# RCAS Summer Tour
# September 9-12, 2012
# Peoria – Springfield –Champaign-Urbana, Illinois

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## Preliminary Agenda

### Sunday – September 9, 2012

**3:00 p.m. – 5 :00 PM** RCAS Business Meeting – Jameson Inn

***Dinner will be on your own Sunday evening. Paul is providing a list of restaurants you might want to consider.***

**Hotel:** Jameson Inn Peoria
4112 N. Brandywine Dr.
Peoria, Illinois 61614
309-685-2556
http://www.jamesoninns.com/locations/peoria.html

## Monday – September 10, 2012

8:00 – 12:00

USDA National Center for Agricultural Utilization Research (NCAUR)
http://www.ars.usda.gov/main/site_main.htm?modecode=36-20-00-00
Host: Paul Sebesta, Center Director

The multi-disciplinary research staff at NCAUR focuses on metabolic engineering, fermentation, food safety, environmental quality, biomaterials and processing technologies. Hundreds of commercial products have been developed from the results of more than 60 years of research, with economic benefits that defy measure. The investments made in basic and applied research programs generate new products and technology from US agricultural commodities, contribute to the public good and continually improve our quality of life.

After reviewing and recognizing the impact of some historic accomplishments at this laboratory, you'll see how the work of NCAUR scientists in the past helped create the future we live today. Once you've glimpsed the potential of some current projects, you'll see how the visionary work of NCAUR scientists today is impacting the future we will live tomorrow.

**12:00** Box Lunch

**1:00** ?
Caterpillar Edwards Demonstration and Learning Center
http://www.cat.com/cda/layout?m=160161&x=7

The Edwards Demonstration and Learning Center - where you can experience progress hands-on. Imagine a facility where you can operate equipment in a real field setting, then step right into a high-tech classroom or meeting room. You'll see, learn about, operate, and service the latest Caterpillar equipment in an environment unlike any other.

Though every square foot of this Cat resource reflects truly advanced technology, it's nestled in 720 acres of unspoiled Illinois prairie. This setting serves not only as a beautiful backdrop, but as a reminder of the importance of being good citizens of the planet. In short, it's a place where people and products unite in order to better utilize, improve, and preserve our planet.

Monday Evening:

**Hotel**: Jameson Inn Peoria

## Tuesday – September 11, 2012

### Check out of Jameson Inn

**7:45 AM** Bus departs for Springfield, IL

**9:45 AM** Abraham Lincoln Home National Historic Site
8th & Jackson Streets
Springfield, Illinois
http://www.nps.gov/liho/index.htm

The home of Abraham and Mary Lincoln has been restored to the Lincoln period, and is surrounded by 13 other historic houses that are preserved in a four-block, nineteenth-century setting. Lincoln Home National Historic Site preserves the Springfield, Illinois home and an historic district where Abraham Lincoln lived from 1844 to 1861, before becoming the 16th President of the United States. The presidential memorial includes the four-blocks surrounding the home and a visitor center.

The house, purchased by Lincoln and his wife, Mary Todd Lincoln in 1844, was the only home that Lincoln ever owned. Located at the corner of Eighth and Jackson Streets, the house contains twelve rooms spread over two floors. During the time he lived here, Lincoln was elected to the House of Representatives in 1846, and elected President in 1860.

**11:15 AM** Abraham Lincoln Presidential Library and Museum
212 N Sixth Street,
Springfield, IL
http://www.alplm.org/ (Best viewed in Internet Explorer)

Box lunch from Subway provided at the site.

The Abraham Lincoln Presidential Library and Museum documents the life of the 16th U.S. President, Abraham Lincoln, and the course of the American Civil War. Combining traditional scholarship with 21st-century showmanship techniques, the popular museum continues to rank as one of the most visited libraries. It is located in Springfield, Illinois and is operated by the Illinois Historic Preservation Agency, a governmental agency of the state government of Illinois. It is not affiliated with the U.S. National Archives and its system of Presidential Libraries.

**Tuesday, September 11, 2012 continued..**

**3:00 PM** The Lincoln Tomb
Located in Oak Ridge Cemetery
Lincoln Tomb & War Memorials
1500 Monument Ave, Springfield,
http://www.illinoishistory.gov/hs/lincoln_tomb.htm

Dedicated in 1874, Lincoln Tomb is the final resting place of Abraham Lincoln, his wife Mary, and three of their four sons, Edward, William, and Thomas. The eldest son, Robert T. Lincoln, is buried in Arlington National Cemetery. Also on the site is the public receiving vault, constructed ca. 1860, the scene of funeral services for Abraham Lincoln on May 4, 1865. In 1960 the Tomb was designated a National Historic Landmark and was placed on the National Register of Historic Places in 1966.

The Tomb's interior is accessible to persons with disabilities. The exterior upper deck is not. The Oak Ridge Cemetery public receiving vault, the scene of President Lincoln's funeral, is located at the base of a hill north of the Tomb.

