Foreword

We are pleased to present the revival of the annual edition of a publication to honor the creative and scholarly work of Fitchburg State University faculty and librarians. This booklet offers an opportunity to recognize and celebrate the intellectual and creative achievements of our faculty and librarians. These activities both spring from and feed our central teaching mission. Reflected in these pages is the dedicated work of a “Community of Scholars.”
Anne Anderson  
*Mathematics*  
**COMMUNITY SERVICE**  
- Three hours per week volunteering at Household Goods Recycling of Massachusetts, a non-profit that distributes donated household goods at no cost to clients referred by social service agencies.

Laura E. Baker  
*Economics, History, Political Science*  
**SCHOLARSHIP**  
- Assessment Scholar, Quality Collaborative Grant, Mount Wachusett Community College—Fitchburg State University.

Mary Baker  
*Communications Media*  
**CREATIVE ACTIVITY**  
- Associate Producer for a 30-minute documentary titled *Pretty People*. The film examines how physical disability is represented in the media through the personal viewpoints of five actors with different physical disabilities. It was screened at the Tallgrass Film Festival in October 2012 in Wichita, KS.

Jennifer Berg  
*Mathematics*  
**SCHOLARSHIP**  
- Peer Reviewer for *Currents in Teaching and Learning*  
- Document reviewer for the Department of Early and Secondary Education, Massachusetts.

William Guedes Cortezia  
*Education*  
**SCHOLARSHIP**  
- Presented at the 34th Annual Conference on Curriculum Theory and Classroom Practice—Bergamo Center-Dayton, Ohio. “Democratic Citizenship.”  
- Attended the Fall 2013 MACTE/COMTE/MAECTE conference. Teaching All Learners: Preparing Teachers to Meet the Needs of English Language Learner.  
- Presented at the 2013 Transformative Researchers and Educators for Democracy Conference: Educational Leadership—University of Massachusetts—North Dartmouth, MA. “A Critical Discourse Analysis of the Pedagogy of Social Sciences in Miami Dade County-FL Public Schools.”

Lucy Dechene  
*Mathematics*  
**CREATIVE ACTIVITY**  
- Carillon Recital at Wellesley College, April 2013

Jennifer Fielding  
*Library*  
**SCHOLARSHIP**  
COMMUNITY SERVICE

Stephen D. Goldstein
Communications Media

SCHOLARSHIP
• Special Projects Grant awarded from Fitchburg State University, Provost’s Office, May 2013. Grant in support of travel to SECAC (Southeastern Art College Conference) to present a paper on November 1, 2013 entitled “Extraordinary Realities: Gunter Rambow’s Poster Designs.”

• “Chinese Graphic Design Since 1979” (in preparation). Awarded Asian Cultural Council (ACC), New York research travel and cultural exchange grant, May 2013. Grant given in support of research in China in 2014 for planned book and exhibition on documenting the origins and development of contemporary design communications and the complexities of information exchange in China.

• “Gunter Rambow: The Poet of Poster Design.” Magazine article and interview (in preparation), coauthored with Richard Doubleday on the graphic designs of leading German designer and educator. Expected publication date: Fall 2013.


• Ruth Butler Achievement Grant, Fitchburg State University, in support of Communications Media Lecture Series 2013-2014.

COMMUNITY SERVICE
• “Graphic Design in a College Curriculum,” lecture (unpublished paper), DVC Conference, Fitchburg State University, March, 2013. Conference held to introduce Communications Media Department concentration programs to vocational arts teachers from Massachusetts vocational arts high school programs.

Meledath Govindan
Biology and Chemistry

SCHOLARSHIP
• Authored the Chemistry B.S. degree proposal and shepherded it through the University’s governance system (Departmental Curriculum Committee, AUC-Curriculum Committee and AUC), University’s Board of Trustees, and the Massachusetts Board of Higher Education (BHE). The BHE application included a review by an external team of experts, which was also coordinated by me. Defended the proposal in front of the BHE Committee on Academic Affairs.

• Continue to serve as an Alternate Councilor to the American Chemical Society (ACS) from the Central MA Section and serve on the Executive Board of the local section.

