

Academic Report for 2010 – 2011

University Honors College

*Oregon State University
September 2011*

The University Honors College (UHC) provides a home at OSU for high-achieving undergraduate students. These are the missions of the UHC:

- Serve the needs and aspirations of **high-potential** undergraduate students;
- Deliver an enhanced curriculum featuring **small classes** and talented and dedicated faculty;
- Enable meaningful and impactful **undergraduate research/scholarship** experiences that leverage OSU's strengths in the three thematic areas; and
- Deliver on institutional and student promise by conferring the **Honors Baccalaureate**, OSU's most prestigious undergraduate degree and one of just a few such degrees available anywhere.

UHC students boast top-tier credentials upon arrival, enjoy spectacular academic and community opportunities while at OSU, and depart leadership-ready. To the extent that graduates are OSU's greatest contribution to the state and to society, Honors graduates are a premium component of that contribution.

2010-2011 PROGRAMMATIC ACHIEVEMENTS

1. Key Initiatives and Noteworthy Outcomes

A. Student engagement and success

- 686 students were enrolled in the University Honors College in the fall term of 2010, and 783 students are expected to be enrolled in the UHC at the beginning of fall term, 2011.
- During the 2010-2011 academic year, the UHC conferred 85 Honors Baccalaureate degrees to 75 students from seven academic colleges. Students earned 28 degrees in the College of Science, followed by 20 degrees in Engineering, 19 in Liberal Arts, 7 in Health and Human Science, 5 in Business, 5 in Agricultural Sciences, and 1 in Forestry. Up to 21 additional students are expected to complete the Honors Baccalaureate during summer term, 2011.
- First-year retention rates (95% 2010-2011, 92.6% seven-year average) and six-year graduation rate (88.8% 2004-2005 class, 88.6% seven-year average) for students who enter the UHC remain high.
- The UHC received \$900,000 in OSU Foundation funds in 2011 to implement new scholarship programs during the next three academic years (2011-2012 through 2013-2014). These funds will be used to provide new finishing scholarships for current UHC students, expand scholarships for incoming students, and offer scholarships for experiential learning.
- The UHC awarded eight \$5,000 scholarships to community college transfer students entering the UHC in fall term, 2010 during the first year of the NSF-supported Transfer to University and Careers Program for students in STEM fields, a program led by the

UHC. In addition, the UHC offered a new course designed to assist these students in transitioning to OSU and the UHC.

- Faculty participation in the UHC curriculum continued to grow with 99 faculty members, representing 36 departments, teaching 150 sections of UHC courses during the 2010-2011 academic year. Twenty-two of these faculty members were first-time instructors for the University Honors College.
- The following table shows the distribution of UHC students (as of fall, 2010, using primary listed majors) and courses offered by college for 2010-2011. The College of Science (COS) continues to be the leading provider of Honors coursework, and the College of Engineering (COE) enrolls the largest number of students in the UHC.

	UHC Students	UHC Courses
Oceanic & Atmospheric Sciences	0	1
University Exploratory Studies	9	0
Forestry	6	1
Pharmacy	8	0
Business	34	6
Agricultural Science	41	1
Health & Human Science	38	3
Liberal Arts	68	30
Science	220	50
Engineering	262	9

Exit interviews for graduating seniors are conducted online before graduation. The exit survey covers the thesis process, the UHC experience, student accomplishments, and plans for the future.

Exit Survey Statistics for 2010-2011

42.67% of graduates completed the exit survey. These students listed the following post-graduate plans: 37.5% graduate school, 28.1% employment or post-baccalaureate internships, 15.6% professional schools (medical, dental, law, etc.), with the remaining students traveling and pursuing other interests.

Quotes from exit surveys:

“I really enjoyed the active interest and engagement professors all over campus had for UHC students. Particularly in the classes I took through the Honors College, the passion professors had for their subjects was evident, which inspired me to connect with the subject they were teaching. I also really appreciated the resources for UHC students in the SLUG (the UHC’s Student Learning Center).” *Cameo Cheung*

“I really enjoyed the Honors College thesis process. It was a valuable experience to do such an in-depth project, and I feel proud of the work I've done. I am currently continuing with the research I did for my thesis in order to submit a paper to hopefully be published.” *Elizabeth Dunfield*

“My best memories or experiences from the UHC involve in-class discussions with students who are interested, involved, and hard-working and professors with the humility and the wisdom to allow students to accomplish more than rote memorization.” *Aaron W. Lieberman*

