*SGER: Southern and Coastal Extent of Picophytoplankton Populations in the South Pacific*,” National Science Foundation (R&D)

Novak, Irwin, “*Space Grant Year 18*,” Maine Space Grant Consortium (R&D)

Pavri, Firooza, “*Characterizing Maine’s coastal wetlands using linked hyper and multi-spectral satellite data*,” Maine Space Grant Consortium (R&D)

Projects funded by and starting by 6/30/09 are denoted by a gray screen.

(R&D) denotes part of R&D initiative

Proposals and Awards

Pavri, Firooza, “*Developing distance courses in remote sensing to enhance Maine’s capacity in NASA’s space-based imaging technologies*,” Maine Space Grant Consortium (R&D)

Rich, Barbara, “*Cross-Cultural and Global Learning in Social Work Education: The Belize Story*,” Marion and Jasper Whiting Foundation

Tracy, Henry, “*Acquisition of LC- and GC-Mass Spectrometers to Create a Cyber-Enhanced Mass Spectrometry-Based Research and Education Environment at the University of Southern Maine*,” National Science Foundation (R&D)

Tracy, Henry, “*MRI: Acquisition of Luminescence Lifetime Instrumentation by a Partnership of Maine Undergraduate Institutions for Research and Student Training*,” University of New England w/NSF Funding (R&D)

Tracy, Henry, “*RUI: A Collaborative Investigation into the Aggregate-Induced Emission Phenomenon in Group 14 Metallolike Molecules*,” National Science Foundation (R&D)

Uzzi, Jeannine, “*Metamorphosis*,” US National Endowment for the Humanities

Wachholz, Sandra, “*Teaching for Sustainability: The Maine Watershed Project*,” Barbro Osher Pro Suecia Foundation

Proposals/Awards College of Education & Human Development

Andrews, Jane, “*Midcoast Contract 08/09*,” Midcoast Superintendents Association

Barnes, Richard, “*Content Literacy Learning Communities Year 3*,” Maine Department of Education

Beaudry, Jeffrey, “*Digital Earth Watch*,” University of New Hampshire w/NASA Funding (R&D)

Beaudry, Jeffrey, “*Leadership and Assessment: Effective Online Visual and Data Learning and Communications*,” Inspiration, Inc.

Brown-Chidsey, Rachel, “*Site Supervision for Psy.D. Interns in RSU 21*,” RSU 21

Davis, Laurie, “*Upward Bound - Classic*,” US Department of Education

Davis, Laurie, “*Upward Bound - Sanford/Biddeford*,” US Department of Education

Evans, Linda, “*Kennedy Park (KP) Family Literacy*,” Barbara Bush Foundation

Evans, Linda, “*Newcomer Mentoring*,” Maine Community Foundation-People of Color Fund

Evans, Linda, “*Pathways Newcomer ETEP*,” Maine Department of Education

Fallona, Catherine, “*Transforming Teaching Through Collaborative Teacher Education*,” US Department of Education

Jones, Kenneth, “*Blended General & Special Education 08/09*,” Maine Department of Education

Proposals and Awards

Kelley, Michael, *“An Evaluation of Three Methods of ‘Saying No’ to Avoid an Escalating Response Class Hierarchy,”* Organization for Autism Research

Kelley, Michael, *“An Evaluation of Three Methods of ‘Saying No’ to Avoid an Escalating Response Class Hierarchy,”* National Institutes of Health

Mace, Bud, *“ACHIEVE 2008-2009,”*
Providence of Maine

Silvernail, David, *“Essential Programs and Services XI,”* Maine Department of Education

Silvernail, David, *“Maine Education Research and Policy Institute,”* Maine Legislative Council

Silvernail, David, *“Maine International Center for Digital Learning,”* Maine International Center for Digital Learning

Silvernail, David, *“Maine Learning Technology Initiative 08/09,”* Maine Department of Education

Silvernail, David, *“School District Reorganization 08/09,”* Maine Department of Education

Silvernail, David, *“The Fiscal Impacts of School District Consolidation: Lessons from Maine,”* U.S. Department of Education, Institute of Education Sciences

Silvernail, David, *“The Fiscal Impacts of School District Consolidation: Lessons from Maine,”* Smith Richardson Foundation

Steege, Mark, *“Brunswick Central School - Ouelette,”* Brunswick Central School District

Proposals/Awards College of Nursing & Health Professions

Samia, Linda, *“Alzheimer Disease Demonstration - ADDGS: Savvy Caregiver Program,”* Maine Department of Health & Human Services

Toy, Brian, *“Building Infectious Disease Surveillance Capacity 2008/2009,”* Maine Department of Health & Human Services

Toy, Brian, *“Hepatitis Coordination 2008-09,”*
Maine Department of Health & Human Services

Toy, Brian, *“Influenza Coordination 2008-09,”*
Maine Department of Health & Human Services

Whately Blum, Janet, *“Implementing the ‘Guiding Stars’ grocery store point-of-purchase nutrition rating system in school food venues to promote sales of healthier ‘starred’ foods,”* Robert Wood Johnson Foundation

Proposals and Awards

Proposals/Awards Lewiston-Auburn College

Holman, Robyn, “*Spineless Wonders - Orkin,*”
Orkin, Inc.

