Welcome to the fall 2013 SERC Newsletter! This newsletter is intended to update you on SERC’s activities and alert you to upcoming events. For more information, please check out the SERC website.

Thanks to all of you who have made a contribution to sustainability in the Boston region and beyond! A special thanks to those who have attended our events, have provided various kinds of support, subscribe to the Organizations and Social Change blog, and participate in our educational programs.

Some notable achievements in the last six months include:

- UMass Boston received a $3.1 million, five year Integrative Graduate Education and Research Traineeship grant from the NSF to train PhDs who will apply innovative solutions to environmental problems across disciplines and geographies.
- Launching a new Sustainable Business Academy initiative to support the regional New Economy, which encompasses encourages sustainability in the broadest sense, including local sourcing, environmental and social policies, small and locally-owned businesses, hybrid and B corporations, social entrepreneurs, more inclusive governance structures, and community and ‘slow’ capital.
- Gina McCarthy, a UMass Boston graduate, was approved by the Senate as Secretary of EPA.
- Several well attended events, including one with EMC’s Kathrin Winkler on IT and sustainability, and a panel on low wage work.

We look forward to your continued support and engagement, and wish you well over the holiday season!

David L. Levy

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UMass Boston Awarded IGERT Grant

By David Levy, Director SERC, Associate Dean for Graduate Studies and Research

In August 2013 UMass Boston was awarded a $3.1 million, five year Integrative Graduate Education and Research Traineeship (IGERT) grant from the National Science Foundation to train PhDs who will apply their innovative solutions to environmental problems across disciplines and geographies. This highly competitive grant is a big vote of confidence in UMass Boston’s capacity at the interface of environmental science, business, and policy. The grant stems from a close collaboration between Robyn Hannigan, Dean of the School for the Environment, Maria Ivanova, Assistant Professor of Global Governance at the McCormack Graduate School for Policy and Global Studies, and David Levy, Associate Dean for Graduate Studies and Research and director of SERC.

Funded over five years, the project (Coasts and Communities: Natural and Human Systems in Urbanizing Environments), has the goal to train a new generation of professionals who can analyze complex problems from multiple perspectives and creatively design solutions. The management of environmental, human, and economic risks associated with sea level rise and coastal flooding is one of the critical challenges students will tackle. Starting in September 2014, the program will welcome 8 new IGERT Fellows each year selected from the students
admitted to the PhD programs in Environmental Sciences, Environmental Biology, Global Governance and Human Security, and Business Administration: Organizations and Social Change. We are currently in a process of recruiting PhD students for next Fall. For more information on the business/organizations track, please contact Richard Wong at Richard.Wong@umb.edu.

**EVENT: ARE LOW WAGES SUSTAINABLE?**

*By Andrew Bishop, MBA Candidate, UMass Boston*

Sustainability is not just about the natural environment, and the issue of fair wages has been on the agenda recently. More than 100 students and faculty attended a dynamic panel presentation organized by SERC on this topic, which featured three distinguished speakers:

- Mark Popovich, Senior Program Officer at the Hitachi Foundation;
- Holly Sklar, Director of Business for Fair Minimum Wage; and
- Randy Albelda, Professor of Economics and Senior Research Fellow at the Center for Social Policy at UMass Boston.

The panelists discussed the changing nature of work, the challenges faced by low wage workers including financial insecurity, lack of access to good education and lack of benefits. This is a highly contentious topic which has been in the news recently as fast food workers have agitated for higher pay. A recent poll found that 67% of small businesses support raising the minimum wage and numerous studies have demonstrated that increases in the minimum wage do not lead to job losses. We are presently in a new era of a low wages, concluded the speakers, where we have a larger number of low wage workers (an increase from 27.5 million in 1980 to 42.9 million in 2011). The question of sustainability here turns on whether low wages create social upheaval and destabilize the economy. While low-wages are not yet totally destabilizing, the speakers agreed that they have generated social responses, such as the Occupy movements and fast-food worker walkouts. Read more about the discussion in the event blog at: [http://www.umb.edu/serc/events1](http://www.umb.edu/serc/events1).