“I like the variety of classes that are available. I appreciated these classes all the more as a break from the somewhat monotonous and predictable load of engineering coursework.” *Justin Madrigal*

“Being able to sum my research up with a thesis to present what I have been working on for the last year. Now I will be able to put myself above from other candidates who have research experience when I apply for graduate school. Also can't forget the free printing, which was incredibly useful!” *Patrick Ramsing*

“I liked the class sizes and the way that the Honors professors met you on a personal, but professional level. The opportunity to in some ways study areas that you are interested in rather than what is required by the University.” *Levi Voigt*

Events and **activities** continue to be used to build community among Honors students while promoting inclusiveness and broadening perspectives. In 2010-2011, the UHC sponsored nearly 50 opportunities for students to connect with each other, challenge beliefs, and deepen understanding. Examples of the range of activities available to students include:

- UHC Faculty/Student Book Clubs were a new activity offered during spring term, 2011. Five OSU faculty selected books to share with small groups of UHC students over dinner at the beginning of the term; students were provided with free copies of their groups' book to read over spring break. Forty UHC students participated.
- Real Talk was a monthly conversation between the UHC Graduate Teaching Assistant and a guest on a topic designed to address some of the challenges students face. Popular topics from the 2010-2011 year included finding a path to undergraduate research opportunities and alternative spring break service options.
- Dad's Weekend Breakfast & Mom's Weekend Talent Show are annual events that provide opportunities for students and their family members to interact with the UHC community, build relationships, and develop social skills.
- Leadership & Service initiatives continue to be a key component of the Honors experience for many students. This past year, UHC students were active in several student groups and work opportunities, including the Honors Advisory and Activities Committee, the UHC Student Learning Center (SLUG) staff, Honors Envoys (the UHC student recruitment team), and front office staff. In addition, students organized adventure, charity, and social trips throughout the year, offering further leadership, community building, and service opportunities. In the OSU Food Drive, UHC students placed second in the student group category.

