

Center for Economic Research and Policy Analysis
Research Institute for the Environment, Energy & Economics
Appalachian State University

Annual Report, 2014-15

August 2015

MISSION

The Center for Economic Research & Policy Analysis (CERPA) is a multidisciplinary unit at Appalachian State University. The mission of CERPA is to improve policy- and decision-making by producing rigorous research and disseminating relevant information on current economic and policy issues. To that end, CERPA maintains research programs in the specific areas of economic development, environment & energy, and experimental economics. A new program introduces opportunities for undergraduate students to collaborate on projects.

Highlights from the 2014-15 include:

- External funded research activity of \$879,908.84, with \$262,965.84 in new submission and \$616,952.00 in continuing support.
- Facilitated and supported multidisciplinary research, with faculty participation from six different departments/units and three different colleges across campus.
- Worked with the Walker College of Business (WCOB) to create a new laboratory to support the research of the experimental economics cluster. It was opened in the summer of 2015.
- Created a new undergraduate research program—CERPA Scholars Program. In its first year, the program had three scholars.
- Began the development of a student-led effort to produce a semi-annual High Country Economic Report.
- Engaged with the groups and businesses in the community and region by collaborating on economic analyses and reports.

PROGRAMS

The Experimental Economics Program

This research program applies the laboratory method of inquiry to better understand how society and policy work. Experiments, in the lab and the field, allow for a more precise investigation of how individual, social and institutional characteristics influence individual behavior and aggregate outcomes. Consequently, the lab can serve as a wind tunnel for policy analysis to better predict the responses and outcomes of competing policies. Such policy simulation increases the power of economic inquiry and policy analysis.

The program is centered on five experimental economists that constitute one of the strongest experimental groups in the world. The most recent ranking places Appalachian's Experimental Economics group in the top 15 nationally and top 30 globally (RePec, 2014). The group contributes to the impressive national rankings of the Department of Economics, which place it ahead of NC State, UNCC, UNCG, Wake Forest and ECU (RePec, 2014). The strength of the experimental program attracts collaborations from leading researchers around the world and secures funding from prominent groups/agencies such as the NSF, Internal Revenue Service, and International Foundation for Research in Experimental Economics.

Environment & Energy Program

This program conducts research and policy analysis on critical environmental and energy issues, such as climate policy, non-market valuation and renewable energy. The program is centered on the strong environmental economics group in Appalachian's Department of Economics. A recent ranking placed Appalachian's environmental economics group among the top 40 nationally (RePec, 2014). The group consistently secures external funding for local, regional and national agencies/groups. There are considerable synergies and overlap across the environmental and experimental economics groups, which CERPA seeks to leverage. A strong feature of the program is the diverse set of approaches and comprehensive perspectives that considers the interdependence of economics, energy and the environment.

The Economic Development Program

This program undertakes research and policy analysis that promotes higher standards of living and improved economic and social conditions. The program addresses a wide range of economic and social issues, such as the urban-rural divide, workforce development, health care, income and job growth. The program maintains an area of work that focuses on Western North Carolina economic and social issues. WNC initiatives attempt to improve conditions in the region by providing relevant, timely and accurate information to the private and public sectors.

CERPA Undergraduate Research Program (*New Program*)

The CERPA Undergraduate Research Scholars Program is an undergraduate research program that provides exceptionally capable and well-motivated students an opportunity to participate in all phases of social, economic and policy research under the supervision of a faculty advisor. The program offers a comprehensive opportunity to more fully develop critical thinking and analytical skills, while also improving writing and presentation skills.

The Program: Selected scholars are typically juniors and seniors, although sophomore students may be appropriate in some cases. The program lasts one to two semesters, though work can extend to additional semesters as needed. The program can start at the beginning of the fall or spring semester. Students are encouraged to register for a one semester hour independent study course, although this is not required. Selected undergraduate research scholars work with a faculty advisor to examine a local, state, national or international economic issue. Scholars meet with their faculty advisors on a regular basis to check progress and receive guidance on their work. Successful completion of the program will culminate with two major accomplishments: a high quality research paper, which will be published in the CERPA Undergraduate Research Series, and a formal presentation (oral or poster) at an approved event (e.g., ASU Celebration of Student Research and Creative Endeavors, National Conference on Undergraduate Research).

CERPA Undergraduate Research Grants: With approval of the faculty advisor, CERPA Scholars can write a proposal to receive funding to support their research. Grants of up to \$1,000 are awarded depending on the needs of the project. Funds may be used to support data collection and travel. In addition, undergraduate research assistantships may be available through CERPA.

FACILITIES

The Appalachian Experimental Economics Laboratory (AppEEL) supports experimental research that tests the validity of economic theories, examines the emerging questions of behavioral economics, and test-best new policies and mechanisms. AppEEL can improve predictions of policy outcomes by serving as a wind tunnel that reveals the response and outcomes associated with alternative policies.

