September 2015

Undergraduate Awards and Honors

UK Office of Undergraduate Research

Follow this and additional works at: https://uknowledge.uky.edu/kaleidoscope

Part of the Higher Education Commons
Click here to let us know how access to this document benefits you.

Recommended Citation
Available at: https://uknowledge.uky.edu/kaleidoscope/vol6/iss1/25

This Undergraduate Awards and Honors is brought to you for free and open access by the The Office of Undergraduate Research at UKnowledge. It has been accepted for inclusion in Kaleidoscope by an authorized editor of UKnowledge. For more information, please contact UKnowledge@lsvaky.edu.
Undergraduate Awards and Honors

Astronaut Scholarship for Research

Andrew L. Lynch
Andrew Lynch awarded a $10,000 scholarship by the Astronaut Scholarship Foundation (ASF). The scholarship is presented to dynamic undergraduates or graduate students who exhibit motivation, imagination, and exceptional performance in the fields of science and engineering.

Andrew plans to pursue his studies in the area of biochemical research after graduation in 2008. The money will be used to attend graduate school. ASF honors students whose talent foreshadows a career leading to advancement of scientific knowledge and technology. Established by the original astronauts in 1984, the foundation has grown to include more than 50 astronauts from the Gemini, Apollo, and Shuttle programs. The foundation is dedicated to helping the U.S. retain its world leadership in science and technology by providing scholarships to students pursuing careers in those fields.

Beckman Scholarship Recipients for 2007-2008

Eddie M. Kobraei
Andrew L. Lynch
Eddie Kobraei, a junior majoring in biology, is from Murray, KY. He is exploring the inhibitory effect of molecules called chondroitin sulfate proteoglycans (CSPGs) on neuronal outgrowth and regeneration following spinal cord injury. A major goal of this project is to identify the inhibitory structural features of CSPGs so that drugs and therapies can be developed that specifically target the inhibitory influences of these molecules. These developments could help to facilitate recovery of function in patients with spinal cord injury. His research is under the direction and mentorship of Dr. Diane Snow, Associate Professor in anatomy and neurobiology.

Andrew Lynch, also a junior majoring in chemical engineering, is from Williamsburg, KY. His research is investigating the oxidative breakdown of halogenated organic compounds. He hopes that this research will lead to a better understanding of the detoxification of environmental contaminants and improve remediation effectiveness. Andrew is performing his research under the mentorship of Professors Allan Butterfield in the Chemistry Department and Dibakar Bhattacharyya in Chemical & Materials Engineering.

Established in 1987, The Beckman Scholars Program is an invited program for accredited universities and four-year colleges in the US. It provides scholarships that contribute significantly to advancing the education, research training, and personal development of selected students in chemistry, biochemistry, and the biological and medical sciences. The sustained, in-depth undergraduate research experiences and comprehensive faculty mentoring are unique in terms of program scope, content, and level of scholarship awards. ($19,300 for two summers and one academic year. (See pages 94-97 for reports from this year’s Beckman Scholars)

Goldwater Scholarship

Andrew L. Lynch
Andrew Lynch, a UK chemical engineering junior, Andrew L. Lynch, has won one of 318 Barry M. Goldwater Scholarships awarded nationwide worth $7,500. The recipients were selected on the basis of academic merit and potential for contribution in the sciences. The scholarship covers expenses for tuition, fees, books, and room and board up to a maximum of $7,500. As part of his successful application Andrew submitted a research proposal focusing on the biochemical breakdown of organic contaminants in groundwater, which builds upon his work in Dr. Dibakar Bhattacharyya’s laboratory.

FULBRIGHT SCHOLARSHIP

Vanessa M. Dimayuga
Vanessa Dimayuga, a graduated senior who majored in Biology, is a 2007-08 recipient of a Fulbright Scholarship. She will travel to the Netherlands to use her scholarship to conduct research at the Netherlands Institute for Neuroscience with Dr. Elly Hol and her research group. Dimayuga’s project will focus on determining the relationship between aberrant neuronal expression of Glial Fibrillary Acidic Protein (GFAP) and Alzheimer’s disease. Her future career plans include attending medical school and working in the medical research field.