Holman, Robyn, “*Spineless Wonders
EOWBF,*” E.O. Wilson Biodiversity Foundation

Holman, Robyn, “*Spineless Wonders GVF,*”
Gilbert Verney Foundation

Holman, Robyn, “*Spineless Wonders MF,*”
METLife Foundation

Holman, Robyn, “*Spineless Wonders NF,*”
Neel Foundation

Holman, Robyn, “*Spineless Wonders RA,*”
Rinck Advertising

Holman, Robyn, “*Spineless Wonders RFF,*”
Raymond Family Foundation

Holman, Robyn, “*Spineless Wonders SSECT,*”
Seth Sprague Educational and Charitable Trust

Holman, Robyn, “*Spineless Wonders:
Invertebrates as Inspiration,*” Witter Bynner
Foundation for Poetry

Jacobus, Michelle, “*Building Castles Together:
Culturally Based Conversations to Develop
Relationships and Resiliency,*” Kellogg
Foundation, (joint submission with Other)

Jacobus, Michelle, “*USM LACares for
YOUth,*” Maine Department of Corrections

Levine, Ira, “*2009-2010 Fulbright New
Century Scholars Program,*” US State
Department (R&D)

Levine, Ira, “*Algal-based biofuel feedstock
cultivation and CO2 sequestration,*” Maine
Technology Institute (R&D)

Levine, Ira, “*BSI - LAC Partnership,*”
Biological Services (R&D)

Phillips, Jan, “*College Preview Adult Ed,*”
MELMAC Education Foundation

Phillips, Jan, “*Making College a Reality:
College Connection Strategies,*” Jane’s Trust

Phillips, Jan, “*MCF/CGV Capacity Grant,*”
Maine Community Foundation/Common Good
Ventures

Phillips, Jan, “*The Learning Works Project,*”
US Small Business Administration

Proposals and Awards

Proposals/Awards Muskie School of Public Service

Alfreds, Shaun, “*State Alliance for e-Health: Opportunities for Facilitating Electronic Health Information Exchange in Publicly Funded Programs 08/09*,” University of Massachusetts Medical School

Atkins, Julie, “*New Americans: Opportunities and Challenges in Early Care and Education for English Language Learners*,” US Department of Health & Human Services

Atkins, Julie, “*Practices Promoting Progress for Preschoolers with Special Needs*,” US Department of Health & Human Services, OPRE

Barringer, Richard, “*New England Environmental Finance Center Continuation*,” US Environmental Protection Agency

Bernotavicz, Freda, “*National Child Welfare Workforce Institute*,” University at Albany - SUNY

Bogdonoff, Sondra, “*Technology Upgrades*,” US Department of Education

Bohlen, Curtis, “*Casco Bay Estuary Partnership Year 13*,” US Environmental Protection Agency

Bohlen, Curtis, “*Casco Bay Estuary Partnership: To Protect the Water Quality of Casco Bay and the Health of the Living Resources in the Bay*,” US Environmental Protection Agency

Bohlen, Curtis, “*Casco Bay Fish Passage Priority Setting and Remediation*,” National Fish and Wildlife Foundation (R&D)

Bohlen, Curtis, “*Casco Bay Tidal Restriction Assessment and Restoration*,” National Fish and Wildlife Foundation (R&D)

Bohlen, Curtis, “*Presumpscot Conservation Planning: Vision, Values, & Priorities*,” Environmental Funders Network

Bolda, Elise, “*Translating a Matter of Balance for Non-medical Residential Care*,” US Centers for Disease Control and Prevention

Booth, Maureen, “*Dirigo Health Agency Cooperative Agreement 2009 - Support to Dirigo Health Agency/ Maine Quality Forum*,” Maine Dirigo Health Agency

Brennan, Michael, “*Child Welfare Reform Initiative*,” Annie E. Casey Foundation

Burns, Penthea, “*Tribal-State Truth and Reconciliation*,” Andrus Family Fund

Coburn, Andrew, “*A Tale of Two States: The Determinants of Evidence Informed Child Health Policy in Arkansas and Mississippi*,” W.T. Grant Foundation

Coburn, Andrew, “*Evaluation of the Implementation and Impact of Multi-Payer Patient-Centered Medical Home Pilots in Maine and New Hampshire*,” Robert Wood Johnson Foundation

Coburn, Andrew, “*Flex 2009 Year 1*,” University of Minnesota

Colgan, Charles, “*Center for Sustainable Solutions: Linking Research to Action to Shape Maine’s Changing Landscape*,” University of Maine w/NSF Funding (R&D), (joint submission with CAS & ASET)

Proposals and Awards

Colgan, Charles, *“Enhancing Knowledge about the Economic Impacts of Directed Investments in Science,”* National Science Foundation, (joint submission with SBUS)

Colgan, Charles, *“Forecasting Project,”* Maine Turnpike Authority, (joint submission with SBUS)

Colgan, Charles, *“Maine Turnpike Authority - Gorham East - West Corridor Feasibility Study,”* HNTB Corporation, (joint submission with SBUS)

Colgan, Charles, *“MTI 2008-2009 Evaluation,”* Maine Technology Institute, (joint submission with SBUS)

Curry, Chip, *“Communities for Children and Youth AmeriCorps VISTA Projects 2008-2009,”* Maine State Planning Office

Dean, Allyson, *“Early Care and Education Career Development Center 08/09,”* Maine Department of Health & Human Services

Dean, Allyson, *“Early StARTS 09-10,”* Maine Arts Commission

Dharod, Jigna, *“Community Food Projects Competitive Grants Program,”* Lots for Gardens, (joint submission with LAC)

Dorsey, Carmen, *“JJAG Formula Grant Evaluation & Technical Assistance Project,”* Maine Department of Corrections

Dorsey, Carmen, *“Maine DOC - Juvenile Services Cooperative Agreement 09-10,”* Maine Department of Corrections

Dorsey, Carmen, *“Maine Juvenile Justice Task Force,”* Maine Department of Corrections

Dorsey, Carmen, *“Maine Statistical Analysis Center FY2009,”* Maine Department of Corrections

Dorsey, Carmen, *“MDOC Adult Program Correctional Assessment Inventory (CPAI),”* Maine Department of Corrections

Dorsey, Carmen, *“MDOC DJS Quality Correctional Case Management, CPAI & Recidivism Research,”* Maine Department of Corrections

Dorsey, Carmen, *“Victims of Crime Assistance Training Initiatives 09/10,”* Maine Department of Health & Human Services

