

# Program Scientist Issues for Consideration

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LCLUC Program Scientist

# LCLUC Research Funding Areas #

- **Regional Case Studies** ( Processes/Drivers)
- **Detection and Monitoring** ( Regional>Global Mapping, Monitoring, Characterization and the associated method development ) - often linked to GOFD-GOLD goals or Regional Initiatives – strong data set generation and distribution component
- **Impacts of LCLUC** (Regional - often linked to Regional Programs or Thematic area (e.g. Urban) often partnered with other NASA or Interagency Programs – Hydrology, Carbon)
- **Impacts of Climate and Global Change on LCLUC** (Regional, Thematic – linked to other programs)
- **Projections and Modeling**
- LCLUC and Ecosystem or Social System **Vulnerability and Adaptation**
- **LCLUC Synthesis Studies**
  - Case Studies/Process Studies ( developing some general rules or new concepts)
  - Data Synthesis ( assessing patterns or trends – Assessments)
- **International Partnering** – US Collaborating PI on large internal projects

# with an emphasis in integrating physical and social science

# Areas of Concern

- **LCLUC Funding**
  - Increasing demand – flat funding
  - Continued program leverage needed ( ROSES)
  - Improving the process of proposing / reviewing
- **Links to the NASA Applications Program**
- **Observations**
  - Moderate Resolution Data
    - Opening the other archives
    - Landsat Data Gap > Real Constellation
    - LSI and all the others
    - LDCM / Sentinel 2
    - Beyond Landsat 8 !
  - VIIRS / Sentinel 3
  - Fine Resn Data Buys ?
  - ECVs
- **USGCRP** - Land use in the next phase
- **International Dimension**
  - Land Use, Deforestation and Carbon Cycle
    - GEO Forest carbon tracking – national demonstrators
    - REDD methodologies
    - Money, Confusion, Grandstanding, Quality Control
  - Adaptation Science

LCLUC Website Redevelopment  
&  
Program Information Outreach

## Science Themes

Detection and Monitoring of LCLUC

Carbon and Biogeochemical Cycle Impacts

Water and Energy Cycle Impacts

Predictive Land Use Modeling

Climate Variability and Change

Ecosystems and Biodiversity Impacts

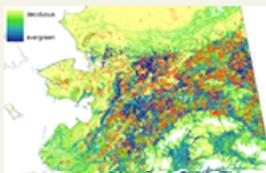
Synthesis Studies

Vulnerability, Adaptation

Observations and Data

Drivers of Change

## Program Highlights



Quantifying Changes in Northern High Latitude Ecosystems and Associated Feedbacks to the Climate System  
**Read Report**

## Welcome to LCLUC (DRAFT SITE)

Welcome to the NASA Land-Cover and Land-Use Change (LCLUC) Program website. LCLUC is an interdisciplinary science program in the Earth Science Division of the Science Mission Directorate. LCLUC is part of the Carbon Cycle and Ecosystems Focus Area with links to the some programs in other Focus Areas.

### What's New

A new global land parameter database derived from AMSR-E multi-frequency microwave remote sensing released

The Global Geo-Referenced Field Photo Library released

New Global Land/Water Mask Released

NASA and USGS complete the Global Land Survey 2005 dataset

NSF enhanced support for interdisciplinary research using multi-scale modeling

NASA Cooperative Agreement Notice (CAN): Global Climate Change Education: Research Experiences, Modeling & Data

The Earth Observer

2010 NASA Terrestrial Ecology Science Team Meeting

### Science Highlights

Scientists Uncover Ecological Impacts of Invasive Species

### Recent Publications

Article on Arctic Research of the Composition of the Troposphere from Aircraft and Satellites (ARCTAS)

### Links To Our Partners

|  |   |
|--|---|
| <a href="#">Land Measurements Portal</a> | <a href="#">ESA Sentinel-2</a>                |
| <a href="#">MODIS Land Program</a>       | <a href="#">CBERS</a>                         |
| <a href="#">USGS</a>                     | <a href="#">Indian Space Research Program</a> |
| <a href="#">ScanEx</a>                   | <a href="#">Global Land Cover Facility</a>    |

## LCLUC Science Team Meeting Schedule

| Date       | Location                                |
|------------|---|
| 08/28/2010 | Tartu, Estonia<br>Bethesda North        |
| 04/20/2010 | Marriott,<br>Bethesda, MD               |
| 09/15/2009 | Almaty,<br>Kazakhstan<br>Bethesda North |
| 03/31/2009 | Marriott,<br>Bethesda, MD               |
| 01/12/2009 | Khon Kaen,<br>Thailand                  |

