This Week’s Departmental Events:

- Team develops cheaper, non-petroleum method to make plastics from biomass
  [http://www.udel.edu/udaily/2012/apr/plastics-biomass-043012.html](http://www.udel.edu/udaily/2012/apr/plastics-biomass-043012.html)

- Department Seminar
  Peter Tessier, Rensselaer Polytechnic Institute
  May 4, 2012
  10:00am in 102CLB

- 29th Annual Senior Thesis Program
  Saturday, May 5, 2012
  9:00am – 12:30pm in Perkins Student Center
  See attachment for more information.

- CBE Seminar
  Peter Fischer, Institute of Food Science and Nutrition, ETH Zurich
  Friday, May 4, 2012
  3:00 pm in 366 CLB
  “Structure and Rheology of a Shear-Thickening Wormlike Micellar System – A Triggered SANS, SALS, UVP, and Birefringence Study”

CBE In the News:

- Dr. Thomas Epps’ article “Triblock copolymers with tapered interfaces form nanonetworks” was featured on the Noteworthy Chemistry section of the ACS website.
  [http://portal.acs.org/portal/acs/corg/content?_npb=true&_pageLabel=PP_ARTICLEMAIN&node_id=840&content_id=CNBP_029825&use_sec=true&sec_url_var=region1&__uuid=f4d9ce10-8507-4f34-ac84-bdb6e8972993#P22_2156](http://portal.acs.org/portal/acs/corg/content?_npb=true&_pageLabel=PP_ARTICLEMAIN&node_id=840&content_id=CNBP_029825&use_sec=true&sec_url_var=region1&__uuid=f4d9ce10-8507-4f34-ac84-bdb6e8972993#P22_2156)

- Engineering faculty published in peer-reviewed journals
  [http://www.udel.edu/udaily/2012/apr/engineering-journals-042412.html](http://www.udel.edu/udaily/2012/apr/engineering-journals-042412.html)

- President Eric Kaler to serve as 2012 Commencement Speaker at the University of Minnesota

- Finalists pitch startup ideas, receive monetary awards
  [http://www.udel.edu/udaily/2012/apr/hen-hatch-042512.html](http://www.udel.edu/udaily/2012/apr/hen-hatch-042512.html)

- Encouraging words for young engineers

Future CBE Events:

- CMET Research Review
  Thursday, May 3, 2012
  Clayton Hall Conference Center
  Registration is free and open to CMET affiliates, but please register on-line so we can plan for your attendance.

- Delaware Membrane Protein Symposium
  Monday, May 14, 2012
  Trabant University Center
  Registration is free and open to the public, but please register on-line so we can plan for your attendance.

- Online registration is now open for the UD Energy Institute Annual Symposium on June 6, 2012. Registration is free and is open until Friday, June 1, 2012. Below is the direct link to the form.
  [https://crayola.hcs.udel.edu/conf/registration/udei/](https://crayola.hcs.udel.edu/conf/registration/udei/)
  We look forward to seeing you soon!

Jobs/Recruiting:

- The largest intellectual property rights entity in the nation needs qualified applicants in the chemical, electrical and mechanical disciplines with a critical need for electrical engineers to work as patent examiners. We offer an inclusive
organizational climate, competitive salaries, bonus incentives, paid overtime, top-notch health care and retirement plans. The USPTO supports flexible work schedules and telework. See innovation in action. 
http://usptocareers.gov/

- VALSPAR is looking to hire a material scientist/engineer with a strong background in characterization of polymeric materials for our Minneapolis, MN Corporate Laboratory. 
http://tbe.taleo.net/NA4/ats/careers/requisition.jsp?org=VALSPAR&cws=1&rid=429

- Oak Ridge Institute for Science and Education is looking for a Postdoctoral Research Associate in Soft Materials. 

- Available positions can be found on the Chemical & Biomolecular Engineering opportunity website (http://www.che.udel.edu/biz/OppIndex.html), so be sure to check it regularly.