Dorsey, Carmen, *“Victims of Crime Assistance Training Initiatives,”* Maine Department of Health & Human Services

Dorsey, Carmen, *“Women Offender Management Model (WOCMM) Demonstration Project,”* Maine Department of Corrections

Dutram, Kay, *“Advancing Public Health Practices 08/09,”* Maine Department of Health & Human Services

Dutram, Kay, *“Skill Building for Cultural and Linguistic Competence,”* Maine Department of Health & Human Services

Dutram, Kay, *“WIC Food Package Online Training,”* Maine Department of Health & Human Services

Ebersten, Sue, *“Distance Education Initiatives 09/10,”* Maine Department of Health & Human Services

Ebersten, Sue, *“Distance Education Initiatives,”* Maine Department of Health & Human Services

Proposals and Awards

Ebersten, Sue, “*Licensing Training & Policy Analysis 08/09,*” Maine Department of Health & Human Services

Edris, Nadine, “*Disability Service System Initiatives 2008-2009,*” Maine Department of Health & Human Services

Edris, Nadine, “*Disability Service System Initiatives 2009-2010,*” Maine Department of Health & Human Services

Edris, Nadine, “*Integration of MH into Chronic Disease Prevention and Health Promotion,*” Maine Department of Health & Human Services

Edris, Nadine, “*MeHAF - Systems Transformation to Advance Integrated Care,*” Maine Department of Health & Human Services

Elbaum Williamson, Martha, “*Maine Marks FY09,*” United Cerebral Palsy

Farmer, Ann, “*Injury Prevention Systems and Evaluation 2008-2009,*” Maine Department of Health & Human Services

Fox, Kimberley, “*MaineCare Policy Cooperative Agreement - Research Related 08/09,*” Maine Department of Health & Human Services

Fralich, Julie, “*Alzheimer’s Dementia-Capable System,*” Maine Department of Health & Human Services

Fralich, Julie, “*Evaluation of Maine’s Alzheimer’s Diversion Initiative,*” Maine Department of Health & Human Services

Fralich, Julie, “*Real Choice ADRC 2008,*” Maine Department of Health & Human Services

Fraumeni, Barbara, “*Support for the Chair of the Committee on the Status of Women in the Economics Profession,*” American Economic Association

Glantz, Larry, “*Maine CHOICES CEO II,*” Maine Department of Health & Human Services

Hart, Barbara, “*OVW E-Recovery TA,*” US Department of Justice

Hartley, David, “*Access to Affordable Healthy Foods among Rural Low-Income Children in Maine,*” Robert Wood Johnson Foundation

Hartley, David, “*Maine Rural Health Research Center 2008,*” US Department of Health & Human Services, Office of Rural Health, HRSA

Hartley, David, “*Maine Rural Health Research Center 2009,*” US Department of Health & Human Services, HRSA

Hartley, David, “*Rural Health Outreach Tracking and Evolution,*” Mathematica Policy Research, Inc.

Hartley, David, “*The Rural Active Living Assessment Tools: Developing a Scoring System for Use by Community Practitioners,*” Robert Wood Johnson Foundation

Joly, Brenda, “*Public Health Quality Improvement Training Evaluation,*” University of North Carolina, Chapel Hill

Kaley, Lori, “*Maine Food Stamp Nutrition Education Plan 08/09,*” Maine Department of Health & Human Services

Kaley, Lori, “*Models of Food Stamp Nutrition Education and Evaluation Demonstration Project,*” US Department of Agriculture

Proposals and Awards

Kaley, Lori, “*Team Nutrition 2008-2010*,”
Maine Department of Education

Kanak, Susan, “*Child Welfare Assistance
Implementation Center*,” US Department of
Health & Human Services

Kanak, Susan, “*Distinguished Fellows:
Improving Child Welfare Outcomes for Children
and Families through Effective Service
Systems*,” William T. Grant Foundation

Kanak, Susan, “*Implementation Center*,”
US Department of Health & Human Services,
Administration for Children & Families

Kilbreth, Elizabeth, “*Emergency Department
Use, Phase 2*,” Maine Health Access Foundation

Kilbreth, Elizabeth, “*Maine Emergency
Department Use*,” Maine Health Access
Foundation

Kilbreth, Elizabeth, “*Maine HRSA State
Health Access Project (SHAP)*,” Maine
Department of Health & Human Services

Lahti, Michel, “*Child Care Research and Data
Capacity*,” Maine Department of Health &
Human Services

Lahti, Michel, “*MHC: Peaceable Stories
Evaluation*,” Maine Humanities Council

Lahti, Michel, “*QRS Implementation Support
FY2009*,” Maine Department of Health &
Human Services

Lambert, David, “*Evaluation of MeHAF
Initiative*,” Westat, Inc.

Lambert, David, “*MBAC Cumberland County
Study*,” PROP, People’s Regional Opportunity
Program

Lambert, David, “*Technical Assistance to the
VA Office of Rural Health Policy*,” Booz Allen
Hamilton

Leighton, Al, “*Seatbelts 09/10*,” Maine
Department of Public Safety, Bureau of
Highway Safety

Leighton, Al, “*Smoking Cessation 09/10*,”
MaineHealth

Martinez, Daniel, “*New England
Environmental Finance Center 08/09*,” US
Environmental Protection Agency

McGuire, Catherine, “*MaineCare Policy
Cooperative Agreement - Information 08/09*,”
Maine Department of Health & Human Services

McGuire, Catherine, “*Quality Counts/
Aligning Forces for Quality: MaineCare Racial
Disparities Study*,” Quality Counts

Merrill, Sam, “*Green Corrections*,” US
Department of Justice, National Institute of
Corrections

Morris, Lisa, “*Understanding the Link between
Female Employment and IPV*,” American
Statistical Association

Nalli, Gino, “*Legislative Policy Forum on
Health Care*,” Maine Development Foundation

