President's Report -April/May 2017

Honors and Awards to Members of the University Community

University of Utah professors Bradley R. Cairns, professor and chair of Oncological Sciences and senior director of Basic Science; Dana Carroll, distinguished professor of Biochemistry; and Christopher D. Hacon, distinguished professor of Mathematics, were raised to a high honor in science on April 12, 2017, with their election to the American Academy of Arts and Sciences. The three scientists join 225 U.S. scholars, scientists, writers, artists, as well as civic, business and philanthropic leaders elected by the Academy, which is headquartered in Cambridge, Mass. Members of the 2017 class include winners of the Pulitzer Prize and the Wolf Prize, MacArthur Fellows, Fields Medalists, Presidential Medal of Freedom and National Medal of Arts recipients, and Academy Award, Grammy Award, Emmy Award and Tony Award winners.

Bradley R. Cairns was honored for his work examining how chromatin, the structures that package chromosomal DNA, switch genes on or off. He is working to understand how changes in chromatin affect cellular mechanisms that can lead to cancer development. As an investigator at the Huntsman Cancer Institute (HCI) at the University of Utah, Cairns is using zebrafish to study genes associated with many types of cancers.

Dana Carroll has been on the faculty at the U of U Health for 42 years. Starting 21 years ago, he developed the earliest of the precise genome editing platforms, zinc-finger nucleases. He has worked with ZFNs and the successor technologies, TALENs and CRISPR-Cas, all of which are being used around the world to learn the consequences of specific mutations, to improve agricultural plant and animals, and to develop treatments for human diseases. Carroll received both the 2012 Edward Novitski Prize from the Genetics Society of America and the 2014 Herbert Sober Lectureship from the American Society of Biochemistry and Molecular Biology. He also received the 2016 Distinguished Innovation and Impact Award from the University of Utah.

Christopher Hacon is a scholar of algebraic geometry, the field of mathematics that studies geometric objects defined by polynomial equations. He is particularly interested in objects that exist in more than three dimensions, and he and his colleagues have applied studies of these objects to extend the "minimal model program," a foundational principle of algebraic geometry, into higher dimensions. The American Mathematical Society has lauded the work of Hacon and his colleagues as "a watershed in algebraic geometry." Hacon is a fellow of the American Mathematical Society and recipient of the 2016 EH Moore Research Article Prize, the 2015 Distinguished Scholarly and Creative Research Award from the University of Utah, the 2011 Antonio Feltrinelli Prize in Mathematics Mechanics and Applications, the 2009 Frank Nelson Cole Prize in Algebra and the 2007 Clay Research Award.

- 2. The Lassonde Studios received another award by Fast Company in April 2017. The Lassonde Studios was named the most innovative idea for Utah in Fast Company's "United States of Innovation for 2017." In August 2016, the Lassonde Entrepreneur Institute at the University of Utah, Salt Lake City, unveiled a 400-person dorm that functions like an incubator. Open to students of any major, the building is a blend of housing and work space: It supports aspiring entrepreneurs with workshops, lectures, networking events, and business-plan competitions.
- 3. Dolph Lundgren, Wallace Stegner, John Steinbeck, Henry Kissinger and John Lithgow were all Fulbright Scholars. University of Utah students Alison Shimko and Elizabeth Gamarra recently

joined that list. Both will head to Spain to teach English beginning Fall 2017. Two other students, Tuscan Thompson and Claire Taylor, were selected as alternates. The Fulbright Scholarship is a prestigious program that each year allows 1,900 US students to travel abroad either to perform research or to teach English. Past recipients of the award include 54 Nobel Prize winners, 92 Pulitzer Prize winners and 33 heads of state or government. The program is sponsored by the US Department of State and allows scholars a stipend to explore the local culture when not in the classroom or lab. While both Shimko and Gamarra are participating in the English Teaching Assistant (ETA) program in Spain, if selected Taylor, hopes to conduct research in New Zealand, while Thompson would teach English in South Korea.

