

DEPAUW UNIVERSITY

ACADEMIC AWARDS CONVOCATION

Kresge Auditorium
Green Center for the Performing Arts
Monday, April 25, 2011
8:00 p.m.

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

Introduction of speaker.....Dr. Julia Bruggemann, Associate Professor of History

Address.....James Larson (DePauw, '05)

Jim graduated from DePauw with a major in history and a minor in education. He received the William Wallace Carson History Scholarship in 2004, the Albert J. Beveridge Fellowship in History and the Robert H. and Vera May Farber Outstanding Senior in Education Award in 2005, and the Charles and Mary Beard Senior Seminar Prize in History in 2006. He went on to earn a Master of Education from Harvard University, where he also worked in educational research. Jim now teaches at the Charles A. Tindley Accelerated School, a public charter school serving grades six through twelve, in Indianapolis. In 2010, he was the recipient of the school's Teacher of the Year Award. He is a member of the Indiana Department of Education's Evaluation Leadership Cabinet, Education Reform Cabinet, and Technical Assistance Team. He was selected to participate in NBC's 2010 Education Nation Summit as a member of the inaugural cohort of Education Champions.

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

Dr. Matthew Balensuela, Professor of Music
Dr. Linda L. Elman, Associate Professor of Modern Languages (Spanish)
Dr. John Caraher, Assistant Professor of Physics and Astronomy
Dr. Michele Villinski, Associate Professor of Economics and Management

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

"A Toast to DePauw"..... Martin J. Hughes (DePauw, '11)

Recessional music.....James Richardson (DePauw, '11)
Prélude and Fugue Op. 7, No. 1, in B Major (Marcel Dupré)

Refreshments will be served in the Great Hall following the convocation.

UNIVERSITY AWARDS

D. J. Angus-Sciencetech 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.

Justin D. Mann

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.

Taylor M. Cantril

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.

Anna G. Sterry

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.

Patrick G. Herrod

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.

Ashlyn M. Archer

Navami Banarji

Delana J. Colvin

Ryan T. Foutty

Tyler G. James

Kaitlin F. Klose

Andrew P. Maddocks

Kyle H. Sattison

Tyler A. Archer

Morgan B. Burke

Christine E. DiGangi

Leslie G. Gaber

Ann E. Jonker

Ellen C. Kobe

Carter E. McKay

Samuel A. Weigley

Macy E. Ayers

Rachel A. Cheeseman

Margaret A. Distler

Patricia J. Gossett

Grace L. Kester

Katherine M. Logan

Ashley M. Nelson

Matthew L. Welch

Joseph F. Gillespie Medical Fellowship

For a deserving senior pre-medical student for advanced education.

Rahul D. Abhyankar

Cody L. Shafer

Jennifer L. Behrens

Tanner M. Miller

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).

Emily R. Jones

Tamesha N. McGuire

Lambda Chi Alpha Prize

For a junior who has made a significant contribution to Christian living at DePauw.

Joanna L. Dukes

Sarah N. Leeper

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.

Alaina C. Hobbs

Sally M. Reasoner

Julia K. Rohm-Ensing

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.

Daniel P. Capes

Mitchell A. Strobl

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.

Taiwo T. Ajumobi

Jonathan D. Cripe

Martha Weddell Nicholson Endowed Scholarship

For a junior woman interested in the sciences with a high grade point average and who is active at DePauw.

Lisa A. Poole

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.

Elizabeth L. Whitlatch

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.

Alexander J. Sroka

Mitchell W. Vonderau

Graham A. Wilkerson

Samuel L. Westerman Fellowship for Community Outreach

For students who undertake service projects in the local community.

Yashaswee Malla

Jordan L. Ragasa

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.

Nicholas Flores

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.