Olsen, Louise, “*LA Automated Audit Tool*,”
Louisiana Department of Health & Hospitals

Payne, Susan, “*Epidemiological Analysis of the
Maine Prescription Monitoring Program Data*,”
Maine Department of Health & Human Services

Payne, Susan, “*Impact of Public Quality
Reports on Patients’ Choice of Provider*,”
Robert Wood Johnson Foundation

Proposals and Awards

Payne, Susan, *“Improving the Use of Controlled Substances by Older People,”* National Institutes of Health

Payne, Susan, *“Maine’s Nursing Home Diversion Initiative,”* Maine Department of Health & Human Services

Payne, Susan, *“Primary Care Quality and Transformation Research,”* National Institutes of Health

Pukstas, Kimberly, *“L-A Safe Schools/Healthy Students Evaluation,”* Lewiston Public Schools

Reed, Susan, *“Early Literacy for Every Child,”* US Department of Education

Reed, Susan, *“Infant-Toddler Curriculum Year 3,”* Maine Department of Education

Rozeff, Leslie, *“First Jobs Curriculum Project,”* Annie E. Casey Foundation

Rozeff, Leslie, *“Maine Child Welfare Training Institute 08/09,”* Maine Department of Health & Human Services

Rubin, Mark, *“Judicial Monitoring TA Project,”* Maine Judicial Branch

Rubin, Mark, *“Probation Violations and Revocations Research & Technical Assistance,”* Justice Research & Statistics Association

Rubin, Mark, *“Technical Assistance to Federal Drug Court: Preliminary Assessment of Program Components and Preparation for Outcome Evaluation,”* US Probation & Pretrial Services

Sahonchik, Kris, *“Colorado Child Welfare IV-E Training 09-10,”* CO Department of Human Services

Scala, Elise, *“Interim Technical Assistance, Maine Professional Assistance Services Association,”* Maine Professional Assistance Services Association

Shaw, Barbara, *“Assuring Voluntary Compliance with Public Health Orders through Improved Employment Protections,”* Robert Wood Johnson Foundation

Shaw, Barbara, *“HealthInfoNet Consumer Advisory Committee,”* Maine Health Information Center

Shaw, Barbara, *“Integrating Mental Health Advance Directives,”* Maine Health Access Foundation

Shaw, Barbara, *“Palliative Care Integration in Treatment of Congestive Heart Failure,”* National Palliative Care Research Center, (joint submission with CONHP)

St. Onge, Anita, *“Advanced Curriculum on Domestic Violence and Child Custody for GALs,”* Bingham Program

St. Onge, Anita, *“Advancing the Practice of Guardians ad Litem in Maine,”* Bingham Program

St. Onge, Anita, *“National Victim Restitution Institute,”* US Department of Justice

St. Onge, Anita, *“VAWA Measuring Effectiveness Initiative,”* US Department of Justice, Office on Violence Against Women

Sutton, Sally, *“Ethics Trainings,”* Casey Family Services

Sutton, Sally, *“Health Workforce Forum,”* Bangor Savings Bank Foundation

Proposals and Awards

Thomas, William, “*Do Defensive Medicine Concerns Affect Physician Supply?*,” US Department of Health & Human Services, AHRQ

Tupper, Judy, “*Maine CAH Medication Safety Initiative Implementation*,” Maine Health Access Foundation

Vishneau, Maggie, “*Jim Casey Maine Youth Opportunities - Year Five*,” Jim Casey Foundation

Vishneau, Maggie, “*Penobscot Nation Customary Adoption Contract 2009-2010*,” Penobscot Nation

Vishneau, Maggie, “*Seasoned Worker Opportunity Project*,” Coastal Counties Workforce, Inc.

Ward, Helen, “*Increasing Education Support for Foster Youth within the Foster Home*,” Smith Richardson Foundation

Ward, Sally, “*Adult Mental Health Workforce Initiatives 08/09*,” Maine Department of Health & Human Services

Ward, Sally, “*Adult Mental Health Workforce Initiatives 09/10*,” Maine Department of Health & Human Services

Ward, Sally, “*Child and Family Services Workforce 09/10*,” Maine Department of Health & Human Services

Ward, Sally, “*DHHSTI Technical Assistance and Workforce Development Initiatives, OIAS 2008/2009*,” Maine Department of Health & Human Services

Watson, Peter, “*National Child Welfare Resource Center for Organizational Improvement Continuation*,” US Department of Health & Human Services, Administration for Children & Families

Watson, Peter, “*National Child Welfare Resource Center for Organizational Improvement*,” US Department of Health & Human Services, Administration for Children & Families

Yoon, Sun Young, “*The Role of Child Maltreatment and Trauma in Adolescent Relationships*,” National Institutes of Health

Zanghi, Marty, “*Maine Tribal - State Child Welfare Truth and Reconciliation Project*,” Andrus Family Fund

Zanghi, Marty, “*Maine Youth Development Initiative 08/09*,” Maine Department of Health & Human Services

Zanghi, Marty, “*Maine Youth Development Initiative 09/10*,” Maine Department of Health & Human Services

Zanghi, Marty, “*Maine Youth Transition Collaborative (formerly Maine Youth Opportunities Initiative)*,” Jim Casey Foundation

Zanghi, Marty, “*York County Community Building Grant*,” Maine Community Foundation

Ziller, Erica, “*Impact of Health Declines on the Financial Well-Being of Families*,” National Institutes of Health

Proposals/Awards Other University Programs

Bock, Susie, “*Equity Fund Grant to Process LGBT Collections,*” Maine Community Foundation-Equity Fund

Bove, Geoffrey M., “*Initial investigations of sympathetic neuritis as a source of altered homeostasis,*” National Institutes of Health (R&D)

Bove, Geoffrey M., “*Neural Inflammation and Autonomic Balance,*” Samuelli Institute for Information Biology (R&D)

