Precessional music.........................................................DePauw Chamber Singers
Gregory Ristow (Director), Amanda Hopson (piano accompanist)

Opening remarks......................................................Dr. Pedar Foss, Dean of Academic Life

Introduction of speaker.........................................Dr. Jonathan Nichols-Pethick, Associate Professor of Communication and Theatre

Address.................................................................Bess Evans (DePauw ’07)

Bess Evans ’07 serves as a Public Engagement Advisor and Policy Analyst in the White House Offices of Science and Technology Policy and Public Engagement. She facilitates all White House policy engagement with the science, technology, research and innovation communities. She also manages private sector relationships around formal White House public-private partnerships and other special portfolios including Insourcing American Jobs, STEM Education, turning community colleges into "community career centers," 300,000 summer career opportunities for underserved youth, and resources for startups and high-growth entrepreneurs. Over the course of President Obama’s Administration, Bess has served at the Department of Justice in the Office on Violence Against Women and in the White House Visitors Office, managing events, engagement and special projects at both. Through her nearly 6 years of experience working for President Obama, especially through her work in seven states on then-Senator Obama’s campaign, she has learned the importance of inclusion and engagement of everyday Americans wanting to make an impact in the lives of their neighbors. Originally from Evanston, Illinois, she received the Walker Cup upon graduation from DePauw.

Announcement of Awards........................................Dr. Pedar Foss, Dean of Academic Life

Dr. Mark McCoy, Dean of the School of Music
Dr. Andrew Hayes, Associate Professor of Communication and Theatre
Dr. Jeanette Pope, Associate Professor of Geosciences
Dr. Matthew Oware, Associate Professor of Sociology
Dr. Marnie McInnes, Director of Nationally Competitive Scholarships

Presentation of Walker Cup........................................Dr. Brian W. Casey, President

“A Toast to DePauw”.......................................................Emily K. Barnash (’14),
Erik J. Erlandson (’13), Elleka A. Okerstrom (’14), Lance J. Orta (’14)

Recessional music....................................................David W. Acton (organ) (’15)

“Grand Choer” (Théodore Salomé 1834-1896)
UNIVERSITY AWARDS

D. J. Angus-Scientech Educational Foundational Scholarship
For the sophomore or junior majoring in the natural sciences or mathematics who has shown the greatest improvement in GPA from one semester or year to the next.
   Emma E. Clor

I. Nelle Barnhart Award
For the senior who has made outstanding contributions to the co-curricular life of the student body in support of the academic mission of the University. Given in honor of I. Nelle Barnhart, Associate Dean of Students at DePauw from 1949-1979.
   Lauren A. Howard

Joan Westmen Battey Endowed Scholarship
For the sophomore member of Kappa Alpha Theta sorority with the highest GPA in the first semester of her sophomore year.
   Celia C. Kauth

David B. Becker Fellows
For upperclass ITAP associates who have demonstrated significant achievement in on-campus and off-campus internship opportunities. A Becker Fellow has assumed a leadership role within ITAP and is recognized for the ability to link on-campus training with real-world IT experience.
   James W. Burgess
   Francis K. Fordjour
   Elise R. Henricks
   Vishal Khandelwal
   KunHee Lee
   Amanda C. Metternich
   N. Anh Nguyen
   Ruxanda A. Profir
   Jonathan A. Saddler
   Gregory B. Screws, II

Busey Family Endowed Scholarship
For the sophomore or junior member of Alpha Tau Omega fraternity who is active in campus leadership and earns the highest first-semester GPA.
   Andrew L. Cusumano

Center for Student Engagement Civic Engagement Award
   Casie J. Sambo

Gertrude and G.D. Crain Award
For students who make the most effective use of the facilities provided by the Eugene S. Pulliam Center for Contemporary Media.
   Michael J. Appelgate
   Karen H. Block
   Barbara E.A. Dageforde
   Abigail L. Dickey
   Joseph A. Fanelli
   Dana M. Ferguson
   Laura E. Guild
   Chase G. Hall
   Caitlin B. Hutchinson
   Benjamin A. Irons
   David T. Jorgenson
   Kaitlin F. Klose
   Erin K. O’Brien
   Alexander S. Paul
   Rebecca M. Stanek
   Caroline C. Torie
   Anastasia S. Way
   Lauren M. Wigton

First-Year Seminar Essay Contest
   Noelle M. Witwer, “Motivations for Morality: Evaluating Plato’s Concept of the Origin of Justice in a Modern Context”
   Evan M. Zelesnik, “From Above”
First-Year Seminar Most Improved Writers
Peter C. Andres  Logan J. Bertalan  Daniel Chen
Lauren Y. Chen  Gino G. Consiglieri  Katherine A. Copper
Taylor A. Crenshaw  Bradley S. Fey  David Baza Fuentes
Emily M. Hancock  Sam N. Sheldon  Kya C. Simmons
Yukai Su  Chenlu Xue

Joseph F. Gillespie Medical Fellowship
For a deserving senior pre-medical student for advanced education.
Mark A. Fadel  Paulina J. Haight  Kelly A. Harms

Katherine Cox Hoover Scholarship
For a sophomore who has demonstrated outstanding character, leadership, and special talents in extra-curricular activities. Established by James E. and Katherine Cox Hoover (’51).
Anna B. Gatdula  Erin K. O’Brien

2012-2013 Information Technology Associates Program Graduates
James W. Burgess  Reid T. Conner  Paul B. Fesenmeier
Francis K. Fordjour  Kyle R. Gough  Mengxiao Han
Elise R. Henricks  Patrick G. Herrod  Xinyan Hu
Mateos B. Kassa  Vishal Khandelwal  KunHee Lee
Amanda C. Metternich  Jacob J. Meyer  Lukas W. Meyer
N. Anh Nguyen  Ruxanda A. Profir  Jonathan A. Saddler
Gregory B. Screws, II  Meghan A. Shearer  Eriya Terada
Kara M. Yator  Katelyn A. Zolman

Lambda Chi Alpha Prize
For a junior who has made a significant contribution to Christian living at DePauw.
Lauren N. Perkins

R. Stanley Lawton, Jr. Prize
For students who have expressed and evidenced an interest in attending law school and who have demonstrated potential for high achievement in law school and in the practice of law as a profession. Established in memory of R. Stanley Lawton, Jr. (’36), with gifts from the law firm of Ice Miller and Mrs. R. Stanley Lawton, Jr.
Hillary C. Egan  James W. Kirkpatrick, Ill  Katherine M. Thrapp

Albert Lund Scholarship
For an active member of Phi Delta Theta fraternity who has won an internal scholarship competition based on academic achievement and community service.
John T. Colton  Jacob M. Rust

Men’s Hall Alumni Association Endowed Scholarship
For a sophomore and junior who have contributed significantly to the quality of life at DePauw. The winners will have demonstrated or promoted through their campus efforts the principles and ideals memorialized by the Men’s Hall Association.
Ronnie D. Kennedy, Jr.  Erin N. McGinnis  Yizhou Ren

Thomas Mote Public and Global Health Senior Award
For the senior who has done the most to promote the health of populations.
Francis K. Fordjour

Martha Weddell Nicholson Endowed Scholarship
For a junior (rising senior) woman majoring in the sciences who plans a career in science or who plans to pursue a graduate science or medical degree and who has a high GPA in her science major. She should have significant campus involvement and leadership outside her academic department and good character and be likely to appreciate the past contributions of alumni who make this and other scholarship awards possible.
Pamela (Lorman) and Ben Peternell Endowed Environmental Scholarship
For a sophomore (rising junior) of merit with a curricular or career commitment to environmental science, environmental studies and/or sustainability who has been recommended by faculty and DePauw’s Chief Academic Officer.

Lauren C. Krumwiede  Leif I. Anderson

Clifton J. Phillips Archives Research Award
For the student who has submitted the best research paper or project using a significant amount of resources from the Archives of DePauw University and Indiana United Methodism.

Samuel L. Spahn ’12

Alice G. Ross Senior Award
For an outstanding senior woman from Indiana. The award is in memory of George A. Ross’ mother, a housemother at Kappa Alpha Theta.

Emily E. Vierk

Stuart and Jane Watson Delta Tau Delta Endowed Scholarship
For members of the Delta Tau Delta fraternity with the highest GPA in their class at the end of the fall semester.

Daniel W. Furman  Eric A. Malm  J. Eric McMechan

Randal L. Wilson Memorial Union Board Award
For a junior who has made outstanding contributions to campus life. Established by Margaret Hardgrove Wilson (’41) and her husband Robert in memory of their son, who had been president of the Union Board.

Benjamin J. Hazen

Phi Beta Kappa
Phi Beta Kappa, founded in 1776, is the oldest and most respected honorary society in the United States. The Indiana Alpha Chapter was chartered at DePauw in 1889.