The Fulbright Fellowship Program, funded by Congress, is a national grant competition for U.S. citizens or permanent residents to work and/or study abroad during the course of their studies or after graduation. Grants cover travel and living expenses for the academic year and necessary tuition at overseas universities. The goal of the program is to increase understanding between the U.S. and foreign countries. Selection for any Fulbright Student Program emphasizes leadership potential, academic and/or professional excellence, and commitment to mutual understanding.

COLLEGE OF AGRICULTURE
Department of Biosystems and Agricultural Engineering

Emily M. Kirkpatrick
Frank Woeste Award
Monetary award given to the highest achieving Biosystems & Agricultural Engineering Student.

COLLEGE OF ARTS & SCIENCES

Robin Louis Michler
The Maddie Lee Walker Scholarship
The Maddie Lee Walker Scholarship - Established in 1984 by Mrs. Mary Walker Fenley in honor of her sister, Maddie Lee Walker, this scholarship is a $2,000 award to an outstanding senior student in the College of Arts and Sciences.

Department of Earth and Environmental Sciences

Elizabeth Almy
Tarr Award
A National award presented to an Outstanding Senior Geology student for high academic and service accomplishments in the department. The recipient receives the Geology Hammer.

Jessica Rosenberg & Daniel Hedges
Pirtle Scholarship
A $1000 cash award to the academically outstanding junior Geology Major.

Nathan Hendren, Allison Richardson, Bryan Roberts
Tuition Scholarship
Glenn Rice Tuition Scholarships are awarded to junior or senior geology majors who have a strong academic record.

Department of Sociology

Adrianne Crow
Coleman Award
The Coleman Award is presented at the end of each spring semester to a graduating senior and carries a certificate and cash prize. Professor Coleman (1913-1995) was a long-time faculty member in the Sociology Department at UK and was particularly concerned with instructional activities. He conducted groundbreaking research on the diffusion of agricultural technology.
and promoted the cause of civil rights in Kentucky and the south. The selection process is based on scholarship, leadership, and involvement in sociological activities in research. Eligibility requires nomination by a faculty member or student, a GPA of 3.50 or above, and submission of an application and example of an independent research project or course paper from a sociology course.

COLLEGE OF BUSINESS AND ECONOMICS
Department of Economics
Jason M. Wattier, KY Society of Certified Public Accounts Scholarships
Jason Mark Wattier of Paducah and Ashley Marie Wesseler of Florence, KY received scholarships provided by the Society of Certified Public Accounts Education Foundation (KYCPA). Scholarships were awarded based on academic as well as financial need criteria set forth by the foundation.

COLLEGE OF COMMUNICATIONS AND INFORMATION STUDIES
School of Journalism and Telecommunications
Megan Boehnke, Hearst Foundation’s National Writing Competition
Megan G. Boehnke took 3rd place in the Hearst Foundation’s National Writing Competition to earn herself a $3,000 prize scholarship. Hearst Reporting competition applicants are full-time undergraduate journalism students returning to school in the fall. The award is based on students’ published articles, resumes, letters of recommendation, and an essay. The Hearst Journalism Awards Program is presented annually under the auspices of the Association of Colleges of Journalism and Mass Communication (ASJMC) with full-funding by the William Randolph Hearst Foundation. The program’s mission is to encourage and support excellence in journalism and journalism education in America’s colleges and universities. This is the 44th year of competitions, in which more than $400,000 in scholarships and grants will be awarded to students and schools. There are six writing, three photojournalism, two radio broadcast news and two television broadcast news competitions each academic year, beginning in October and ending in April. The monthly competitions honor the top ten winners with awards ranging from $500 to $2,000, with the schools receiving matching grants. The competition year culminates in June with the National Writing, Photojournalism and Broadcast News Championships, and is open to selected winning students from the monthly competitions who also receive additional awards.