**3:45 PM** Depart for Champaign

**5:30 PM** Check in Hotel

Hawthorn Suites
101 Trade Centre Drive
Champaign, IL 61820
(217) 398-3400
http://www.hawthorn.com

**6:30 PM** Dinner – ACES Library, Information, and Alumni Center
Cash Bar
Entertainment

## Wednesday – September 12, 2012

### Check out of Hawthorn Suites

**8:00 AM** Energy Biosciences Institute,
Feedstock Development Research Farm
http://www.energybiosciencesinstitute.org/index.php

The Energy Biosciences Institute (EBI), largest public-private partnership of its kind in the world, was created in 2007 to address one of the 21st Century's greatest challenges – finding a technological solution to the problems associated with climate change, global warming, and the rising price and diminishing supplies of carbon-based fossil fuels.

The partner institutions – the University of California, Berkeley; the University of Illinois at Urbana-Champaign; the Department of Energy's Lawrence Berkeley National Laboratory; and the international energy company BP, which funds the research – are addressing bioenergy concerns on several fronts. Their 10-year, $500 million quest seeks sustainable, environmentally friendly plant-based fuels to join a balanced portfolio of responsible, renewable energy sources.

The EBI is comprised of more than 70 programs and projects involving over 300 scientists and students engaged in investigations within five multidisciplinary fields.

**10:30 AM** SOYFACE Experiment
Genomic Ecology of Global Change
http://www.igb.uiuc.edu/research-areas/genomic-ecology

Project focus is on how ecosystems — complex ecological communities and their environments — respond to rapid changes in climate? Human activities are altering the composition of the atmosphere, affecting the Earth's climate, and introducing invasive species. Naturally, such changes alter the capacity of native and agro-ecosystems to provide critical goods and services, including food, fiber, fuel, clean air, and fresh water.

The Genomic Ecology of Global Change Research Theme investigates:

How changes in networks of genes affect ecosystem metabolism when challenged by elements of global change, including elevated atmospheric carbon dioxide and ozone, increased drought, and altered interactions with insect herbivores and plant pathogens

How information obtained from genomes and metabolomes may be used to predict the effect of environmental changes on ecosystem function

How this information can be formulated into an overarching framework of mathematical modeling

The University of Illinois at Urbana-Champaign has the only facility in the world for studying the interacting effects of and rising levels of carbon dioxide and ozone with biotic and abiotic factors on plants under open-air conditions. IGB researchers are in a unique position to examine the effects of global atmospheric change on the transcriptome and metabolome of agro-ecosystems.

Theme research will focus on agro-ecosystems with significant economic impact and could potentially lead to the development of biorational products for agricultural pest and disease management. Further benefits may include improved quality of ecosystem health, and a better understanding of the environmental implications of various energy supply options.

**12:00 Noon** Lunch at IGB
The Institute for Genomic Biology
1206 West Gregory Drive
Urbana, IL 61801

**1:00 PM** Overview of IGB
Tour of IGB Facility

The IGB is housed in a $75 million, 186,000 square foot state-of-the-art facility. Construction began in April 2004 and was completed in November 2006. The building was dedicated in March 2007. The building design facilitates collaboration between researchers and provides space to advance technology transfer, education, and engagement with partners in genomic biology. Each research area is housed in a Thematic Lab Module, which includes facilities for biology, bioengineering or chemistry, and bioinformatics. The construction and daily operation of the Institute is funded by the state, while the research programs are supported mainly through external funding from the federal government, corporations, and foundations.

IGB Research Areas: The mission of the Institute for Genomic Biology (IGB) is to advance life science research at the University of Illinois at Urbana-Champaign and to stimulate bio-economic development in the state of Illinois. To achieve that mission, our research themes capitalize on recent advances in genome science and technology.

Research at the IGB falls under one of three Program Areas:

Systems Biology

Cellular and Metabolic Engineering
Genome Technology

Most research themes are part of the Systems Biology and Cellular and Metabolic Engineering Program Areas. These Themes use genomically sequenced microbial, plant, or animal species (including insects) as model or target organisms. The goal is to achieve integration within life kingdoms and across Program Areas, as well as higher order interactions among the Research Themes.

Research within the themes focuses on significant problems facing humanity, such as treating chronic human diseases, managing new and emerging pests and pathogens, and maintaining an abundant and healthy food supply. IGB is also home to programs that explore the ethical, legal, and social issues arising from the genomic research.

**3:00 PM** The Morrow Plots
http://agronomyday.cropsci.illinois.edu/2001/morrow-plots/

The Morrow Plots are the oldest continually used experimental agricultural fields in the United States and also the first soil experimental plots by a United States college. They are also the second oldest in the world, second only to the Rothamsted Field, founded in 1843 in England. They were founded in 1876 by Manley Miles, a professor in agriculture, and George Morrow, the first dean of agriculture at the University. Only 3 of the 10 original plots survive, with the observatory claiming 2 plots in 1895 and five others being given back as grassy areas in 1903. Little has changed since 1903 and over almost 150 years of use, the plots have provided invaluable data on the effects of crop rotation, natural soil nutrient depletion, and effects of various man-made and natural fertilizers on crop yield.

The remnants of the fields, now located at Gregory Dr. at Matthews Ave. in Urbana, were designated a National Historic Landmark on May 23, 1968. The fields are still actively used, and "corn samples are taken to measure yield each year. A small sample of corn from each plot is saved for future analysis. The remaining corn is brought out to the South Farm and stored in our grain bins until it is marketed".

**3:30 PM** Depart for Peoria

**5:30 PM** Arrive at Jameson Inn
Check in if you have made reservations

**Tour Concluded**