**Other Department Seminars:**

- **MSEG Seminar**
  Dr. Isao Noda, The Proctor and Gamble Co.
  Wednesday, May 2, 2012
  10:00am in 219 Brown Lab
  “Two-Dimensional (2D) Correlation Spectroscopy Study of Polymers, Biomolecules and Other Interesting Systems”
29th Annual Senior Thesis Symposium

Saturday, May 5, 2012
9:00 a.m. – 12:30 p.m.
Perkins Student Center
University of Delaware
Newark, DE

The Senior Thesis Symposium showcases the work of senior thesis students from a wide range of disciplines at the University of Delaware. Each of the presenters is a candidate either for the Degree with Distinction or the Honors Degree with Distinction. The Symposium is sponsored by the Board of Senior Thesis Readers of the University Committee on Student and Faculty Honors.
Board of Senior Thesis Readers
2011-2012

Lynnette Overby, Faculty Director of Undergraduate Research and Experiential Learning
Jan Blits, School of Education
Nicole Donofrio, Plant & Soil Sciences
Marlene Emara, Animal & Food Sciences
Darryl Flaherty, History
Ruth Fleury-Steiner, Human Development & Family Studies
Nancy Getchell, Kinesiology & Applied Physiology
James Glancey, Bioresources Engineering
Susan Groh, Chemistry & Biochemistry
Robert Hodson, Biological Sciences
Rolf Joerger, Animal & Food Sciences
Heidi Kaufman, English
Sherry Kitto, Plant and Soil Sciences
Kalmia Kniel, Animal & Food Sciences
David Legates, Geography
Jennifer McConnell, Civil and Environmental Engineering
John Patrick Montaño, History
Christine Ohannessian, Human Development & Family Studies and Psychology
Mark Parcells, Animal & Food Sciences
Eric Rise, Sociology & Criminal Justice
David Suisman, History
Meredith Wesolowski, Chemistry & Biochemistry
Carol Wong, School of Education
Danilo Yanich, School of Public Policy & Administration
The Senior Thesis Symposium would not have been possible without the following people:

Lynnette Overby (UREL Faculty Director)
Meg Meiman (URP Coordinator)
Roshni Chopra (URP Webmaster)
Mary Ann Null (URP Office Coordinator)
Emily Kutch (URP Student Assistant)
Christine Yacyshyn (URP Graduate Assistant)

A special thank you to our plenary speaker, Joshua Figueroa, to the senior thesis candidates who participated in today’s program, and to all the UD faculty who make the Senior Thesis Program possible.
**POSTER SESSION**
9:00 a.m. – 10:15 a.m.  East Lounge

**Anthropology**
(1)  *Locomotor Diversity and Midfoot Mobility in Gorillas*
   Cody Prang, Anthropology
   (Karen Rosenberg, Anthropology)

**Athletic Training**
(2)  *The Effect of Lower Leg Kinesio® Tape Application on Plantar Pressures in Subjects with Medial Tibial Stress Syndrome*
   Maggie Griebert, Athletic Training
   (Thomas Kaminski, Kinesiology & Applied Physiology)

**Biochemistry**
(3)  *Glycosylation and Phosphorylation Induce Opposing Structural Conformations in Tau’s Proline-Rich Domain*
   Michael Brister, Biochemistry
   (Neal Zondlo, Chemistry & Biochemistry)

(4)  *Poultry Evolution: A Concentration on NAG, CPSI, and the Urea Cycle*
   Laura Wertman, Biochemistry
   (Carl Schmidt, Animal and Food Sciences)

**Biological Sciences**
(5)  *The Role of atg18 in Signal Transduction Pathways during Drosophila Development*
   Erica Boetefuer, Biological Sciences
   (Erica Selva, Biological Sciences)

(6)  *Binding Inhibition of Casein Kinase 2 and Membrane Localization of BMP Receptor Type 1a*
   Alex D’Angelo, Biological Sciences
   (Anja Nohe, Biological Sciences)

(7)  *The Redirection of Adipocyte to Osteoblast through the Bone Morphogenetic Protein 2 Pathway and with the use of Casein Kinase 2*
   Lauren Gurski, Biological Sciences
   (Anja Nohe, Biological Sciences)