Bove, Geoffrey M., “*Neural Inflammation and Visceral Autonomic Balance,*” National Institutes of Health (R&D)

Bove, Geoffrey M., “*Pain and Endometriosis: Effects on Ectopic Cyst Innervation and Axons,*” National Institutes of Health (R&D)

Bove, Geoffrey M., “*Pain and Endometriosis: Effects on Ectopic Cyst Innervation and Axons Resubmission,*” National Institutes of Health (R&D)

Bove, Geoffrey M., “*UNE COBRE Subcontract,*” University of New England (R&D)

Briggs, Kaitlin, “*Thesis as Rhizome: Towards a New Vision for the Undergraduate Honors Thesis in the Twenty-First Century,*” Marion and Jasper Whiting Foundation

Dodge, Lee Anne, “*HEAPP High-Risk Drinking Prevention,*” Maine Association of Substance Abuse Programs

Downing, Tom, “*Healthy Outcomes - Health Promotion for Maine’s Small Business,*” Robert Wood Johnson Foundation

Downing, Tom, “*Lifeline Martins Point HC,*” Martin’s Point Health Care

Downing, Tom, “*USM Wellness Anthem,*” Anthem

Farwell, Timothy, “*Homeland Security Grant 2008,*” Maine Department of Homeland Security

Forhan, Kate, “*Transforming USM’s Culture for Learning,*” Association of American Colleges and Universities

Freid Moses, Lori, “*2008 Skin Cancer Prevention Mini-Grant,*” Maine Melanoma Foundation

Freid Moses, Lori, “*CCI Support,*” Maine Department of Health & Human Services

Freid Moses, Lori, “*Child Care Slots FY09,*” Maine Department of Health & Human Services

Hansen, Robert, “*Online for ME,*” Alfred P. Sloan Foundation

Kuplinski, Paul, “*December 2008 Winter Storms and Flooding Federal Relief,*” Maine Department of Defense, Veterans and Emergency Management

Lightfoot, Kali, “*A Science Education Center for the Third Age,*” National Science Foundation

McCall, Andrea Thompson, “*College Community Mentoring Partnership - Portland,*” Maine Department of Corrections

McCall, Andrea Thompson, “*USM, Portland Housing Authority, and NAACP MLK Day Arts Program,*” Maine Commission for Community Service

Proposals and Awards

Menard, Alicia, “*Maine Space Grant Consortium/USM Science Scholarship 09/10,*”
Maine Space Grant Consortium (R&D)

Peck, Abraham, “*War and Reconciliation: From Child Soldiers to Community Healers,*”
Maine Humanities Council

Theunissen, Yolanda, “*Preserving Maine’s Cultural Heritage: A Statewide Initiative,*”
Maine State Museum

Proposals/Awards School of Applied Science, Engineering and Technology

Alagic, Suad, “*BPC - LSA Students with Disabilities in Computer Science,*” National Science Foundation (R&D)

Alagic, Suad, “*Verifiable Constraints for XML Objects,*” National Science Foundation (R&D)

Congdon, Clare Bates, “*CAREER: Evolutionary Computation and Bioinformatics,*” National Science Foundation (R&D)

Congdon, Clare Bates, “*Lobster CyberCatch (ISE),*” University of Virginia, Main Campus w/ NSF Funding (R&D)

Congdon, Clare Bates, “*Machine Learning for the Inference of Cis-Regulatory Modules in Environmental-Response Genese,*” Dartmouth College w/NIH Funding (R&D)

Congdon, Clare Bates, “*MRI: Acquisition of the Memory-Intensive Maine Supercomputer (MIMS),*” National Science Foundation (R&D)

Congdon, Clare Bates, “*MRI-Consortium: Development of a Virtual Interactive Environment for Workgroups of Education and Research (VIEWER),*” National Science Foundation (R&D)

Dubois, Monroe, “*Sustaining the Maine ScienceCorps: Collaborative Integration of Research Experiences and Active Learning into Bioscience Education,*” National Science Foundation (R&D)

Proposals and Awards

Duboise, Monroe, “*Developing Multidisciplinary Astrobiology Research Infrastructure Through Exploration of Extreme Environments at the Intersection of Maine’s Metal Mining Past and the Gulf of Maine*,” Maine Space Grant Consortium (R&D), (joint submission with CAS)

Duboise, Monroe, “*Higher Education Partnership in Development of Extremophile Science and Technology in USA and Kenya Universities*,” US Agency for International Development (R&D)

Duboise, Monroe, “*Micro and Nano-space Exploration of Health and Disease*,” National Institutes of Health/NCRR (R&D)

Duboise, Monroe, “*Nano-space Observatory Supplement to Micro- and Nano-space Explorations of Health and Disease*,” National Institutes of Health (R&D)

Hodgkin, Brian, “*Scientific Ballooning Senior Design Project*,” Maine Space Grant Consortium (R&D)

Incze, Lew, “*Active whale feeding grounds in the northern Gulf of Maine: Biological and physical processes*,” US Office of Naval Research (R&D)

Incze, Lew, “*CDI-Type II: Simulations of Whale Migrations in the North Atlantic: An Evolutionary Computational Approach*,” University of Maine w/NSF Funding (R&D)

Langley-Turnbaugh, Samantha, “*Applied Energy Education at the University of Southern Maine*,” National Science Foundation (R&D)

Langley-Turnbaugh, Samantha, “*EASTHealth: Increasing Access to the Health Professions for Persons with Disabilities*,” National Institutes of Health (R&D), (joint submission with CONHP)

Langley-Turnbaugh, Samantha, “*RDE-RAD: Eastern Alliance in Science Technology, Engineering and Mathematics (EAST) Phase 2*,” National Science Foundation (R&D), (joint submission with CEHD)

Langley-Turnbaugh, Samantha, “*University of Washington Summer Program*,” University of Washington w/NSF Funding (R&D)