Ethan E. Brauer (’14)  Emily A. Brelage (’13)  Jack E. Burgeson (’14)  Reid T. Conner (’13)
Brittini E. Crofts (’13)  Taylor D. Crompton (’13)  Mason A. Davenport (’13)  Brent M. Hume (’13)
Patrick G. Herrod (’13)  John D. Hoover (’14)  Brent M. Hume (’13)  John D. Hoover (’14)
Nora L. Murphy (’13)  Stefan B. O’Neill (’13)  Martha M. Parsons (’13)  Rachel E. Rominger (’13)
Tyler L. Perfitt (’13)  Son D. Pham (’13)  Ruxanda A. Profir (’13)  Katherine M. Thrapp (’13)
Michelle E. Reed (’13)  Yizhou Pham (’14)  Rachel E. Rominger (’13)  Bradley P. Wethington (’13)
David Tykvar (’13)  Mohammad Usman (’13)  Emily E. Vierk (’13)  Bradley P. Wethington (’13)
Adam E. Weaver (’13)  Daniel J. Walsh (’13)  Bradley P. Wethington (’13)
Xin Zheng (’14)
John and Esther Browning Scholarship
For an outstanding pianist or violinist completing the junior year at DePauw.
   Susan G. Miller

Leah Curnutt Prize
For an outstanding student majoring in music education or piano. Established by Mildred Gardner (’47), a School of Music alumna and lifelong friend of Professor Leah Curnutt. Professor Curnutt taught at DePauw from 1935-1970.
   Megan A. Benedict

Fitzpatrick Opera Award
For the senior vocalist who has contributed the most to opera productions during his or her time at DePauw. Dr. Fitzpatrick taught at DePauw from 1963-1991.
   Erik J. Erlandson

Meghan Parker Memorial Prize
For the outstanding first-year vocalist in the School of Music. Established through gifts from family and friends in memory of Meghan Parker, who was killed in an automobile accident in September 1990, at the beginning of her first year at DePauw.
   Sydney E. Cason

Performance Certificates
For seniors who have attained a high degree of excellence in applied music.
   Erik J. Erlandson     Josiah Q. Rushing     Emily A. Smith
   Patrick M. Speranza   Elisa D. Sunshine

Presser Undergraduate Scholar Award
For an outstanding junior majoring in music.
   Gwendolen L. Eberts

Mabel Lucille Sherman Music Award
For the outstanding pianist in the graduating class.
   J. Alexander Diaz

Van Denman Thompson Award
For a senior who has achieved excellence in scholarship, musicianship and activities. Established by Van Denman Thompson, who taught in the School of Music from 1911-1957.
   Patrick M. Speranza

Pi Kappa Lambda Music Honorary
The national music honorary society, to which students are inducted on the basis of scholarship and musicianship.
   Miriam R. Alter     T. Blaine Kuss     Susan G. Miller
   Alexander C.H. Muetzel     Stefan B. O’Neil     Josiah Q. Rushing
   Carly J. Tebelman
ARTS AND HUMANITIES

DEPARTMENT OF ART AND ART HISTORY

Art Department Scholarship
For students selected by the Department of Art and Art History to receive funds for materials, books or studio fees at the student's discretion for furthering art studies while at DePauw.
Meghan C. Gieseker

Vera May Knauer Farber Award
For a sophomore or junior studio art major, with preference given to one who uses direct observation as a source for imagery. Established by Vera May Knauer Farber ('36).
Rebecca A. Zucker

Indiana Artist-Craftsmen/Talbot Street Art Fair Prize
For deserving underclass students majoring in studio art, to be used for the purchase of art supplies. Established in honor of Richard Peeler, who taught ceramics at DePauw from 1958-1972, and Marjorie Peeler.
Rebecca A. Zucker

William Meehan Prize in Art
Adalky F. Capellan

Senior Art History Prize
For a senior art history major.
Vishal Khandelwal

Fritz Smith Memorial Art Award
For an undergraduate student whose outstanding painting or drawing is selected for the University's permanent collection. Established in memory of Fritz Smith, a DePauw art student, who died in 1959.
Ruth L. Poor

A. Reid Winsey Memorial Art Scholarship
Sarah A. Trujillo

ASIAN STUDIES PROGRAM

Arthur E. “Bud” Klauser Summer Project Grants
For students for summer study projects related to Asia and the study of Asian languages. This award is in honor of Arthur “Bud” Klauser.
Shea R. Lewis Benjamin J. Roess Garth E. Synnestvedt
Rebecca A. Zucker

DEPARTMENT OF CLASSICAL STUDIES

Kairos Award for Achievement in Classical Studies
Awarded to the student who has demonstrated significant achievement in Greek and/or Latin as well as Classical Civilization.
Yaze Li

Kairos Award for Achievement in Greek
Awarded to the student who has demonstrated significant achievement in Greek at the advanced level.
Genevieve H. Flynn
**Kairos Award for Achievement in Latin**
Awarded to the student who has demonstrated significant achievement in Latin at the advanced level.

*Stephen T. McMurtry*

**Outstanding Senior Major**
For a graduating senior majoring in Classical Civilization, Latin or Greek who has achieved outstanding academic success and/or made significant contributions to the department during his or her four years at DePauw.

*John R. Glerum*

**Georgia M. Watkins Prize**
For the outstanding beginning Greek student and the outstanding beginning Latin student.

*Andrew L. Cusumano (Latin) Amanda C. Metternich (Latin) Yukun Zhang (Greek)*

**Eta Sigma Phi**
Honorary society for Classical Studies.

Andrew G. Bartucci, Jr. Alisha L. Grider Madeline N. Hawk
Yaze Li Xiaomei Qian Dakota N. Watson
Yukun Zhang

**DEPARTMENT OF COMMUNICATION AND THEATRE**

**Don Campbell Award**
For the senior man and woman who contributed most toward theatre while at DePauw, selected by members of Duzer Du, the theatre honorary.

*William A. Freske Elisabeth E.G. Sutherland*

**Stephen Gentry Scholarship**
For a junior dedicated to excellence in broadcast journalism.

*Brian K. Alkire Zachary W. Crenshaw Lydia R. Hayden*

**Margaret Noble Lee, Class of 1882, Prize for the Promotion of Public Speaking**
For success in an extemporaneous speaking contest open to all DePauw students.

*James W. Kirkpatrick, III Lauren L. Owensby*

**Barbara Petty Award**
For the senior who has shown dedication to DePauw theatre, relative proficiency in an area of theatrical ability, and promise of future professional achievement in theatre.

*William A. Freske*

**Elizabeth Turnell Award**
For the senior with high academic achievement who has contributed the most toward broadcasting and who shows promise of professional achievement in electronic media. Ms. Turnell taught at DePauw and advised WGRE from 1944-1971.

*Kaitlin F. Klose Carter E. McKay*

**Robert O. Weiss Speaker of the Year**
For the member of the Debate Team who has contributed the most to the vitality of the program and who shows the most promise as a wise, effective, and ethical advocate in the future.

*James W. Kirkpatrick, III*

**WGRE Award**
For the student who has contributed the most to WGRE

*Caroline C. Torie*
Lambda Pi Eta
Honorary society for the National Communication Association

Ashley M. Bauer  Megan W. Crowley  McKenzie A. Curran
Nicole L. Dobias  Dana M. Ferguson  Theresa J. Figliulo
Kaitlyn D. Frische  Abigail E. Ginn  Marissa G. Jansen
Frances M. Jones  Kelly D. Killpack  Carter E. McKay
Austin H. Miller  Lara E. Naanouh  Taylor J. Richison
Ellaree M. Swim  Amanda R. Troyer  Erica L. Tucker
Katherine M. Voskoboynik  Emily M. Welch

DEPARTMENT OF ENGLISH

Christena Biggs-Kathleen Steele College Writing Award
For recognition of "greatest achievement" or "greatest improvement" for College Writing. Chris Biggs and Kitty Steele taught at DePauw from 1972-2002 and 1958-1996 respectively.

Michael J. Chavez  Yibo Chen  Dana E. Hart
Danilla F. Hill  Justin M. Murray  Deanna C. Reder
Malcolm E. Steele, Jr.  Xinchen Yu

Walker Gilmer Prize
For the junior or senior English major who is most outstanding in literature. Established in honor of Professor Emeritus of English Walker Gilmer, who taught at DePauw from 1963-1997.

April L. Daugherty

Gilpin Prize in Dramatic Writing
For a senior who is outstanding in playwriting or screenwriting.

Meghan A. Shearer

Mary Smith Hamer Journalism Prize
For a sophomore or junior who has excelled in journalistic endeavors and who demonstrates promise for a career in journalism. Established in memory of Mary Smith Hamer ('70).

M. Sunny Strader

J. David Hogue ('21) Journalism Scholarship
For a sophomore or junior with demonstrated ability and interest in the field of journalism. Established in memory of the distinguished journalist and editor by Mrs. J. David Hogue (Mildred Robinson '21) and Mrs. Harold Comelisen (Margaret Ellen Hogue '56).

Leann D. Burke  James R. Easterhouse (Honorary)

Roy and Anna Kennedy Prize in Creative Writing
For the senior who has most distinguished himself or herself in creative writing and who shows great promise as an artist. Established by Adam Kennedy ('46) in honor of his parents.

Sarah R. Kloppenburg (Fiction)  Isabelle S. Chapman (Nonfiction)

Chad Kostel Memorial Award
For a junior or senior who has a commitment to writing as a profession. Given in memory of Chad Kostel, a former student of the Department of English who went on to a career as a writer and editor.

Henry F. Johnston  Elise M. Lockwood  Margaret R. Wagner

Elizabeth B. Powell Prize
For a junior who exhibits outstanding ability in the area of written communications and usage of the English language. Established in 1987 by the friends and family of Mrs. Powell.

Laura Y. Kooiman  Abigail E. Emmert (Honorary)
Paul Query Prize in Poetry
For a senior writing major who is an outstanding poet. The award also includes a special feature section in A Midwestern Review.
Amanda C. Feller

William G. Schoenhoff Award
For the senior who, in the judgment of the Department of English, has achieved most in growth during his or her four years at DePauw. Established in memory of Mr. Schoenhoff by his parents.
Elizabeth J. Hoffman

Judith Shakespeare Award
For a junior or senior English literature major who is exceptionally gifted in literary interpretation.
MacKenzie A. Weeks

DeWitt Wallace-Reader’s Digest Print Journalism Award
For juniors who have demonstrated a career interest in print journalism.
Dana M. Ferguson  Rebecca M. Stanek

DEPARTMENT OF HISTORY

Charles and Mary Beard Senior Seminar Prize
For the outstanding senior seminar paper in the previous academic year. Established by an anonymous donor.
Roy R. Leaf (‘12), “Antimodernism and the American Sportsman: Protest, Accommodation, and Hegemony in the Late 19th Century”

William Wallace Carson History Scholarship
For academically promising sophomore and junior history majors. Established as a gift from Mrs. Samuel H. Swint in 1968 in honor of Dr. Carson, who taught at DePauw from 1916-1953.
William A. Calderwood  Kortney D. Cartwright  Ryan M. Heeb
Yue Qiu  Benjamin J. Roess  Tracy A. Thompson

John Dittmer Award
For the senior history major with the highest grade point average in history. Established in honor of John Dittmer, Professor Emeritus in American history.
Carroll T. Bible

Phi Alpha Theta
National honorary society for history.
Jaclyn F. Anglis  Ryan M. Heeb  Mark P. Jaskowiak
Emily F. Kaufmann  Kathryn E. Meyer  Yue Qiu
Anne K. Rivelli  Benjamin J. Roess  Kristine V. Ruhl
Lauren E. Schultz  Dakota N. Watson  Mark R. Weiss

DEPARTMENT OF MODERN LANGUAGES

Professor Ralph F. Carl Endowed Prize
For the senior with the highest GPA in French through the fall of the senior year. Professor Carl taught at DePauw from 1947-1948 and from 1952-1982.
Elise R. Henricks
G. Hans Grueninger Prize
For the outstanding student in German. Established by friends and former students of Professor Grueninger at his retirement. Dr. Grueninger taught at DePauw from 1930-1968.

