

Welcome

to the
University of Wisconsin
Eau Claire



Rebecca Kidnie

UW-Eau Claire Senior Vocal Performance Major Catcher, Division III Championship Women's Softball Team



Ah, Love, but a day!

Amy Beach

Pianist: Stephanie Schmidt





2008 Carbon Emissions Inventory

Isaac Borofka-Webb

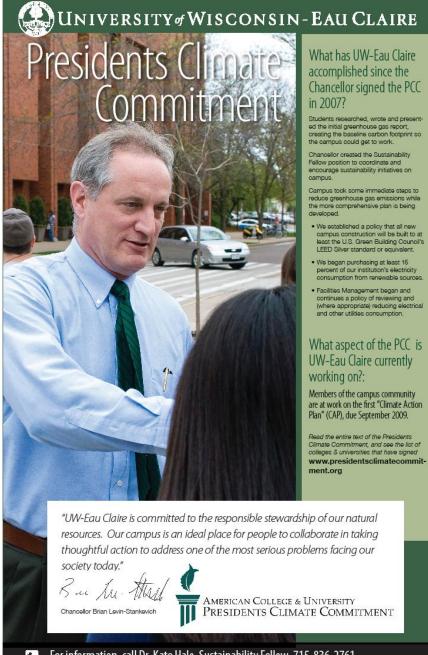
Senior, Economics Major

Robyn Fennig

Senior, Economics Major

Dr. Kate Hale Wilson

Campus Sustainability Fellow



- American College & University Presidents Climate Commitment (ACUPCC)
- UWEC signed in September 2007
- Since Chancellor Brian Levin-Stankevich signed, over 300 institutions have joined
- To date, 655 signatories across the US
- Provide educational opportunities for UW-Eau Claire students



Nationatics

English

Biology

Economics

Geology

Sociology

ZNPI

Political Science

Chemistry

History



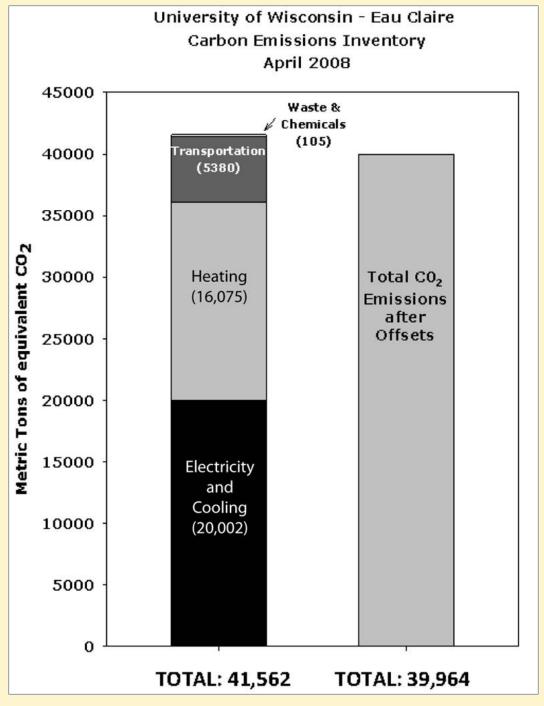
About Our Study

- CNT students decided which components went into the final calculations
- Modeled after a greenhouse gas emissions inventory at Middlebury College in Middlebury, Vermont.