• Organized and hosted March 2013 scientific meeting of the ACS Central MA Section with a lecture by Dr. J. Gregory Reid, “Mastering the 5000-L Rotavap and Other Challenges to Making Drugs on Industrial Scale” at Fitchburg State University.

• Organized and hosted September 2013 scientific meeting of the ACS Central MA Section with a lecture by Dr. Mathangi Krishnamurthy, “Finding New Cures for Cancer—From “Pot” to “Pill” at Fitchburg State University.

• Organized the Division Meeting in May 2012 at FSU as Central Division Chair of the New England Association of Chemistry Teachers (NEACT). Recruited presenters, made arrangements for out-of-town guests, and coordinated the meeting which included presentations and a teacher workshop by Professors Shari Litch-Gray and Cheryl Coolidge of Colby-Sawyer College, NH.

• Elected President-elect of NEACT for 2013-15 and will host and Conference Chair of the 75th Summer Conference to be held at Fitchburg State University, August 11-14, 2014.

• AP Chemistry Reader, Educational Testing Service, June 2013. Participated in scoring the free-response sections of AP Chemistry exam.

INVITED LECTURE
• “Structure Elucidation of Natural Products by NMR,” Third Annual Professor K. P. Antony Memorial Lecture, St. Thomas College, Thrissur, Kerala, India, 2013.


• In March 2013, participated in the annual Oil Palm Phenolics Technical Meeting at MIT that discussed the progress of the research taking place at six centers around the world - MIT, Brandeis University, Wayne State University, Brigham and Women’s Hospital, Commonwealth Scientific and Industrial Research Organization (CSIRO) of Australia, and Advanced Biotechnology Breeding Center of MPOB, Malaysia. (Active collaborator of the MIT group since 2003.)

COMMUNITY SERVICE
• Coordinated the “Chemists Celebrate Earth Day” illustrated poem contest of the American Chemical Society in March 2013 - carried out all aspects of the contest including conceiving the project, sending information out to 100+ schools in the area soliciting participation, collecting the poems, assembling the judging panel, judging and finally distributing the participation certificates and awards to the winners. Award ceremony was held in conjunction with the NEACT meeting in May 2013 at Fitchburg State.

• Coordinated the Worcester regional educational contests of the North South Foundation at Fitchburg State University (April 6-7, 2013) and Cambridge regional contests at Tufts University campus in Medford (April 2013).

• Continue to serve as an Alternate Councilor to the American Chemical Society (ACS) from the Central MA Section and serve on the Executive Board of the local section.
Contests were held in spelling, vocabulary, geography, math, science, essay writing and public speaking. Over 400 school children from MA, NH and RI participated at each center. [North South Foundation is an all-volunteer non-profit organization based in Chicago that holds these contests at over 80 sites throughout the U.S. and Canada. Its goals are to provide educational opportunities for children here and back in India. The monies raised in the form of registration fee are used to provide college scholarships for economically disadvantaged but meritorious children in India. This past year we supported the college education of 2250 students, who may not have been able to attend college without this scholarship.]

Robert Harris  
**Communications Media**

**CREATIVE ACTIVITY**

- Video work, *Suite of Summer Evenings* featured in First International Cinema Turbulent Film Festival at the University of Victoria, British Columbia, Canada – hosted in conjunction with the Canadian Anthropology Society Annual Conference 2013 (CASCA). May 2013.
- Video work, *Burning Memories: Pt. 1 Forbidden Songs* was featured in Experiments in Cinema V8.53 Film Festival, in Albuquerque, NM. April 2013.
- Collaborated with pioneering video artist Aldo Tambellini assisting with planning, editing, and sound design, in the creation of his gallery exhibition *We Are All Primitives of a New Era* at the James Cohan Gallery, New York City. September – October, 2013.

Michael Hoberman  
**English Studies**

**SCHOLARSHIP**

**PUBLICATIONS**


**INVITED TALKS**

- Old South Meeting House, Boston, “Middays at the Meetinghouse” lecture series speaker (March 2013).
- Newport Historical Society, Newport, RI, planning retreat for 2013 conference on “The Spectacle of Tolerance: Learning from the Livelie Experiment” (October 2012).
- Reed College, American Studies program, Portland, OR (October 2012).

