Students & the Sustainable Future

A True Story of the Astonishing and Amazing Power of Students to Change a University and, Quite Possibly, the World

ROOSEVELT UNIVERSITY

Admitted Student Day

Chicago IL | 29 April 2017

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Who am I? Why am I here?

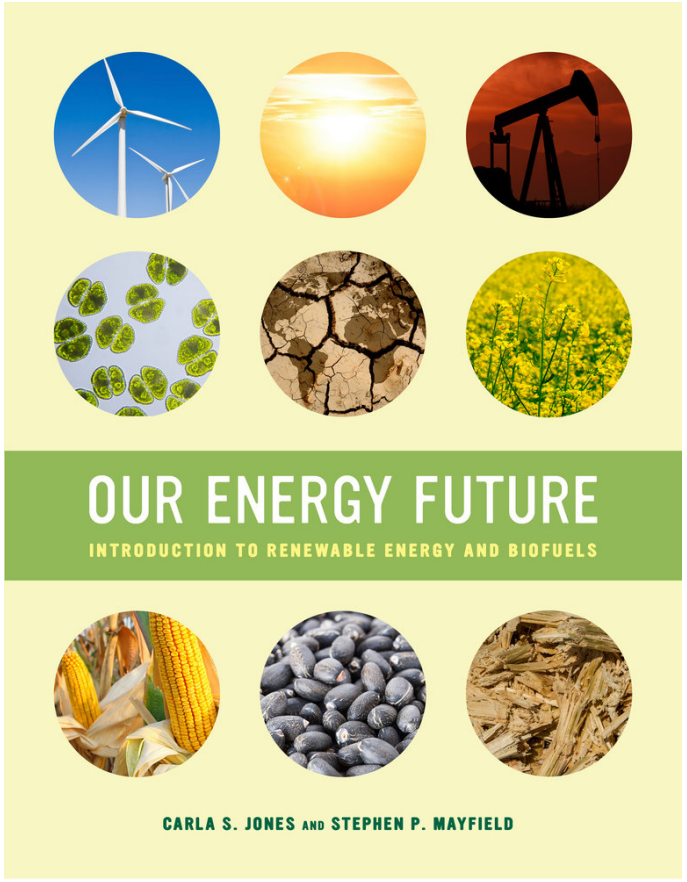
At Stearns Quarry Park in Chicago w/ CIMBY students, Summer 2013

What Does a Sustainable Future Look Like?

SUST 250 students explore the restored prairie at Canal Origins Park in Chicago, 19 April 2017 (photo: M. Bryson)

What Does a Sustainable Future Look Like?

Mr. Will Allen -- Urban Farmer, Founder of Growing Power, & Sustainability Entrepreneur



2016 Book by SUST Adjunct Professor and Oceanographer, **Dr. Carla Jones** (U Cal Press)

What Does a Sustainable Future Look Like?

Hiking Northerly Island, 2011
(photo: L. Bryson)

Environmental resources are conserved for both future human generations as well as non-human biota.

Economic development occurs not at the expense of the natural environment, but in a way to mitigate ecological costs and impacts.

Equity – social, economic, and environmental justice – governs the process of sustainable development.