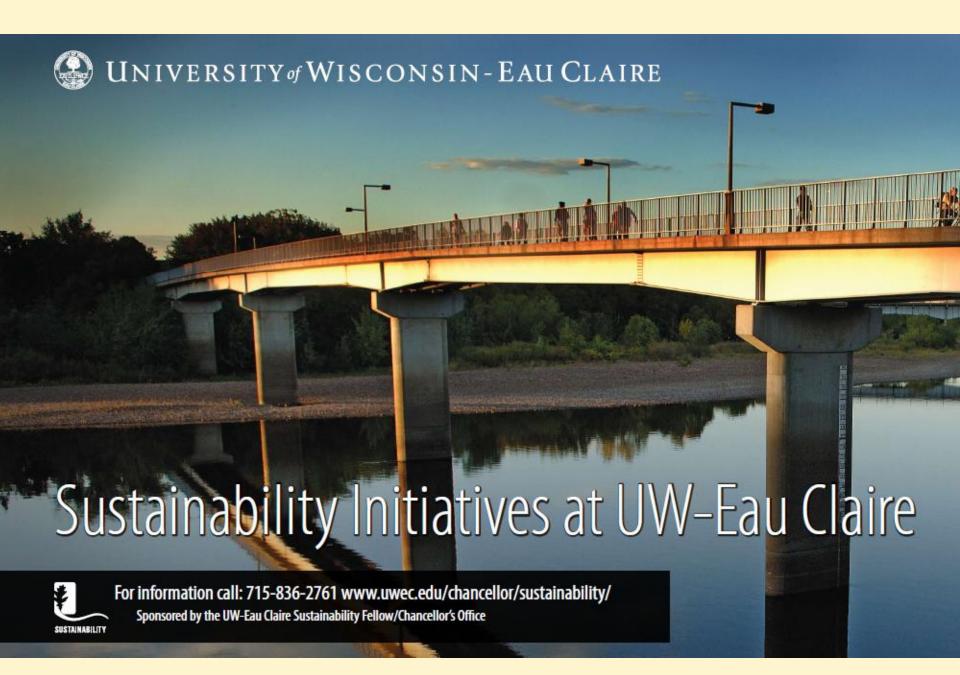
Composite figure

presented at the end
of the semester to
Chancellor Brian
Levin-Stankevich

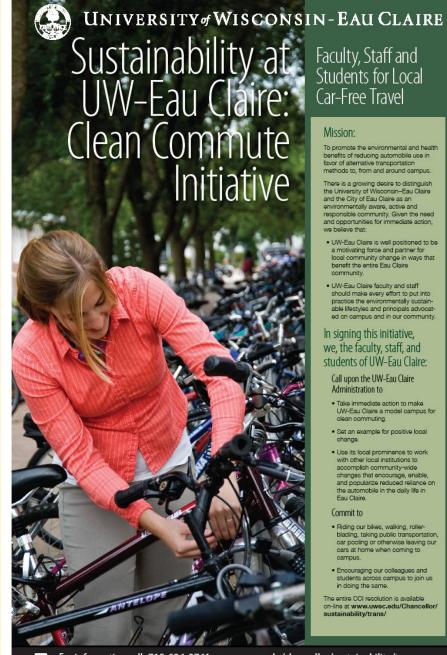




- Recommendations from 2008 Greenhouse Gas Emissions Inventory broken into three categories
- Low Impact
 - Limit number of appliances
 - Recyclemania
- Medium Impact
 - Clean Commute Initiative
 - Reduce campus parking
- High Impact
 - Window upgrades
 - Improved lighting
 - Heating Plant Upgrades
 - Fuels, gas turbine, geothermal technology
 - LEED Certification



NIVERSITY & WISCONSIN-EAU CLAIRE UW-Eau Claire consumes between 22 and 27 percent renewable electrical energy from sources of hydro, wind and RDF (refusederived fuel). Additionally, since Fiscal Year 2005, energy use per gross square foot has been reduced by 6.8 percent. Custodial Services, already using Green Seal-certified cleaning products for many years, just started using a new technology that employs activated ionized tap water - instead of a chemical cleaner - for normal cleaning of floors and general surfaces. This technology reduces VOCs and stops sending chemicals and packaging into the waste stream For fiscal year 2007-08. Veolia removed a total of 1,954,180 pounds of refuse from UW-Eau Claire, including 543,160 pounds of recycling materials - so the university's waste diversion rate is 28 percent. The purchase of one electric truckster and three NEVs (Neighborhood Electric Vehicles) will save 1,200 gallons of fuel annually. The addition of a Toyota Prius Hybrid to the Rental Fleet vehicle system will save an estimated 480 gallons of fuel An Upper Campus Chilled Water Distribution System, under construction, will eliminate 2 one-time-through water-cooled A/C condensers in Towers Hall (along with 3 other chillers!) This change will save 90,000 gallons of water annually. Sustainability at UW-Eau Claire: Facilities Planning and Management continues to practice an IPM (Integrated Pest Management) program that minimizes the use of pesticides. A "Biological Turf Management" program, in place for several years, uses a blend of organic and synthetic fertilizer products - and regular soil tests Facilities Management allow us to apply this only as required rather Systematically, campus buildings are being analyzed for lighting renovation projects (number of lamps, wattage, ballasts and occupancy sensors). Lower wattage lamps and ballasts were installed in Schneider Hall, Maintenance and Central Stores, the McPhee gymnasium, Phillips Hall and the Library. Over 5000 lamps were removed and will not be replaced. These changes save -224,200 kilowatt hours (\$14,500!) annually. Lighting renovation for Ade Olson and Zorn Arena are planned next.