Sean Rose, Hearst Spot News Writing Competition
UK junior Sean Rose finished 4th in the nation in the Hearst Spot News Writing Competition. Often called the “Pulitzers of College Journalism,” its awards are open to journalism students actively involved in campus media at 107 undergraduate journalism programs in the US. Rose’s spot news story from the KY Kernel is titled “Crash kills 49.” The story ran the day after Comair Flight 5191 crashed following its takeoff from Blue Grass Field. Rose competed against 75 students from 48 universities in the spot news category. He will receive a $750 scholarship, and the UK School of Journalism and Telecommunications will receive a matching grant.

Sloane Cavitt, James C. Bowling Scholarship
The Bowling scholarship is awarded in conjunction with the James C. Bowling Executive-in-Residence program in the UK School of Journalism and Telecommunications. The scholarship and a lecture series was established through a generous endowment from the late Joseph M. Cullman III, former chairman of the board at Philip Morris. As part of the series, a nationally recognized public relations professional visits the UK campus each year.

Samantha Harrell, Chaplin Scholarship
The Chaplin Scholarship, named for a popular Lexington radio talk show host, was established in 1998. The scholarship is awarded to incoming freshman and/or undergraduate students. The students must be diagnosed with a certified disability, qualify for financial need, declare a pre-major or major in journalism and have 2.8 or higher GPA. Chaplin, remembered mostly by radio listeners as Herb Oscar Kent, was a radio host for the “The Herb Oscar Kent Show,” that ran 25 years on Lexington station WLAP 630 am. The scholarship honors Chaplin who, despite being born with a deformed foot and contracting polio at 6, overcome impairments to have a successful broadcasting career.

Kernel, Pacemaker Award
The university’s independent daily student newspaper, The Kentucky Kernel, won the Pacemaker award, often called the Pulitzer Prize of college journalism. The Kernel was the only college newspaper in Kentucky to win. The Kernel has been a finalist four out of the past five years. Each year between 10 and 16 finalists are selected from student newspapers around the country. The last time The Kernel won this award was in 1999 and before that in 1986. The paper has a circulation of 17,000 and its readership is about 35,000 people. Its circulation ranks among the top newspapers in the state. The award was handed out at the Associated Collegiate Press annual convention in October. The Kernel’s winning issues included stories about a UK Med Student traveling to Africa to fight the spread of AIDS; A former UK professor suffering from Pick’s Disease; A student group that traveled to the Gulf Coast to help Hurricane Katrina victims repair homes, and a special section commemorating the four seniors on the men’s basketball team.

COLLEGE OF DESIGN
School of Architecture
Brian Buckner, Yu Fan Cheung, Matthew Storrie, Brandi Berryman, and Rudy Renfro
Five UK Architecture students received honors in the American Institute of Architecture Students (AIAS) and American Plastics Council (APC) jointly sponsored competition. The event challenged students, working either individually or in teams, to learn about materials, specifically plastics and plastic composites construction materials, and their assembly in the design of a transportation hub. A team of three earned second place and earned the students a $1500 cash award. The judges’ notes on the project commented on how it was provocative and intriguing. The plan was a city in real terms and showed a great deal of transit research, had compelling images, and clear understandable graphics. The project will be published in the fall issue of Crit, Journal of AIAS and will be exhibited on the AIAS Web site. Berryman and Renfro received honorable mention recognition for their design along with $500 to the students.

Matt Clarke, 9th Annual Berkeley Undergraduate Prize for Architectural Design Excellence Competition
Matt Clarke was awarded second place in the Ninth Annual Berkeley Undergraduate Prize for Architectural Design Excellence competition. Clarke, a native of Lexington, received the $2,000 prize for his essay, "Re-presenting Public Housing: creating community in the East-End." The essay detailed Lexington’s Bluegrass-Aspendale neighborhood, home to the abandoned landmark, the Lyric Theatre, and presents an image of a possible future to revitalize the community, highlighted by green technologies, mixed-use, and urban connectivity. Matt’s
essay was among entries from students representing 14 countries, on 6 continents. The competition focused on the social art of architecture. Matt’s essay was in response to the competition question that asked what do you believe is the most needed project in your town that, when built, would better the cultural situation for a population in need? As a 2nd place winner, Clarke is invited to participate in the Berkeley prize Travel Fellowship Competition. The winner of the fellowship receives airfare and a stipend to attend and participate in the Global Studio to be held in July in Johannesburg, South Africa. A version of Matt’s essay appears on pages 4-13 of this issue of Kaleidoscope.