Sustainability

The 21st Century's Greatest Imperative

Science Students at RU:
in the field and in the lab

Climate Change

Biodiversity Loss

Urbanization & Population Growth

Pollution

Clean Energy

Economic Development

Sustainable Agriculture

Social Justice & Equity

Environmental Stewardship

Sustainability at Roosevelt

In Full Gear Since 2010

Sustainable Buildings & Operations

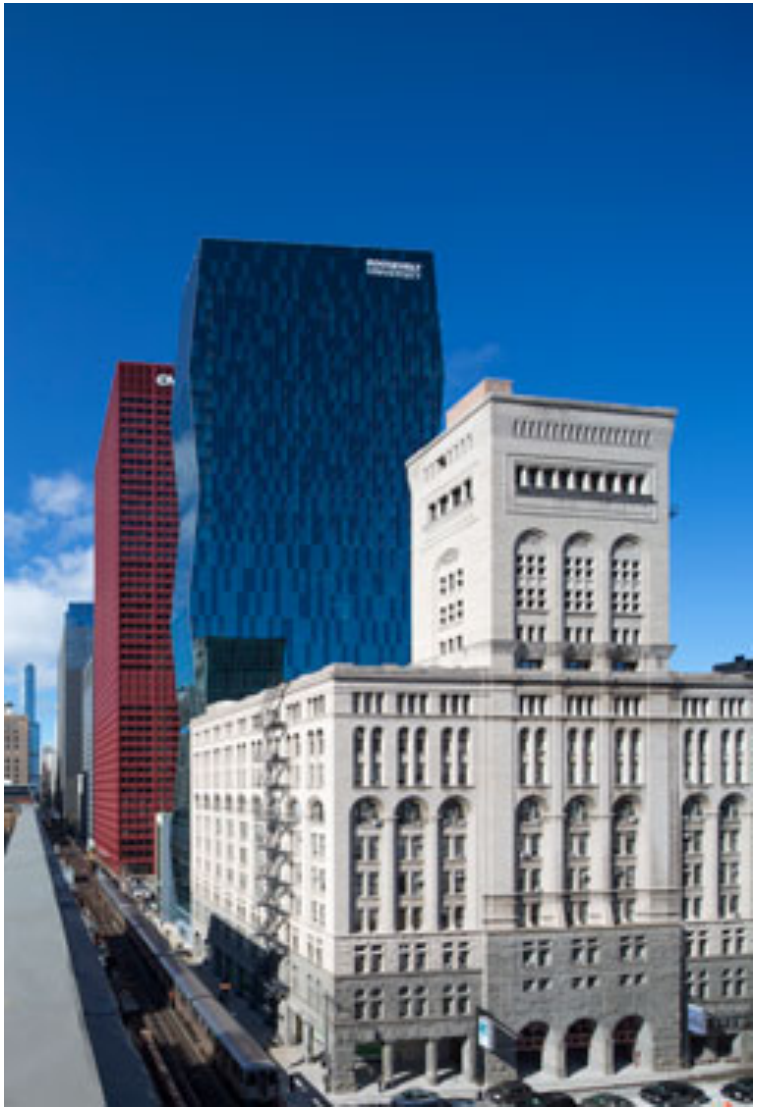
- Wabash Building (LEED Gold)
- Goodman Center (LEED Silver)
- AUD retrofits
- Schaumburg Campus Redevelopment

Academic Innovation

- Sustainability Studies undergrad program est. Fall 2010 (1st in Chicago region)
- SUST Student Symposium (biannual)
- Environmental Science Minor
- Civic Engagement through STEM
- Service Learning & Internships
- Strategic Sustainability Plan 2015-20

Student Organizations & Activism

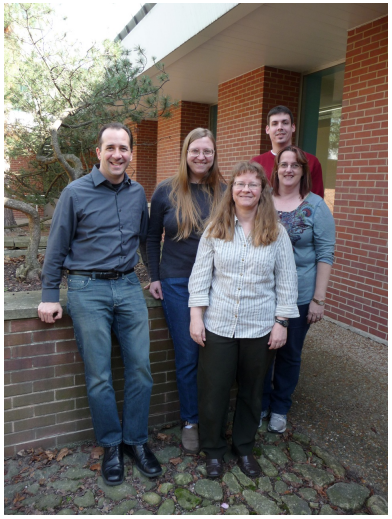
- RU Green (environmental advocacy)
- Net Impact (business and sustainability)
- RU Reforesting (conservation biology)
- RUrbanPioneers (Schaumburg garden)
- RISE (student activism & social justice)