**ORAL PRESENTATIONS**
11:15 a.m. – 12:30 p.m.

**Chemical Engineering and Environmental Engineering**
*Rodney Room*

Moderator: Prasad Dhurjati, Professor, Chemical Engineering

1.  Tracie Ervin, Environmental Engineering
   *Enzyme-Enhanced Microbial Fuel Cells*
   Steve Dentel, Civil and Environmental Engineering

2.  Jing Lu, Chemical Engineering
   *Thermus Thermophilus as a Thermophilic Model Organism for Biofuels Production*
   Maciek Antoniewicz, Chemical & Biomolecular Engineering

3.  Joanna Adadevoh, Chemical Engineering
   *The Effect of Ammonia on the Glycosylation Pattern of Monoclonal Antibodies*
   Babatunde Ogunnaike, Chemical & Biomolecular Engineering

4.  Joey Kim, Chemical Engineering
   *Characterization of Gradient Generating Vapor Deposition Device and Application on Elastomeric Polymer Substrate Surface*
   Thomas Epps, Chemical & Biomolecular Engineering
ORAL PRESENTATIONS
11:15 a.m. – 12:30 p.m.

Chemistry, Biochemistry, and Biological Sciences
Ewing Room
Moderator: Klaus Theopold, Chair, Chemistry & Biochemistry

1. Soma Jobbagy, Biochemistry
   Novel Antiandrogens as Potential Prostate Cancer Therapeutics
   John Koh, Chemistry & Biochemistry

2. David Raciti, Biochemistry
   Activity of Astrogorgiadiol
   Douglass Taber, Chemistry & Biochemistry

3. Tim Gilpatrick, Biochemistry
   Examining the Role of Lipoprotein-Associated Phospholipase A2 in Atherosclerosis
   Brian Bahnson, Chemistry & Biochemistry

4. Derek Ahneman, Chemistry
   Mechanistic Studies of the Silyl-Heck Reaction
   Donald Watson, Chemistry & Biochemistry

5. Role of Hyaluronidases in Prostate Cancer Metastasis
   Lyana Labrada, Biological Sciences
   (Kenneth Van Golen, Biological Sciences)

6. Hypoplastic Left Heart Syndrome: Molecular Consequences of Transcription Factor Mutation
   Ashley Shay, Biological Sciences
   (Vicky Funanage, Biological Sciences)

7. The Effect of Wetland Restoration on Arthropod Communities
   Katie Yost, Biological Sciences
   (Douglas Tallamy, Entomology & Wildlife Ecology)

8. Small RNA Regulation of Neurogenesis in Sea Urchins
   Lydia Bonar, Biological Sciences
   (Jia Song, Biological Sciences)

9. Mechanisms of Resistance to Quaternary Ammonium Compounds and Other Antimicrobials in Salmonella enterica
   Sarah Stamm, Biological Sciences
   (Diane Herson, Biological Sciences)

10. NHC-Gold(I) and (III) Complexes for use in Energy Storage and Halogenation Catalysis
    Michael Ghidiu, Chemistry
    (Joel Rosenthal, Chemistry & Biochemistry)

11. Spatio-Temporal Hydrodynamic Variability in a Small Tidal Creek
    Rebecca Aiken, Civil Engineering
    (Thomas McKenna, Geological Sciences)
Criminal Justice  
(15) Juvenile Victimization and Trauma: the Link Between Juvenile Offending and their Victimization  
Helen Turkel, Criminal Justice  
(Susan Miller, Sociology & Criminal Justice)

Early Childhood Education  
(16) Maneuvering through the Thought Stream: Investigating Preschoolers’ Thoughts about Thoughts  
Rebecca Godwin, Early Childhood Education  
(Cynthia Paris, Human Development & Family Studies)

English  
(17) The Utopias of Vonnegut and Marcuse  
Ryan Morse, English  
(Timothy Spaulding, English)

Geological Sciences  
(18) Radionuclide Indicators of Sediment Deposition in the Delaware Estuary  
Joshua Humberston, Geological Sciences  
(Christopher Sommerfield, Oceanography)

Neuroscience  
(19) Assessment of bdnfDNA Methylation in the Developing Amygdala Associated With Caregiving  
Kenneth Chen, Neuroscience  
(Tania Roth, Psychology)