Svetlana N. Derevyashkina  T. Blaine Kuss  Adam E. Weaver

Excellence in Russian Studies
For superior academic achievement in Russian Studies.

David Tykvart

Laurel H. Turk and Esther L. Turk Prize for Spanish
For the senior Spanish major with the highest cumulative GPA in Spanish through the fall semester of the senior year and/or who has made significant contributions to the department.

Joshua E. Miller  Daniel J. Welsh

Laurel H. Turk and Esther L. Turk Scholarship for Spanish Language
For sophomore or junior students majoring in Spanish, or in another discipline but with a concentration in Spanish, who have demonstrated high academic achievement and/or leadership skills. Dr. Laurel Turk taught at DePauw from 1928-1968.

Chelsea N. Ohler

Merle Royse Walker Language Award
For the outstanding senior in modern or classical languages.

Adam E. Weaver

Pi Delta Phi
National French honorary society.

Laura E. Arvin  Elise R. Henricks  Christopher Q. Lamping
Angela N. Martaus  N. Anh Nguyen  Ibijoke O. Oke
Lauren E. Salay

Sigma Delta Pi
National Spanish honorary society.

Paul B. Fesenmeier  Nathan R. Mullins  Annabel Ramirez
William P. Scharfenberger  Lindsay C. Shake  David Tykvart
Emily M. White

DEPARTMENT OF PHILOSOPHY

Bioethics Bowl Team
Bioethics Bowl is held annually in conjunction with the National Undergraduate Bioethics Conference. It is patterned after the national Ethics Bowl competition, but the focus of the case studies is limited to issues in bioethics. Teams are judged mainly on the clarity and cogency of their arguments and the effectiveness of their responses to the opposing team.

Ethan E. Brauer  Paul B. Fesenmeier  Benjamin C. Hoffman
Luke B. Miller  Cole P. Rodman  Katherine M. Thrapp

Emily M. White
Ethics Bowl Team
The Ethics Bowl is a national competition in which teams of 3-5 students debate complex and puzzling moral questions that may deal with personal, professional or social and political ethics. Teams are judged mainly on the clarity and cogency of their arguments and the effectiveness of their responses to the opposing team.

Ethan E. Brauer*  Kyle R. Gough  Benjamin C. Hoffman*
Sara K. Scully*  Katherine M. Thrapp  Mohammad Usman*
Robert L. Watson

The * denotes those students who were members of the Regional Team and the team that won the National Ethics Bowl competition.

Phi Sigma Tau
National honorary society for philosophy.

Ethan E. Brauer  Kyle R. Gough  Kaleb D. Gregory
Luke B. Miller  Kristina R. Mulry  Sara K. Scully
Katherine M. Thrapp  Sarah K. Tibbitts  Camille G. Veri

SCIENCE AND MATHEMATICS

DEPARTMENT OF BIOLOGY

Marcella Fletcher Memorial Award
For a biology major who is pursuing advanced education.

Megan K. May

Dr. John C. Frazier Memorial Prize / Albert E. Reynolds Outstanding Senior Award
For the outstanding senior biology major.

Emily E. Vierk

Charles and Frances (Wylie) Condit Science Scholarship
For a promising sophomore or junior biology major. Established by Mr. and Mrs. Charles M. Condit to assist promising sophomores or juniors to further their studies in the fields of science and mathematics.

Jillian C. Balser  Bilal Sadiq

Truman G. Yuncker Endowed Merit Scholarship
For the outstanding junior biology major. Dr. Yuncker taught botany at DePauw from 1919-1944.

Ashley N. Guevara  J. Cameron Wiethoff

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Donald J. Cook Scholarship
For gifted sophomore or junior chemistry majors. Established by the Percy L. Julian family in honor of Dr. Cook, Professor of Chemistry from 1945-1980, on the occasion of his retirement. Many other admirers of Dr. Cook have contributed over the years to this endowment.

Megan M. Hannemann  Nicole M. Inman  Evan M. Miller
Madeline F. Perry  Robert A. Wieland  Julie A. Wittwer
Awesome Dawson Award
For seniors who attend more than twenty seminars over the course of their junior and senior years.

Anderson J. Antoine  Christine M. Bach  Christina M. Gale
Kelly M. Hoerst  Joshua E. Miller  Arezoo Nazari

Percy L. Julian Memorial Scholarship
For talented students, based on excellence and potential for success, to pursue training in chemistry and other fields. Established by the late Anna Julian in memory of her distinguished husband, Dr. Percy L. Julian (’20), scientist, civil rights activist, and businessman, as well as trustee and benefactor of DePauw University.

Brett A. Gentle  Jerry E. Plange  Stephanie M. Reid
Ball Sadiq  Jeffrey M. Schulte  Jensen R. Tabil

Elliott Morrill Fellowship
For student-faculty collaborative research during the summer between the junior and senior year. Students are chosen for their interest in research, strong academic credentials, and goals to pursue the chemical sciences after graduation.

Stephanie M. Reid  Wei Tao  Xin Zheng

John Ricketts Endowed Prize in Physical Chemistry
For the student who shows the highest achievement in physical chemistry. Established by former students of Professor Ricketts, who taught at DePauw from 1952-1989.

Cole P. Rodman  Xin Zheng

Charles and Frances (Wylie) Condit Science Scholarship
For a promising sophomore or junior chemistry or biochemistry major. Established by Mr. and Mrs. Charles M. Condit to assist promising sophomores or juniors to further their studies in the fields of science and mathematics.

Samantha M. Anderson  Alicia A. Erwin

ACS Division of Analytical Chemistry Award
This award goes to a student showing ability, promise and interest in the area of analytical chemistry.

Cole P. Rodman

Phi Lambda Upsilon
Chemistry honorary society.

Samuel C. Borcherding  Stephen I. Buchholz  Benjamin C. Cox
Mark A. Fadel  Paul B. Fesenmeier  Francis K. Fordjour
Christina M. Gale  Rachel L. Gearinger  Vincent S. Guzzetta
Paulina J. Haight  Kelly A. Harms  Kelly M. Hoerst
Kathleen A. Kay  Matthew A. Kukurugya  KunHee Lee
Joshua E. Miller  Thomas E. Moran  Andrew J. Nash
Arezoo Nazari  Colin G. Neill  Michael G.R. Padilla
Daniel T. Piedmonte  Amy R. Richmond  Cole P. Rodman
Drew M. Rohm-Ensing  Lauren E. Salay  Dana C. Sprague
Jamie Y. Story  Xin Zheng

DEPARTMENT OF COMPUTER SCIENCE

Outstanding Service to the Computer Science Department
For a computer science major who contributes exceptional service to one of the department’s programs.

Yandan Ni
Robert J. Thomas Outstanding Computer Science Senior
For an academically excellent senior Computer Science major carefully selected by all members of the Computer Science faculty. Dr. Thomas taught at DePauw from 1958-1991.

Brent M. Hume

Charles and Frances (Wylie) Condit Science Scholarship
For a promising sophomore or junior computer science major. Established by Mr. and Mrs. Charles M. Condit to assist promising sophomores or juniors to further their studies in the fields of science and mathematics.

Yechan Hong  Derrick S. Roach

DePauw Computer Science Honorary Society
For junior and senior computer science majors, who are admitted on the basis of outstanding academic achievement in their computer science coursework.

James W. Burgess  Quinn M. Carrico  Reid T. Conner
David W. Garrett  Mengxiao Han  Marcus W. Hays
Matthew P. Hellmann  Patrick G. Herrod  Yechan Hong
John D. Hoover  Brent M. Hume  Da Huo
Ngoc H. Nguyen  Yandan Ni  Derrick S. Roach
Jonathan A. Saddler  Graham T. Singer  Botong Sui
Eriya Terada  Tarun M. Verghis  Bradley P. Wethington
J. August Wigen-Toccalino

DEPARTMENT OF GEO SCIENCES

Dr. Charles Leonard Bieber Scholarship
For sophomores or juniors excelling in the major of geosciences. Established by Professor Bieber, who served as department chair from 1947-1965.

Ariana A. Borrello  Emma J. Cooper  Mackenzie M. Cremeans
Lauren C. Krumwiede  Forrest G. Kunkel  Nicholas J. Williams
Elizabeth A. Diibone (Honorary)

Hugh Richard Gault Memorial Fund
For worthy students majoring in geosciences. Established by Arrabella B. Gault in honor of her husband, Hugh Richard Gault ('36), a Rector Scholar active in science and civic and school affairs.

Carly T. Dutkiewicz

Ernest Rice “Rock” Smith Memorial Scholarship
For geosciences majors with a cumulative GPA of at least 3.25. Established by the former students of Ernest “Rock” Smith, who was head of the Department of Geology from 1921-1947, in recognition of his excellence and dedication as a teacher. Prof. Smith retired to Ithaca, New York, and served as president of the Paleoanthropological Research Institute until his death in 1952.

Henry C. Binning  Stephen C. Dobbs  William T. Joseph
Katherine R. Shover (Honorary)

Charles and Frances (Wylie) Condit Science Scholarship
For a promising sophomore or junior geosciences major. Established by Mr. and Mrs. Charles M. Condit to assist promising sophomores or juniors to further their studies in the fields of science and mathematics.

Tyler R. Donaldson  Lauren E. Van Fleet
DEPARTMENT OF KINESIOLOGY

Charles and Frances (Wylie) Condit Science Scholarship
For a promising sophomore or junior kinesiology major. Established by Mr. and Mrs. Charles M. Condit to assist promising sophomores or juniors to further their studies in the fields of science and mathematics.