**EVENT: THE SUSTAINABILITY/IT NEXUS**

*By Vesela Veleva, Lecturer and Co-Director, SERC*

Close to 120 students, faculty and local business representatives attended this event, featuring Kathrin Winkler, Senior VP and Chief Sustainability Officer at EMC Corp., and
facilitated by Pratyush Bharati, Chair and Associate Professor, Management Information Systems Dept. at UMass Boston. A global business-to-business company with operations in 80 countries, 60,000 employees and sales of $22 billion, EMC is a leading producer of both software and hardware. In her presentation, Ms. Winkler outlined both the positive and the negative impacts of the IT sector. She first discussed how sustainability has brought new business opportunities to IT companies and how customers are increasingly driving such changes. Yet, the industry still has significant environmental impacts including e-waste, consumption of materials, energy and water, and a variety of supply chain impacts related to work conditions, pay, and health and safety. Two more recent challenges facing the industry include privacy and the potential misuse of products. Through the Electronic Industry Citizenship Coalition, competitors are often collaborating to address many of these challenges. As stated by Joel Makower of GreenBiz, “the IT is on a race to the top” in terms of improving its sustainability performance while uncovering new business opportunities. While sustainability jobs per se are rare today, companies like EMC believe that sustainability education is critical for every college major as it is crucial for promoting innovation and identifying new business opportunities.

NEW! CERTIFICATE IN SUSTAINABLE FACILITY MANAGEMENT

By Vesela Veleva, Lecturer and Co-Director SERC

In a collaboration with the College of Professional and Advanced Studies (CAPS) and the International Facility Management Association (IFMA), SERC is launching a new Sustainable Facility Management Certificate in March 2014 to better prepare a variety of professionals – facility managers and coordinators, architects, designers, consultants, and LEED-certified professionals – for more efficient management of buildings and other facilities. Participants will gain access to guest speakers, leading practitioners, and be updated on regulations, financing and available technical assistance. They will tackle real problems and learn how to achieve cost savings and other financial benefits.

The Certificate program covers three main areas:

- Strategy and Alignment for Sustainable Facility Management
- Management of Sustainable Facilities
- Operation of Sustainable Facilities

Completion of the course will prepare participants for the IFMA 3-part assessment which results in obtaining the Sustainability Facility Professional (SFP®) certification. For more information check: http://www.umb.edu/serc/sfp_course.
NEW! SUSTAINABLE BUSINESS ACADEMY

By David Levy, Director SERC and Associate Dean for Graduate Studies and Research

SERC is leading a new initiative to develop a “Sustainable Business Academy” to crystallize the Boston-area regional community of educators, business owners and social change leaders to support the emerging New Economy. The concept of the New Economy is inspiring entrepreneurs, non-profits, policymakers and thought-leaders as a force for environmental sustainability, social innovation, and regional economic growth. Aspirations for the New Economy encompass a range of businesses and grassroots organizations that encourage sustainability in the broadest sense, including local sourcing, environmental and social policies, small and locally-owned businesses, hybrid and B corporations, social entrepreneurs, more inclusive governance structures, and alternative and ‘slow’ capital.

The initiative will be housed at UMass Boston, and will engage SERC, the Entrepreneurship Center, SCORAI - the Sustainable Consumption Research and Action Initiative (www.scorai.org), and faculty from Clark University, Babson College, Simmons College, and the Tellus Institute. The SBA plans to be active in several areas including:

Engagement and Research:
- Engage with local businesses and NGOs regarding the issues facing them as they work to build sustainability into their strategies, operations and impacts, and produce research that is both relevant to solving these issues and has theoretical implications for the scholarly community.
- Quantify and analyze the impact of new economy businesses through research and case studies.

Dialogue
- Develop a forum for mutual learning regarding best practices for business, policymakers and others.
- Become a pipeline for student engagement, through projects, internship opportunities, and jobs.