Lechner, John, “*Biomarkers to Certify Antioxidant Potency of Dietary Supplements*,” National Institutes of Health (R&D)

Lechner, John, “*Prevention of Lung Cancer by Red Beetroot Food Coloring (RBFC)*,” National Institutes of Health (R&D)

Lichter, Erika, “*Chronic Disease and MCH Epidemiology Capacity Building 09/10*,” Maine Department of Health & Human Services (R&D)

MacLeod, Bruce, “*MoTech Ghana Health Initiative*,” Columbia University w/Gates Foundation Funding (R&D)

Martinez, Daniel, “*Human Capacity Building Planning Grant*,” US Agency for International Development

Meyer, Katie, “*Chronic Disease and Maternal and Child Health Epidemiology Capacity Building 08/09*,” Maine Department of Health & Human Services (R&D)

Ng, Ah-Kau, “*A Novel Osteopontin Fragment as a Diagnostic/Prognostic Cancer Plasma Biomarker*,” Maine Medical Center Research Institute w/NIH Funding (R&D)

Ng, Ah-Kau, “*Effects of Nanomaterials on the Immune System*,” National Institutes of Health (R&D)

Proposals and Awards

Pelsue, Stephen (faculty mentor), “*Age Related B Cell Immunosenescence And The Flaky Skin (fsn) Mutation In Mice*,” National Institutes of Health (R&D)

Pelsue, Stephen (faculty mentor), “*Increased B1b Cell Production and Cardiovascular Disease*,” American Heart Association (R&D)

Thompson, Douglas, “*A Regional Multi-Institutional Academic Partnership for Excellence in Environmental Public Health Tracking*,” University of Medicine and Dentistry of New Jersey w/CDC Funding (R&D)

Thompson, Douglas, “*Capacity Building in Environmental Epidemiology 09-10*,” Maine Department of Health & Human Services (R&D)

Thompson, Douglas, “*Capacity Building in Environmental Epidemiology*,” Maine Department of Health & Human Services (R&D)

Willis, Theodore, “*Alewife population structure in the Gulf of Maine*,” National Marine Fisheries Service (R&D)

Willis, Theodore, “*Assessing and improving passage for diadromous fish in the Dennys River, Maine*,” US National Oceanic and Atmospheric Administration (R&D)

Willis, Theodore, “*Genetic Diversity of Alewife Subpopulations in Maine*,” US Fish & Wildlife Service (R&D)

Willis, Theodore, “*River herring critical fish habitat in Penobscot Bay*,” National Fish and Wildlife Foundation (R&D)

Willis, Theodore, “*Telemetry tagging alewife as part of the Penobscot River Restoration effort*,” Davis Conservation Foundation (R&D)

Wilson, Glenn, “*Maine GeoLibrary Project*,” Maine Department of Environmental Protection (R&D)

Wilson, Glenn, “*Tilson Development*,” Tilson Technologies (R&D)

Wilson, Karen, “*Monitoring Marine-Freshwater Linkages Using Stable Isotopes*,” Nature Conservancy (R&D)

Wilson, Karen, “*Penobscot River Restoration: Monitoring Marine-Freshwater Food Web Linkages Using Stable Isotopes (SI), Phase One sample collection and trial analysis (TNC)*,” Nature Conservancy (R&D)

Wilson, Karen, “*Sherman Marsh 2009 Monitoring Contract*,” Maine Department of Transportation (R&D)

Wilson, Karen, “*Virginian Refugia and Relict Oyster Populations in Maine: The Need For Protection And Opportunity For Restoration*,” Bigelow Laboratory for Ocean Sciences (R&D)

Wise, John, “*A Combined In Vitro and In Vivo Approach to Assess the Genotoxicity of Nanomaterials*,” National Institutes of Health (R&D)

Wise, John, “*Acquisition of an intracellular metal measurement system*,” US Department of Defense (R&D)

Wise, John, “*Arsenic potentiates the carcinogenicity of hexavalent chromium by inhibiting the repair of Cr(VI)-induced DNA double strand breaks exacerbating chromate-induced chromosome instability*,” US Environmental Protection Agency (R&D)

Proposals and Awards

Wise, John, *“Effects of Altered Gravity on Cellular Function,”* Maine Space Grant Consortium (R&D)

Wise, John, *“Enhancement of research, development and manufacturing infrastructure for production of Maine-based nutraceuticals,”* Eldertide, Maine Medicinals w/MTI Funding (R&D)

Wise, John, *“Genotoxicity and Carcinogenicity of Particulate Depleted Uranium,”* US Department of Defense (R&D)

Wise, John, *“Increasing K-12 Environmental Health Education with Engaged Learning and Research,”* National Institutes of Health (R&D)

Wise, John, *“Inhibition of Arsenic-caused Lung Cancer,”* Maine Cancer Foundation (R&D)

Wise, John, *“Mechanisms of Altered Gravity Potentiation of Metal-Induced Genotoxicity,”* National Aeronautics and Space Administration (R&D)

Wise, John, *“Particulate Cr(VI) Toxicology in Human Lung Epithelial Cells and Fibroblasts,”* National Institutes of Health (R&D)

Wise, John, *“The Effects of Toxic Particles in Human Lung Cells,”* US Department of the Army (R&D)

Wise, John, *“Tinnitus: Mechanisms and Therapy,”* University of New England w/US DoD Funding (R&D)

Wise, John, *“Toxicology of Metal and Lunar Particles in Biological Systems,”* Maine Space Grant Consortium (R&D)

Wise, Sandra, *“Developing a Cytogenetic Biomarker for Chromate-Induced Lung Cancer,”* Maine Lung Association (R&D)

Wright, John, *“Alternative Energy Vehicle Training and Education,”* Massachusetts Institute of Technology (R&D)

Wright, John, *“Maine1st Robotics Project,”* National Science Foundation (R&D)