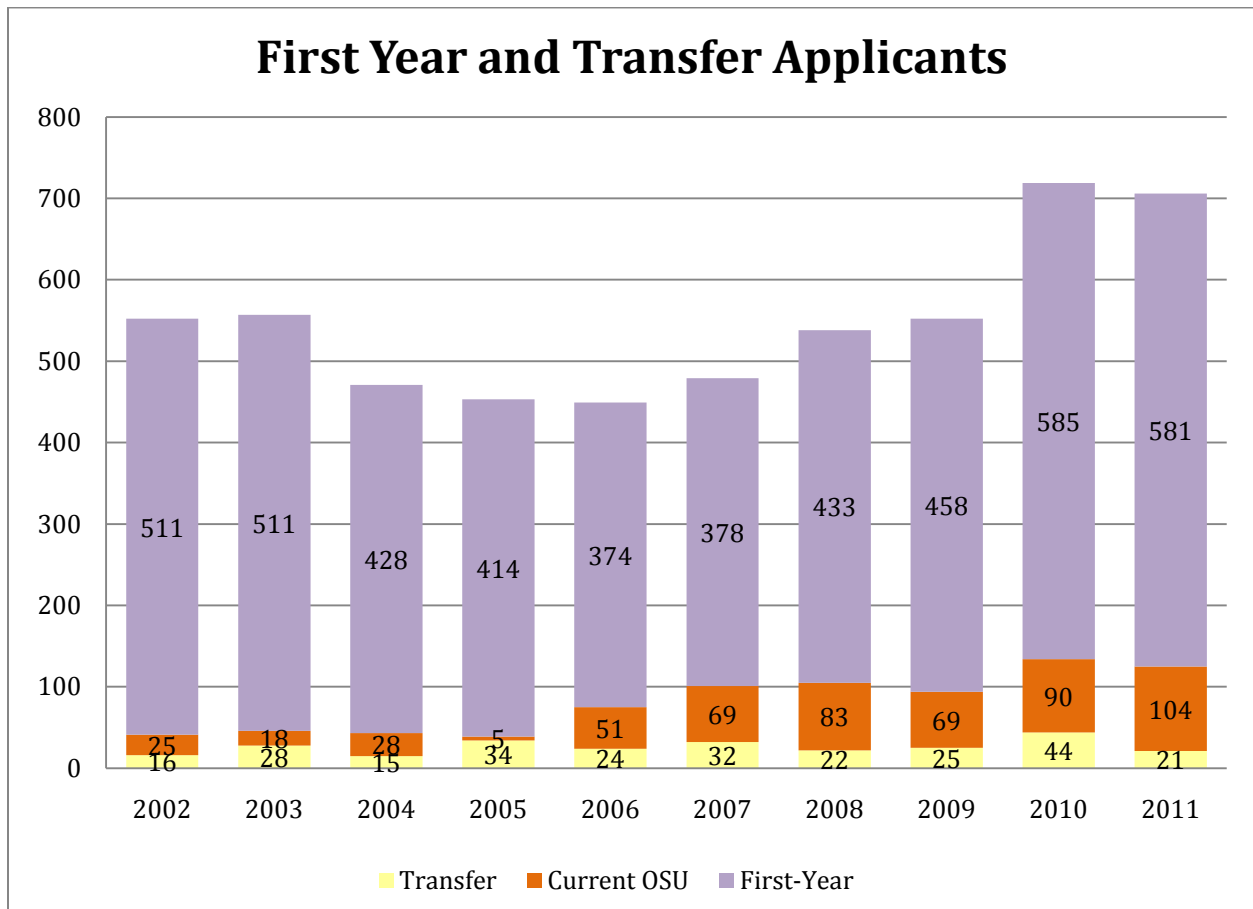
B. Research and its impact

- Under the direction of dedicated faculty mentors, Honors students write **senior theses** that represent more than undergraduate excellence: Honors scholars make original contributions to their fields. See the Appendix for a full list of senior theses completed during the 2010-2011 academic year. All UHC theses are made available through the ScholarsArchive digital collection of the Valley Library at OSU <http://ir.library.oregonstate.edu/jspui/handle/1957/7>.
 - a. In the 2010-2011 academic year, the UHC had 79 first-time faculty thesis mentors.
 - b. Several funding sources are available to UHC students in support of their thesis research and related professional activities, including the UHC Excellence Fund, the Grandma Honors Fund, and the DeLoach Work Scholarship program. In 2010-2011, 15 DeLoach Work Scholars earned more than \$15,000.
- UHC coursework is designed to offer UHC students opportunities for broad intellectual engagements. Three new course offerings from the 2010-2011 academic year highlight this effort to allow students to pursue learning in diverse, widely-relevant areas:
 - a. Medicine, Pain, and the Self (Courtney Campbell, CLA, Philosophy)

- b. Modern Iran: Revolution and its Aftermath (Jonathan Katz, CLA, History)
- c. Energy IQ: Resources, Responsibility, and Renewability Today and Tomorrow (Dan Arp, UHC/CAS; Skip Rochefort, COE; and Dan Euhus, COE)

C. Outreach and engagement

- The UHC welcomed 246 new students in fall term, 2010. A further 276 of OSU’s top new undergraduates are slated to arrive in fall term, 2011. Seventy-five out of 197 high school admits shared their class rank information with us, and 65 of these were above the 90th percentile in their graduating class. Seventeen of the 75 students who reported data were first in their graduating class. The GPA and test score averages for all 2011 admitted students were:
 - a. 3.93 high school GPA (unweighted average on a 4.0 scale)
 - b. 2000 SAT
 - c. 30 ACT
 - d. 3.8 transfer GPA
- The following chart illustrates that the number of applications to the UHC remained high this year. An increase in applications from within the OSU community balanced against small declines in applications from high school students and transfer students.



D. Community and Diversity

- Following its diversity action plan, the UHC places an emphasis on recruiting members of underrepresented groups. The percentage of minorities in the University Honors College continues to outpace the percentage in the general student population. For the incoming class, 42 students (15%) are Asian (28), Hispanic (10), Indian (1), African American (1), or American Indian (2).
- The UHC, for the second year, offered students an opportunity to earn credit while helping guide international students through their first years at OSU. In 2010-2011 thirteen UHC students enrolled in the Pathway Scholar Mentor program to earn credit for their experience. Eleven additional UHC students volunteered their time for this valuable program.

E. International-level activities and accomplishments

- The UHC continues to encourage international experiences for students. During 2010-2011, 28 UHC students completed at least one term of study abroad or an international internship through International Degree and Education Abroad (IDEA). Six students completed the International degree during the academic year.
- For the second year, the UHC sponsored a team of four UHC students to conduct research under the direction of Dr. Ping-Hung Hsieh, Associate Professor of Quantitative Methods in the College of Business, focused on a comparative analysis of the business practices of Oregon companies with companies in Asia, this year corporations in Beijing. Final results will be presented to OSU faculty and students in written and multimedia formats.