Rahul D. Abhyankar ('11)

Avery M. Archer ('11)

Tyler A. Archer ('11)

Julie C. Ardelean ('11)

Elizabeth A. Attewell ('11)

Jennifer L. Behrens ('11)

Matthew T. K. Brauer ('11)

David R. Dietz ('11)

Paul H. Elliott ('11)

Leslie G. Gaber ('11)

David L. Geiger ('11)

Pucong Han ('11)

Rachel A. Hilgendorf ('11)

Alaina C. Hobbs ('11)

Kevin D. Hoesley ('11)

Rebecca L. Janvrin ('11)

Ann E. Jonker ('11)

Gretchen M. Kasting ('11)

Heidi N. Keiser ('11)

Robert Corey Klee ('11)

Rita M. Klofta ('11)

Mackenzie C. Knight ('11)

Yavor S. Kovachev ('11)

Steven V. Lemasters ('11)

Rebecca G. Maddrell ('11)

Kelsey R. Miller ('11)

Tanner M. Miller ('11)

Hallie M. Moberg ('11)

Jorie E. Moss ('11)

Caroline E. Murphy ('11)

JooYoung Park ('11)

Ashley R. Ramsey ('11)

Elizabeth Q. Ratchford ('11)

Brandon D. Roberts ('11)

Julia K. Rohm-Ensing ('11)

Hunter C. Schouweiler ('11)

Emily H. Smedra ('11)

Jordan S. Stefanov ('11)

Kelly C. Summers ('11)

Mary K. Summers ('11)

Emily M. Terrell ('11)

Mary K. Tilly ('11)

Jaclyn M. Tormoehlen ('11)

Ryne K. Weppler ('11)

Stephen K. Worden ('11)

Katherine M. Wright ('11)

Catherine M. Baker ('12)

Kara L. Bishak ('12)

Victoria S. Googasian ('12)

Van C. Hoang ('12)

Ruize Ma ('12)

Elias M. Oziolor ('12)

Andrew S. Pfaff ('12)

Kathryn J. Pfaff ('12)

SCHOOL OF MUSIC

John and Esther Browning Scholarship

For an outstanding pianist or violinist completing the junior year at DePauw.
Jane M. J. Lim

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.
Bridget C. Parker

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.
Elizabeth A. Orsborn

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.
Emily K. Barnash **Elleka A. Okerstrom**

Performance Certificates

For seniors who have attained a high degree of excellence in applied music.

Katherine N. Blakey
Andrea J. Spencer

Ariel C. Detwiler
Seth J. Tsui

Elizabeth A. Orsborn

Presser Undergraduate Scholar Award

For an outstanding junior majoring in music.
Samuel V. Crocker

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.
Case M. Nafziger

Pi Kappa Lambda Music Honorary

The national music honorary society, to which students are inducted on the basis of scholarship and musicianship.

Caitlin R. Conley
Rebecca L. Janvrin
Jared P. Norman

Samuel V. Crocker
Caroline E. Murphy

Martin J. Hughes
Megan S. Murphy

A R T S A N D H U M A N I T I E S

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.
Naïomy M. Guerrero **Clare K. Mail**

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).
Sommer M. Braun

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.

Jessica A. Kane

William Meehan Prize in Art

For a senior art student who works in traditional media in non-traditional ways. Established in memory of Professor William Meehan, who taught at DePauw from 1963-1992.

Rita M. Klofta

Christopher A. Neal

Senior Art History Prize

For a senior art history major.

Caroline E. Murphy

Duncan L. Wolfe

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.

Rita M. Klofta

A. Reid Winsey Memorial Art Scholarship

For an outstanding first-year art student. Awarded in honor of A. Reid Winsey, department chair from 1935-1970.

Yizhou Ren

ASIAN STUDIES PROGRAM

Chinese Summer Language Scholarship

For a student who plans to study Chinese in Pan-China.

Risa Morita

Sharon Hamilton Nolte Prize in Japanese Studies

For a student who plans to study at a Japanese university. Established in memory of Sharon Hamilton Nolte, a faculty member in the Department of History from 1984-1987.

Eric R. Gasper

Katelyn A. Zolman

DEPARTMENT OF CLASSICAL STUDIES

Georgia M. Watkins Prize

For the outstanding beginning Greek student and the outstanding beginning Latin student.

Kristen T. Fanning (Greek)

Robert J. Spichiger (Latin)

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.