Xie, Hong, *“Mechanistic Role of Hypermethylation in Depleted Uranium-Induced Carcinogenesis,”* National Institutes of Health (R&D)

Proposals and Awards

Proposals/Awards School of Business

Andrews, Bruce, *“A Model-Based Analysis of Factors that Drive Long-Term Disability Submitted Incidence Rates,”* Society of Actuaries, (joint submission with MSPS)

Andrews, Bruce, *“EDA University Center Grant,”* US Department of Commerce, EDA

Andrews, Bruce, *“EDA University Center Grant Continuation,”* Economic Development Administration

Andrews, Bruce, *“Preparation of Resource Report 5 for Calais LNG Terminal,”* Calais LNG Project Company, LLC, (joint submission with MSPS)

Andrews, Bruce, *“The Corporate Library,”* The Corporate Library

Andrews, Bruce, *“UNUM Movement Modeling Phase I,”* UNUM

Artz, Nancy, *“Educating for Sustainable Business - on-line, noncredit continuing education program,”* US Environmental Protection Agency

Cheever, Leslie, *“DBE Education Programming April 2008-December 2010,”* Eastern Maine Development Corporation

Delisle, Mark, *“7 Habits for Managers/Small Business Owners 09,”* Maine Department of Economic and Community Development

Delisle, Mark, *“Farms for the Future 2008-2010,”* Maine Department of Agriculture

Delisle, Mark, *“Maine Business Works Resource Sharing Project,”* Maine Department of Labor

Delisle, Mark, *“Maine Enterprise Option FY 2009,”* Maine Department of Labor

Delisle, Mark, *“Maine SBDC 2009,”* Maine Department of Economic and Community Development

Delisle, Mark, *“Maine SBDC Energy Initiative,”* US Small Business Administration

Delisle, Mark, *“Maine SBDC Veterans Assistance and Services Program,”* US Small Business Administration

Delisle, Mark, *“Maine Small Business Development Center 2009,”* US Small Business Administration

Delisle, Mark, *“Small Business & Technology Development Center FY2009,”* Maine Technology Institute

Delisle, Mark, *“Small Business Development Centers’ Surviving an Economic Downturn,”* US Small Business Administration

Delisle, Mark, *“The Business Side of Logging - Online,”* Wood Education and Resource Center Program

Delisle, Mark, *“Voc Rehab FY 2009,”* Maine Department of Labor

Lamont, Valarie, *“FastTrac Growth for Business Owners in the Tourism Industry,”* Center for Tourism Research and Outreach

**Proposals/Awards
School of Law**

Anderson, Pamela, *“Youth Violence Prevention through Restorative School Practices,”* Maine Department of Health & Human Services

Heimes, Rita, *“Biotechnology Trade Association Membership and Communications Infrastructure,”* Center for Innovation in Biotechnology

Mahoney, Kathleen, *“Legal Interns Maine Department of Labor,”* Maine Department of Labor

Smith, Deirdre, *“Juvenile Justice Clinic - Maine Bar Foundation 2009,”* Maine Bar Foundation

Smith, Deirdre, *“Juvenile Justice Clinic - Maine Bar Foundation,”* Maine Bar Foundation

Smith, Deirdre, *“Language Access Project,”* Maine Bar Foundation

Smith, Deirdre, *“Maine Coalition to End Domestic Violence,”* Maine Coalition to End Domestic Violence

Smith, Deirdre, *“Prisoner Assistance Clinic - Department of Corrections Contract 07/08,”* Maine Department of Corrections

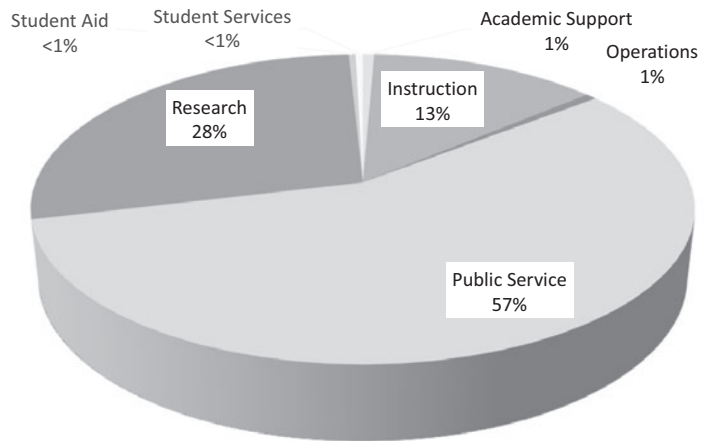
**Proposals/Awards
Women's Studies**

Feiner, Susan, *“Reforming Higher Education in the UAE by integrating the role of women in society, equity and social inclusion, family/child rights, and women’s rights into the curriculum,”* Higher Education for Development

SUMMARY OF ACTIVITY

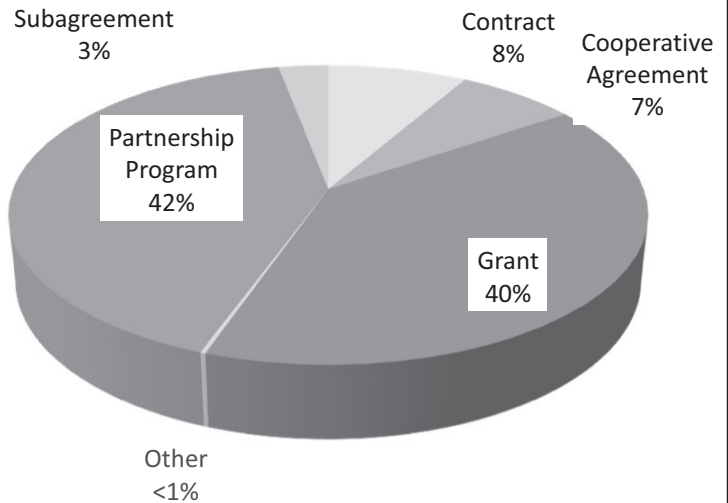
Awards by Project Type

Instruction	\$5,895,949
Academic Support	\$294,895
Operations	\$282,000
Public Service	\$25,510,921
Research	\$12,573,181
Student Aid	\$175,586
Student Services	\$184,778
TOTAL	\$44,917,310