Hannah H. Lukemeyer  Cory N. Meixner

Kappa Omicron Nu
The honor society for students in kinesiology.

Katherine E. Broecker  Christine A. Clement  Kelly A. Doyle
Amy C. Hallett  Benjamin J. Hazen  Erin N. Komornik
Emmanuel B. Lavarias  Kyle R. Mackey  Carter D. Mikesell
Nicole L. Rossillo  Samantha M. Szyska  Emily M. White
Tyler D. Witherspoon

DEPARTMENT OF MATHEMATICS

H.E.H. Greenleaf Memorial Award
For worthy students majoring in mathematics. Established in memory of Herrick Greenleaf, who taught at DePauw from 1921-1960.

Mateos B. Kassa  Bolun Peng

Charles and Frances (Wylie) Condit Science Scholarship
For a promising sophomore or junior mathematics major. Established by Mr. and Mrs. Charles M. Condit to assist promising sophomores or juniors to further their studies in the fields of science and mathematics.

Weiqing Zhang

Association for Women in Mathematics
The Association for Women in Mathematics (AWM) is a non-profit organization founded in 1971. AWM's main goal is to encourage women in the mathematical sciences. AWM currently has more than 4100 members (women and men) representing a broad spectrum of the mathematical community, from the United States and around the world.

Emily J. Bichler  NingXiaoxi Chang  Emily A. Curnow
Huong T.T. Dao  Katherine M. Devillebichot  Lejia Dong
Paige W. Gooch  Caitlyn L. Hammack  Mengxiao Han
Lee A. Harmon  Khanh M. Hoang  Chengyuan Huang
Mengqiao Li  Sijia Luo  Ling P. Nguyen
Yizhou Ren  Casie J. Sambo  Yue Teng
Jiao Wu  Xiaochen Yang  Dandan Zhang
Jieyu Zhang  Yuqi Zhao  Shiyi Zhou

DEPARTMENT OF PHYSICS AND ASTRONOMY

O. H. Smith Endowed Scholarship
For junior or senior physics majors who have demonstrated exceptional ability and potential. Established by friends and former students of O. H. Smith, who taught at DePauw from 1925-1952.

Ethan E. Brauer

Austin D. Sprague Scholarship
For a sophomore or junior physics major. Established by Austin Sprague, Professor of Physics from 1946-1971.

Erin K. Dinn
Charles and Frances (Wylie) Condit Science Scholarship
For a promising sophomore or junior physics major. Established by Mr. and Mrs. Charles M. Condit to assist promising sophomores or juniors to further their studies in the fields of science and mathematics.

Quincy L. Abarr

Sigma Pi Sigma
National physics honor society.
Quincy L. Abarr  Courtney M. Leeds  Wei Tao
Xin Zheng

DEPARTMENT OF PSYCHOLOGY

Rex Rector Service Award
For senior psychology majors who have shown outstanding achievement in the area of human service. Given in memory of Dr. Rector, who taught in the psychology department at DePauw from 1957-1980.
Madeleine L. Briere  Amanda R. Brinkman  Lauren A. Howard

Senior Thesis Seminar Award
For senior psychology majors for outstanding performance on senior research projects and senior theses.
M. Kathleen Lear  Patrick S. Ledwidge

Kenneth S. Wagoner Research Award
For the senior psychology major who has shown the highest research potential and dedication to experimentation as the surest road to an expanding and dependable structure of knowledge. Given in honor of Dr. Wagner, an outstanding researcher and scholar, who taught at DePauw from 1946-1977.
Patrick S. Ledwidge

Charles and Frances (Wylie) Condit Science Scholarship
For a promising sophomore or junior psychology major. Established by Mr. and Mrs. Charles M. Condit to assist promising sophomores or juniors to further their studies in the fields of science and mathematics.
Andres E. Munoz  Haley A. Pratt

Psi Chi
National honorary society for psychology.
Alexandra M. Butler  Betsy A. Corrigan  Carly R. Dea
Cheney C. Hagerup  Kelly A. Harms  Kimberly W. Klee
Laura Y. Kooiman  Clare O. Monhart  Andres E. Munoz
Courtney M. Nelson  Katherine E. Reichel  Margaret E. Steele

SOCIAL SCIENCE

DEPARTMENT OF ECONOMICS AND MANAGEMENT

Frank T. Carlton Senior Award
For the outstanding senior economics major. In honor of Frank T. Carlton, who taught at DePauw from 1919-1927.
Adam E. Weaver

Bruce Allen Long (‘75) Endowed Scholarship
For a sophomore economics major who has demonstrated leadership potential and academic achievement. Established by Mr. and Mrs. Clarence W. Long in memory of their son.
Hien T. Nguyen
**Randal L. Wilson Memorial Award—Junior**
For a junior economics major who shows a sincere dedication to the field of economics and is judged most likely to make a positive and worthwhile contribution to that field in the future. Established by Margaret Hardgrove Wilson (’41) and her husband Robert in memory of their son.
  
  Tam V.T. Bui

**Randal L. Wilson Memorial Award—Senior**
For the senior economics major who has contributed the most to the Department of Economics and Management at DePauw and to the field of economics in general, and who shows promise in the future. Established by Margaret Hardgrove Wilson (’41) and her husband Robert in memory of their son.

Ngoc H. Kim

**DEPARTMENT OF EDUCATION STUDIES**

**Education Studies Department Award**
For a transformative intellectual who through coursework and extracurricular activities has demonstrated an awareness of personal power and agency, the ability to engage in social critique and problem solving, and who consequently takes informed and principled action in the interest of social justice.

Chelsea L. Courtney

**Robert H. and Vera May Farber Outstanding Senior in Education Award**
For the most outstanding senior majoring in education studies based on GPA. Dr. Robert H. Farber taught and served as dean at DePauw from 1936-1936 and 1937-1979.

Margaret K. Burke

**DEPARTMENT OF POLITICAL SCIENCE**

**Richard Watson Bunch Memorial Scholarship**
For the outstanding junior political science major. Established by Mrs. Richard W. Bunch (Eugenia Anderson ’29) in honor of her husband.

Shelby L. Beasley         Ronnie D. Kennedy, Jr.

**Stephen Charles Sellett Memorial Award**
For the outstanding senior political science major. Established in 1971 by Dr. and Mrs. Thomas Sellett in honor of their son, Stephen Charles Sellett, a DePauw graduate who was killed in action in Vietnam in 1970.

David Tykvart

**Pi Sigma Alpha**
National political science honorary society.

Shelby L. Beasley         Ryan M. Heeb         Caroline A. Heyde
Tracy A. Thompson         Anne M. Wake        Shuyang Yu

**DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY**

**Paul C. Glick Award**
For an outstanding senior in sociology and anthropology. Established by Paul C. Glick (’33), professor emeritus at Arizona State University, past president of the Population Association of America and for many years Senior Demographer of the U.S. Bureau of Census.

Morgan A. Davenport         Daniel J. Welsh
Roland Naylor Award
For students interested in conducting fieldwork in anthropological archaeology.
Kristin R. Otto

Alpha Kappa Delta
National sociology honorary society.
Eleanor A. Axt  McKenzie A. Curran  Maritza J. Mestre
Colin T. Oakley  Kristin R. Otto  Christine B. Webster

Lambda Alpha
National collegiate honorary society for anthropology.
Lia F. Berhane  Carly R. Dea  Allison N. Jones
Stephanie K. Kohlman  Christina M. Oberrieder  Kristin R. Otto
Mami Oyamada  Victoria V. Polak

HONORS AND FELLOWS PROGRAMS

HONOR SCHOLAR PROGRAM

Dr. Irving Serlin Distinguished Honor Scholar Award
For the graduating senior in the Honor Scholar Program who best exemplifies the ideals of an Honor Scholar.
Henry K. Dambanemuya, Jr.  Sara K. Scully

2012-2013 Honor Scholar Program Graduates
Brian G. Banta, “Press “A” to Speak: Video Games as a Storytelling Medium”
Henry K. Dambanemuya, Jr., “Early Warning Systems for the Responsibility to Protect”
Jeffrey T. Easterling, “Democracy, Identity and Anti-Americanism in Turkey: Implications for the United States-Turkey Relations”
Chase G. Hall, “Internet Dating: News Media’s Battle to Court a Clicking Audience (and Why an Updated Ethics Code Could Help)”
Christopher R. Jennings, “Finding a Happy Medium for Science Education: Conservatism vs. Progressivism”
Alexander M. Landreville, “Greenwashing: The Ethics of Green Marketing”
Emily K. Miller, “Reinvesting in Art Education in Putnam County: An Analysis and Case for The Castle”
Arezoo Nazari, “A Climate for Swelling: The Social & Biological Differentiation of Lymphatic Filariases on Males & Females in Developing Countries”
Michael G.R. Padilla, “Moving to the Beat: Musical Rhythm as a Cipher for Priming, Synchronizing and Entrainment in the Dorsal Premotor Cortex”
Sara K. Scully, “Academic Integrity: Values, Responsibilities, and Policies in Postsecondary Education”
Mark W. Tolley, “The Effect of Foreign Direct Investment on Economic Growth and Its Implications”
MANAGEMENT FELLOWS

2012-2013 Management Fellows Program Graduates

Erica R. Bennett  Valeria Bermudez  Sumeru Chatterjee
John T. Fagan  S. Reid Garlock  Laura C. Gerhardstein
John R. Glerum  Stefanie P. Hathaway  Troy R. Hollings
Allison N. Jones  Andrew S. Kahn  Nicholas L. Lucca
Yashaswee Malia  Nathan R. Mullins  M. Philipp Pascua
W. Logan Patterson  Son D. Pham  Ruxanda A. Profir
Christian A. Rector  Camila Romero  Emma R. Scherer
Austin C. Schile  Alexander J. Skebb  Kaleigh M. Solley
Samantha J. Stahler  Adam E. Weaver  Joseph C. Wojda
Kevin J. Wynn

MEDIA FELLOWS

2012-2013 Media Fellows Program Graduates

Michael J. Appelgate  Amanda R. Bernardin  Emily A. Brelage
Shelby F. Bremer  Margaret A. Distler  Joseph A. Fanelli
Ryan T. Foutty  David T. Jorgenson  Kaitlin F. Klose
Ellen C. Kobe  Carter E. McKay  Lauren M. Reed
Kelly L. Reeves  Anastasia S. Way

SCIENCE RESEARCH FELLOWS

2012-2013 Science Research Fellows Program Graduates

James W. Burgess  Schuyler A. Cook  Christina M. Gale
Rachel L. Gearinger  Maria T. Haag  Paulina J. Haight
Kelly A. Harms  Stephen G. Hesterberg  Katherine L. Hill
Kelly M. Hoerst  Da Huo  Allana J. Johnson
Matthew A. Kukurugya  Megan K. May  Alessandra N. Pistoia
Amy R. Richmond  Rachel E. Rominger  Elizabeth A. Weingartner
Bradley P. Wethington  Alicia L. Whitney

Student Summer Research Recipients 2013

For student-faculty collaborative research during the summer. Students are chosen for their interest in research, and strong academic credentials.

