

# **New Directions and Multi-Disciplinary Partnerships in Preserving the History of Genetic Engineering**

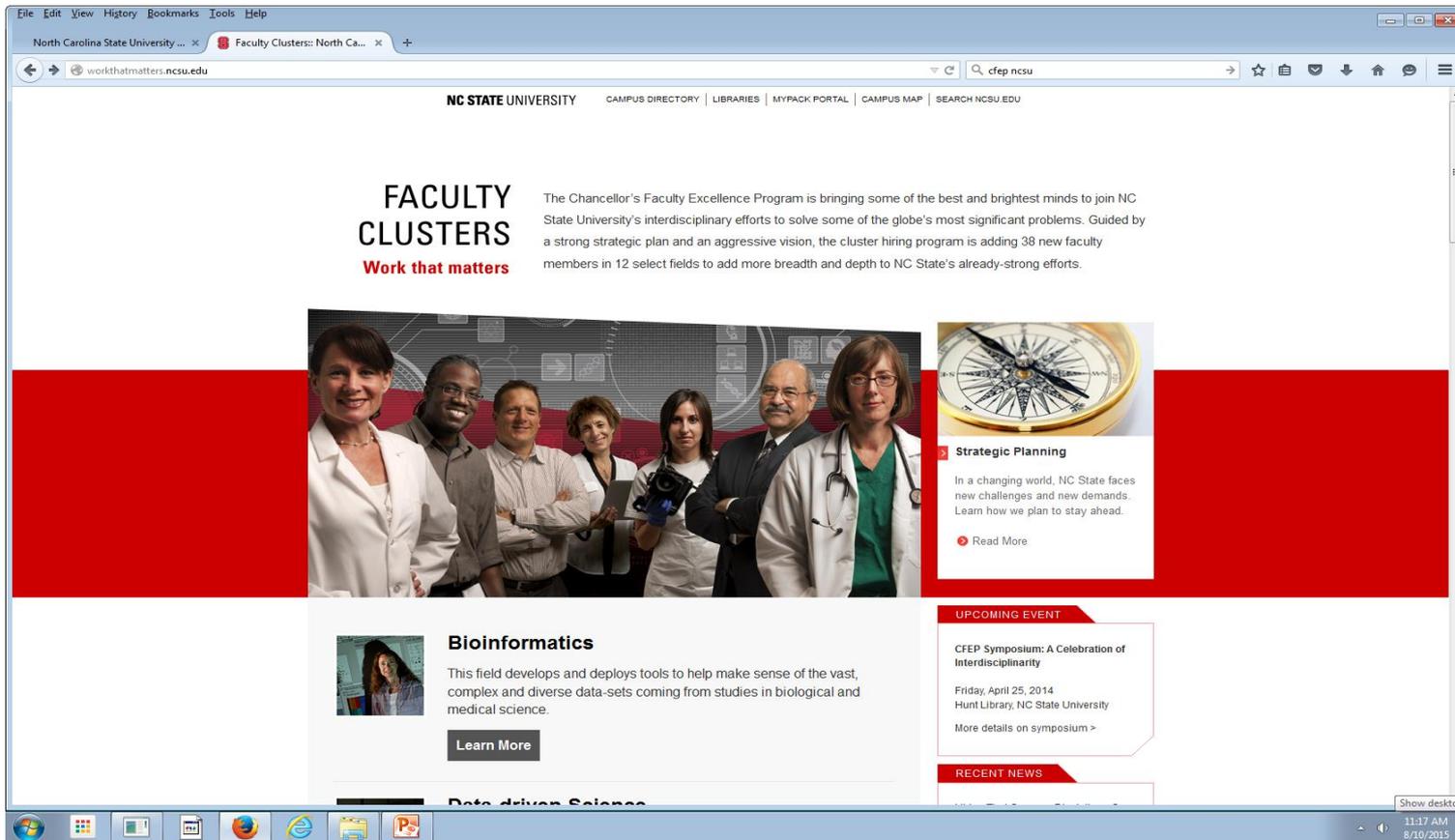
Eleanor Brown

Head, Special Collections Research Center

NCSU Libraries

[mbrown9@ncsu.edu](mailto:mbrown9@ncsu.edu)

# Chancellor's Faculty Excellence Program



File Edit View History Bookmarks Tools Help

North Carolina State University ... x Faculty Clusters: North Ca... x

workthatmatters.ncsu.edu

NC STATE UNIVERSITY CAMPUS DIRECTORY LIBRARIES MYPACK PORTAL CAMPUS MAP SEARCH NCSU.EDU

## FACULTY CLUSTERS

**Work that matters**

The Chancellor's Faculty Excellence Program is bringing some of the best and brightest minds to join NC State University's interdisciplinary efforts to solve some of the globe's most significant problems. Guided by a strong strategic plan and an aggressive vision, the cluster hiring program is adding 38 new faculty members in 12 select fields to add more breadth and depth to NC State's already-strong efforts.