[Newest](#) | [Prev](#) | [Next](#) | [Oldest](#)

[Related Program Meeting Calendar](#)

## Job Opportunities

The Land Environment and Atmospheric Dynamics (LEAD) Program Postdoctoral Position

## Fellowships

Graduate teaching and research fellowships in Environmental Science, U of Toledo

Ph.D. Research Assistantship in Land Use and Water Resources, Montana State

Post Doctoral Research Associate in Hydroecology of Desert Streams, University of Washington

Call for proposals: Global Climate Change Education: Research Experiences, Modeling & Data

## Solicitations

### International Global Programs



### International Regional Programs



### Landsat Program Updates



# LCLUC People

## What we have...

- Role in current & past projects
- LCLUC Presentations

## What we need...

- Complete/updated contact info?
- Publications?
- Awards?

http://webster2.lcluc.org/people.php

**NASA LCLUC**  
Land-Cover / Land-Use Change Program

Home Program Information Meetings People Projects Data & Information Education

### LCLUC Contacts

Filter by Last Name:  
  
 Name Contains:

Page 1 of 10

First | Prev | Next | Last

**Name**

- Arun Agrawal
- Vladimir Aizen
- Martha Anderson
- Steven Archer
- Kathleen Bergen
- Kathleen Bergen
- Uma Bhatt
- Richard Bilsborrow
- Michael Binford
- Michael Binford
- Nancy Bockstael
- Paul Bolstad
- Gordon Bonan
- Lahouari Bounoua
- Laura Bowling
- Dan Brown
- Foster Brown
- Andrew Bunn
- Gyanesh Chander

### Contact Details

**Garik Gutman**  
NASA Headquarters

**Contact Information:**  
 Code YS  
 300 E Street, SW - Room 5C74  
 Washington DC, 20546  
 United States



### Projects

| Role            | Time Period       | Project |
|-----------------|-------------------|---------|
| Program Manager | 01/1999 : 01/2050 | LCLUC   |

### Meeting Presentations

| Type                                 | Meeting / Date   | Title  |
|--------------------------------------|--|--|
| Programmatic Presentation            | UMUC Inn and Conference Center, Adelphi, MD<br>04/2007 | NASA's Land-Cover/Land Use Change Program  |
| Programmatic Presentation            | UMUC Inn and Conference Center, Adelphi, MD<br>04/2007 | Summary, Impressions, Requests, Recommendations, Plans                                     |
| Programmatic Presentation            | Urumqi, Xinjiang, China<br>09/2007                     | The NASA land-cover/land use change (LCLUC) program: Linkages to NEESPI drylands component |
| NASA LCLUC Science Team Presentation | Bethesda North Marriott, Bethesda, MD<br>03/2009       | Welcome to the LCLUC cherry blossom ST meeting   |
| NASA LCLUC Science Team Presentation | Bethesda North Marriott, Bethesda, MD<br>03/2009       | Summary, Impressions, Requests, Recommendations, Plans                                     |

### Other Papers and Presentations

| Type                                 | Date | Title   |
|--------------------------------------|------|---|
| Programmatic Presentation            | 2000 | NASA LCLUC Program and Objectives of the Meeting                            |
| Programmatic Presentation            | 2002 | Roadmaps to Answering LCLUC Key Science Questions                           |
| Programmatic Presentation            | 2004 | NASA's Land Cover Land Use Change Program                                   |
| Programmatic Presentation            | 2005 | State of the LCLUC Program and the CCSP LULCC                               |
| NASA LCLUC Science Team Presentation | 2005 | Carbon Cycle & Ecosystems Roadmap - NACP                                    |
| Programmatic Presentation            | 2009 | The NASA Land-Cover/ Land-Use Change (LCLUC) Program: Focus on Central Asia |

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LCLUC is a NASA program.  
 Responsible official: Garik Gutman  
 Website manager: Mary LeeAnn King.

This site is hosted by the University of Maryland.  


# LCLUC Projects

## What we have...

- PI, Co-I & collaborator contact information
- Annual progress reports

## What we need...

- Other funded team members?
  - Contact info
  - Publications/ awards
  - Role/ academic status
- Impact explanation
- No cost extension?
- Publications?
- Awards?

You can find the LCLUC information form here:

<ftp://ftp.iluci.org/LCLUC/LCLUCMeetings>

# A New LCLUC Initiative

- **Hotspots of LCLUC** ( areas of rapid change )
- Started as a UMD class project – Map / Poster
- Will be a New Component of the LCLUC Web Page
- Contributions will be requested from LCLUC PIs
- Identifying areas of rapid land cover change
- Template for each location
  - Quantification of rates
  - Description of primary causes
  - Description of impacts