Lia F. Berhane  Ethan E. Brauer  Michael M. Britton
Stefani T. Cleaver  Jeffrey M. Craig  Stephen C. Dobbs
Michael C. Davidson  Genevieve H. Flynn  Leah M. Freestone
Brian D. Good  Jason R. Grullon  Ashley N. Guevara
Jocelyn N. Jessop  Zhiyan Jiang  William T. Joseph
Kimberly W. Klee  Aaron D. Krabill  Forrest G. Kunkel
Courtney M. Leeds  Tianqi Li  Janelle L. Lyons
Jessica G. Maginity  Trina M. Manalo  Erin L. Minnick
Kristina R. Mulry  Kristin R. Otto  Jerry E. Plange
Stephanie M. Reid  Cole P. Rodman  Felicia M. Santiago
Jacquelyn E. Stephens  Jiaxin Su  Wei Tao
Sarang G. Wardadkar  Dakota N. Watson  Phua Xiong
Xin Zheng
DACOR Bacon House Foundation Fellowship
Awarded to an outstanding senior who plans a career in international affairs, the DACOR fellowship covers tuition expenses for one year of full-time graduate study.
Neisha M. Washington ’12

Critical Language Scholarship
A program of the U.S. Department of State, Bureau of Educational and Cultural Affairs, the Critical Language Scholarship (CLS) Program offers intensive summer language institutes in thirteen critical foreign languages.
Sandra L. Bertin, for the study of Arabic

Fulbright U. S. Student Program Grants
The largest U.S. international exchange program, Fulbright offers opportunities for students, scholars, and professionals to undertake international graduate study, advanced research, university teaching, and teaching in elementary and secondary schools worldwide.
Katlin V. Kraska, Study/Research Grant: “Community Empowerment and Wildlife Conservation Enhancement through Tourism” (Indonesia)
Kendall C. Quisenberry, English Teaching Assistantship (Malaysia)
David Tykvart, English Teaching Assistantship (Czech Republic)

Benjamin A. Gilman International Scholarship
The Gilman Scholarship Program aims to diversify the kinds of students who study abroad and the countries and regions in which they study.
Olivia C. Flores (Buenos Aires, Argentina / Spring 2013)
Shaquoia D. Gulley (Segovia, Spain / Spring 2013)
Phua Xiong (Yunnan Province, China / Fall 2012)

Barry M. Goldwater Scholarship
The Goldwater Scholarship Program encourages outstanding students to pursue careers in mathematics, the natural sciences, or engineering and fosters excellence in these fields.
John D. Hoover (Computer Science and Biochemistry)
Jack E. Burgeson (Honorable Mention in Biochemistry)
Stephen C. Dobbs (Honorable Mention in Geosciences)

National Science Foundation Graduate Research Fellowship
The NSF Program provides three years of support for outstanding graduate students pursuing research-based master’s and doctoral degrees in the fields of science and engineering.
Megan K. May (Biology)

The recipients of other nationally competitive fellowships and awards will be announced later in the spring.
MARK A. FADEL

Mark came to DePauw from Cleveland, Ohio where he graduated as Valedictorian and Class President of Mayfield High School. Pursuing his interest in science, Mark is majoring in biochemistry and once a week travels to Tzouanakis Intermediate School to teach science to fourth graders. Through building connections with alumni and faculty, Mark had the opportunity to witness similarities and differences between metropolitan and rural clinical practices at the Cleveland Clinic and Putnam County Hospital. Mark applied his science background by completing a drug research project for Putnam County Hospital and working on a biochemistry project at DePauw in collaboration with the Jackman Laboratory at The Ohio State University. Mark broadened his exposure outside the sciences by serving as the Teacher Assistant for the 2011 May Term trip to Italy. Beyond the classroom, Mark serves as the Executive Vice President of DePauw Student Government and works as a First-Year Mentor and Presidential Ambassador. During his first year at DePauw, Mark established a chapter of Up 'til Dawn, a St. Jude Children’s Research Hospital program that has raised over $28,000 since September 2010. He has been a member of and volunteered as a student coach for the DePauw Men’s Swim team and worked as a swim instructor for youth throughout Greencastle. Engaged in bettering the DePauw experience, Mark served as a Class Senator for three years and the student representative for the Management of Academic Operations Committee for two years. One of his most significant achievements with DePauw Student Government was successfully advocating for a change to the class scheduling system. Mid-way through his Junior year, Mark achieved early admission to the University of Toledo College of Medicine and will be attending following graduation from DePauw.

AREZZO NAZARI

Arezoo is a biochemistry major and philosophy minor from Fort Wayne, Indiana. Arezoo’s enthusiasm for the prestige and progress of DePauw University has only grown stronger over the years. Since her first year at DePauw, she has been involved as a DePauw Student Government Executive Board Member and then continued to serve as Vice President of Student Life. Her various involvements on faculty and student committees have allowed her to build a variety of relationships. Arezoo has served as the Vice President of Chapter Operations for Alpha Phi and a mentor for College Mentor for Kids. She is currently serving as a Peer Mentor for the First-Year Experience Program, a Leadership Intern for the Office of Campus Living and Community Development in which she helped design and create a Greek Fellows Leadership Program, a Chapter Assisting Trained Student (CATS) Member in which she assisted with campus-wide alcohol initiatives, a tour guide for the Office of Admission, and a Presidential Ambassador. During her Winter Term experiences, she earned her EMT certification and traveled to El Salvador to help build schools and provide medical aid to surrounding villages. Over the summers, Arezoo has worked on cancer stem cell research at the University of Illinois. Most recently, she became the student member of the Vice President for Academic Affairs Search Committee. Arezoo credits DePauw for her fuller appreciation of the educational rigor and the talented people she has grown to know and love. After graduation she will be working in hospital administration for the Cancer Treatment Centers of America.

SARA K. SCULLY

Sara is a philosophy major and an Honor Scholar from Dallas, Texas. Sara is extremely grateful to her fellow students for providing her the opportunity to contribute to DePauw University through DePauw Student Government. After serving as a Class Senator and on numerous committees for three years, Sara was honored to earn the confidence of DePauw students as they elected her to be their chief advocate as Student Body President. A three-year member of DePauw’s Ethics Bowl team, Sara has spent countless hours with professors and students debating issues of applied ethics and preparing for competitions. She is especially proud of helping to expand DePauw’s reputation as she captained the 2013 team, which won the national championship for the first time in DePauw’s history. Having benefitted greatly from the First-
Year Experience program, Sara served as a Mentor for the program her sophomore and junior years, and was promoted to Peer Mentor her senior year. As part of her Honor Scholar capstone experience, Sara has spent much of her senior year in her favorite Roy O. West cubicle, analyzing justifications and evaluating systems (including DePauw's) for academic integrity. Sara has tremendously enjoyed being challenged in the classroom, supporting friends who are athletes, musicians, and artists, assisting local literacy programs, speaking with prospective students as a part of multiple Admissions endeavors, and exploring and appreciating DePauw. Sara is incredibly humbled to have been nominated as a Walker Cup Finalist alongside two of her hardest working and dearest friends. Upon leaving DePauw, Sara will most miss her daily experiences walking around campus and through academic buildings – experiences filled with constant opportunities to talk with and learn from such friendly, talented, and inspiring individuals.

*Please join us in the Grand Hall for a reception and refreshments immediately following the convocation.*
Deja S. Armstrong, Religious Studies, “James Cameron’s Avatar: A Paulo Freirean Analysis of Jake Sully’s Odyssey from Oppressor to Liberator”
This thesis uses Paulo Freire’s theoretical framework to describe Jake Sully’s personal transformation or journey toward liberation in James Cameron’s film Avatar. To emerge as a new person, Sully undergoes four stages of transformation: oppressor, mediator, oppressed, and liberator. The study uses Freire’s dialogical method as deployed in his Pedagogy of the Heart, Pedagogy of Hope, and Pedagogy of the Oppressed to show how Sully negotiates his stages of transformation. Cameron’s Avatar challenges its audiences to critically reflect on Sully’s experiences and to imagine the possibility of an alternative world. Through reflection and action experienced liberation, transformation, love, and a new community that offered him fulfillment and redemption. It concludes that the oppressor, at least on the individual level, can be transformed or liberated. Through the dialogical approach, as advocated by Freire, Sully’s transformation in the film provides hope for models of relationship, apart from those that are dominant and hierarchical, and the creation of multiple subjectivities.

Megan A. Benedict, Music Education, “Growing Up: My Student Teaching Experience at Fall Creek Valley Middle School”
In my semester student teaching, I was both a teacher and a student. My students challenged me, forcing me to learn new and unique methods of classroom management, relating to students, and teaching musical concepts and ideas. I was there as a teacher, but I was also learning about myself as a person and as a teacher. My cooperating teacher was there to help and support everyday as I taught two eighth grade bands, two beginning band class periods, a band for the pop culture and a jazz band. In this presentation, I will show you my transformation from student to teacher.