(20) Behavioral Therapy to Ameliorate the Effects of Neonatal Alcohol Exposure on Dendritic Spines on the Rodent mPFC  
Kerry Criss, Neuroscience  
(Anna Klintsova, Psychology)

(21) The Effects of Dorsal Hippocampal Inactivation on Working Memory-dependent and Independent Tasks  
Glenn Watson, Neuroscience  
(Amy Griffin, Psychology)

History and Anthropology, cont’d  
Alumni Lounge  
2. Amanda Goebel, Anthropology  
Women’s Waistcoats in England and America, 1700-1790  
Lu Ann DeCunzo, Anthropology

3. Paul Miranda, History  
Captive in Barbary: The Stereotyping of Arabs, Moors, Turks, and Islam in Early American Society, 1785-1846  
Owen White, History

4. Madeleine Wright, Latin American Studies  
Curbing the Mayhem in Rio de Janeiro’s Sensations: The Phenomenon of Pacified Favelas  
Carla Guerron-Montero, Anthropology

Political Science and Criminal Justice  
Art Gallery  
Moderator: Gretchen Bauer, Chair, Political Science & International Relations

1. Brenna James, Political Science  
President Obama’s Role in Re-invigorating the Arab-Israeli Peace Process  
Daniel Green, Political Science & Internat’l Relations

2. Liam Phibbs, Political Science  
Justice Scalia: Textualism v. Technology  
James Magee, Political Science & Internat’l Relations

3. William Humphrey, Political Science  
‘I Accept Your Nomination’ - American Dream Rhetoric in Presidential Nomination Acceptance Speeches, 1932-2008  
Jason Mycoff, Political Science & Internat’l Relations

4. Rebecca Trexler, Criminal Justice  
Cruel Punishment: Proportionate Sentencing and the Delaware Constitution  
Kenneth Haas, Sociology & Criminal Justice
ORAL PRESENTATIONS
11:15 a.m. – 12:30 p.m.

English and Computer Science    Williamson Room
Moderator: Iain Crawford, Chair, Department of English

1. Kelli Shermeyer, English
Dangerous Play-things: Staging the Scandalous in
Middleton and Rowley’s The Changeling
Miranda Wilson, English

2. Gregory LaLuna, English
Nature’s Logic: Understanding Tragedy in the Works of
Thomas Hardy
Bernard McKenna, English

3. Shane Palkovitz, English
Human Displacement in the ‘Third World,’ and in
Paradise
McKay Jenkins, English

4. Ben Karlin, English
Stories of the Jasmine Revolution
McKay Jenkins, English

5. Cory Bart, Computer Science
Wacky Writing: Exploring the XO Laptop as a Platform for
Encouraging Creative Writing by Children
Lori Pollock, Computer Science

History and Anthropology    Alumni Lounge
Moderator: Jill Nietzel, Associate Professor,
Department of Anthropology

1. Jennifer Gallo, Anthropology
Hanging out and Hooked up: Ambiguity in Interpersonal
Relations in Contemporary Campus Culture
Peter Weil, Anthropology

Nursing
(22) The Effect of a Mobility Program on the Prevalence of Delirium in
the Hospitalized Older Adult
Marissa Merson, Nursing
(Paula Klemm, Nursing)

Physics
(23) Habitability and Stability of Earth-Like Planets in Binary
Star Systems
Nicholas Troup, Physics
(John Gizis, Physics & Astronomy)

Psychology
(24) Exploring the Neural Basis of Emotional Induced Blindness
Using Event-Related Brain Potentials
Sage Boettcher, Psychology
(James Hoffman, Psychology)

(25) Continuing Study of Retroactive Memory Enhancement
Edgar Petras, Psychology
(Steve Most, Psychology)

(26) Do Cross-linguistic Differences affect Source Monitoring?
Adrienne Pinto, Psychology
(Anna Papafragou, Psychology)

Quantitative Biology
(27) The Effects of the Oxylosyltransferase Mutation on Wg, Hh,
and DPP Signaling
Alicia Liu, Quantitative Biology
(Erica Selva, Biological Sciences)