Sustainability at Roosevelt

Faces and Places

Sustainability Studies



Science & Math

Bennett Institute
of Real Estate

Hospitality & Tourism
Management

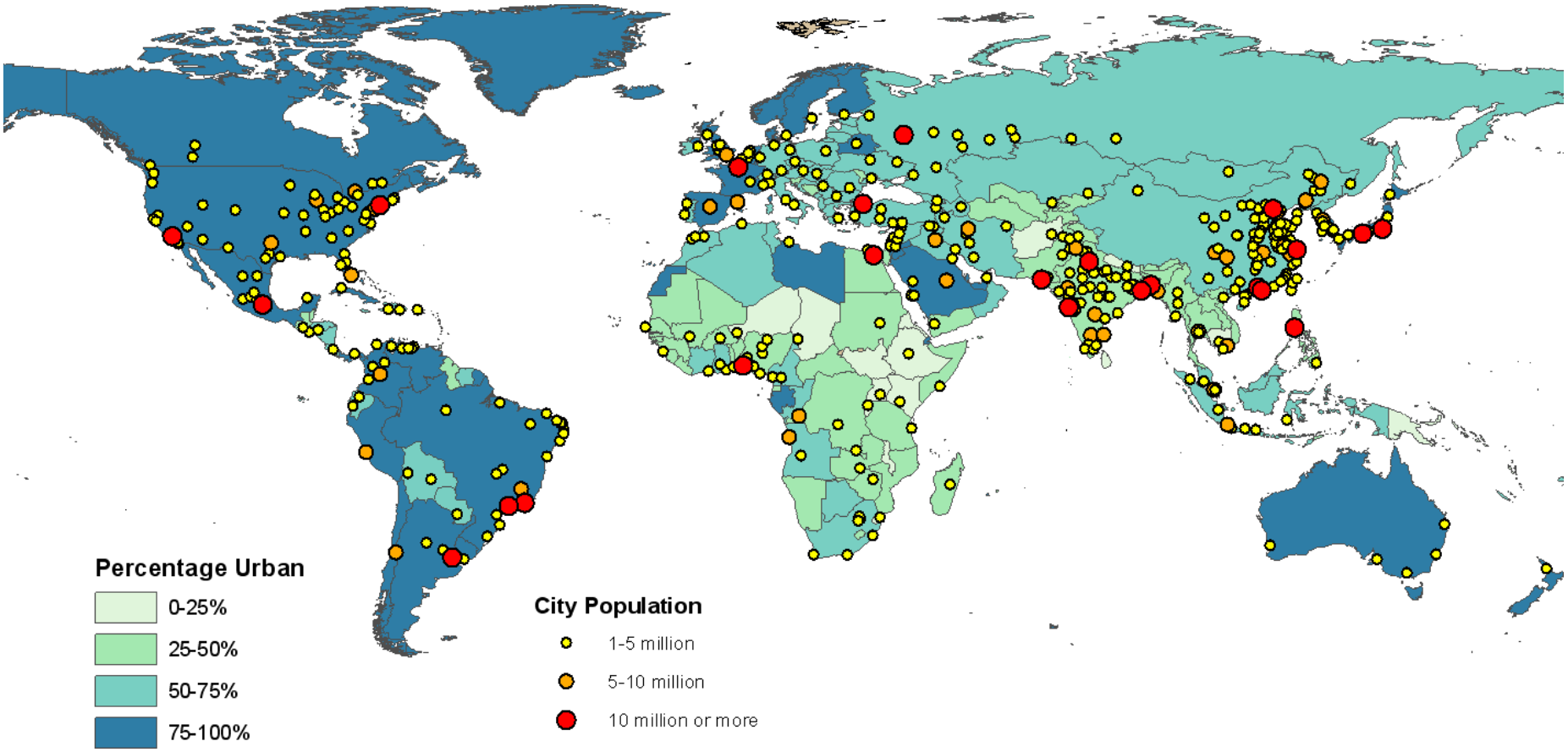
Environmental Science

Mansfield Institute for
Social Justice

Chicago: An Urban Laboratory for Sustainability, Science, & Service

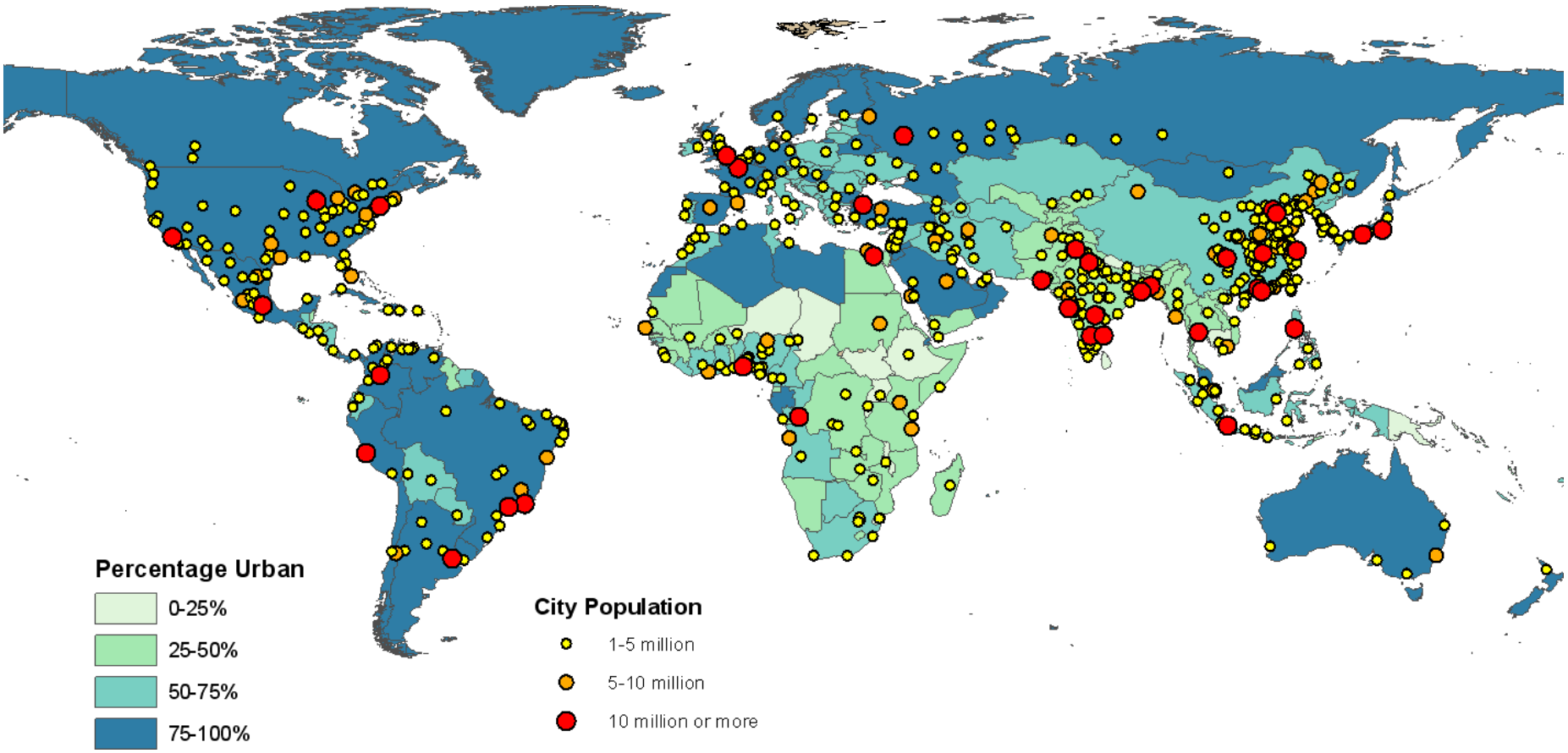
SUST 350 Service & Sustainability, Fall 2014
Planting trees at Eden Place Nature Center in Chicago's Fuller Park neighborhood

Global Urbanization in 2011



Source: United Nations, Department of Economic and Social Affairs, Population Division. *World Urbanization Prospects, the 2011 Revision*. New York, 2012.

Global Urbanization: 2025 Projection



Source: United Nations, Department of Economic and Social Affairs, Population Division. *World Urbanization Prospects, the 2011 Revision*. New York, 2012.