AppEEL has been the underpinning of the development and continuation of the highly regarded experimental economics group in the Department of Economics at Appalachian. Since its inception in 2008, AppEEL has been an integral part of about 50 research projects, with more than half of these receiving external funding. Since 2008, nearly 5000 people have participated in experimental sessions—about 800 participants during the past year, which is up from 726 and 520 registered in the previous two years. This translates to more than \$125,000 in cash payouts to members of the campus community since 2008.

New and improved laboratory. For seven years, AppEEL has served the research needs of the experimental economics faculty on the second floor of Peacock Hall. This summer, the Walker College of Business has provided generous support to create a new and much improved lab on the third floor. CERPA led the process that replaced all of the aging hardware, provided custom furniture, and included a much needed waiting/debriefing area. It is truly a point of pride for CERPA, the Walker College of Business and Appalachian State University.

AppEEL is directed by Michael McKee. An annual report of AppEEL activities is provided as an appendix (A1).

PEOPLE

Director	Todd L. Cherry Professor, Department of Economics
Assistant Director	O. Ash Morgan Associate Professor, Department of Economics
Program Directors	Michael McKee, Experimental Economics Program Professor, Department of Economics O. Ash Morgan, Economic Development Program Associate Professor, Department of Economics John Whitehead, Undergraduate Research Program Professor, Department of Economics Todd L. Cherry, Environmental and Energy Program Professor, Department of Economics
Research Fellows	David Dickinson Professor, Department of Economics David McEvoy Associate Professor, Department of Economics
Research Associates	Jason Hoyle, Research Analyst, Appalachian Energy Center John Dawson, Associate Professor, Department of Economics Tammy Kowalczyk, Associate Professor, Department of Accounting Gregg Marland, Research Faculty, Department of Geography and RIEEE Jayjit Roy, Assistant Professor, Department of Economics
Research Affiliates	James Alm, Tulane University Kim Bloomquist, US Internal Revenue Service Steffen Kallbekken, Senior Research Fellow, CICERO Todd McElroy, Florida Gulf Coast University Håkon Sælen, Research Fellow, CICERO Jason Shogren, University of Wyoming

MAJOR ACCOMPLISHMENTS

1. EXTERNAL FUNDING ACTIVITY

SUMMARY

Number of Proposals Submitted, Awarded or Rejected along with Total Funding Amounts for the period beginning July 1, 2014 and ending June 30, 2015.

Proposals	Total Number	Number with Indirect	Dollars
Total New Submissions	4	2	\$262,965.84
Awarded	2	2	\$33,705.40
Not Funded	2	0	\$200,000.00
Under Review	2	2	\$29,260.44
Continuing	5	4	\$616,952.00
Total Grant Activity*	10	8	\$879,908.84

*This is the number of grants awarded, continuing, under award negotiation or under review.

DETAILS

PROPOSAL SUBMISSIONS – FUNDED

Project No. 14-0147
Title: Measuring the Economic Impact of Mission Health
PIs: Owen Morgan
Funder: Mission Health, Inc
Amount: \$19,819.00
Indirect: Yes

Project No. 15-0081
Title: IRS Experimental Economics Research
PIs: Michael McKee
Funder: US Internal Revenue Service/Fors Marsh Group
Amount: \$13,886.40
Indirect: Yes

CONTINUED AWARDS

Project No. 12-0141
Title: Sleep Restriction and Circadian Mismatch Effects on Differential Decision Processes
PIs: David Dickinson
Co_Pi's: David McElroy
Funder: NSF
Amount: \$405,628.00
Duration: 09/01/2012 – 08/31/2015
Indirect: Yes

Project No.
Title: Joint Estimation of Revealed and Stated Preference Recreational Data for Evaluation of the Economic Effects of the Allocation of Harvests
PIs: John Whitehead
Co_Pi's: Paul Hindsley, Craig Landry and Kurt Schnier
Funder: NOAA National Marine Fisheries Service (MARFIN)
Amount: \$186,401.00
Duration: 09/01/2014 – 08/31/2016
Indirect: Yes

Project No. 12-0318
Title: Aggregate Risk Reduction Scoping Project
PIs: John Whitehead
Funder: University of North Carolina, Chapel Hill, Center for the Study of Natural Hazards and Disasters
Amount: \$10,000
Duration: 07/01/12 – 01/31/2014
Indirect: Yes

Project No. 14-0254
Title: Economic Impact of the Watauga County Business Park
PIs: Owen Morgan
Funder: Watauga County Economic Development Commission
Amount: \$5,000.00
Duration: 06/26/2014 to 08/15/2014
Indirect: Yes

Project No. 11-0268
Title: Economic Values of Coastal Erosion Management
PI: John Whitehead
Sponsor: N.C. Sea Grant, East Carolina University, NOAA National Marine Fisheries Service (MARFIN)