Robert Corey Klee

APA Outstanding Student Award

For an outstanding student in the Department of Classical Studies. Granted by the American Philological Association.

Han Peng

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.

Jacqueline R. Keyes

Donald M. Smith

Stephen Gentry Scholarship

For a junior dedicated to excellence in broadcast journalism.

Molly J. McGonigal

Ashley M. Nelson

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.

Avery M. Archer (first place)

Christine E. Walker (second place)

James W. Kirkpatrick, III (third place)

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.

Emily M. Terrell

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.

Tyler A. Archer

Elizabeth Q. Ratchford

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. Dr. Weiss taught at DePauw from 1955-1997.

Avery M. Archer

Lambda Pi Eta

Honorary society for the National Communication Association.

Lucy J. Chen

Sarah L. Maher

Marisa L. Rouse

Emily S. Vernon

Allison N. Little

Lauren E. Palfrey

Anne E. Sexton

Mira N. Yaseen

Xinxin Liu

Elizabeth Q. Ratchford

Emily M. Terrell

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.

Carianna D. Arredondo

Amber M. Ellinger

Ngoc H. Nguyen

Mami Oyamada

Devika Roy

Clarissa A. Zingraf

Lia F. Berhane

Joshua L. Jones

Margarita Nikonova

Aashray Patel

Vantryce S. Scott

Thu Huong Dao

Jennilee J. McFarland

Sergio E. Ossorio

Wenxuan Ren

Sandy Tran

Gilpin Prize in Dramatic Writing

For a senior who is outstanding in playwriting or screenwriting.

Julianna C. Goldsmith

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.

Julia C. Ardelean (fiction) **Stacie M. Grissom** (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.

Margaret B. Johnston

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*.

Katherine J. Reising

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.

Stephen K. Worden

Judith Shakespeare Award

For a junior or senior English literature major who is exceptionally gifted in literary interpretation.

Gretchen M. Kasting

DeWitt Wallace-Reader's Digest Print Journalism Award

For juniors who have demonstrated a career interest in print journalism.

Rachel A. Cheeseman **Matthew W. Cecil**

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).

Margaret A. Distler

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 Corneilsen (Margaret Ellen Hogue '56).

Ellen C. Kobe

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.

Kyle J. Macy

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.

Caitlin R. Conley

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.

Emily C. Schulte ('10), "Tartan and the Union Jack: British Recruitment Appeals During the Great War"

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.

**Carroll T. Bible
Tianjiao Liu**

**Luke P. Bretscher
Samuel L. Spahn**

**Roy R. Leaf
Connor D. Stallings**

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.

Robert Corey Klee

Lucien J. Kirkby Award

For the outstanding history major in the senior class.

Roy R. Leaf

Phi Alpha Theta

National honorary society for history.

**Christopher P. Alonzi
Julia E. Beck
Tyler M. Doane
Sarah A. Hampel
Alexander G. Kleber
Tianjiao Liu
Kathryn G. Merkel
Katherine A. Pickering
Kaleigh M. Solley
Leighanne T. Steckbeck
Jacob R. Sweeney
Graham A. Wilkerson**

**Michael J. Appelgate
Carroll T. Bible
Haley L. Fowler
Kerry A. Hobson
Carolyn C. Latta
Andrew P. Maddocks
Lucas C. Morrison
Erin K. Sheek
Samuel L. Spahn
Sarah E. Steele
Anne M. Wake**

**Taylor A. Beaty
John R. Brickson
Alexander C. Grip
Kevin D. Hoesley
Andres J. Leal
Robert P. McMurray
Staci M. Orr
Ashton M. Simmons
Connor D. Stallings
Samuel E. Swafford
Alexandra E. Walker**

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.

Matthew T. K. Brauer

Excellence in Russian Studies

For superior academic achievement in Russian Studies.

Katherine A. Pickering

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.

Jorie E. Moss

Colin J. Hertel

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.

Paul B. Fesenmeier
Katherine M. Thrapp

Samuel T. Holley-Kline
Joshua E. Miller
Daniel J. Welsh

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.