2. Assessments: What Worked, What Needs Improvement, Barriers

The UHC delivered courses for a record number of Honors and high-achieving OSU students in the 2011 academic year. Non-blanket UHC courses served 1700 students, an increase of 22% over the 2009 and 2010 academic years. New courses and additional sections or offerings of existing courses were added to the UHC coursework portfolio to meet the increased demand resulting from UHC growth. Effort was also focused on increasing utilization of all UHC courses. Low enrollment courses were rescheduled or reworked to ensure that courses meet student needs. Non-blanket UHC course utilization was 78% in 2011.

With UHC enrollments continuing to increase, discussions with leaders in other OSU units were initiated to determine the best way to meet unit-level needs and simultaneously serve Honors students in different programs. The focus of these discussions were high-demand and special need areas, including business, DPD, engineering, math, and writing. Agreements with the College of Business, College of Engineering, Department of Mathematics, and School of Language, Culture & Society have been reached and will be

used to support growth in UHC enrollments. Additional discussions will be undertaken in the 2012 academic year to address increased need for biology, cultural diversity, and writing coursework.

In the spirit of continuous improvement, a program outcome and assessment plan was developed for the UHC. The plan includes UHC-specific learning goals, program outcomes, and a detailed assessment plan. The plan was reviewed by the UHC Council (UHCC) of the Faculty Senate. In addition, in an effort to provide UHC instructors relevant course feedback, an updated UHC Student Evaluation of Teaching (SET) was proposed and approved by the UHCC and by OSU General Counsel. The updated evaluation of teaching maintains an open-ended assessment process for evaluation purposes related to the UHC curriculum and includes the OSU standard SET questions to enable UHC faculty to include UHC course evaluation scores in their dossiers for P&T. The revised UHC SET provides more comprehensive data that can also be used to help inform UHC curriculum planning and development processes.

3. Faculty and Student Awards

National awards

- Ishan Patel (Bioengineering) was awarded a Barry M. Goldwater Scholarship to pursue his study of blood chemistry and clot formation, OSU's only recipient of this prestigious award.
- Elliott Finn (Biology) was OSU's sole Udall Scholar for 2012.
- Anneke Tucker (Bioresource Research) won *The Journal of Young Investigator* Virtual Poster Session for her display on the inhibition of enzymes in the stomach.
- Justin Chi (Environmental Engineering) and Cassandra Loren (Biological Engineering) earned the grand prize in the Bechtel Student Engineering Video Contest, receiving an all-expenses-paid trip to the Dulles Metrorail extension project in Washington, D.C.

University awards

- UHC students claimed 24 of the 63 Waldo Cummings Awards and Honorable Mentions at the Annual Faculty Senate Student Recognition Reception.
- UHC students were involved in half of the eight award-winning projects at the Celebrating Undergraduate Excellence event in spring, 2011.
- Dylan McDowell (Fisheries and Wildlife Science) was one of five winners of OSU's first annual sustainability writing contest.

College awards

- Kathleen Dean Moore (Philosophy) and Gary Ferngren (History) were named UHC Eminent Professors for 2011.

- AnnaRose Adams (Bioresource Research) received the Culture of Writing Honors Thesis Awards co-sponsored by the Writing Intensive Curriculum program.
- Caitlin Crimp (Biochemistry and Biophysics), Ryan Frederick (Chemical Engineering), and Neebinnaukzhik Southall (Applied Visual Arts) were named UHC Exceptional Poster Awardees for their thesis poster presentations during the annual UHC Thesis Fair.

4. Leveraging Resources and Administrative Efficiencies

- With current student enrollment and projected enrollment it became imperative to hire an additional academic. Our newly-hired third advisor (1.0 FTE), Leanna Dillon, will bring a fresh perspective and allow us to maintain the UHC's high standards of student advising. She will also enable us to carry out new advising initiatives such as revising the advising section on our website to include on-line advising appointment scheduling for students.
- The UHC awarded \$260,000 in merit-based OSU Foundation scholarships to new and continuing students for the 2011-2012 academic year.
- The UHC has upward of \$140,000 available for UHC students in the 2011-2012 academic year who are participating in service learning projects and experiential learning activities such as internships, study abroad, and research projects.
- A continued emphasis on developing private support for UHC programs and students led to \$233,249 in total gifts and pledges during the 2011 fiscal year from 83 different donors. Thirty-five of these donors were OSU alumni, who gave \$100,295 (15 UHC alums gave \$7,267). Additional donations came from UHC friends (19 donors), Honors student family members (15 donors), and current and past OSU faculty and staff (14 donors). The UHC began the process in 2010-2011 of transitioning its external advisory Board of Regents into a fund-raising board with minimum donation requirements.