- 4. The University of Utah is the top research university in the nation when it comes to commercializing technology innovations, according to the Milken Institute's 2017 ranking of Best Universities for Technology Transfer. The U has "quietly evolved into one of the most prestigious research universities in the United States with a strong emphasis on commercializing its research," the institute said in the report released today. The U moved to the top spot after being ranked 14th in the institute's inaugural report released in 2006. The U was ranked above other top-tier research institutions, including Columbia University, the University of Florida, Brigham Young University and Stanford University.
- 5. Paisley Rekdal, professor of English at the University of Utah, has been named the new Utah Poet Laureate by the Utah Division of Arts & Museums. The Utah Poet Laureate, established in 1997, is a governor-appointed advocate for literature and the arts throughout the state who presents in communities, schools, libraries and public events. As the Utah Poet Laureate, Rekdal will create a website that maps the writers and poets of Utah, along with all of the various literary presses and journals in the state. She plans to conduct audio interviews with as many Utah poets, writers and publishers as possible and post them on the website. The project is a spin-off of Mapping Salt Lake City, a community-created archive of art and literature, which she created and manages.
- 6. The National Council on Teacher Quality, NCTQ, released its latest ratings for 717 undergraduate programs that prepare high school teachers, including ratings for seven colleges in Utah. The University of Utah is the only school in the state to be included on the NCTQ's list of the "Nation's Top Tier Secondary Teacher Prep Programs." The U is one of only 16 programs to be included on the list. Programs achieve top tier status because they have solid admission standards, provide sufficient preparation in each candidate's intended subject area and show them how best to teach that subject. Many also do well in evaluating candidates on how to manage a classroom and providing and ensuring the high quality of practice opportunities.

Teacher prep programs in Utah

- · University of Utah (99th percentile)
- Brigham Young University (81st percentile)
- Dixie State University (57th percentile)
- Southern Utah University (64th percentile)
- · Utah State University (46nd percentile)
- Utah Valley University (76th percentile)
- · Weber State University (49th percentile)
- 7. The NCAA announced its latest single- and multi-year Academic Progress Report (APR) for NCAA Division I schools today, and the University of Utah was again near the top of the Pac-12 for APR success. The APR accounts for eligibility, retention and graduation of all student-athletes on

scholarship, and provides a measure of each team's academic performance. The latest multi-year APR calculations include scores from 2012-13, 2013-14, 2014-15 and 2015-16. The average for Utah's teams was 988, up one point from last season's average of 987, while establishing a new department record for the fourth consecutive year and easily exceeding the NCAA minimum requirement of 930. Utah had five sports (cross country, gymnastics, women's tennis, track and volleyball) with perfect single-year APR scores of 1000. The volleyball team earned a perfect single-year APR score for the fourth consecutive year, while both gymnastics and cross country teams received perfect scores for the third straight season.

- 8. Mary Beckerle, CEO and director of the Huntsman Cancer Institute at the University of Utah, has been inducted into the American Philosophical Society, joining a group of 32 that includes former President Barack Obama. Each spring a new group of members is elected. The individuals represent national and international leaders in mathematical and physical sciences, biological sciences, social sciences, humanities, the arts, and public and private affairs. In addition to Beckerle and Obama, inductees this year include the secretary of the Smithsonian, the CEO of the New York Times, the vice chancellor at the University of Oxford, and scientists from Stanford, Harvard and Princeton. The American Philosophical Society, founded in 1743 by Benjamin Franklin, is the oldest learned society in the United States. Members are involved in diverse scholarly activities and are encouraged to attend semiannual meetings where scientific papers are presented and discussed. Current membership consists of 827 Americans and 161 international members.
- 9. Distinguished professor of biochemistry Dana Carroll, Ph.D., who has devoted much of his career to developing precise genome editing platforms, received one of the highest honors in science May 2, 2017 when he was elected to the prestigious National Academy of Sciences. Carroll is among 84 U.S. scientist-scholars and 21 foreign associates elected by the Academy in 2017, which is headquartered in Washington, D.C. He joins 2,289 active members and 475 foreign associates who have received this prestigious honor. Carroll's career, which included 24 years as chairman of the U's Department of Biochemistry until he stepped aside in 2009, is credited with advancements that have led to dissecting gene function, engineering disease- and drought-resistant (or hardy) crop plants, and correcting genetic diseases in people.
- Huntsman Cancer Institute (HCI) and the College of Pharmacy at University of Utah Health (U of U Health) have been awarded a \$9.1 million, five-year grant from the National Cancer Institute (NCI) to serve as a Research Center in NCI's Cancer Systems Biology Consortium (CSBC). HCI is one of nine research institutions nationwide to be selected as a Research Center in the CSBC. The CSBC Research Centers address questions in basic cancer research, including the emergence of drug resistance, the mechanisms underlying cancer metastasis, and the role of the immune system in cancer progression and treatment.