Vanessa Bernal, Education Studies, “What Is ‘Popular Education’?: A Case Study”
In an attempt to illuminate the meaning of the term ‘popular education,’ and ultimately formulate a personal definition,” this research study involved viewing popular education in situ in a Chicago community center serving as an alternative high school setting. Although no single definition of popular education exists, it has, over time, taken on numerous and varied meanings, thus leading to confusion over definitional issues in the field. Thus, the meaning and ways of applying the term were clarified via direct observation of the popular education process.

Katherine E. Broecker, Kinesiology, “Age-Predicted Maximal Heart Rate in College Students”
Training intensity for exercise is typically set as a percentage of maximal heart rate in athletes and cardiopulmonary patients. In the absence of direct measurement, maximal heart rate is often estimated using the equation 220 – Age. The validity of using this equation to estimate maximal heart rate across populations has been questioned. Thus the purpose of the present study was to generate a prediction equation for maximal heart rate in college age subjects and validate it against previously reported prediction equations.

Margaret K. Burke, Education Studies, “High-Stakes Standardized Testing: Curriculum and Teacher Morale”
In recent years, high-stakes standardized testing has become the norm for student, and in some cases, even teacher evaluation in the American public school system. There is no question about the power of such testing on many levels. This qualitative, case-study research project examined the impact of this testing culture on classroom curriculum and teacher morale. It is hoped that this and future such studies exploring the nature of high-stakes testing will provide teachers a voice in policy-making decisions, which will ultimately serve to improve the future of public education in this country.
Isabelle S. Chapman, *English (writing)*, “Texas Red Dirt, Texas Blue Sky”

“Texas Red Dirt, Texas Blue Sky,” is a short narrative piece about the author’s relationship with her paternal grandmother. The essay follows the two as they hike the family’s West Texas ranch one summer afternoon. As the walk progresses the author tackles the estrangement she feels from her Texas roots, but also hostility towards a family she struggles to understand.

Nicole M. Chokran, *English (writing)*, “Polaroids”

I think I was always a writer, but during my time at DePauw I became a poet and a historian. If my liberal arts education has taught me anything, it is that academic subjects are only a breath apart and a pen can bridge any two fields. *Polaroids* aims to capture history in poems using distinctly different voices.


Functional ankle instability (FAI) is a chronic condition that results from an acute ankle injury (ankle sprain) in some individuals. Individuals with FAI experience a decrease in postural control and balance. Decreased proprioception, muscle weakness, and ligament laxity around the joint are the suggested causes of FAI. Kinesio™ Tape has been reported to increase proprioception, correct joint position, and increase muscle strength solely due to the tape’s contact with the skin. Thus the purpose of this study was to determine if the application of Kinesio™ Tape to individuals with FAI improved static and postural balance.

Schuyler A. Cook, *Chemistry and Biochemistry*, “Enantioselectivity of an Aldol/Epoxidation Reaction”

Epoxides are reactive groups that are commonly used in drug synthesis. The configuration of the epoxide is very important because in biological systems harmful effects may result with the wrong chemical arrangement. My reaction utilizes a chiral sulfur ylide, synthesized in my lab, to create the desired arrangement of the epoxide. My reactions have yielded a 4:1 ratio of the epoxide configurations that can be applicable to similar reactants.

Patrick C. Corley, *English (writing)*, “My Addiction Summer”

Last May, after my friend Alex graduated from DePauw, him and I caravanned from my house in Kansas City to our respective temporary positions in Los Angeles. By day, we worked in the same building, functioning as assistants/phone answerers/go-fors/house boys. The rest of our time we spent schmoozing and gossiping in whichever celebrity circle (quasi- or otherwise) we’d managed to tangentially infiltrate. I came back to school in the fall and, for whatever reason, couldn’t stop trying to engineer some dramatic motion, conjure up a story that I could, for whatever reason again, use to hash my way through what I learned about working, and people, and myself, while existing in and with the surprisingly welcoming heart of America’s magical motion picture industry.

April L. Daugherty, *English (literature)*, “In This My Prison”: Women Writers, Female Characters, and Hysteria in the Renaissance

Shrouded in theories of wandering wombs and dangerous vapors, hysteria was believed for much of history to be a malady specific to the female sex. Focusing not only on Renaissance women such as Lady Arbella Stuart and Margaret Cavendish who were deemed "hysteric" by their contemporaries but also on mad female characters such as Shakespeare’s Ophelia and Lady Macbeth, this essay argues that because hysteria was a natural effect of the stifling and restrictive spheres to which women were confined, it offered, through temporary insanity, an essential form of escape.
**Derek J. Davis, Computer Science, “Kinect-Controlled Robot Arm”**

My project is a robotic arm that is controlled by using a Microsoft Kinect. This robot is designed to be an entry-level step to create remote-controlled robots for a sterile environment. The project consists of three major parts: the robot’s construction, the robot’s programming, and programming for the Kinect interface. The construction of the robot is meant to resemble a human with a shoulder joint, a bicep/tricep and tendon elbow joint, and claw that can opened and closed. The Kinect interface displays a square, a circle, a rectangle, and an oval which represent the user’s right hand, wrist, elbow, and should respectively. The Kinect uses skeletal tracking to recognize three distinct gestures. When the user points their arm straight out to their or bends it at a 90° angle up or down the Kinect will send a corresponding byte to the robot's microcontroller. From there, the robot will move to match the user’s arm position. The interface also displays two buttons for opening and closing the claw to be controlled with the user’s left hand.

**Carly R. Dea and Tara A. McNeil, Psychology, “The Role of Fearless Dominance in Psychopathy: A Comparison of the Psychopathic Personality Inventory and Antisocial Personality Questionnaire”**

Lilienfeld et al., (2012) suggests that Fearless Dominance is a commonly overlooked aspect of psychopathy, reflecting adaptive features of psychopathy. In the current study, we focus on the role of Fearless Dominance in psychopathy by examining relationships of the Psychopathic Personality Inventory – Revised (PPI-R; Lilienfeld & Widows, 2005) with Blackburn and Fawcett’s (1999) Antisocial Personality Questionnaire (APQ) as well as the Revised NEO Personality Inventory (NEO-PI-R; Costa & McCrae, 1992) and multiple measures of psychopathic functioning. Major dimensions of Withdrawal and Impulsivity from the APQ appear similar to major dimensions of Fearless Dominance (reverse scored) and Self-Centered Impulsivity from the PPI-R.

**Dana N. deVeer, Psychology, “The Effects of Operational Sex Ratio and Competitive Disadvantage on Impulsivity and Attitudes towards Sexual Violence in Men”**

This study examines how risk-taking, discounting, and other relevant aspects of mating effort are context-sensitive particularly when there are cues of competition. In two experiments we test how two different cues of competition will affect post-tests of risk-taking and attitudes towards sexual violence.

**Erik J. Erlandson, Music Performance (voice), accompanied by John Clodfelter, piano, “Miei rampolli” from La Cenerentola by Gioacchino Rossini (1792-1868)**

After being awakened by his children, Don Magnifico curses them but then tells them about the dream he just has had where he was turned into a donkey. He goes on to interpret his dream, concluding that the dream predicts the family’s rise to royalty.

My female descendants, I disown you, I am ashamed of you!
You have come to disturb my magnificent dream.
See how they are mortified! They are truly worthy daughters of a Baron!
Come: silence, and pay attention. Tell me what you think of my dream.
I had a dream in the wee hours of the night
Of a beautiful donkey, a donkey, but an important one.
When all of a sudden, oh what a wonder!
On its shoulders by hundreds and hundreds
On him grew the feathers, and into the air woosh he flew!
And on the top of the bell tower like on a throne he stopped.
They were heard from below
The bells to chime: ding, dong.
With your yakkety-yak all of a sudden you awakened me.
But for a dream so intricate here is the symbolism explained.
The bell ringing as for a holiday? Happiness in the house of mine.
These feathers? Are you:
This great flight? Common people goodbye.
Remains the jackass, but this jackass am I;
Just by looking at you, one can see clearly
That the donkey is your father.
A most fertile queen the one, and the other shall also become,
And the grandfather a dozen of grandchildren will embrace.
A king little over here... Your servant, your servant;
A king baby over there... And the glory mine shall be.

Christina M. Gale, Chemistry and Biochemistry, “The Enantioselectivity of an Aldol/Epoxidation Reaction”
Epoxides are compounds that are very useful in making larger drug molecules. When making these epoxide molecules, it is important that we control not only the connections between the atoms, but also their specific arrangement in space. This is called stereoselectivity. It is important that we have one specific arrangement of the molecule because different arrangements have different biological effects. My reaction involves using two catalysts and a sulfur ylide to create one specific arrangement of the epoxide. My results have shown that this reaction can yield epoxide product with up to 97% of one arrangement and 3% of the other.

The Cerros del Rio volcanic field located west of Santa Fe, New Mexico spans the southwestern part of the Espanola Basin with the Rio Grande to the west. Underlying the volcanics are the Santa Fe Group sediments, which contain the Ancha Formation, an important aquifer in the region. High temperature gradients in water wells reveal a potential geothermal prospect. In 2012 the Summer of Applied Geophysical Experience (SAGE) program acquired transient electromagnetic (TEM), audiomagnetotelluric (AMT), gravity and ground magnetic data to determine the buried eastern margin of the volcanic field and the connectivity related to the underlying sediments. The roughly EW 5-km long transect was sited from USGS aeromagnetic data to cross the boundary of the Cerros del Rio volcanic field.

Two volcanic flows interbedded with Ancha Formation and overlying Santa Fe Group sediments were identified in both the TEM and AMT modeling. High surface resistivity zones (>300 ohm-m) with depths ranging from ~100 to 300 m define the volcanic flows and correspond to high densities (2.3 to 2.55 g/cm3), while low resistivity zones (<30 ohm-m) correspond to lower densities (~2.1 g/cm3). High spatial-frequency magnetic variations are a possible indication of different volcanic flows that are characterized by normal or reverse remnant magnetization. The upper flow (normally polarized) is inferred to extend beyond the study area and, therefore, past the end of the Cerros del Rio volcanic field boundary defined by USGS aeromagnetic data.

