

# GOALS AND OBJECTIVES FOR SUMMER 2009



GLOBAL CHANGE EDUCATION PROGRAM



# Summer Undergraduate Research Experience - SURE

## Orientation Workshop – Kennewick, WA - Pacific Northwest National Laboratory

What is DOE Office of Biological and Environmental Research (BER) doing in Global Change Research?

Climate Modeling – Atmospheric and Ecology Research

How to Succeed in Graduate School Applications, and More!

**Research Experience – Mentoring!**

Opportunity to do hands on work in Global Change Study Areas!



**Summer Undergraduate Research Experience (SURE)**

**Graduate Research Environmental Fellows (GREF)**

**Orientation for NEW SURE**

**FOUR GREF STUDENT LECTURES.. Chance to talk to successful Graduate Students about Graduate Schools and Programs..**

**SURE  $\Rightarrow\Rightarrow\Rightarrow\Rightarrow$  GREF!**

**ELECTRONIC PRESENTATION**

**– SUBMITTED FOR WEBSITE! DUE in Late August!**

**USED AS PART OF YOUR EVALUATION FOR RENEWAL!**

# NETWORKING

**Getting to know the players!**



**Getting to know other students in the field!**



## **Our Global Change Education Program Goals:**

Give students the opportunity to find out what research is like!

One on one with leaders in the field of Global Climate Change!

Encourage undergraduates to enter graduate school!

Help graduate students complete thesis in Global Climate Change!

Increase high quality U.S. Scientists!



GLOBAL CHANGE EDUCATION PROGRAM

## **SURE Goals:**

Find out what research is all about!

Meet new people – mentors and students interested in  
Global Change Research and Environmental Issues

Learn, Learn, Learn!\*

Find out what the Dept. of Energy is doing!

Let us know how it went! – Feed back!

\* Note: This is lifelong process, trust me on this.. I am still learning!

## **SPEAKERS – MENTORS**

Jeff Gaffney – University of Arkansas at Little Rock (UALR)

Nancy Marley – University of Arkansas at Little Rock (UALR)

Larry Berg – Pacific Northwest National Laboratory

Steve Ghan – Pacific Northwest National Laboratory

Alex Laskin - Pacific Northwest National Laboratory

Julia Laskin – Pacific Northwest National Laboratory

## **GRAF STUDENTS**

Emily Fischer – University of Washington

Mike Long – University of Virginia

Erika Roesler – University of Michigan

Erin Wagner – University of Wisconsin

## **THE GCEP STAFF**

Mr. Rick Petty – DOE Office of Biological and Environmental Research, Climate Change Research Division

Milt Constantin – Oak Ridge Associated Universities (ORAU)

Donna Holdridge- Argonne National Laboratory (ANL) – Web Site

Jeff Gaffney – University of Arkansas at Little Rock (UALR)

Nancy Marley – University of Arkansas at Little Rock (UALR)

Estelle Gilbreth – University of Arkansas at Little Rock (UALR)

# **Some Final Comments!**

**Abbreviations need to be defined –**

DOE is Department of Energy

BER – is Office of Biological and Environmental Research

GCEP – is Global Change Education Program

SURE – is Summer Undergraduate Research Experience

GRAF – is Graduate Research Environmental Fellowships

ARM – Atmospheric Radiative Measurements

ASP – Atmospheric Science Program

ACP – Atmospheric Chemistry Program

NIGEC – National Institutes for Global Environmental Change

EMP – Environmental Meteorology Program

VTMX – Vertical Transport and Mixing

TCP – Terrestrial Carbon Program

PER – Program for Ecological Research

IA - Integrated Assessment

ORISE – Oak Ridge Institute for Science and Education

SOARS – Significant Opportunities in Atmospheric Research and Science

ANL - Argonne National Laboratory

BNL – Brookhaven National Laboratory

ORNL – Oak Ridge National Laboratory

PNNL – Pacific Northwest National Laboratory

LBNL – Lawrence Berkeley National Laboratory

LLNL – Lawrence Livermore National Laboratory

LANL – Los Alamos National Laboratory

EMSL – Environmental Molecular Sciences Laboratory

UALR – University of Arkansas at Little Rock

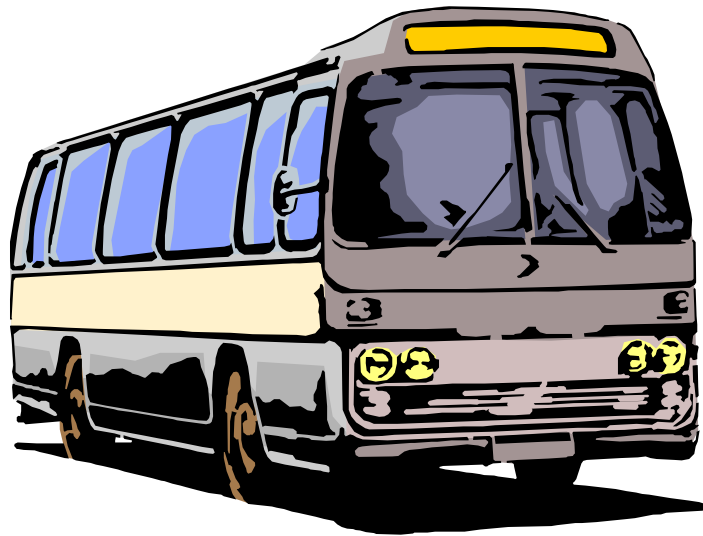
**ALSO....**

**IF YOU ARE OVERWHELMED WITH ALL OF THE INFORMATION PRESENTED.. GOOD – THEN WE HAVE DONE OUR JOB – THERE IS LOTS TO BE DONE IN GLOBAL CLIMATE CHANGE RESEARCH!**

**WE HOPE TO GET YOU THINKING ABOUT WHAT DOE IS DOING – IN MANY AREAS..**

**YOU MAY LEARN DIFFERENT SPEAKS! (BIO.. GEO..  
..ECO..ATMO..SPEAK)**

**THE ENVIRONMENTAL PROBLEMS OF THE FUTURE WILL REQUIRE INTERDISCIPLINARY INTERACTIONS OF EXPERTS FROM THEIR FIELDS.. WE HOPE YOUR PART OF THAT!**



**Glad you got here safe and sound and are part of GCEP!**

**Enjoy the Lectures and the Discussions!**

**If you need anything.. Ask Milt!**