Curriculum and Lexicon Development
- Develop modules and specializations for curriculum, and share these among faculty participating in the collaboration. Become a leading source of such information within the Boston region and beyond.
- Pursue a Web/Technology presence that publicizes programs and research created through the Academy.

Seminars, workshops, forums and media
- Connect international best practices with the local level through seminars, case studies, and speakers.
- The Academy will convene forums, workshops and conferences to engage key stakeholders and leaders.
UPDATE: ORGANIZATIONS AND SOCIAL CHANGE BLOG

By Stephan Manning, Assistant Professor, College of Management, UMass Boston College

The Organizations and Social Change (OSC) blog from the UMass Boston College of Management has continued to attract a lot of attention from scholars, students and the general public. Since the OSC blog was launched in April 2013, 32 posts and 143 comments have been posted. Users all around the world have viewed these postings about 14,000 times so far. Latest contributions include:

- a post by Julie Nelson on the construction of firms as profit-maximizing machines by many economists;
- a reflection by David Levy on corporate political strategy in the porn industry;
- a critical comment by Suhaib Riaz on the loss of knowledge in largely publication-driven management research; and
- a post by Michael Johnson on the end of privacy through modern company towns such as Facebook’s.

Most popular posts during the year 2013 include:

- a critical reflection by Nick Stewart on the portrayal of women in Britney Spears's latest song 'Work Bitch', and
- a post by Stephan Manning on the Fashion Trap, i.e. the question why Fairtrade-type standards seem to work fairly well in the coffee industry but not in the fashion industry.

The OSC blog also introduces in detail the members of the OSC research group, including the PhD students of the UMass Boston College of Management OSC PhD track. Also, it introduces the various MBA and PhD programs running at the College of Management. Please check out the blog and consider making comments or submitting your own post (around 750 to 1,000 words) to Stephan Manning (Stephan.manning@umb.edu) who will respond on behalf of the editorial team (Ed Carberry, Suhaib Riaz, David Levy, Stephan Manning).

UPDATE: GREEN INTERNSHIPS PROGRAM

By Vesela Veleva, Lecturer and Co-Director, SERC

Green internships are an ideal way for students to obtain hands-on experience and knowledge, develop their professional skills, and improve their ability to find an appropriate job after graduation. Environmental skills and knowledge are increasingly valued in the employment market. In a recent survey, 65% of businesses said they value environmental and sustainability knowledge in job candidates and 78% said that this knowledge would grow in importance in the next five years. In addition, clean energy jobs in Massachusetts have grown over 11% annually over the past 2 years according to a recent MA Clean Energy Center report.

Since it was first launched in November 2012, SERC Green Internships Program has identified and posted over 100 environmental internships and jobs in New England area.
These range from positions at companies, government agencies, academic institutions, and NGOs and are updated on a weekly basis. The program is open to all UMass Boston students, but is particularly appropriate for students enrolled in the **Clean Energy and Sustainability Programs**, including the certificate and the MBA Environmental Management specialization. We are currently collaborating with UMass Boston Career Services to better identify and prepare interested students to take advantage of available internships (see next section about Green Internships Workshop). For a list of currently available internships refer to: [www.umb.edu/serc/internships](http://www.umb.edu/serc/internships).

SERC is inviting companies and other organizations to participate in the program and send their available green internships and jobs (please email [Vesela.Veleva@umb.edu](mailto:Vesela.Veleva@umb.edu)).

**GREEN INTERNSHIPS WORKSHOP**

*By Matthew Power-Koch, UMass Boston Office of Career Services and Internships*

On November 21, 2013, the Office of Career Services in collaboration with SERC held a workshop focused on Green opportunities for UMass Boston students. The workshop was put together to help better prepare our students for Green internships and job opportunities and to ensure that they were “Career Ready”. It was in organized in response to some feedback from SERC Board Members and Industry partners that our students need to be better prepared with presentable professional documents (resume, cover letter). The workshop focused on professional etiquette, how to write a proper email, the importance of customizing your resume and cover letter to each specific opportunity, how to communicate your top 5 skills, and how to follow up properly with potential employers. After the “Career Ready” portion of the presentation, SERC Director David Levy and Co-Director Vesela Veleva presented on the various Green opportunities that are presently available here at UMB. This workshop was the first of its kind and is reflective of how our faculty and programs can work collaboratively with The Office of Career Services and Internships, to help create a pipeline of qualified candidates that are ready to take advantage of the growing opportunities in Green industries.