Autistic Spectrum Disorders (ASD) are a range of developmental abnormalities typically characterized by stereotyped actions, delayed speech, aversion to social situations, and obsession with one object or behavior. A subset of autistic individuals known as Musical Savants are characterized by a greatly increased incidence of Absolute Pitch (AP), the ability to correctly label the pitch of musical notes with no basis of comparison, and an ability to replicate musical pieces that rivals those of professional musicians, even with little to no formal training. This review of the literature covers several case studies of musical savants, and experimental insights of potential neurological underpinnings of this phenomenon.
Jorden X. Giger, Political Science, "Symbolic Racism and the 2008 Presidential Election"

The research paper largely investigates the white vote and asks whether or not anti-black attitudes, related to symbolic racism, affect candidate choice during the 2008 Presidential election. How do anti-black attitudes amongst whites play a role in their lack of support for a black presidential candidate, Barack Obama? The research suggests that those holding anti-black attitudes and those who thought Barack Obama to be relatively pro-black in terms of policy preference (i.e., favoring affirmative action) are less likely to express support for his candidacy. Candidate Obama did earn the support of whites who took pro-black positions on the symbolic racism items. Note: Respondents were asked for whom they plan to vote in the 2008 Presidential Election.

Maria T. Haag, Biology, “Regeneration in the Heart of the Common Goldfish”

Cardiac cells in the adult human heart have limited ability to divide and proliferate. As a result, cardiac tissue lost during a heart attack cannot be replaced though intrinsic mechanisms. While limited in mammals, the ability for heart regeneration has been demonstrated in salamanders and zebrafish. Our lab has recently demonstrated that the giant danio, a small fish closely related to the zebrafish can also regenerate its heart, suggesting that this ability may extend to more fish species. We tested whether this regenerative ability is conserved in the cyprinds, a family that include the zebrafish and the giant danio. In our study, we demonstrate that another member of the cyprinds, the common goldfish is capable of regenerating portion of its heart, albeit a smaller fraction (~10%) than that observed in the giant danio and zebrafish (~25%).

Mengxiao Han, Computer Science, “Switch Task Tracker”

Switch Task Tracker is a persuasive technology software system intended to help with discouraging users from engaging in high frequency switch-tasking while working with computers in the long term. Switch-tasking, commonly referred to informally as multi-tasking, refers to repeated changes between tasks. By providing a visualized timeline bar and an interactive software system, Switch Task Tracker tries to make users aware of their switch-tasking rate and then helps them to moderate the amount of switch-tasking they engage in, hopefully helping them alter their behaviors in the long run.

Kelly A. Harms and Jamie Y. Story, Chemistry and Biochemistry, “Unique Crystal Structures of the Methanosarcina acetivorans Repressor MA4344”

Recently, biological classification of organisms expanded with the addition of a new domain within the tree of life, Archaea. Some organisms within this domain, known as extremophiles, thrive in inhospitable environments. Methanosarcina acetivorans is an archaeal extremophile that is found in sulfate-rich marine environments with high metal concentrations. In order to maintain homeostasis in this extreme environment, it is hypothesized that M. acetivoransempleys a metalloregulatory system to sequester metal ions out of the cell. We believe a self-regulating transcription factor found in M. acetivorans, MA4344, is involved in the metal response mechanism within the cell. Sequence comparisons with similar proteins have suggested an evolutionary progression of DNA-binding metal transcription factors to MA4344. Through protein crystallization and X-ray crystallography, the structure and function of proteins may be observed. We report the solved structure of various forms of MA4344 bound to metal ions.

Elizabeth J. Hoffman, English (literature), “Creating Spaces: Early Modern Women and Their Unconventional Pulpits”

Women writers and religious revolutionaries in the sixteenth and seventeenth centuries such as Anne Askew, Aemilia Lanyer, and Rachel Speght attempted to use their writings to affect religious practices and discussion; however, these women did not have the common spaces of religious instruction such as the pulpit and church altar available to them. Rather than accept their marginalized position, the women subverted male authority and created their own spaces from which to wield power and influence. These created spaces, such as the interrogation room, poetry, letters, and pamphlets, rewarded the women’s innovation and tenacity by allowing them not only to
gain equal footing with their male counterparts but also to achieve greater legitimacy than they would have from a traditional church setting.

Brent M. Hume, *Computer Science*, “Sound Effects Online”
Sound Effects is a reading improvement program based upon card games that help beginning readers around the second grade age to become familiar with vowel sounds and simple words. As a former tutor at the Gobin Tutoring center, I was familiar with the struggles that they had keeping track of all the kids’ game cards and keeping them interested in the games themselves. I decided to help out the tutoring center by alleviating these issues through an online application version of Sound Effects that would get rid of the need for physical cards and hopefully keep the kids more interested.

Adedoyin E. Johnson, *Biology*, “The Giant Danio as a Model to Study Heart Failure Due to the Cancer Drug Doxorubicin”
Doxorubicin is an effective drug used in the treatment of a variety of solid tumors and leukemia. To date more than 30000 children have been treated using this drug. While the drug is effective in the treatment of cancer, it has been associated with significant cardiac toxicity and heart failure later in life. In order to understand how doxorubicin causes heart dysfunction various animal models are being studied. In our lab we study the effects of the drug on the heart of the small danionin called the giant danio. We found that the response of the giant danio heart is in many ways similar to the effects that have been described in human treated with the drug. We conclude that the giant danio may be used as a model to decipher the cell and molecular mechanisms of the detrimental side effect seen in human. These findings may lead to the development of therapies that mitigate or decrease the risk of cardiac dysfunction on patient treated with doxorubicin.

B-hive is a web application that allows parents to supervise their teenager’s social networking accounts without invading their children’s privacy. The goal of B-hive is to make social networking safe for teenagers by warding off the effects of cyberbullying. Cyberbullying is the act of intentionally humiliating a specific target using various information technologies. The National Crime Prevention Council reports that almost half of all American teens are affected by cyberbullying. Unlike the traditional form of bullying, cyberbullying offers anonymity and allows the bullies to continuously attack the victim, causing depression, low self-esteem and even suicide among teenagers. Legislation has been created to make cyberbullying a punishable crime; however, despite these attempts to punish cyberbullies, very little is being done to prevent cyberbullying incidents or provide solutions for them. To address these issues, B-hive streams data from social networking applications such as Facebook and Twitter and filters the content before displaying it on the user’s page. B-hive blocks all material deemed inappropriate, displaying only acceptable (parent-approved) content on a user’s account. Whenever inappropriate content is posted to a B-hive user’s account, B-hive blocks the content and alerts the user’s parent as well as the social networking site where the inappropriate content is posted.

Much energy is lost in the form of waste heat when generating electricity at power plants. Internal combustion engines, too, are only about 25-30% efficient, and produce significant amounts of waste heat. This project focuses on minimizing waste heat by replacing conventional electric heat pumps with an engine-driven multifunction heat pump. This gas-driven engine heat pump, designed for residential use, recovers wasted combustion heat to heat water. Replacing electricity with a gas-powered engine also allows for use in off-grid locations and can avoid electric power shortages by providing an alternative to electricity for space cooling and heating, and water heating.

The 1980 Olympic American hockey victory over the USSR has become immortalized as “the miracle on ice.” While it is one of the most impressive and memorable moments in sports history, it also has much broader implications. The purpose of my research was to investigate how the American victory over the Soviet Union in hockey affected the cold war. What I found was the 1980 Olympic matchup between the United States and Soviet Union marked a new chapter of American nationalism and pride.

Rebecca L. Leahy, *Psychology*, “Examination of Reinforcement Sensitivity Theory in Primary and Secondary Psychopathy”

Investigations of the relationship between psychopathy and Reinforcement Sensitivity Theory (RST) have been useful in elucidating the long-disputed construct of psychopathy. In particular, distinctions have been found between primary and secondary psychopathy in terms of the BIS (behavioral inhibition system) and BAS (behavioral activation system) sensitivity. However, the integration of the FFFS (fight-flight-freeze system) in the revised model of RST calls for a re-examination of this relationship. In the current study, we used multiple self-report measures of psychopathy to examine the relationship between primary and secondary psychopathy and the BIS, BAS, and FFFS.

M. Kathleen Lear & Patrick S. Ledwidge, *Psychology*, “The Effects of Ego Depletion and Personality on Emotion Regulation”

The purpose of this study was to assess the effects of personality traits and ego depletion on emotion regulation. We expect to find relationships between personality traits and effectiveness of emotion regulation strategy. We expect a glucose swishing reward along with cognitive reappraisal to be the most successful regulatory condition.


During my semester of student teaching with six concert band classes and a jazz band at Plainfield Middle School, I learned a lot about myself, my students, my cooperating teacher, and the heart it takes to teach well, consistently. Having no prior experience in front of middle school students, I was excited to learn the ways of developing teens. In four short months, I learned what an honor it can be to change the lives of students through music at such a young age. Their hearts and devotion helped strengthen my love for teaching music.


Discrepancies in quantification methods of microbial cells in marine sediments make it difficult to explore the dynamics of these microbes. During summer 2012, I worked at University of Tennessee with Dr. Karen Lloyd and Dr. Andrew Steen and completed research to answer this question. I continued the research at DePauw during the fall semester with Dr. Dana Dudle. We conducted a metadata analysis of published and unpublished data on three different quantification methods (qPCR, CARD-FISH, and slot blot hybridization) in two environments (marine sediments and the marine water column). With this data, we are able to provide recommendations for what quantification method is “best” for a given environment.

Austin H. Miller, *Political Science*, “Aid, Poverty, and Terrorism: America’s Failed Approach”

Since the transformative events of September 11th, The United States has launched a “War on Terror” that has been fought on and off the literal battlefield. Two consecutive administrations have geared American Foreign policy to fight poverty in order to limit the spread of terrorism due to
Bush’s logic that “we fight against poverty because hope is an answer to terror.” In order to fight poverty, the United States has provided, and continues to provide, massive amounts of aid to various impoverish countries despite a wealth of empirical evidence asserting that aid is not an effective tool to stimulate long term economic development or growth. While this strategy’s lack of success is upsetting, more demoralizing is the notion that the US is ineffectively giving aid to pursue a goal that is unattainable by merely eliminating poverty. Poverty does not foster terrorism, rather occupation of Muslim countries, whether literal or perceived, causes extremism and terrorist activities to thrive.