Sanjay Kaul  
**Industrial Technology**

**SCHOLARSHIP**

**RESEARCH**

- Energy Efficiency Considerations in Heat Exchangers Design (with Dr. S.C. Kaushik) (*Cooling India*, vol. 8, No. 11, Feb 2013).

**CONFERENCES AND WORKSHOPS**


**FELLOWSHIPS**

- Japan Studies Institute (JSI) fellowship by American Association of State Colleges and Universities (AASCU), held at San Diego State University (June 11 – 22, 2013).

**EDITORIAL BOARD**

- Member, Editorial Board for *Advances in Energy* (AIE), on-line journal.
- Member, Editorial Board, TELKOMNIKA, Indonesian Journal of Electrical Engineering.

Lynne Kellner  
**Behavioral Sciences**

**SCHOLARSHIP**

- Nominated as New England Director of the Council for Standards in Human Services Education.
- Served as external reader on re-accreditation self-study for the College of DuPage's Human Services program.

**CONFERENCE**

- Collaborated with seven HMSV students to present, “No Time to Cry: How to support our Veterans Returning from War” at the annual conference of the New England Organization for Human Services in Newton, MA, April 2013.
Kwahng S. Kim  
**Business Administration**  
**SCHOLARSHIP**

- Global Standardization of U.S. by – product: Corporate Social Responsibility: The Cross-Cultural Differences and Similarities among the U.S. China, and India, Academy of Business Research (ABR), San Antonio, TX, USA, September 18-20, 2013.
- Material Resource Planning and Strategic Management Without the customer will you need MRP? Open Journal of Social Sciences (ISSN Online: 2327-5960, ISSN Print: 2327-5952).

**SERVICE LEARNING PROJECTS**

- Fitchburg State Undergraduate Research Conference: Advised and sponsored two students (2 Students’ Paper Presentation).
- UMASS Undergraduate Research Conference: One Student Paper Presentation.

**COMMUNITY SERVICE**

- Consulting Advisory Board (Senior Advisor to the President): China (Gwangdong and Hongkong), December 16-23, 2012 which involved company’s capacity expansion plan and its relocation to South Vietnam. The plan tentatively will have been completed by the end of December 2014: Idealink, Hongkong and Gwangdong, China.

Megan Krell  
**Behavioral Sciences**  
**SCHOLARSHIP**

**PUBLICATIONS**


**PRESENTATIONS**

- Presented “Calling all counselor educators” at the annual spring conference (April 2013) of the Massachusetts School Counselors Association, Hyannis, MA.
- Presented “Data collection for school counselors” at the annual spring conference (April 2013) of the Massachusetts School Counselors Association, Hyannis, MA.

Aruna Krishnamurthy  
**English**  
**SCHOLARSHIP**


**SERVICE LEARNING PROJECTS**

- Shaped the Arts Education Syllabus for pre-service teacher training within the Diploma in Education programme (D.Ed.) for the state of Karnataka in India.
- Coordinated the creation of an Arts Education Resource Book for the implementation of the arts education syllabus.
- Published two position papers in the Karnataka Curriculum Framework for Teacher Education in 2012: “Aims of Education” and “Communication Skills through Arts Education.”

Frank Mabee  
**English Studies**  
**SCHOLARSHIP**


SERVICE LEARNING PROJECTS


“Welcome to Turnitin!” With members of the Turnitin pilot program. Center for Teaching and Learning (CTL) Summer Institute 2013, Fitchburg State, August 2013.


Tara Mariolis
Nursing
SCHOLARSHIP

Poster presentation: In conjunction with Carol McKew (Nursing) and Kelly Morgan (Communications Media) poster accepted and presented at the St. Anselm Nurse Educator Conference in May 2013 entitled, Actors redefine Mental Health Simulation. The poster highlighted the benefits of a year-long collaboration between the Department of Nursing and the Department of Communications Media utilizing actors as patients in simulations of complex health related scenarios with nursing students providing care in the nursing laboratory.