Rebecca G. Maddrell

Kathryn J. Pfaff

Julia K. Rohm-Ensing

Merle Royse Walker Language Award

For the outstanding senior in modern or classical languages.

Kathryn J. Pfaff

Pi Delta Phi

National French honorary society.

Matthew T. K. Brauer
Ashton M. Simmons

Hallie M. Moberg

Justin Q. Quall

Sigma Delta Pi

National Spanish honorary society.

Anne H. Casey
Stephanie L. Grass
Bethany L. Harrod
Joshua E. Miller
John W. Scott, IV
Matthew L. Welch

Tracey L. Dewland
Marie Ann Graw
Claire E. Hollis
Zhenya P. Mocheva
Emily H. Smedra
Daniel J. Welsh

Rachel L. German
Katheryn N. Hannaford
Rebecca G. Maddrell
Kathryn J. Pfaff
Megan K. Swanson
Leah V. Weprich

DEPARTMENT OF PHILOSOPHY

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.

Brittney S. Belcher
Sehrisch Khan Saddozai
Hallie M. Moberg
Robert W. Steele, Jr.

Kyle R. Gough
Alexander M. Landreville
Andrew S. Pace
Stephen K. Worden

Elizabeth H. Hewell
Alex S. Lopatka
Sara K. Scully

SCIENCE AND MATHEMATICS

DEPARTMENT OF BIOLOGY

Marcella Fletcher Memorial Award

For a biology major who is pursuing advanced education.

Michael P. Benson
Briana N. White

Eric T. Hawley

Amy Y. Sato

Dr. John C. Frazier Memorial Prize / Albert E. Reynolds Outstanding Senior Award

For the outstanding senior biology major.

Hannah N. Ramage

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.

Elizabeth A. Botts

Kelsey R. Gagesch

Mitchell A. Strobl

Truman G. Yuncker Endowed Merit Scholarship

For the outstanding junior biology major. Dr. Yuncker taught botany at DePauw from 1919-1944.

Lala Tanmoy Das

R. Joshua Fantus

Elias M. Oziolor

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

American Chemical Society Division of Inorganic Chemistry Award

For a student who shows strong ability, promise and interest in the area of inorganic chemistry.

Patrick M. Brophy

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.

Anne K. Hickey

Max. A. Mattson

Awesome Dawson Award

For seniors who attend more than twenty seminars over the course of their junior and senior years.

Julia E. Beck

Patrick M. Brophy

Lydia M. Coddens

JooYoung Park

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.

Anderson J. Antoine

Francis K. Fordjour

Jerry E. Plange

Nefertiti Muhammad

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.

Patrick M. Brophy

John Ricketts Prize for Exemplary Participation in Research

For students whose engagement in undergraduate research is particularly meritorious and usually culminates in a senior thesis. Established by the department in 2008 as a result of gifts to the University by former students of Professor Ricketts, who taught at DePauw from 1952-1989.

Patrick M. Brophy

JooYoung Park

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.

Peter J. Haigh

Elizabeth Ann Weingartner

CRC Press Achievement Award

For a student who shows outstanding academic achievement in first-year chemistry courses.

Xin Zheng

Phi Lambda Upsilon

Chemistry honorary society.

**Julia E. Beck
Virginia J. Bruce
Siobhan M. Deis
Peter J. Haigh
Rebecca G. Maddrell
Paul T. Mooney
JooYoung Park
Kelly C. Summers
Boxin Tang
Xinyi Wang**

**Jennifer L. Behrens
Daniel P. Capes
Noe B. Flores
John Adam Hawkins
Elizabeth K. Medlock
Elias M. Oziolor
Cody L. Shafer
Mary K. Summers
Sajel E. Tremblay
Briana N. White**

**Patrick M. Brophy
Jeffrey Samuel Cheesman
Brian J. Groendyke
Kreigh A. Kamman
Tanner M. Miller
Michael G. R. Padilla
Nishant K. Singh
Jacob R. Sweeney
Chelsea E. Ullmann**

DEPARTMENT OF COMPUTER SCIENCE

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.