### Strategic Planning

In a changing world, NC State faces new challenges and new demands. Learn how we plan to stay ahead.

[Read More](#)

### Bioinformatics



This field develops and deploys tools to help make sense of the vast, complex and diverse data-sets coming from studies in biological and medical science.

[Learn More](#)

### UPCOMING EVENT

#### CFEP Symposium: A Celebration of Interdisciplinarity

Friday, April 25, 2014  
Hunt Library, NC State University

[More details on symposium >](#)

### RECENT NEWS

11:17 AM  
8/10/2015

# Selection Criteria

- Ability to achieve national eminence in proposed topic
- Alignment with university strategic priorities and/or cross-cutting platforms
- Demonstration of real interdisciplinarity
- Potential to build on an existing university strength (or strength of the existing assets)
- Opportunity for faculty to engage in both research and teaching of proposed topic
- Ability to attract funding
- Commitment to share resources and physical infrastructure
- Inclusion of multiple colleges
- Demonstration of a balanced hiring plan with clear leadership
- Potential to attract diverse faculty

# The First 12 Clusters at NCSU

- Bioinformatics
- Data Driven Science
- Digital Transformation of Education
- Environmental Health Science
- Forensic Sciences
- Genetic Engineering and Society
- Geospatial Analytics
- Global Environmental Change and Human Well-Being
- Innovation + Design
- Personalized Medicine
- Synthetic and Systems Biology
- Translational Regenerative Medicine

# 2014 Cluster Selection

- Carbon Electronics
- Emerging Plant Disease and Global Food Security
- Global Water, Sanitation and Hygiene
- Leadership in Public Science
- Microbiomes and Complex Microbial Communities
- Modeling the Living Embryo
- Sustainable Energy Systems and Policy
- Visual Narrative

# GENETIC ENGINEERING + SOCIETY CENTER (GES)

RESEARCH  
COLLABORATION  
HISTORY PROJECT  
EVENTS  
CALENDAR  
GES MINOR  
ABOUT US



## WHO + WHAT

The GES program is unique  
example of engaged scholarship  
that serves as a regional, national,  
and international hub of  
interdisciplinary, research analysis