Matthew Bailey Receives key to city for reconstruction project
The key to the town of Guthrie was bestowed on Matthew Bailey, a native of this community and a UK architecture student, for his proposal for the community reconstruction project to the community’s mayor, Scott Marshall. The award recognized the proposal’s vision to transform the small railroad town with a rough past, into a new urban community with a bright future. Guthrie is a small 19th-century railroad city that was a stop on the L&N line. Once a busy stop on the railroad line, by the 1960s the town was in decline. Now, with the growth of Clarksville, TN, the community has seen a population increase and new interest in the small border town. The growth made Guthrie city officials consider reconstruction projects for its community. They decided to begin with a new museum and visitors’ center. Matthew originally created the designs for the Guthrie Multicultural Arts & Heritage Center. As the project evolved, he expanded it to include a new town hall and convert the town into a new urban community — Todd County’s first — with much of the city’s residential developments, schools, stores, offices, and recreation centers within walking distance.

Dan Thornberry Furniture Design Winners
Brad Arnold
Dan McNatt
Mitchell Kersting
The Furniture Design Studio submitted “Furniture Jewelry” (door and drawer pulls) to an all school vote for the best designs. Faculty, students and staff were encouraged to pick the best design from four categories representing the tectonic building elements of line, plane, mass, and best complete set. 107 votes were cast with the following winners:

  - Dan Thornberry: Best design using “line,” Design book award
  - Brad Arnold: Best design using “plane,” Design book award
  - Dan McNatt: Best design using “mass,” Design book award
  - Mitchell Kersting: Best overall, $100 award

Five of the designs were sent to an international design competition for furniture hardware in Cologne Germany. The philosophy and pedagogy of the Furniture Design Studio is to research, develop, and produce three-dimensional forms at varied scales. By designing multiple scaled objects, students have the opportunity to “exercise” both theoretic and pragmatic design and fabrication skills.

OFFICE OF STUDENT AFFAIRS
Kathryn “Katie” Braun
Patrick Conlon

The Carol S. Adelstein Outstanding Student Award was given to Kathryn “Katie” Braun and Patrick Conlon. Katie is an Honors senior majoring in psychology, and Patrick is a senior with a double major in linguistics and political science. This is the 23rd year for the presentation of the award. Named for the late Carol S. Adelstein, wife of retired UK English professor Michael Adelstein, Carol, who used a wheelchair because of polio, was an inspiration to persons with disabilities by leading a meaningful, successful life at a time when individuals with disabilities were not encouraged to be independent and contributing members of society. The Adelstein Award is given by the UK Disability Resource Center to students with disabilities who are inspirations to others. Nominations are solicited from the entire campus community.

Patrick Conlon was chosen as the recipient of this award for his tenacity and courage to travel and study abroad in China. While there, student strikes broke out and the school closed. He was faced with many challenges, but that did not deter him from continuing to serve as an educator. He volunteered teaching English in an elementary school and wrote a blog for Mobility International, an organization that empowers people with disabilities around the world to achieve their human rights through international exchange and development. He also speaks more than 20 languages fluently. During the spring semester, he studied at one of the best language institutes in the world, St. Petersburg State University in Russia.

Katie Braun received the award for her work and juried project as a Fellow in the Gaines Center for Humanities. She researched, collected, and drafted a resource guide for students with physical disabilities to maneuver their way around campus. The guide, titled “Bridge to College” features sections on before, during, and after college. She hopes to see it on the UK Web site soon.