2010-2011 RESULTS AND OUTCOMES

1. Performance on college-level metrics

We have referred to the relevant metrics in the narrative above. Several of the metric categories provided by the Office of Institutional Research are not relevant to the University Honors College. Perhaps the most relevant metrics to consider are our first-year retention rates (95%) and six-year graduation rates (88.8%). These numbers compare favorably with both university-wide averages and the past performance of the UHC despite significant growth in the UHC's student population over the past five years.

Appendix: 2010-2011 Senior Theses

Name	Major	Title
Adams, AnnaRose	Bioresource Research	Response of Reef Fish Assemblages to Overgrowth of the Hydrocoral <i>Millepora complanata</i> by the Crustose Alga <i>Ramicrusta</i> sp.
Asson, Danielle	Biology, International Degree	Under the Sea: An Evaluation of the Establishment and Continued Effectiveness of the Galapagos national Park and Marine Reserve in Ecuador
Atkinson, Nathan L	Economics, Philosophy	Dangerous Cake
Bauer, Nicole L	Chemical Engineering	Nanomechanical Characterization of Atomic Layer Deposition Coating for Biomedical Applications
Carey, Alyssa B	Microbiology	Characterization of the Plasmids of the Pathogenic Plant Bacterium <i>Erwinia amylovora</i> in Washington and Oregon
Cheung, Cameo M	Communications	NACURH Adventure in Conference Undertaking and a Resource handbook
Chun, Nicole W	Animal Science	The Effects of Long-Term Detrital Manipulation on Miconutrients in oil Solution
Chung, Yun Soo	Chemistry	Toad Populations Decreasing in South Korea
Cole, Gail M	English	Dueling Narrators and Astonished Readers: A Craft Analysis of Alice Munro's <i>Lives of Girls and Women</i>
Collins, Lee	Physics	Monte Carlo Simulations of Structure and Melting Transition of Small Ag Clusters

Converse, Bradley R	Mechanical Engineering	Traveling to Africa: An Orientation
Dunfield, Elizabeth M	Biochem/Biophysics	Mechanically Actuated Droplet Microfluidics
Farhad, Mohammad	Biology	Presence of Diarrhea and its Intensity due to Human Behaviors in Deh Sabz, Kabul, Afghanistan
Frederick, Ryan T	Chemical Engineering	Photoactuated Droplet Microfluidics
Garza, Natalia L	Business Admin	Effect of Ecolabels in Context on Perceived Sustainability
Gifford, Jessica	Physics	Gravitational Waves and the Laser Interferometer Space Antenna (LISA) and Lab on a Chip
Grellmann, Elise	Microbiology	Characterization of Quorum-Sensing Diversity in Environmental <i>Pseudomonas aeruginosa</i> Populations
Hall, Mark	Biochem/Biophysics	Activation of Co-stimulatory Molecule OX40 Increases Memory T-cell Function and Cytokine Production in Uveitis
Heppe, Kenan G	Chemistry	Evaluation of Bacterial F ₁ F ₀ -ATPase Inhibitors for Synergistic Effects
Hunter, Sean C	Mechanical Engineering	A Comparative Study of Funding and Budgeting Profiles of Collegiate Athletic Bands, with the Emphasis on Alumni Relations
Johnson, Victoria C	Chemical Engineering	Electrochemical Hydrogen Production from Water and Sulfur Dioxide in an Ionic Liquid Electrolyte
Koebel, Ellen	Exercise & Sport Science	Attention Principles of Exercise Training: A review of Exercise Studies in Cancer Survivors
Kohan, Patrick	Business Admin	The Discovery of Sports Marketing Through the Willamette Volleyball Classic