Recipient, Special Projects Grant: For the funding of collaboration between Department of Nursing and the Department of Communications Media in the development of simulations utilizing actors in complex scenarios with nursing students in the nursing laboratory.

Wayne Munson
Communications Media
SCHOLARSHIP

Presented paper, “The Non-essentializing Narrative: John Cassavetes and What His Approach Means for Storytelling,” at the annual conference of the University Film and Video Association (UFVA), Chapman University, Orange, CA, August 3, 2013. Also attended and participated in the conference July 29 – August 3.

Attended, and participated as voting Lifetime Fellow in the annual conference of the Society for Cognitive Studies of the Moving Image (SCSMI), Berlin University of the Arts, Berlin, Germany, June 12 – 15, 2013.

Nursing and Addictions Conference: Organizer and presenter at continuing education conference held at Fitchburg State University on latest trends in nursing care of addictions December, 2012 and April, 2013.

COMMUNITY SERVICE

Chair, 50th Anniversary Celebration Ad Hoc Committee: Fitchburg State University Department of Nursing (Event took place October, 2012 at Fitchburg State University).

Sally Moore
Humanities
CREATIVE ACTIVITY

Cushing-Martin Gallery, Solo Exhibition, Stonehill College, Easton, MA, September – October 2012.

Artist Talk and classroom visitation at Stonehill College as part of exhibition.


Massachusetts College of Art & Design, Ellipses: Alumni Works in 3D, juried show, Boston, MA.


COMMUNITY SERVICE

Created and donated sculpture to Annual AIDS Benefit Show at the Barbara Krakow Gallery, a fundraiser for African and Pediatrics AIDS Research and Treatment.

Created and donated ceramic platter for Benefit Auction for REACH Beyond Domestic Violence, Boston, MA, Fall 2012.

Invited as part of a select group of artists to create work for a fundraiser at the DeCordova Museum.

Wayne Munson
Communications Media
SCHOLARSHIP

Presented paper, “The Non-essentializing Narrative: John Cassavetes and What His Approach Means for Storytelling,” at the annual conference of the University Film and Video Association (UFVA), Chapman University, Orange, CA, August 3, 2013. Also attended and participated in the conference July 29 – August 3.

Attended, and participated as voting Lifetime Fellow in the annual conference of the Society for Cognitive Studies of the Moving Image (SCSMI), Berlin University of the Arts, Berlin, Germany, June 12 – 15, 2013.
**John J. Paul**  
**Economics, History and Political Science**  
**SCHOLARSHIP**  

**CREATIVE ACTIVITY**  

**Community Service:**  
- Elected Corporate Board Member, Vellore Christian Medical College Foundation Inc., New York, NY, October 2012.

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**Benjamin Railton**  
**English Studies**  
**SCHOLARSHIP**  

**CONFERENCE PRESENTATIONS**  

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**René Reeves**  
**Economics, History, Political Science**  
**SCHOLARSHIP**  

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**Sean Rollins**  
**Biology/Chemistry**  
**SCHOLARSHIP**  

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- Visiting Instructor of Medicine, Harvard Medical School.
- Adjunct Assistant Professor of Biology, Massachusetts College of Pharmacy and Health Sciences.
Thomas Schoenfeld  
**Biology and Chemistry**

**SCHOLARSHIP**
- Presented three invited talks in July 2013 on “Inverting the A&P Classroom: What Not to Do” to provosts and academic affairs administrators attending the 2013 Academic Affairs Summer Meeting of the American Association of State Colleges and Universities (AASCU) in Baltimore, MD. The talks were part of a special set of concurrent sessions on “Innovations in Teaching” that featured teaching demonstrations by faculty at seven member institutions recognized by their provosts as “doing extraordinary teaching using some of the new tools,” including flipped and blended classrooms, personalized approaches, and MOOC’s.
- Made occasional contributions to my blog, http://dissectingpublicscience.com/, offering critiques of the coverage of science in the public domain by science writers and journalists and even scientists.