Cities as Human Ecosystems

Chicago in 1857 (source: Chicago History Museum)

Water: Exploring the Chicago River

Understanding the river as a modified natural ecosystem (natural sciences)

Developing conservation policies (social and natural sciences)

Representing the river as a cultural resource (arts and humanities)

Restoring the river: water quality, biodiversity, riparian zone integrity, citizen access and recreation (all disciplines)

Sense of Place | Urban Sustainability

Assessing Water Quality (Chemistry)

Temperature

pH

Turbidity

Dissolved oxygen (DO)

Nutrients (nitrate, phosphate)

Bacterial indicators (coliform)

Metals and organic contaminants (lead, copper, benzene, PCBs, hexavalent chromium)

Emerging contaminants (pharmaceuticals, synthetic hormones, flame retardants)

Assessing Water Quality (Biology)

Sampling macro-invertebrate benthos in the North Branch, May 2010 (M. Bryson)

Engaging the Community thru Science

Identifying macro-invertebrates from the North Branch, May 2010 (M. Bryson)

Canoeing the River

RU canoe trips on the Chicago River, 2009- (M. Bryson)

Science: Research at the Field Museum

SUST major Kristina Lugo (BPS '16) and alum Colleen Dennis (BA '15) interned at the Field Museum of Natural History, Chicago IL; SUST 330 Biodiversity taught onsite at museum by Prof. Julian Kerbis Peterhans (aka "Illinois Jones")

Recycling: Conducting Campus Waste Audits

SUST 240 Waste students conduct a waste audit of WB and AUD,
Fall 2014 (M. Bryson)

Composting: Putting Food "Waste" to Work

SUST 250 Sustainable University students conduct Compost Pilot Project in Spring 2017 to reduce food waste on RU's Chicago Campus
(poster design by R. Avidi and E. Vuillemot; photo by E. Vuillemot)

Food: Tending an Urban Farm

SUST students working at the Chicago Lights Urban Farm, 2013 (M. Bryson)

People: Fighting for Environmental Justice

Recognize this guy?

Chicago EJ Advocates: Kim Wasserman of LVEJO, 2014 (left);
Hazel Johnson of People for Community Recovery, 1989 (photos: LVEJO, PCR)

Sustainability Internships, Fellowships, & Travel

SUST students have blogged about internships, fellowships, and study abroad experiences at (clockwise from upper left) Southern IL Univ, the Field Museum, Uncommon Ground (Chicago), Iceland, Appalachia, the Center for Neighborhood Technology, Growing Power, and more.

Students Are Driving Us Forward

SUST 250 students perform waste audit, Spring 2017 (photo: M. Bryson)

On the Campus:

- Environmental literacy
- Sustainability education
- Research symposia
- Student and staff engagement
- New student orientation
- Green living & learning communities (new for F17!)
- Waste reduction & recycling
- Energy conservation
- GHG mitigation

SUSTAINABILITY TRACKING, ASSESSMENT & RATING SYSTEM
stars
a program of aashe
BRONZE

Students Are Driving Us Forward

Workday at Eden Place Nature Center, Nov. 2014 (C. Dennis)

In the Community:

- Sustainable development research & activism
- Open space conservation & environmental restoration
- Soil / air / water quality analysis
- Environmental justice advocacy
- Community sustainability asset mapping

Building on the Past, Staking out the Future

SUSTAINABILITY TRACKING, ASSESSMENT & RATING SYSTEM
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BRONZE ®

RU students were instrumental in these watershed accomplishments:

Strategic Sustainability Plan, adopted Spring 2015;
STARS Assessment Report, submitted Fall 2015

Everybody Can Ride this Bus!

Emily (Lisle, IL), **Arlene** (S. Side Chicago), **George** (Sussex, England), and **Jesse** (Cleveland, OH) at Eden Place Nature Center, Nov. 2014 (photo: M. Bryson)

ROOSEVELT UNIVERSITY

Vital and Incredibly Interesting Online Resources

Sustainability Studies @ RU
Blog (e-subscribe!) for news, critical analysis, and student writing

RU Green Campus
All things sustainable at Roosevelt

Schaumburg's Sustainable Future
Student website/blog (e-subscribe!) featuring suburban ecosystems & environmental justice

SUST on Twitter & Facebook
(news, events, people, stories)

Prof. Bryson's Faculty Website/Blog
(lots of key resources)

It's all about the journey . . .

Canoeing the North Branch of the Chicago River, Fall 2014
(photo: M. Hoffman)