Kraus, Amanda	Liberal Studies, Spanish	Unsent Messages and Undelivered Mail: Self-Reflection Through Correspondence
Landin, Joshua M	Psychology	Investigating the Validity of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)
Lewis, Katherine A	Psychology	Personality and Binge Drinking: How Personality Risk Factors Affect the Prevalence and Timing of College Binge Drinking
Lieberman, Aaron W	Psychology, German	"Just" Words
Lincoln, Danae A.	Mechanical Engineering	The Art and Craft of John Williams
Lovelace, Anna	Biology, Spanish	Analysis of the Toxicity of Apoptolidin Compounds in Human SF295 Glioblastoma Cells
McGuire, Madilynne J	Enviro. Economics, Policy, & Management	Red Raspberry Production Cost Comparison in Oregon and Chile
Miller, Erin L	English	One Person, One Broadcaster: Social Media in Iran
Mueller, Solveig T	Mathematics	Numerical Method and Step Size Variation in the Lorenz Equations
Nandgopal, Akhila	Electrical & Computer Engineering	The Effect of Electrode Configurations on Dielectrophoresis of Zinc Oxide Nanowires
O'Brien, Shawn W	Philosophy	Responding to Contemporary Religious Diversity in the United States: Mitigating Religious Conflict by Emphasizing Pluralism and Interfaith Dialogue
Patel, Japan K	Nuclear Engineering	Assessing the Quality of Three Dimensional Simplified Spherical Harmonic (SPN) Radiation Transport Solutions to Source Detector Problems

Patton, B. Wren	Biology, Fisheries & Wildlife, International Degree	Surfacing Behaviors of Juvenile Loggerhead Sea Turtles <i>Caretta caretta</i> in North Carolina
Pierson, Kayla L	Chemical Engineering, International Degree	Comparison and Cultural Review of Biosphere Modeling Using Foliar Uptake of Technetium-99 in Radishes
Prince, Morgan K	Biology	Beyond Empathy: A Glimpse into Physician-Patient Relationship
Ramsing, Patrick E	Chemical Engineering	Comparative Studies of Batch and Continuous Processes for the Synthesis of Copper Nanoparticles
Riesen, Audrey M.	General Science	The Choice: Art or Science
Riscoe, Erin W	Microbiology	Survey of Cyanophages: A Study of Bacteriophages Associated with Pacific Northwest Cyanobacterial Blooms
Rodriguez-Walmisley, Olga B	English, Spanish	How the Portrayal of Women Characters in the Zorro and Robin Hood Stories has Changed Over Time
Schneider, Christine A	Biochem/Biophysics	Investigations into the Mechanism of Action of Dengue Virus Inhibitors Compounds
Scott, Derek A	Biology	Excellence in Emergency Medicine: The Real Untold Stories
Smith, Claire D	Design & Human Environment	Barriers to Weatherizing Low-Income, Rural Homes on the Oregon Coast
Snyder, Brittany E	Civil Engineering	The Effects of Debris Loading on the Performance of a Tsunami Evacuation Building for Life Safety
Southall, Joel M	Philosophy	Developing a Native American Pedagogy Around the Work of Paulo Freire, Viola Cordova, and Vine Deloria
Southall, Neebinnaukzhik	Applied Visual Arts	Then and Now: Asserting Anishinabek Identity Through Indigenized Apparel

Tadehara, Katherine M.	Chemical Engineering	Molecular Origins of Recombinant Factor VIII (rFVIII) Stabilization with Pluronic® F68
Tadlock, Caterina	English	The Pen and the Sword
Tilleman, Kirsten	Natural Resource	Our Natural Family: A Study of Young Children and How They Connect with Nature
Vanlue, Mary Elizabeth	Indust & Mfg Engineering	A Method to Effectively Measure Sustainability in Non-Profit Organizations
Varin, Sara M	Chemical Engineering	Effects of rMnP on Yeast Growth Inhibitors Generated During the Pretreatment of Lignocellulosic Biomass
Vigeland, Anna E	Biochem/Biophysics	UVB Radiation Affects the Quality of the Skin Lipids of Red-Sided Garter Snakes
Voigt, Levi R	Civil Engineering	The Location of the Neutral Axis in Wood Beams with Multiple Knots
Weaver, Katherine I	Liberal Studies	Life List
Weiss, Benjamin M	Mechanical Engineering	A Graphical Method of Computing Offset Curves
Wenning, Stephanie E	Design & Human Environment	Modifications of Homes for the Comfort of Arthritis Sufferers
Wilson, Kiya	Geosciences	Using an Array of NE Pacific Margin Sediment Samples to Link Land and Ocean Responses to Glacial-Interglacial Climate Variability
Zook, Molly L	Food Science & Technology	Impact of Pre-Fermentation Maceration Techniques on Yeast Populations and Color of Pinot Noir Wine