Paul H. Elliott

Outstanding Service to the Computer Science Department

For a computer science major who contributes exceptional service to one of the department's programs.

Kiara L. Williams

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.

Catherine M. Baker

Zachary A. Keller

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.

**Ross E. Allen
Wesley P. Cleveland
Paul H. Elliott
Zachary A. Keller**

**Catherine M. Baker
Joseph E. Diekhoff
Jianling Fang
Jonathan A. Shidal**

**Alexander K. Billingsley
Charles Alan Dull
Pucong Han**

DEPARTMENT OF GEOSCIENCES

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.

**Katie E. Aldrich
Brittany L. Slate**

**Jason J. Blasdel
Reilly S. Taylor**

Melissa L. Penfold

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 Paleontological Research Institute until his death in 1952.

Alex S. Lopatka

Jake T. Willingham

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.

Ariana A. Borello

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.

Katherine E. Broecker

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.

Elizabeth A. Attewell

Courtney N. Lauer

Steven V. Lemasters

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.

Lois N. Aryee

Elizabeth A. Attewell

Cassandra Bauhan

Shelby L. Bridges

Wenjun Ge

Ha Thu Hoang

Claire E. Hollis

Courtney N. Lauer

Yuyi Liu

Allison M. Mousel

Hailee M. Newton

Amanda M. Russ

Casie J. Sambo

Mengfei Shao

Rong Wang

Yi Wang

Michelle N. Whitehead

Chen Zhang

Yue Zhang

Shuangru Zuo

Mathematical Association of America

The leading professional association in collegiate mathematics.

Jonathan D. Cripe

Yavor S. Kovachev

Courtney N. Lauer

Mengei Shao

Chen Zhang

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.

Ruizhe Ma

Austin D. Sprague Scholarship

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

Jonathan D. Cripe

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.

Andrew D. Ledbetter

Sigma Pi Sigma

National physics honor society.

Mateos B. Kassa

Tyler J. Spear

Steven V. LeMasters

Weiyong Zhang

Heng Li

DEPARTMENT OF PSYCHOLOGY

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.

Heidi N. Keiser

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.

Roddrea V. Smith

Senior Thesis Seminar Award

For senior psychology majors for outstanding performance on senior research projects and senior theses.

Laura J. Hedrick

Heidi N. Keiser

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.

Heng Li

Van C. Hoang

Psi Chi

National honorary society for psychology.

Shelby L. Bridges

Anna C. Field

Stephanie L. Grass

Katherine A. Janowski

Erin C. O'Donnell

Leanne M. Schaub

Leah L. C. Somerville

Xinyi Wang

Lichen Xu

Madeline L. Briere

Eric R. Gasper

Van C. Hoang

Rebecca L. Leahy

Elizabeth B. Pendery

Aubrie E. Scott

Kelly C. Summers

Ryne K. Weppler

Dana N. daVeer

Elizabeth R. Gentry

Amanda B. Hughes

Tara A. McNeil

Caroline E. Pietrzak

Bridgette E. Shamleffer

Mary K. Summers

Chelsea B. Wills

S O C I A L S C I E N C E

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.

Ryne K. Weppler

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.

Adam E. Weaver

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.

Aishwarya Subbaraman

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.

Justin Q. Quall

DEPARTMENT OF EDUCATION STUDIES

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.

Eliza J. Scanlon

Emily H. Smedra

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.

Elyse E. Petruzzi

Katharine M. Sowar

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.

Macy E. Ayers

Daniel K. Cetina

Paromita Sen

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.

Stephen K. Worden

Pi Sigma Alpha

National political science honorary society.

Macy E. Ayers

Matthew T. K. Brauer

Daniel K. Cetina

Patricia J. Gossett

Paromita Sen

Lacey M. Berkshire

Luke P. Bretscher

Rachel A. Cheeseman

Drew G. Olson

Kara L. Bischak

Matthew W. Cecil

David R. Dietz

Joshua W. Schlake

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.

David R. Dietz

Roland Naylor Award

For students interested in conducting fieldwork in anthropological archaeology.