UNDERGRADUATE EDUCATION
Tara Bonistall
Christopher Garnett

The Algernon Sydney Sullivan Award is an annual award presented to an undergraduate male and female at graduation in recognition of their community service activities. Tara Bonistall of Centerville, Ohio, was selected for her extraordinary crisis intervention volunteerism and a medical advocacy at the Rape Crisis Center. She logged 277 hours as a volunteer with the center last year and continues to serve rape victims. She had a double major in psychology and social work. In addition, she served as a Big Sister of the Bluegrass and was co-president of the Student Social Work Association at UK.

Christopher G. Garnett, a biology major from Lexington, Kentucky, served as director of UK FUSION, a program that recruits and coordinates the campus’ largest community service program. In addition, he served as a Spanish interpreter at UK Chandler Hospital.

The Sullivan Awards were established by the New York Southern Society in 1925 in memory of Mr. Algernon Sydney Sullivan, a southerner who became a prominent lawyer, businessman, and philanthropist in New York in the late nineteenth century. The award seeks to perpetuate the excellence of character and humanitarian service of Mr. Sullivan by recognizing and honoring such qualities in others and demonstrating the spirit of love for helpfulness to other men and women through their heart, mind, and conduct. The first medallion was presented in June, 1925, at the George Peabody College for Teachers in Nashville, Tennessee, now a part of Vanderbilt University. The University of Kentucky is one of several southern universities that present the Algernon Sydney Sullivan award — sponsored by the Algernon Sydney Sullivan Foundation.
Honors Program

Leslie Hamby

Publication Announcement

Leslie Hamby’s honors capstone project was published by posting on the Kentucky Pharmacists Association Web site — www.kentuckypharmacists.com. During the spring semester of 2006, while Leslie Hamby was a pre-pharmacy student in the Honors Program, she completed her capstone project on the spread of illicit methamphetamine labs across the state during a 10-year period. She compiled her data from Kentucky State Police Reports. Her paper was titled “Geographical Dissemination of Clandestine Methamphetamine Lab Operations across Kentucky: 1995-2004.” With these data compiled in tabular and map form one can track the impact of this major societal challenge on his or her county. Prof. Joe Fink served as her Honors Program mentor for this project.

Posters-at-the-Capitol 2007

This annual event is intended to help members of Kentucky’s legislature and the Governor better understand the importance of involving undergraduates in research, scholarly, and creative work. Undergraduates, whose abstracts were selected for participation in Posters-at-the-Capitol, 2007, displayed their work in the state capitol and were encouraged, along with their faculty mentors, to arrange visits with legislators from their hometown and university districts. Twenty-eight UK students participated.

Presenters:

Megan Culler
(Oral Presentation)
Mentor: Becky Dutch
Cellular Protein Interactions with the Cytoplasmic Tail of Paramyxovirus Fusion Proteins

Nick Badre, Brent Hayden, Justin Kolasa, Geoffrey Hughes, Sonya Bierbower, Megan Adami, Mohati Desai
Mentor: Robin L. Cooper
Research in Neurophysiology: Calcium’s role in synaptic transmission, facilitation, and behavioral regulation

Jennifer L. Baumgardner and Ashleigh B. Ohlmann
Mentor: Patricia V. Burkhart
Factors Related To Asthma Quality Of Life For U.S. And Icelandic Adolescents

Tara Bonistall
Mentors: Kay Hoffman, Joanna Badagliacco, Joan Callahan, and Patricia Cooper
Reversing Complacency

Jennifer Baumgardner and Ashleigh Ohlmann

Matthew Clarke
Mentors: Wallis Miller, Michael Crutcher, and Richard Schein
Voices of Home in Bluegrass-Aspendale: constructing the ideal

Amanda Duncan
Mentors: David Hamilton and David Olster
Saving the Commonwealth by Educating its Women: The Works Progress Administration in Kentucky, 1935-1937

Megan Marie Gillespie
Mentor: Leonidos Bachas

Carrie Grimes
Mentor: Suzanne Segerstrom
Personality, Skills, and Goals

Joshua Ishmael
Mentor: John Nychka
Improved Materials for Dental Restoratives

Kena Lanham
Mentor: Doug Steinke
Trends In Oral Antidiabetic Medication Initiation And Use In A HMO Population