## Fellows

Find out about our fellows and



## Sloan Grant

We were awarded a Sloan



## IGERT

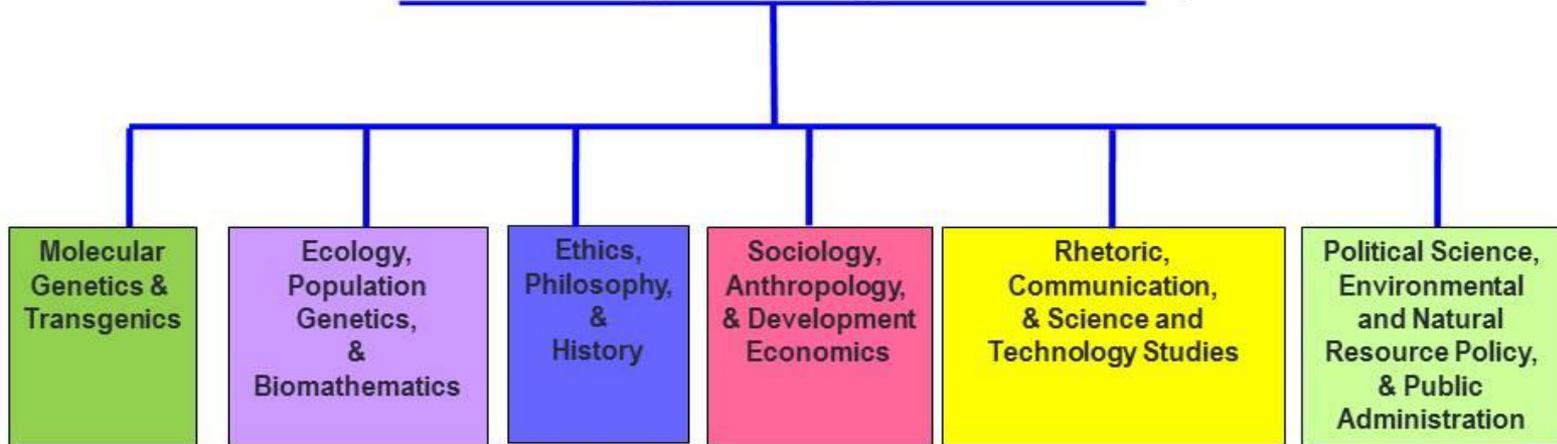
Find out what is going on with

# Genetic Engineering + Society Center

- Faculty members will be hired in the social sciences and humanities with specific expertise examining cultural, policy and economic aspects of genetically modified organisms, including the development and use of transgenic pests to suppress diseases, protect crops and conserve biodiversity. A longer-term goal is to broaden the program to include other transgenic approaches such as synthetic biology and genetic engineering of livestock.

# Disciplines

## Genetic Engineering and Society



NCSU Libraries  
 Computer Simulation Archive

Videos Collections Giving About

Search people and stories Search

# Computer Simulation Archive

## Chronicling Computer Simulation Pioneers



### Interviewees

- [Russell C. H. Cheng, Ph.D.](#)
- [Richard W. Conway, Ph.D.](#)
- [James O. Henriksen](#)
- [W. David Kelton, Ph.D.](#)
- [Philip J. Kiviat](#)
- [Donald E. Knuth, Ph.D.](#)
- [Averill M. Law, Ph.D.](#)
- [Peter Lorenz, Ph.D.](#)
- [Harry M. Markowitz, Ph.D.](#)
- [William L. Maxwell, Ph.D.](#)
- [Richard E. Nance, Ph.D.](#)
- [Ray J. Paul, Ph.D.](#)
- [C. Dennis Pegden, Ph.D.](#)