Charles H. Sides  
**Communications Media**

**SCHOLARSHIP**
- Editor, Baywood’s Technical Communication Series. Books edited and published:
  - *Rhetorical Accessibility: At the Intersection of Technical Communication and Disability Studies*, by Lisa Meloncon.
  - Executive Editor, *Journal of Technical Writing and Communication (JTWC)*; edit four issues per year and write accompanying editorials for each issue.

**COMMUNITY SERVICE**
- Ongoing service associated with:
  - City Mission of Boston
  - Heifer Project International

Joshua B. Spero  
**Economics, History, Political Science**

**SCHOLARSHIP**

**PUBLICATIONS**
- “International and Conflict Studies Keynote Speaker: Dr. Monica Duffy Toft.” Center for Teaching and Learning Newsletter. Fitchburg State University (March 2012).
- “REDI Serving Our University and North Central Massachusetts Community.” Center for Teaching and Learning Newsletter. Fitchburg State University (February 2012).

**AWARDS AND FELLOWSHIPS**
- 2013 – Fitchburg State University’s Vincent J. Mara Award for Excellence in Teaching.

**THESIS SUPERVISIONS**

**UNIVERSITY COMMITTEE AND COMMUNITY SERVICE**
- Regional Economic Development Institute (REDI) Director, Fall 2009 – present (created, launched, manage, oversee, and direct REDI, in alternative assignment, inclusive of writing all administrative and research guidelines and game plans regarding REDI’s Mission, Vision, Implementation Plans (annually); planning, managing, and advising REDI Faculty Research Fellows and REDI Student Research Interns; guide, prepare and support REDI Advisory Board—leading/coordinating meetings three times annually; strategizing to help make REDI self-sustainable; initiate, update, expand the REDI Website; wrote REDI’s first Program Review (winter-spring 2013) and implement its recommendations by Framingham State University’s Evaluation Team.
- Undergraduate Research Conference Committee, Fall 2011 – Spring 2014.
- Coordinator of Political Science Major’s Program Review, Fall 2013 – Spring 2014.
- Fitchburg Anti-Violence Education (FAVE) invited training & orientation presentations (August 2013).
FITCHBURG STATE INTERNATIONAL STUDIES (IS) MINOR
COORDINATOR FOR THE IS KEYNOTE SPEAKER SERIES
• 2013: Ambassador Adrian Basora, Senior Fellow at the Foreign Policy Research Institute, Philadelphia, PA – “The Challenges for Post-Communist Democracies: Surviving a Continued Euro-Crisis.”
• 2012: Dr. Monica Toft, Associate Professor, John F. Kennedy School of Government, Harvard University – “Resurgent Religion, Global Politics, and Conflict Resolution.”

INVITED LECTURES
• McKinsey & Company (Waltham, MA), “Crisis Management Decision-making” (September 2013).

PRESENTATIONS
• Fitchburg State University/Core to College Seminar: “Critical Thinking, Research, Writing, and Role-Playing” (May 2013).
• Panel Chair and Discussant: North Eastern Political Science Association’s Annual Conference (Boston) – “Studies on Voter Behavior and Political Parties” (November 2012).

REVIEWER/EDITORIAL BOARD MEMBER

Elisabet Takehana
English Studies
SCHOLARSHIP

Teresa Fava Thomas
Economics, History, Political Science
SCHOLARSHIP
• Scholar in Residence: Vittore Branca Center at the Fondazione Cini, Isola San Giorgio Maggiore, Venezia, Italia, (Venice, Italy), June 2013 for research on migration from Veneto to Massachusetts.
• Presentation: Scholar Talk on “Sacco and Vanzetti and the Press Reaction in Fitchburg, Massachusetts.” On panel after the play’s presentation with director Kelly Morgan and writer Bruce Robinson of play “(Sacco & Vanzetti) Vince, Al and Teddy,” April 7, 2013.