Catherine R. King

Alpha Kappa Delta

National sociology honorary society.

Ashlyn M. Archer

Betty J. Cao

Meghan L. Jenkins

Elizabeth F. Palmer

Jordan T. Buchanan

Sydney L. Crouch

Ryan V. Jones

Kathryn L. Russell

Melody L. Buckley

Lauren Gregerson

Katherine E. Markiewicz

Kathleen E. Tangri

Lambda Alpha

National collegiate honorary society for anthropology.

Jordan T. Buchanan

Kelsey S. Moore

Alicia K. H. Yurong

Nicholas V. Flores

Paromita Sen

Meghan L. Jenkins

Zachary R. Young

PROGRAMS OF DISTINCTION

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.

Victoria S. Googasian

Hallie M. Moberg

2010-2011 Honor Scholar Program Graduates

Matthew T. K. Brauer, "Representations of English in France: Conflict and Opportunity in Language and Identity"

Alana G. DeWitt, "Marathon: From Myth to the Modern Era"

Michael B. Duffy, "How to Blow Up a Wal-Mart Without Getting Caught and Without Blowing It Up: An Exploration of Social Protest, Change, and Crime on Stage"

Victoria S. Googasian, "Does the Animal Speak? Narratives of Animality in Four Contemporary Novels"

Alaina C. Hobbs, "Constructing Narratives and Establishing Moral Capital: An Analysis of American Tales of Jewish Resistance"

Kerry A. Hobson, "Coal Mining, Masculinity and Meth: The Development of Appalachia and Its Modern Crisis"

Meredith G. McGrady, "After the Ball: The Effect of Cinderella Seasons on College Admissions and Enrollment at NCAA Division I Institutions"

Emily C. Meyers, "Deconstructing the Argentine Metanarrative: The Mothers of the Plaza de Mayo and the Evolution of Memory of the Dirty War (1976-1983)"

Kevin D. Milne, "Pacifying Violence: The Ethics and Responsibility of Living in a Militarized Society"

Hallie M. Moberg, "'Pour vous, qu'est-ce qu'être Français?': The Politics of French National Identity in the 21st Century"

Caroline E. Murphy, "Putnam County Through the Lens: Creating Community with Art"

Christopher A. Neal, "Observing, Comparing and Discussing: Perception of Obsessive Behaviors in Society"

Katherine A. Pickering, "Ka'aba Under Communism: Muslim and Clan Identity in Soviet Literature of the Caucasus and Central Asia"

Ellen E. Snell, "Hogar sin luz: Home, Homeland and Personal Space in the Works of Federico Garcia Lorca"

Robert W. Steele, Jr., "Balancing the Scales of Justice: Legal, Ethical Dilemmas within Wrongful Convictions Involving Client Confidentiality"

Jacob R. Sweeney, "Epigenetics and Allergic Disease"

Stephanie C. Wood, "Literary Genesis"
 Stephen K. Worden, "Deconstructing Democracy Through the Lens of Higher Education"
 Katherine M. Wright, "Conservation in Conflict: Reconciling Resource Management
 Perspectives in a 'Geographical Mosaic' Grand Canyon, Arizona"

INFORMATION TECHNOLOGY ASSOCIATES PROGRAM

Justin and Darrienne Christian ITAP Annual Fund Scholarship

For an ITAP student who has made a significant contribution to the campus and community, has maximized the experience for his or her professional and personal growth, and has contributed to the development of other students in the program through his or her dedication to the on-campus ITAP internship.

Katherine A. Satterfield

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.