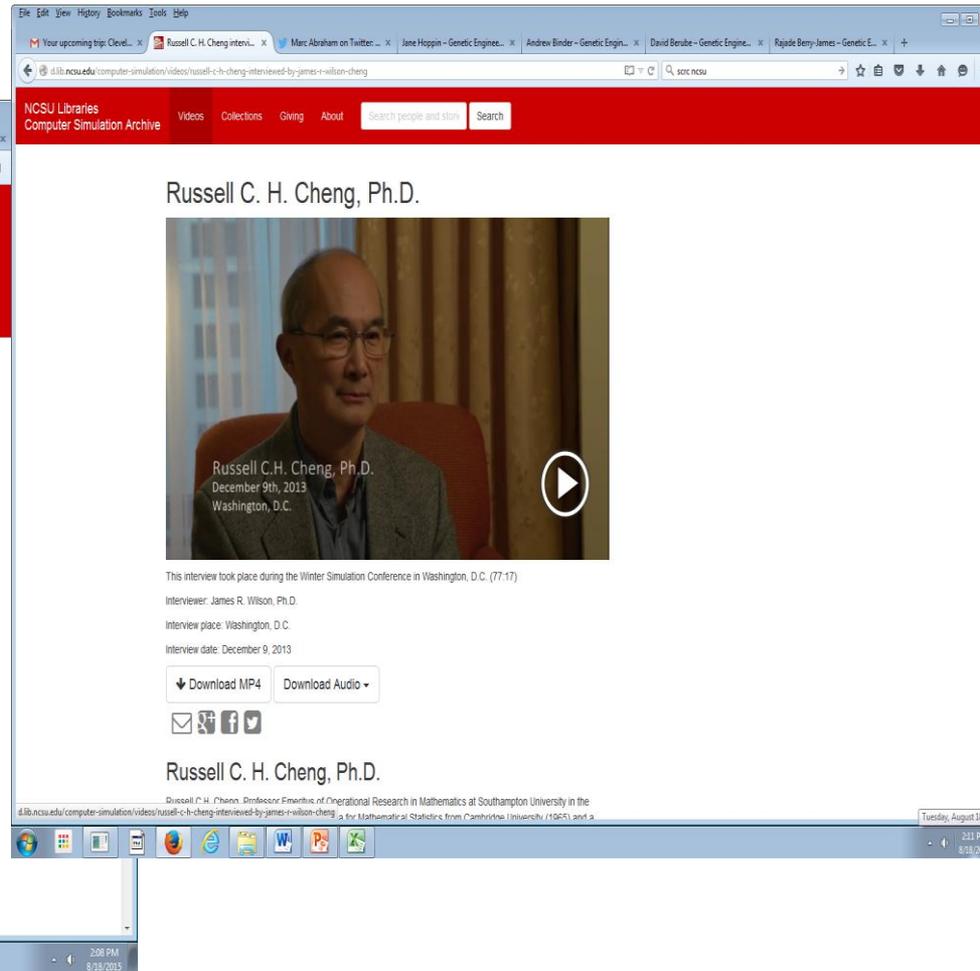
# Computer Simulation Archive

## Chronicling Computer Simulation Pioneers



### Interviewees

- [Russell C. H. Cheng, Ph.D.](#)
- [Richard W. Conway, Ph.D.](#)
- [James O. Henriksen](#)
- [W. David Kelton, Ph.D.](#)
- [Philip J. Kiviat](#)
- [Donald E. Knuth, Ph.D.](#)
- [Averill M. Law, Ph.D.](#)
- [Peter Lorenz, Ph.D.](#)
- [Harry M. Markowitz, Ph.D.](#)
- [William L. Maxwell, Ph.D.](#)
- [Richard E. Nance, Ph.D.](#)
- [Ray J. Paul, Ph.D.](#)
- [C. Dennis Pegden, Ph.D.](#)
- [Julian Reilman](#)
- [Robert G. Sargent, Ph.D.](#)



# The History Project

## Collecting a History of Agricultural Genetic Engineering and Society

- Promote work of the GES Center by creating web-ready short video clips based on interviews with invited guest speakers.
- Encourage public access to the history of genetic engineering's ideas, practice and impact by posting longer-form video interviews on the website.
- Create and preserve and archive of high-quality oral histories with key figures in the field, to be archived in NCSU Libraries special collections.
- Impact education both at universities and in K-12 schools.

# Building on Existing Programs

- GES Center has hosted a series of public talks at NCSU
- Video interviews conducted with a diverse community of agricultural biotechnologists, basic scientists, biotech developers, regulators, policy makers, NGO workers, social scientists, economists and industry executives.

# Interviewees- from all perspectives

- Eric Sachs, Lead, Scientific and Regulatory Affairs, Monsanto
- Craig Yencho NCSU Horticulturist with \$12.4M sweet potato breeding grant from the Gates Foundation
- Sheldon Krimsky, Professor Urban & Environmental Policy and Planning (early scholar critical of GE crops)
- Ingo Potrykus, Golden Rice Humanitarian Board
- Terry Medley, VP for Biotechnology Regulatory and External Affairs, DuPont Company
- Doug Gurian-Sherman, Senior Scientist, Food & Environment Program at the Union of Concerned Scientists
- Ignacio Chapela, UC Berkeley microbial ecologist at center of Mexican maize controversy
- Tony Shelton, Cornell entomologist at center of Monarch Butterfly controversy and director of genetically modified Diamondback moth release project
- Mark Lynas, Environmentalist and early critic of genetically engineered crops who now defends them
- Jeremy Rifkin, Economist, author, activist against genetically engineered crops

# Sample Research Questions

- How do participants define their field?
- Why is genetic engineering of food crops significant
- How does it fit into the longer history of agricultural innovation?
- What are its greatest risks and possibilities?
- How did this technology evolve in response to market, regulatory and policy initiatives?
- Why is the genetic engineering of food crops so much more controversial than the widespread genetic engineering of pharmaceuticals?
- Were you involved in any controversies in your work?
- Who most influenced your career and how you think about genetic engineering?

# Future Plans for the Archive

- Grant Funding
  - NSF Science and Technology Section
- Educational Partners
  - NCSU Faculty
  - Kenan Teaching Fellows
  - Museum of Natural Science
  - Museum of Life and Science
- Corporate partners
  - Research Triangle Park
  - NC Biotechnology Center
  - Centennial Campus

# Questions?

Eli Brown

Head, Special Collections Research Center

NCSU Libraries

[mbrown9@ncsu.edu](mailto:mbrown9@ncsu.edu)