Faculty, Staff and Students for Local Car-Free Travel

To promote the environmental and health benefits of reducing automobile use in favor of alternative transportation methods to, from and around campus,

There is a growing desire to distinguish the University of Wisconsin-Eau Claire and the City of Eau Claire as an environmentally aware, active and responsible community. Given the need and opportunities for immediate action

- UW-Eau Claire is well positioned to be a motivating force and partner for local community change in ways that benefit the entire Eau Claire
- · UW-Eau Claire faculty and staff should make every effort to put into practice the environmentally sustainable lifestyles and principals advocated on campus and in our community.

In signing this initiative, we, the faculty, staff, and students of UW-Eau Claire:

Call upon the UW-Eau Claire Administration to

- · Take immediate action to make UW-Eau Claire a model campus for clean commuting
- change.
- · Use its local prominence to work with other local institutions to accomplish community-wide changes that encourage, enable and popularize reduced reliance on the automobile in the daily life in Eau Claire.

Commit to

- · Riding our bikes, walking, rollerblading, taking public transportation, oar pooling or otherwise leaving our cars at home when coming to
- Encouraging our colleagues and students across campus to join us in doing the same.

The entire CCI resolution is available on-line at www.uwec.edu/Chancellor/ sustainability/trans/

For information call: 715-836-2761 www.uwec.edu/chancellor/sustainability/trans Sponsored by the UW-Eau Claire Sustainability Fellow/Chancellor's Office



- Robyn
 - Serve as student-mentor to the Carbon Footprint Course, Spring 2009
 - Graduate School Plans
- Isaac
 - Climate Action Plan (CAP)
 - Study abroad



Materials Science Center

Dr. Douglas Dunham

Director, Materials Science Center

Dr. Marcus McEllistrem

Director, Materials Science Center Academic Programs

Patrese Hoffman

Senior, Physics Major

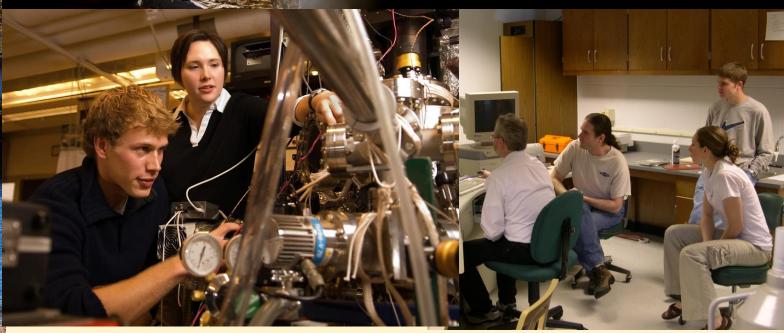
The University of Wisconsin-Eau Claire Materials Science Center





Mission:

Student-faculty research K-12 Outreach Industrial Outreach





NanoSTEM DIN (UW System Growth Agenda)

- 1. Educating more students in advanced STEM disciplines, including nanotechnology, biotechnology, polymer engineering and computer and electrical engineering;
- 2. Providing access to state-of-the-art science and engineering facilities and expertise for both students and regional businesses and industry as more public-private partnerships are promoted and sustained in the Chippewa Valley region to provide a positive economic impact for knowledge and technology based industries;
- 3. Building a three-pronged workforce skill set of science, engineering, and technology through which to attract and retain the high-end employers of tomorrow.



K-12 Outreach

Altoona Durand Augusta Fall Creek Eau Claire Eleva-Strum Osseo-Fairchild Chippewa Falls Prescott Mondovi Gilmanton Stratford





Industrial Outreach

- •CleanWater Solutions
- Catalytic Combustion
- •Northern Engraving
- •Silicon Graphics Inc (SGI)
- •Cardinal Glass 3 plants (WI, OK, NC)
- •Earth Mimic
- •Extrusion Dies Inc
- •OEM Fabricators/OEM

Micro

- •Nestle
- •Linetec
- Phillips Plastics
- •Phillips Metal Injection Molding

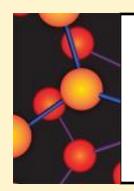
- •Phillips Multi-Shot
- •US Filter/Siemens Water Technologies
- •Resonant Microsystems
- Microassembly
- Altoona Lake District
- •Swanstrom Tools
- •TaylorMade Products
- •CoolScience
- Steve's Scoring
- •Atlas Materials Testing
- McMillian Electric Company
- •All Metal Stamping
- •Elemental Scientific Inc



Collaboration with Resonant Microsystems

- A new high tech company in the Chippewa Valley
- Materials characterization by the Materials Science Center
- Currently at 13 employees
- Employs 3 UWEC interns
- Projected to be to 30 employees by the end of next year





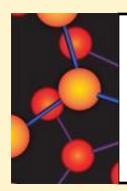
Center for Adaptive Microsystems

A collaboration between:

- Engineers at Resonant Microsystems
- Faculty at Purdue University
- Faculty at UW-Eau Claire
- Faculty at CVTC
- Faculty at UW-Stout

Focal Project
Nanoswitches





Center for Adaptive Microsystems

At present:

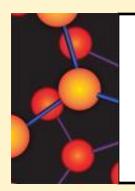
- CVTC: NanoRite
- Purdue: Design (and results from prototype)
- UW-Eau Claire: Characterize contacts
- Resonant Microsystems: Manufacturing
- UW-Stout: Manufacturing Engineering

Resonant Microsystems has purchased a \$350,000 instrument that will be housed at UW-Eau Claire

Prospective collaborators:

• Faculty at sister UW campuses could bring expertise in new materials for nanoswitches.





Center for Adaptive Microsystems

An Emerging Technology Center!?

- Opportunity for intense collaboration on a well-focused, industrially relevant project
- Opportunity to connect with other announced Emerging Technology Centers, especially at UW-Stevens Point, UW-Platteville.



A Student's Perspective – Patrese Hoffman

Student Outreach:

- 4th grade High school
- In school presentations as well as activities arranged at UWEC





A Student's Perspective – Patrese Hoffman

Undergraduate Research:

- Atomic Force Microscopy (AFM)
- Scanning Electron Microscopy (SEM)
- X-ray Photoelectron Spectroscopy (XPS)





A Student's Perspective – Patrese Hoffman

Engineering Internship:

- Experience working for a small business
- Practice applying skills in real world situations unfamiliar to the university environment.







LA SED

Latin American Sustainability Education & Development

Margaret McInnis

Junior, Political Science Major, Treasurer

Cory Ploessl

Senior, Art-Ceramics Major, President

Kristin Racchini

Senior, Spanish Major, Vice-President

Meghan Sluga

Senior, Spanish & Social Work Majors, Secretary

Analisa De Grave

Associate Professor of Spanish & Latin American Studies

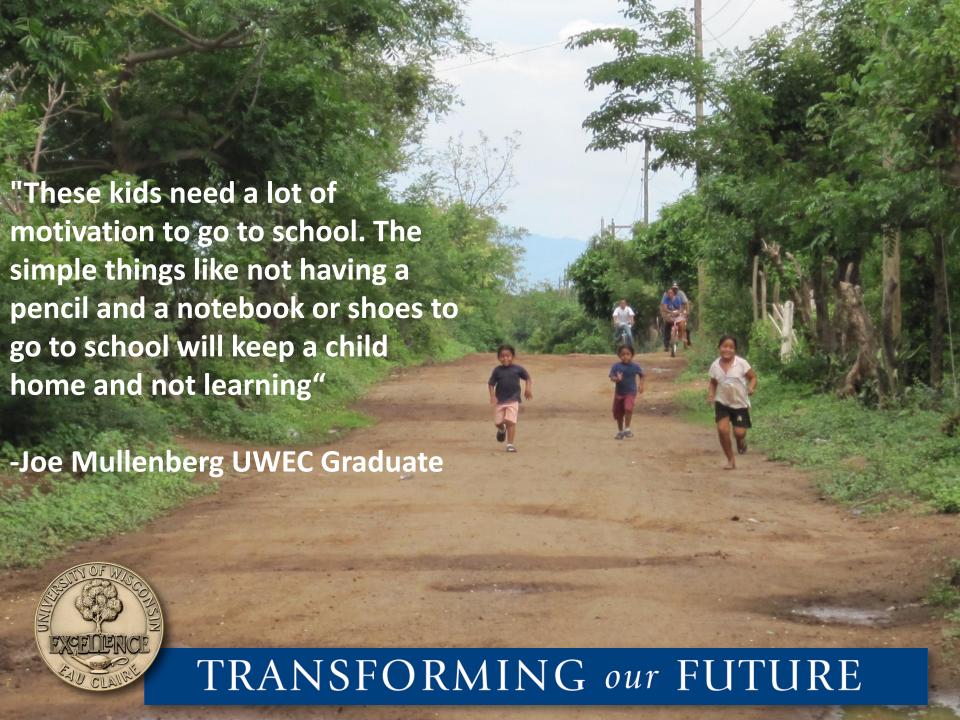


Building a Global Community

How Study Abroad
Transformed Our
Future

































Civil Rights Pilgrimage



Jodi Thesing-Ritter, *Associate Dean of Students*Sarah Gonzalez, *Senior, Psychology Major*Anthony Och, *Senior, Sociology Major*Janna Caspersen, *Junior, Geography Major*