Mitchell Martin
Mentor: Gary Ferland
Influence of Dielectronic Recombination upon the Ionization State of Interstellar and Intergalactic Clouds

Dale McClure, Tyler Doring, and Daniel Urb
Mentors: James Lumpp, James Hereford, and Ben Malphrus
Development of an Off-the-Shelf Bus for Small Satellites

Sam Nicaise and Nicholas Jackson
Mentors: Vijay Singh and Suresh Rajaputra
Fabrication And Characterization Of Porous Alumina Based Devices

Christina Nicole
Mentor: Brett Spear
The Fusion of Luciferase and Green Flourescent Proteins in Transgenic Mouse Models

Amanda Peacock
Mentor: Jonathan Golding
The Impact of Instructions to Disregard on Child Witness Credibility

Neil Russell
Mentor: Frank R. Ettensohn
Taphonomy Of Late Ordovician Cyclocystoids From The Millersburg Member, Lexington Limestone, Central Kentucky

Lavanya Wijeratne
Mentors: Kenneth L. Kirsh and Peter Wright
Predictors of Successful Outcomes in Chronic Pain Patients

Peter Wulff
Mentor: Karyn Esser
Bmal1-/- Mice as a Model for Temporal Mandibular Joint and Muscle Disorder
The National Conferences on Undergraduate Research (NCUR), established in 1987, is dedicated to promoting undergraduate research, scholarship, and creative activity in all fields of study by sponsoring an annual conference for students. Unlike meetings of academic professional organizations, this gathering of young scholars welcomes presenters from all institutions of higher learning and from all corners of the academic curriculum. Through this annual conference, NCUR creates a unique environment for the celebration and promotion of undergraduate student achievement, provides models of exemplary research and scholarship, and helps to improve the state of undergraduate education. Dominican University of California hosted the 21st NCUR. Approximately 2,200 undergraduates from more than 250 colleges and universities attended the three-day event. The students from UK who were selected to attend are listed here.

**Presenters:**

**William Bledsoe**
Natural Products with Anti-inflammatory Functions against Oral Bacterial Infections

**Jeremy Bonzo**
Nebulette: Characterizing the Interactions of a Small Cardiac Protein with Tropomyosin

**Deena Cotterill** (Oral Presentation)
Are Recommended Clothes Care Instructions Contributing to Energy Conservation?

**Megan Culler**
Cellular Protein Interactions with the Cytoplasmic Tail of Paramyxovirus Fusion Proteins

**Christina Davis**
The Fusion of Luciferase and Green Fluorescent Proteins in Transgenic Mouse Models

**Amanda Duncan** (Oral Presentation)
Saving the Commonwealth through Women: The Works Progress Administration in Kentucky, 1935-1937

**Jason Fackler**
NIR Spectrometry for the Differentiation of Oral Bacteria using Near Infrared Spectroscopy (NIRS)

**Jeff Griffin** (Oral Presentation)
Russian Iconography and the Formation of a Radical Political Identity

**Carrie Grimes**
Hidden Goals: Output Primacy as a Measure of Goal Accessibility

**Andrew Klapheke**
Study on Interactions between Host Cell and Oral Bacteria, and their Effect on HIV-1 Reactivation in Dendritic Cells

**R. Deric Miller** (Oral Presentation)
Sex Expression in Response to Environmental Factors in Non-vascular Plants

**Amanda Peacock**
The Impact of Instructions to Disregard on Child Witness Testimony

**Lauren Reynolds** (Oral Presentation)
Non-vascular Plant Recovery from Desiccation in Tropical Rainforests

**Kathryn Schweri**
Investigating the Modular Nature of a Cyclic Peptide Synthetase Required for Production of Pharmaceutically Important Ergot Alkaloids

**Maja Starcevic**
Nutraceutical Inhibitors of Osteoclast Activation by Oral Bacteria