Avery M. Archer
Noe B. Flores
Emily M. Riggs
William Trenton Wood

Alexander K. Billingsley
Stacie M. Grissom
Jordan S. Stefanov

Codanda (Ganga) Devaiah
Andrew P. Maddocks
Christine E. Walker

MANAGEMENT FELLOWS

2010-2011 Management Fellows Program Graduates

Arielle N. Babineaux
Breana A. Buchler
Patrick C. Geoghegan
Yavor S. Kovachev
Colby E. Mueller
Hunter C. Schouweiler
Travis K. Sheppard
Benjamin L. Stilwill
William T. Wood

Mark P. Branigan
Charles R. Davis
Lucy M. Grimm
Courtney N. Lauer
Justin Q. Quall
John W. Scott
Ewing Shields
William F. Tidwell

John R. Brickson
Julia E. Drummond
Bethany L. Harrod
Julia M. Mathews
Joshua W. Schlake
Mischa A. Serlin
Jordan S. Stefanov
Meghan R. Wolfgram

MEDIA FELLOWS

2010-2011 Media Fellows Program Graduates

Lacey M. Berkshire
David R. Dietz
Stacie M. Grissom
Andrew P. Maddocks
Emily M. Riggs
Matthew L. Welch

Lynn M. Demos
Sarah E. Eutsler
Tyler G. James
Ashley N. Oliver
Grace M. Tober
Duncan L. Wolfe

Christine E. DiGangi
Leslie G. Gaber
Erin C. Luck
Elizabeth Q. Ratchford
Elaine S. Weed

SCIENCE RESEARCH FELLOWS

2010-2011 Science Research Fellows Program Graduates

Brian Patrick Allman	Margaret Belle Baber	Julia Eve Beck
Siobhan Marie Deis	Ryan Emerson Edelen	Paul Hak-Soo Elliott
Diane Margreth Fernandez	Noe Benjamin Flores	David Stuart Hanger
Eric Thomas Hawley	Rebecca Grace Maddrell	Elizabeth Katharine Medlock
Tanner Michael Miller	Vanessa Lorraine Mock	Paul Timothy Mooney
Christopher Andrew Neal	Cody Julian Kalakaua Roldan	Kelly Christine Summers
Mary Kathryn Summers	Michelle Nichole Whitehead	

NATIONALLY COMPETITIVE SCHOLARSHIPS AND FELLOWSHIPS

Critical Language Scholarship

For intensive summer study of one of thirteen "critical need foreign languages". This scholarship is sponsored by the United States Department of State.

Janelle C. Thixton (to study Arabic in Oman)

Davies-Jackson Scholarship

For post-graduate study in political thought and intellectual history at St. John's College, Cambridge University.

Stephen K. Worden

Fulbright English Teaching Assistantship

For teaching English in one of more than fifty countries worldwide. ETAs work to improve their students' English-language abilities and knowledge of the United States, are fully integrated into their host communities, and may pursue individual study/research plans in addition to ETA responsibilities.

Chelsey E. Jonason (Slovak Republic)

Ashlee L. Anton (South Korea)

Benjamin A. Gilman International Scholarship

For undergraduate study abroad.

Kelly M. Kish (Ecuador)

Anna Kung (South Korea)

Matthew A. Norton (Senegal)

The recipients of other national awards will be announced later in the spring.

WALKER CUP FINALISTS

David R. Dietz is a sociology major and Media Fellow from Indianapolis. He is incredibly humbled to be nominated as a Walker Cup Finalist with two of the most talented and dedicated individuals he has had the pleasure to call his friends. Looking back on his four years at DePauw, David is amazed by the accomplishments of the Class of 2011. He is particularly proud of his efforts during the 2008 U.S. presidential election, his successful leadership in bringing Building Tomorrow—an international social-profit organization that encourages philanthropy among young people by raising awareness and funds to build and support educational infrastructure projects for underserved children in sub-Saharan Africa—to DePauw and his role as Student Body Vice President, which contributed to DePauw Student Government becoming a legitimate voice of the student body. Whether he was knocking on doors in sub-zero Iowa temperatures, working in the East Wing of the White House or trading stories with locals in rural Uganda, his DePauw experience has taken him places he would never have thought possible. David feels that his contributions would not have been possible without the professors who have challenged him, the friends and family members who have supported him and the mentors who continue to inspire him.