**REFLECTIONS FROM A GREEN INTERNSHIP**

*By Jonathan Millburg, MBA Candidate and Co-President, Graduate Net Impact Chapter, UMass Boston*

It has been several weeks since I finished my internship, and after reflecting on my experience, I thought I’d share some things that I found interesting and valuable. In sharing this with other students (and other readers) perhaps it may encourage them to look for and participate in internship opportunities offered here at UMass Boston or elsewhere.

I interned for a small start-up in Boston’s innovation district called Energy Compression. This company, a member of the clean tech incubator Green Town Labs, consisted of the
founder/CTO, the CEO and myself, is focused on creating and ultimately manufacturing an air adsorption device that will harness the potential energy of stored air, similar to a battery storing energy, and then releases it on demand. The main difference is that batteries use caustic materials to produce chemical energy where Energy Compression's air storage device uses benign, non-toxic material to store and release energy mechanically. My role at the fledgling company was to conduct market research mainly focused on market segmentation, customer and competitor analysis. I also compiled a library of research material that I gathered over my four month tenure. For my final project I presented a market analysis presentation that included the segmentation of the energy storage market, identifying Energy Compressions target markets, the size and growth pattern of each target market and SWOT analysis of all major competitors.

I learned a great deal, not only about how to perform market analysis, but also about the incredible complexities of the energy grid system. The main take away was the impressive amount of growth that is predicted to take place in the energy storage sector particularly the rise of smart grids. One particular crop of the expansion of smart grids (and driven due to several other reasons including the deregulation of the U.S. utility structure) is the emergence of microgrids. This sector, according to the energy market research group SBI in its 2012 bulletin on microgrids, is predicted to expand dramatically with revenue forecasted to quadruple by 2020 to $16 Billion and an electrical capacity of 6-7 GW in North America alone. This is very good news for companies in the energy storage sector because microgrids are an essential target market. It will also provide new job opportunities for students from engineering, to management, marketing, finance and accounting.

**UPDATE: UMASS BOSTON NET IMPACT ACTIVITIES**

*By Nicole Hamilton, President, UMass Boston Net Impact Undergraduate Chapter*

The Net Impact Undergraduate Chapter hosted and co-hosted some great events this semester, including a Q&A session with Peter DeBruin, VP of the Office of Sustainability at State Street and the SERC Green Internship Workshop. Two members traveled all the way to San Jose, CA to attend the annual Net Impact Conference in October 2013.

For future semesters, the chapter is planning a campus-wide sustainability forum/brainstorm, Net Impact Case Competition, and concert to educate members about organic food and the chemicals in the food we eat. The chapter also plans to host several smaller events with food and drinks covering various environmental and social impact topics. Contact the Chapter President, Nicole Hamilton, at nicole.hamilton001@umb.edu if you want to learn more about Net Impact and upcoming meetings and events. Also, find the Net Impact Undergraduate Chapter on Facebook at [www.facebook.com/NetImpactUMBUndergraduate](http://www.facebook.com/NetImpactUMBUndergraduate). The Chapter works closely with the Graduate Net Impact Chapter at UMass Boston; for information and to join the Graduate Chapter contact Jonathan Millburg at Jonathan.Millburg001@umb.edu.
## BUSINESS INVOLVEMENT AND PARTNERSHIPS

**By Vesela Veleva, Sc.D., Lecturer and Co-Director SERC**

Companies have an important role to play in sustainability programs today helping to better prepare students for future career opportunities by advancing their practical knowledge and skills to tackle complex sustainability challenges. SERC is involved in fostering a variety of partnerships with local companies and organizations, from guest speakers, to internships, class projects, events, and research, among others.