Wildlife Conservation
(28) Building a Predictive Habitat Model for Muskrats in
New Jersey
Jessica Ermak, Wildlife Conservation
(Christopher Williams, Entomology & Wildlife Ecology)
(29) A Comparison of Sampling Methodologies to Improve Carrying Capacity Estimates of American Black Ducks in New Jersey
   Marissa Goldstein, Wildlife Conservation
   (Christopher Williams, Entomology & Wildlife Ecology)

(30) Habitat Use of White-Tailed Deer During the Growing Season
    Holley Kline, Wildlife Conservation
    (Jacob Bowman, Entomology & Wildlife Ecology)

(31) The Effect of Landscape and Microhabitat Variables on the Distribution of Herpetofauna in Forest Fragments
    Errica Capossela, Wildlife Conservation
    (Jacob Bowman, Entomology & Wildlife Ecology)

(32) Interpreting Nest Evidence of Predated Artificial Wild Turkey Nests in Sussex County Delaware
    Nicole Hengst, Wildlife Conservation
    (Jacob Bowman, Entomology & Wildlife Ecology)

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**Plenary Session**

10:30 a.m. – 11:00 a.m. Rodney Room

**Welcoming Remarks**
Provost Tom Apple
University of Delaware

**Recognition of 2012 Degree with Distinction and Honors**
Degree with Distinction Candidates
Dr. Lynnette Young Overby
Faculty Director of Undergraduate Research

**Introduction of the Keynote Speaker**
John Burmeister, Alumni Distinguished Professor and Associate Chair, Department of Chemistry & Biochemistry
University of Delaware

**Keynote Address**
Joshua Figueroa
Assistant Professor of Chemistry & Biochemistry
University of California, San Diego
B.S. in Chemistry (UD 2000)
**ORAL PRESENTATIONS**  
9:15 a.m. — 10:15 a.m.

**Nursing & Neuroscience**  
Alumni Lounge  
Moderator: Brian Ackerman, Professor, Department of Psychology

1. Victoria Allen, Nursing  
   *Investigating Participation in Level I/II Activities by Potential Copers and Non-Copers 12 Months After Anterior Cruciate Ligament Reconstruction*  
   Lynn Snyder-Mackler, Physical Therapy

2. Lisa Beth Dokovna, Neuroscience  
   *Identifying Sensitive Developmental Periods for the Effects of Neonatal Alcohol Exposure on the Context Pre-Exposure Facilitation Effect*  
   Mark Stanton, Psychology

3. Elizabeth Anne Allen, Psychology  
   *Assessing Intervention Experiences Among Parents of High-Risk Children*  
   Mary Dozier, Psychology

**Music & Music Education**  
Ewing Room  
Moderator: Maria Purciello, Assistant Professor, Department of Music

1. Cera Babb, Music Education  
   *The Emotional Affect of Choral Singing on Vocalists*  
   Duane Cottrell, Music

2. Katherine Gloede, Music Education  
   *Das Unheimliche in Alban Berg’s Lulu and Fritz Lang’s Metropolis*  
   Philip Gentry, Music

3. Rebecca Cweibel, Music History & Literature  
   *Selling Out in the Sixties: Commercialization and Commodification in Three Musical Genres*  
   Philip Gentry, Music

**Plant & Soil Sciences, Marine Science, and Biological Sciences**  
Williamson Room  
Moderator: Harsh Bais, Assistant Professor, Plant & Soil Sciences

1. Christopher Wright, Biochemistry  
   *Analysis of Small RNA’s Associated with Plant Senescence*  
   Pam Green, Plant & Soil Sciences

2. Emily Olson, Marine Science  
   *The Presence of juvenile horseshoe crabs, Limulus polyphemus, and other benthic fauna of Mid-Atlantic coastal bays*  
   Douglas Miller, School of Marine Science and Policy

3. John Paul Harris, Plant & Soil Sciences  
   *Degradation of Harmful Bacteria in Simulated Wastewater and Storm Water Runoff by the White or Rot Fungus Pleurotus ostreatus*  
   Anastasia Churnside, Bioresources Engineering