Samuel Tobin
Communications Media
SCHOLARSHIP

PUBLICATIONS AND EDITORIAL WORK
• Special editor for The New Everyday “Everyday Play” cluster, Future of the Book/Media Commons.
• Also wrote “Everyday Play: an introduction to a cluster of work via a precedent” for the same. http://mediacommons.futureofthebook.org/tne/pieces/everyday-play August 2013.
• Completed Manuscript of Dual Screen: Portable Play in Everyday Life to be published in Fall 2013 by Palgrave Macmillan.

PEER REVIEWED CONFERENCE PRESENTATIONS
• “The Afterlife of the American Video Arcade” at the Society for Cinema and Media Studies annual conference in Chicago IL, March 2013.
• “Bring Your Game to Work” at the joint international conference of the Pan-American Mobilities Network and the Cosmobilities Network, Montreal, QC, May 2013.
• “Playing at Work: Firewalls, Cubicles and Crafting Tables” at Media in Transition 8, MIT, Cambridge MA, May 2013.
• “What We Lost in the Storm” at the Extending Play conference, Rutgers University, New Brunswick NJ, April 2013.

Susan Wadsworth
Humanities
SCHOLARSHIP

TEACHING
• Coordinated the teaching of a new course for fall 2012: Commonwealth of Asian Arts with Dr. David Svolba, Philosopher, and Dr. Marjorie Ness, Music Historian. I taught the art history component of the course.
• Prepared a new course, Mozart to Modernism, for Honors students for spring 2013.
• Taught with Susan Williams in the Fitchburg State University program in Verona Italy. Taught Art and Culture Abroad: Italian Art and Architecture.

CREATIVE ACTIVITY
• Set up a new website: http://susanwadsworthworksonpaper.com
• Created over 30 new pastel works, including several inspired by Verona and Sirmone, Italy as well as those inspired by Vermont and by Lake Temagami, Ontario.

JURIED EXHIBITIONS
• Biennial Regional Juror’s Choice Competition, Thorne-Sagendorph Art Gallery, Keene State College, Keene, NH. January to February, 2013.
• Landscapes For Landsake 11th Annual Art Exhibition, Coila, NY, October, 2012.
• Keene Art Walk, June 1-8, 2012.

COMMUNITY SERVICE
• 2013 Chair of the Fall Foliage Art Studio Tour of the Monadnock Region of New Hampshire.
• 2013 Secretary to the Central Massachusetts Women’s Caucus for Art.
• Juror for the Boys and Girls Club of Fitchburg and Leominster, April, 2013.

Amy Wehe
Mathematics

SCHOLARSHIP
• Wrote a textbook, Informal Geometry, during my sabbatical, and utilizing it for the Informal Geometry course.
• Found and read material on critical thinking and wrote a report for the administration as part of an alternate assignment. This work is continuing to inform my current teaching as I learn to ask more critical thinking of my students.

COMMUNITY SERVICE
• Continued to lead a Math Circle at McKay Arts Academy. The Math Circle is an after school program where middle school students participate in activities related to mathematics and problem solving beyond what they would see in their classrooms. Fitchburg State University students participate in the program by helping students with the activities and by creating and trying out their own activities with the middle school students.

Richard P. Wiebe
Behavioral Sciences

SCHOLARSHIP

PEER-REVIEWED JOURNAL ARTICLES
• Zheng, Y., Wiebe, R. P., Cleveland, H. H., Molenaar, P. C. M., & Harris, K. S. (2013). In idiographic examination of day-to-day patterns of substance use craving, negative affect and tobacco use among young adults in recovery. Multivariate Behavioral Research, 48, 241-266.