Amount: \$9,923.00
Duration: 01/02/2012 – 12/20/2013
Indirect: Yes

PROPOSALS UNDER REVIEW

Project No. 14-0209
Title: Measuring Consumer Preferences for Aquaculture Relayed and Branded Gulf Oysters
PIs: Owen Morgan
Co.PIs: David McEvoy, John Whitehead, and David Bruner
Funder: USDA NIFA Agriculture and Food Research Initiative (AFRI)
Amount: \$338,272.44
Duration: 11/01/2014 to 10/31/2016
Indirect: Yes

Project No. 15-0102
Title: Measuring the Economic Cost of Bragging
PIs: David McEvoy
Funder: Utah State University
Amount: \$29,260.44
Indirect: No

PROPOSALS SUBMISSIONS – NOT FUNDED

Project No. 15-0103
Title: DC Distribution as a Smart Grid Alternative on UNC Campuses
PIs: Todd Cherry
Funder: UNC-ROI Program/NCSU Future Renewable Electric Energy Delivery and Management (FREEDM)
Amount: \$200,000.00
Indirect: No

2. FACULTY PARTICIPATION & EXTERNAL COLLABORATION

CERPA projects involved 12 researchers across campus, representing 7 different departments and 3 colleges. Many projects involved multi-disciplinary teams of researchers.

Campus Researchers	Total Number
Total	12
Department/College	
Economics/WCOB	6
Accounting/WCOB	1
Technology /CFA	1
Biology /CAS	1
RIEEE	1
Energy Center	1
Psychology/CAS	1

CFA (College of Fine and Applied Arts); CAS (College of Arts and Sciences)

CERPA activities also entailed collaborations with many other research institutions (e.g., subcontracts, co-PIs, collaborators, etc.). Below is an abbreviated list.

Off-Campus Collaborations
Cornell University
University of Georgia
Tulane University
University of Tennessee
University of North Florida
University of Wisconsin-Milwaukee
Florida Gulf Coast University
University of Massachusetts-Amherst
University of Alaska Anchorage
University of Wyoming
CICERO-University of Oslo (Norway)

3. STUDENT PARTICIPATION

CERPA UNDERGRADUATE SCHOLAR PROGRAM

Student: Brandon Lee
Title: Immigration in the U.S.: Estimating the Effects on High School Completion
Presentation: National Conference on Undergraduate Research, Spokane WA
Advisor: Todd Cherry
Completed: Yes

Student: Robyn Cramer
Title: Willingness to Pay for a National Renewable Energy Portfolio Standard
Presentation: 18th Annual Celebration of Student Research and Creative Endeavors
Advisor: John Whitehead
Completed: Yes

Student: Kevin Patel
Title: Estimating the Efficacy of Federal and State Climate Policies
Presentation: TBD
Advisor: Todd Cherry
Completed: No

4. PUBLIC ENGAGEMENT

CERPA-related engagement during 2014-15 includes the following projects:

Economic Impact of the 2014 Beech Mountain Metric

Economic Impact of the 2014 Blood Sweat and Gears

Economic Impact of the 2014 HCSA Triple Crown Series

Economic Impact of the 2014 High Country Beer Fest

5. DEVELOPMENT

Started a New Undergraduate Research Program: CERPA Scholars

The Department of Economics and CERPA started a new undergraduate research program in 2014-15. It was a success with three highly motivated and qualified students directly collaborating with faculty on research projects. Two of the three students completed the requirements, with the third student continuing the program in 2015-16.

Completion of New Experimental Economics Laboratory

Collaborations with the WCOB and Department of Economics led to the planning of a new experimental economics laboratory. The effort and investment created an excellent facility for experimental research—a real feather in the WCOB cap. The new space will benefit the current and future position of the experimental group, the Department of Economics and CERPA.

Development of High Country Economic Report

In an effort to fill the void of losing the WNC Economic Index, the Department of Economics and CERPA have worked to create a new student-led effort to produce a quarterly or semi-annual report on the high country economy. Development began in 2014-15 and will continue in 2015-16.

Updates for Experimental Economics Lab: Database Management

The Experimental Economics Research Program depends on a sizable database of students that participate in the experimental sessions. This database must be updated on a regular basis to keep up with the departure of graduating students. This is done annually.

PROBLEMS/NEEDS

General Support

CERPA does a lot with little financial support. Support is very narrow, with the Walker College of Business and Department of Economics providing all of the support outside the administrative support at RIEEE. With additional support (e.g., research office), CERPA could be more effective at facilitating and supporting research on campus.

Community Engagement Support

A small budget for community engagement would be welcomed. Currently, faculty members volunteer their time and typically cover expenses out-of-pocket.

Faculty Support

A primary, if not the most pressing, constraint on increased research output and external funding is the lack of time for these efforts. An on-going desire is to create a program that supports faculty reassigned-time to pursue external funding opportunities. This could be more feasible by collaborating (e.g., matching funds) with current initiatives on campus.

Sponsors/Development Funds

There are two existing avenues for possible private sponsorship. The new experimental lab may be of interest to a donor, and the new undergraduate research program is another possibility.