Martha M. Parsons, Geosciences, “Multidirectional Shortening in the Yanshan Fold-Thrust Belt, China”

The Yanshan fold-thrust belt is located approximately 150 km northeast of Beijing in Hebei Province, China. The Yanshan, which developed on the former North China Craton, experienced polyphase, multi-directional deformation from several opposing forces during Mesozoic time. Development of the Solonker collisional suture to the north, the Paleo-Pacific subduction zone to the east, and the Qinling-Dabie suture to the south all potentially contributed to contractile Mesozoic deformation in the Yanshan. Several episodes of Mesozoic deformation are evident in the region east and south of the city of Xiabancheng (Chengde County). Early NW-SE contraction, likely related to Permo-Triassic formation of the Solonker Suture, created a regional northeast-trending, southeast-vergent anticline. Subsequent NE-SW compression, possibly related to early Paleo-Pacific subduction, refolded this anticline and formed several other northwest-trending folds. Lower Jurassic Xingshikou Formation conglomerate unconformably overlies one such fold. NW-trending folding also appears to predate development of a major south-vergent thrust. NE- and NW-trending strike-slip faults cut this thrust, the older folds, and the Xingshikou Formation. Following a Middle-Late Jurassic phase of extension and volcanism, all of these structures were cut by a system of E-W trending, Late Jurassic-Early Cretaceous thrust faults that include the north-vergent Chengde County Thrust, the south-vergent Pingquan Thrust, and the south-vergent Gubeikou Thrust. Following intrusion of several mid-Cretaceous plutons, some of these thrusts were reactivated on a smaller scale. Although it is unclear how extensive these events are throughout North China, the Yanshan Belt has apparently undergone a more complex history than is currently recognized.

Jordan Lee Ragasa, Asian Studies, “Shima Uta: Constructing an Okinawan Identity”

My thesis explores the construction of an Okinawan identity through the perpetuation of the Okinawan musical tradition, called shima uta (island song). I am interested in the use of shima uta to tap into historical memory to construct a unique Okinawan identity that is separate from a nationalist Japanese identity. I also try to envision the role of shima uta in contemporary Okinawan political activism.


Most Americans believe that voting is a fundamental right given to all citizens. This is not entirely true, however. Every year, thousands of Americans are disenfranchised because of felony convictions. While some may only be disenfranchised for the period they are incarcerated, others find themselves permanently barred from voting. Jeff Manza and Christopher Uggen explored disenfranchisement as it related to the 2000 Presidential election in Florida finding the outcome would have changed if ex-felons were not disenfranchised. This paper mirrors their research and applies it to the 2004 Presidential election in Florida finding that in more normative elections, felon re-enfranchisement would not change the outcome because of the rate at which their demographic normally votes.

Josiah Q. Rushing and Patrick M. Speranza, Music Performance (percussion), “Carousel” by Dave Samuels (b. 1948) and David Friedman (b. 1944)

Carousel by David Friedman and Dave Samuels is a duet for vibraphone and marimba, originally performed by the composers’ jazz duo, Double Image. The "carousel" feeling is created by its rapid,
repeating motoric figures. Originally, *Carousel* was improvised, with no two performances exactly alike. Eventually Friedman and Samuels decided to write down the basic outline of the piece, while still allowing for the improvised nature around which the piece is built. Both players are featured in the "solo" sections. This piece is highly favored by performers and audiences making it a wonderful addition to recitals and concert.


In a world of constant social interaction and persistent networking, arts organizations are struggling to stay relevant. Many performing arts organizations, regional opera included, have found it difficult to draw in new patrons and audience members. This thesis will examine the roots of regional opera theatre, discuss various nonprofit arts marketing techniques, and explore the current marketing efforts of several regional opera theatres throughout the Midwest. The research contained within this thesis is designed to be useful for small, not-for-profit arts organizations looking to expand their audience base and improve their marketing efforts with limited funds.

**Sara K. Scully, Philosophy, "Prodding the Debate: Is the Concept of *summum bonum* Necessary for Kant's Moral System?"**

In his *Critique of Practical Reason*, Kant describes the entirety of his deontological system of morality and how it requires the *summum bonum* (highest good). He defines this as the union of virtue and happiness. However, the necessity of this concept to Kant's moral system is widely subject to debate. Using Kant's *Groundwork for the Metaphysics of Morals* and *Critique of Practical Reason*, as well as leading Kantian scholars, I will show that his conception of the highest good is not necessary either to determine the moral law or to show the rational motivation of the "pure" moral agent, who only acts upon the results of the tests of reason.

**Maria D. Skiles, English (writing), “Pith”**

This story attempts to explore the boundary between fiction and nonfiction, telling a personal story through the lens of magic realism, blurring the true and the fantastic. After getting a splinter in her finger, a young girl begins the slow process of becoming the story itself as she turns into a tree and peels away the pages of the story she has always held inside.

**Emily A. Smith, Music Performance (voice), accompanied by Amanda Hopson, piano, “Les oiseaux dans la charmille” from *Les Contes D'Hoffman* by Jacques Offenbach (1819-1880)**

The poet Hoffman has come to the house of the inventor Spalanzani to become his apprentice. At a party, Spalanzani winds up Olympia the doll, his newest invention, to sing for his guests. She sings this song about the birds and how they sing of the young girl of love.

The birds in the hedges,  
the star of daylight in the sky,  
Everything speaks to a young girl of love!  
Ah! This is the sweet song,  
The song of Olympia! Ah!  

Everything that sings and sounds  
And sighs, in its turn,  
Moves her heart, which trembles with love!  
Ah! This is the darling song,  
The song of Olympia! Ah!

**Tyler J. Spear, Physics and Astronomy, “The Nitrogen Laser: Conception to Completion”**

For an atomic physics class project, I and two fellow students attempted constructing a nitrogen gas laser using a 15,000 Volt power supply, and whatever else we could find in the Julian basement.
After one semester, the project had not reached fruition and a group member and I agreed to continue work toward creating a functional laser. Along with explaining basic laser theory, this poster will follow the story behind the construction; the decisions made, the obstacles faced, and the difficulty of transforming a theoretical model on paper to functional product, which scientists encounter every day. Success is not guaranteed.

**Elisa D. Sunshine, Music Performance (voice),** accompanied by John Clodfelter, piano, “Depuis le jour” from *Louise* by Gustav Charpentier (1860-1956)

The story of *Louise* centers on a young woman and her forbidden love with Julien, a Bohemian writer. Louise has decided to leave her home and her disapproving mother to live with Julien in Paris. Here, she sings about the joys of love and the changes she sees in herself and the world around her.

> Since the day I gave myself,  
> My fate seems all in flower.  
> I seem to be dreaming beneath a fairy sky,  
> My soul still enraptured  
> By that very first kiss!  
> What a wonderful life!  
> My dream was not a dream!  
> Oh! I am so happy!  
> Love spreads its wings over me!  
> In the garden of my heart  
> A new joy sings!  
> Everything resonates,  
> Everything rejoices in my triumph!  
> About me all is smiles,  
> Light and happiness!  
> And I tremble deliciously  
> At the delightful memory  
> Of the first day of love!  
> What a glorious life!  
> Oh, how happy I am! Too happy!


This thesis explores the theme of self-transformation in Milena Shibush, the protagonist in Geoff Ryman’s science-fiction novel, *The Child Garden: A Low Comedy*. Dante’s *The Divine Comedy* serves as a kind of ‘sacred text’ to ground and channel Milena’s alienated existence within the Consensus, the collective group of Read personalities. Her transformation exemplifies what Williams James called “A new zest which adds itself like a gift to life, and takes the form of either lyrical enchantment or of appeal to earnestness and heroism.” After discovering how to learn herself, Milena attains fulfillment, heroic status, and bliss through a process of transformation from individual to communal existence. Consequently, Milena redeemed both herself and the Consensus through her embrace of death in her journey toward full self-acceptance.

**Katherine M. Thrapp, Philosophy, “The Benefits of Backward-Looking Rationality”**

In her account of practical reason, G.E.M. Anscombe focuses on how teleological (or goal-oriented) motivations contribute to one’s rational decision-making. This means that our actions are done for a specific purpose. But does this forward-looking rationality actually tell the whole story? Some philosophers, including Anselm Winfried Müller, assert that backward-looking motivations (such as experience and morality) play a fundamental role in intention and action that is not recognized by
Anscombe. In my paper, I explain Anscombe’s action theory as well as Müller’s defense of backward-looking rationality as a pertinent source of motivation. I conclude that backward-looking rationality as described by Müller is central to an explanation of at least some human actions and intentions.


This paper investigates how lyrics in Christian worship shape or reflect theological positions. First, the paper will contextualize and compare the worship debates in Charles Wesley’s day, 1707-1788, and today. Next, the paper evaluates why theology in music matters and propose an analytical methodology for a worship song’s theological content. That methodology will be applied to Hillsong United’s Joel Houston and Charles Wesley’s songs for apparent Christology. Finally, the paper suggests how pastors and worship leaders might develop more theologically sound services.

Anne M. Wake, *History*, “Reassembling the Pieces: Loyalist Women's Lives Before, During, and After the War for American Independence”

Throughout and following the War for American Independence, 60,000 Loyalists fled the United States to reconstruct their lives abroad. The often overlooked stories of eleven Loyalist women of different class, age, and region were analyzed in order to articulate the greatest impacts on their lives both during the war in the American colonies and in their struggle to survive afterwards. Though they faced diverse tribulations, each woman was forced to adapt to new circumstances while desperately striving to maintain their traditional lifestyles.


As climate change continues to produce shifts in the vertical ecological zones that have long characterized the topography of the Andes, so too have indigenous communities in the region begun shifting agricultural production to market economies based on short-term access to and use of capital, such as through the sale of novel cash crops. This paper explores the intersections of rural development, climate change, and urbanization through an ethnographic case study of the indigenous community of Huatta, located in the Andean region of southern Peru. Community member narratives and archival research together reveal the spatial, gendered, and generational impacts of local market-based development programs on agricultural production and labor, which this paper aims to critically address.