In Fall 2013 **guest speakers** included:

- **Charlie Myers, President, Massachusetts Hydrogen Association**, discussed the challenges and opportunities with fuel cells and the growing number of applications from automobiles to buildings;
- **Don Delikat, Industrial Hygiene Consultant, OSHA Consultation Program**, discussed the business case for improving occupational health and safety in small establishments, and focused in particular on nursing homes in Massachusetts, one of the sectors with the highest rate of non-fatal injuries and illnesses;
- **Rebecca Kaiser, Chief of Staff, Spaulding Rehabilitation Network & Partners Continuing Care**, provided an overview of the Affordable Care Act, as well as the Massachusetts Health Reform and the main challenges and opportunities from the new policies.

As part of his independent study on tidal energy, Mark Gallo, a graduate student pursuing his certificate in Clean Energy and Sustainability, conducted an interview with **John Ferland, Vice President of Project Development at Ocean Renewable Power Company** (the company is currently building the first commercial, grid-connected tidal power system in the U.S. in the Bay of Fundy, Maine).

In partnership with the **New England Clean Energy Council (NE CEC)** SERC faculty has developed two surveys of clean tech companies. The first one aims to examine the role that educational institutions such as UMass Boston and SERC can play in supporting the industry; the second one, to examine the factors behind clean tech cluster development, including supportive policies, supply-chain collaboration, and availability of educated workforce, among others. SERC also participated with an information table in the Global Clean Tech Meet Up in November 2013, seeking further opportunities for student internships and other industry collaborations.

In Spring 2013 we will continue to seek companies’ involvement in our educational programs and research. In addition to guest speakers and research, we will be launching case competition jointly with Net Impact, and a Fellowship Program. If you are interested in participating, please contact SERC Co-Director Vesela Veleva at **Vesela.Veleva@umb.edu**.
**SAVE THE DATE! 2014 GREEN CAREER FORUM**

In Spring 2014 SERC will organize the annual Green Career Forum, providing students with the opportunity to learn more about the environmental and sustainability field, hear from alumni and talk with a variety of local employers. The event will be held on **April 16, 2014, from 4 pm until 6 pm at UMass Boston Campus Center**. This year we are also planning a presentation from the **Bureau of Labor Statistics Green Jobs Initiative** which will include information about the numbers and trends over time in green jobs, their industrial, geographic and occupational distribution, and the wages of workers in such jobs. Companies and other organizations interested in participating in the event can contact SERC Co-Director Vesela Veleva at [Vesela.Veleva@umb.edu](mailto:Vesela.Veleva@umb.edu). Information about last year’s Green Career Forum is available on the SERC website at: [http://www.umb.edu/serc/events1](http://www.umb.edu/serc/events1). More information about the 2014 Green Career Forum and other upcoming events is available at [http://www.umb.edu/serc/upcoming_events](http://www.umb.edu/serc/upcoming_events).

**SERC RESEARCH & ACTIVITIES**

SERC faculty engages in research projects with the aim of exploring the business-sustainability interface and providing businesses and policy makers with a solid foundation for long-term strategic decisions. Our faculty undertakes research that encompasses everything from accounting and finance issues associated with climate risk to sustainability standards to organizational challenges of combining economic and social values and goals. We have recently initiated new research projects on planning and adaptation for coastal flooding risks, and on the development of regional clean-tech clusters within global value chains. A (partial) list of recent publications is below. For more information, please check out the [SERC website](http://www.umb.edu/serc/).

**RECENT PUBLICATIONS BY SERC FACULTY (SELECTED)**


Communications for the Emerging Green Economy (pp. 141-157), New York: M.E. Sharpe.


Zhang, W. “Laboratory profile of the Green Organic and Medicinal Chemistry at the University of Massachusetts Boston” Green Processing and Synth. 2012, 1, 291-293.


Zurawicki L. and M. Habib (2013), Socially responsible cooperation between the government and business social responsibility, in Jonathan Westover (ed.), Socially responsible and sustainable business around the globe, Common Ground, pp. 147-160, B-02-R