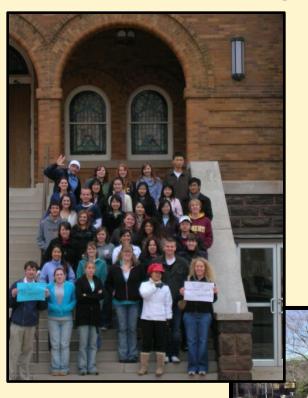


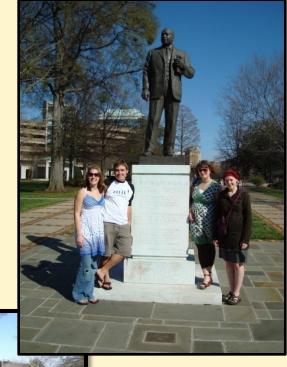
Atlanta, Georgia





Birmingham, Alabama







Montgomery, Alabama

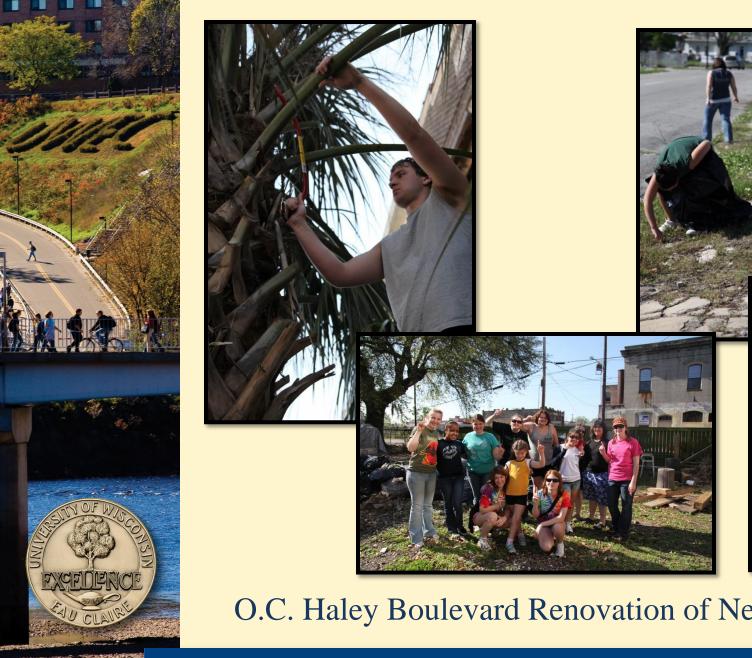






Selma, Alabama





O.C. Haley Boulevard Renovation of New Orleans



Little Rock, Arkansas





I had something to do with that.



Memphis, Tennessee

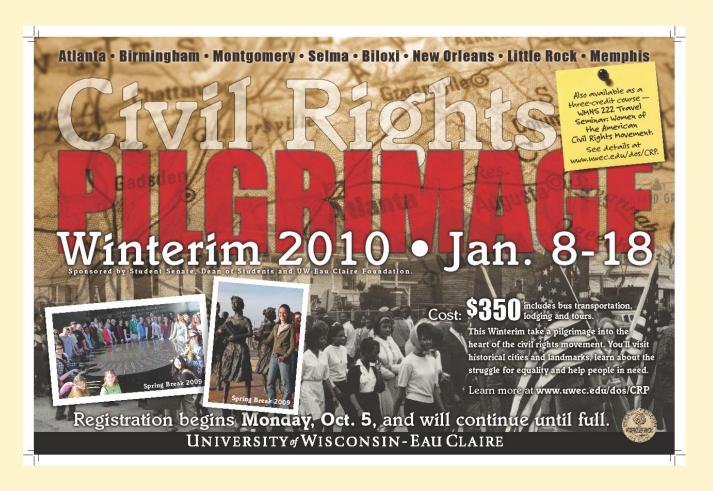




Visiting Minority Scholar







http://media.uwec.edu/Civil Rights 2009/Civil
Rights 1024.asx



Research

The Modern Racism Scale

- 1. Over the past few years, the government and news media have shown more respect to Blacks than they deserve.
- 2.It is easy to understand the anger of Black people in the United States. (Reverse scored).
- 3. Discrimination against Blacks is no longer a problem in the United States.
- 4. Over the past few years, Blacks have received more economically than they deserve.
- 5.Blacks have more influence upon school desegregation plans than they ought to have.
- 6.Blacks are getting too demanding in their push for equal rights.
- 7.Blacks should not push themselves where they are not wanted.

Note. From McConahay, J.B. (1996). Modern racism, ambivalence, and the modern racism scale.



NCORE Presentation