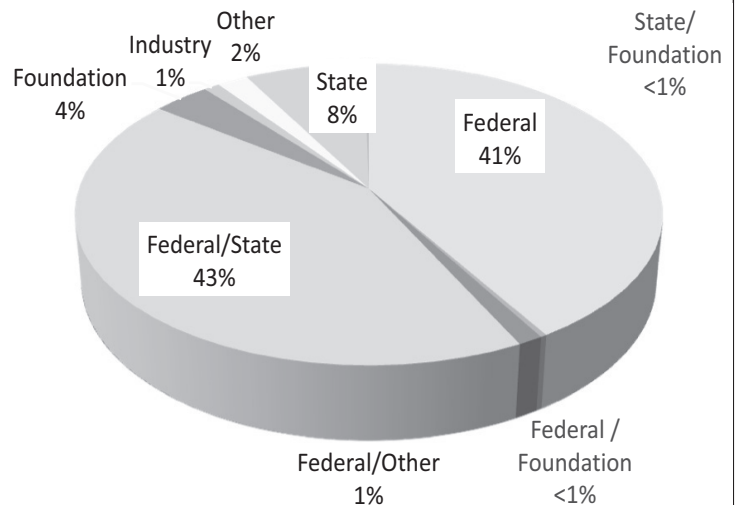
Awards by Form

Contract	\$3,730,509
Cooperative Agreement	\$3,193,693
Grant	\$17,914,841
Other	\$100,122
Partnership Program	\$18,649,844
Subagreement	\$1,328,301
TOTAL	\$44,917,310



Awards by Source of Funds

Federal	\$18,529,156
Federal/Foundation	\$135,174
Federal/Other	\$534,305
Federal/State	\$19,100,049
Foundation	\$1,644,883
Industry	\$461,676
Other	\$893,144
State	\$3,484,216
State/Foundation	\$134,707
TOTAL	\$44,917,310



Proposal and Award Activity

FY08 figures have been revised
*Awards = New & Continuing Awards

UNIT	—FY2009—			—FY2008—				
	PROPOSALS	PROPOSAL \$	AWARDS*	AWARD \$	PROPOSALS	PROPOSAL \$	AWARDS*	AWARD \$
ASET	49.83	\$18,313,285	23.17	\$4,052,294	49.83	\$24,288,682	31.17	\$4,176,882
CAS	13.83	\$2,960,510	15.00	\$2,173,908	37.00	\$5,551,026	11.33	\$308,252
CEHD	19.00	\$3,077,838	15.83	\$3,146,680	24.83	\$4,845,024	19.0	\$2,677,687
CONHP	6.00	\$1,608,206	3.00	\$766,103	4.00	\$436,293	2.0	\$511,190
LAC	17.00	\$956,221	5.50	\$645,249	11.00	\$1,368,689	2.0	\$105,000
MSPS	102.83	\$43,890,060	64.50	\$30,287,045	88.00	\$36,402,005	81.5	\$30,492,957
OTHER	25.5	\$3,514,878	13.50	\$862,779	15.33	\$2,240,622	13.0	\$1,829,780
SBUS	19.00	\$1,731,485	14.50	\$2,432,523	15.00	\$2,076,343	12.0	\$2,256,473
SOL	6.00	\$315,336	6.00	\$267,834	6.00	\$419,927	3.0	\$124,249
WST	0	\$0	1.00	\$284,895	1.00	\$284,895	0.0	\$0
TOTAL	259	\$76,367,819	162	\$44,917,310	252	\$77,913,506	175	\$42,482,470
R&D Projects	73	\$25,445,271	40	\$7,207,061	79	\$32,260,901	39	\$5,059,607

Actual Expenditures by College/School/Division (x\$1000)

Following the trend from last year, we again experienced a slight decline (3%) over the prior year. This is a direct result of the economic downturn. We are now seeing a turnaround due to a change in administration policies and priorities and the injection of stimulus funds. The Research and Development activity continues to show strength with a 25% increase from last year.

UNIT	—FY2009—			—FY2008—		
	T.D.C.	SPONSOR I.C.	TOTAL	UNIVERSITY T.D.C.	SPONSOR	UNIVERSITY
ASET	\$ 3,531	\$ 616	\$4,147	\$ 490	\$ 2,961	\$ 722
CAS	460	107	568	29	539	57
CEHD	2,097	151	2,248	148	2,969	111
CNHP	713	133	846	0	725	1
LAC	230	2	232	2	16	-10
MSPS	24,619	3,223	27,843	61	29,871	75
OTHER	1,354	79	1,432	211	1,040	2
SBUS	2,065	193	2,257	189	2,707	198
SOL	210	15	225	4	228	15
WST	0	0	0	0	-1	0
TOTAL	\$35,279	\$4,519	\$39,798	\$1,134	\$41,055	\$1,171
R&D Projects	\$4,365	\$741	\$5,106	\$501	\$4,019	\$779
T.D.C. = Total Direct Costs; I.C. = Indirect Costs						

In complying with the letter and spirit of applicable laws and in pursuing its own goals of pluralism, the University of Southern Maine shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, transgender status and gender expression, national origin or citizenship status, age, disability, or veteran's status in employment, education, and all other areas of the University. The University provides reasonable accommodations to qualified individuals with disabilities upon request. Questions and complaints about discrimination in any area of the University should be directed to the executive director, Office of Campus Diversity and Equity, 207:780-5094/ TTY 207: 780-5646.