Jiang Yu
Geo/Physical Sciences

SCHOLARSHIP
• Continued to serve the 4th and last year as the Chief Reader for the College Board/Educational Testing Service annual AP Physics Reading. AP courses are for able high school students who are ready to take college-level introductory courses while still attending high school. AP Physics includes three courses/exams reflecting Algebra/Trigonometry-based and Calculus-based Introductory Physics offered at higher education institutes in the United States. The annual AP Physics Reading scores student physics exam papers. In 2013, 145,000 exams were scored. As the Chief Reader, I attend the Physics Exam Development Committee meetings at which exams are written, final prove the exam books before printing, hire college physics faculty members and high school AP Physics teachers to serve as Readers, manage the entire Reading from preparation beginning in September 2012 to carrying out and finishing the Reading Operation in June 2013, and finally present the AP Physics Exam results at the national AP Annual Conference. Chief Reader assignment is termed for four years.
Continued to serve as a College Board certified workshop consultant. In the 2012/2013 academic year, I led College Board two-day workshops for in-service physics teachers in Norwood, MA, worked with the L.A. Unified School Districts in California on a three-year teacher training program for in-service physics teachers, and led five week-long Physics Summer Institutes for high school physics teachers in Massachusetts (Bridgewater State Univ., a National Math and Science Initiative program), West Virginia (WV State Professional Development program), Florida (Nova Southeastern Univ.), Alabama (Univ. of Alabama), and Connecticut (Taft School).

Continued to serve on the College Board/Univ. of Oregon’s Physics 1 and Physics 2 Syllabi Audit Standard Setting Committee (on-going, second year). The committee is charged by the Center for Educational Policy Research at the Univ. of Oregon and is devising standards for evaluating College Board’s newly re-designed algebra-based introductory physics courses, Physics 1 and Physics 2.

Continued to serve on the AP Annual Conference Steering Committee for the third and last year.

In October 2012 I went to Beijing Royal School in Beijing, China to work with the school’s physics department on their AP physics curriculum and laboratories. Beijing Royal is a private boarding school for students who are to attend colleges in the United States and Great Britain. AP Physics is one of their curricula.

In March 2013 I went to Chengdu, China to work with the curriculum developers at Dipont Company on streamlining the AP, IB, and British A-level science courses with the Chinese requirement. Dipont is one of the leading education companies in China. 80% of their students from its 27 schools throughout China come to the United States for post-secondary education; many of them take engineering as majors.

Evaluated more than three dozen of introductory physics lab ideas for my sabbatical leave project in fall 2012. Lab outlines were written. In spring and summer 2013, more than a dozen of them were field tested with the high school physics teachers attending the workshops or summer institutes. These labs have been adapted for General Physics courses in the current academic year.

Jane Xinxin Zhang
Geo/Physical Sciences

Scholarship

Research Project: “Mapping Hotspots of Crime and Traffic Violation in Fitchburg.” Funded by REDI. This mapping project is a critical component of the DDACS program at Fitchburg Police Department. DDACS stands for “Data Driven Approaches to Crime and Traffic Safety.” The goal of DDACS is to reduce the incidence of crime, crashes, and traffic violations. This research project was focused on mapping and identifying “hotspots” in crime patterns and traffic accidents using a GIS (Geographic Information System).

Research Project: “Urban Structure Study of Fitchburg.” Funded by REDI. The project focused on mapping and analyzing the urban socio-economic parameters that relate to the distributions of population settlement and urban structure in Fitchburg. A historic assessment of Fitchburg and data variables of demographic, economic, education, and housing were coupled with spatial structure study using a GIS to form this comprehensive research project.


NEARC 2012 Conference Presentation: “Involving Undergrad Students in GIS Research—the Bringing Broadband to North Central Massachusetts Project,” in Rockland, ME. Funded by the Faculty Special Project Grant on Travel.

GSA (Geological Society of America) 2013 Conference Presentation: “Teaching and Learning Beyond Classroom—Leading Students on Local Projects Using GIS and GPS Technologies,” in Bretten Wood, NH.

Service Learning Projects


TravTime Traffic Congestion Study in the Montachusett Region—a Class Project with MRPC. In the Fall 2012 semester, requested by MRPC (which was in cooperation with MassDOT and FHWA), the entire class of GEOG 2400: Computer Application in Geography and Earth Science, participated in this unique local project. The students collected and analyzed traffic data in the most congested corridors in the Montachusett region using a high precision car-mounted Trimble® GPS and TravTimeTM, a GIS based traffic analysis software. This class project not only provided an irreplaceable learning-beyond-classroom experience for the students to use high-tech spatial technologies, but also benefited the local community.