Benjamin L. Stilwill is an economics major and Management Fellow from Okemos, Michigan. Over the past four years, he has contributed to the DePauw community in almost every aspect, including involvement with Student Life, Admission, alumni and the Class of 2011. Ben has been on the executive boards of Building Tomorrow, DePauw Entrepreneurs' Association, Management Fellows Student Council, Civic Fellows and Beta Theta Pi. Additionally, Ben has served on the DePauw Student Government Allocations Board and the Wellness Center Student Advisory Board, played string bass in the University Orchestra and done stints as Tyler the Tiger, DePauw's mascot. During his Management Fellows senior seminar, Ben worked with Greencastle entrepreneurs to strengthen the economic vitality of Greencastle by starting a non-profit organization that sold locally-made products to parents of DePauw students. Off campus, Ben has had the opportunity to represent DePauw by studying abroad and working in five different internships, including an internship in Washington, D.C., with Congressman Mike Rogers and a year as the #2 nationally-elected youth for the Boy Scouts of America, which provides leadership training to young Scouts across the country. After graduation, Ben looks forward to working with BMO Capital Markets as an IB Financial Analyst in Chicago, Illinois.

Christine E. Walker hails from Fort Wayne, Indiana, where she lives with her parents, twin sister and fellow classmate Katherine, and younger sister Emma. She has been a member of the Hapkido Club, has served on the Executive Board of Alpha Phi, was a co-founder of Model United Nations, and was the founder of TG3, an organization that works on town-gown relations through service. She has also been a member of the DePauw Debate Society, a columnist for *The DePauw*, a participant in the DePauw Environmental Policy Project and student director in the Information Technology Associates Program (ITAP). Currently, Christine serves as the Student Body President, which has allowed her to collaborate with faculty and administrators to further the mission of the institution. Christine notes that her greatest challenge while at DePauw has been taking classes that require her to go outside of her academic comfort zone, but adds that she has found that these classes are often the ones in which she learns the most. Christine enjoys reading historical fiction, volunteering at the Putnam County Humane Society and spending time with friends over long dinners. After graduating, Christine will attend law school with the hope of going into public policy concerning criminal code and procedure.

SENIOR SHOWCASE PARTICIPANTS

Avery M. Archer, *Physics and Astronomy*, "Millennium Gas Simulation: An X-ray Observer's View"

75% of the universe is composed of dark energy. Large-scale structures provide a unique window into this foreign energy. The Millennium Simulation was a groundbreaking effort in cosmology to simulate the universe and its structure from a God's eye view. The Millennium Gas Simulation is a new take on the Millennium Simulation that puts on emphasis on the gaseous component of galaxy clusters and provides an observer's point of view. This new simulation provides 400 simulated galaxy clusters including the gaseous component, which can be compared with observable data. With a new database of observer's point of view simulated clusters cosmologists can better test their models and make small changes to the simulations in an attempt to match observed clusters.

Julie C. Ardelean, *English (writing)*, "Our House"

Our House is a collection of short that revolve around an Indiana family, specifically a mother who leaves and the repercussions doing so has on her two daughters, Quinn and Daphne. Each story shifts perspective, told either by a different person or at a different stage in a character's life, but ultimately the collection explores themes of forgiveness, relationships, and the weight of decisions.

Margaret B. Baber, *Geosciences*, "Trends in Extreme Temperatures and Dry Periods in the Northeastern United States"

A continuous, homogenized set of daily minimum and maximum temperature and precipitation data from 40 weather stations throughout the northeastern United States is used to analyze temporal trends and spatial patterns in extreme temperatures and dry periods. Time series of various lengths were used, with the long-term from 1899-2008 and the short-term from 1970-2008. Trends in extreme temperature were analyzed by counting the annual occurrence of extreme maximum and minimum temperatures exceeding high (99th, 95th, & 90th) and falling below low (10th, 5th, & 1st) percentile thresholds. Changes in precipitation were analyzed by counting the number of dry days (no recorded precipitation) by season. Linear regressions were used to show changes.

Margaret B. Baber, *Geosciences*, "DePauw Sustainability Initiative: A Visual History of a Changing Institution"

A visual timeline is used to exhibit the history of sustainability at DePauw University from the mid-1990s to present day. DePauw's leaders, faculty, staff and students have acted prudently over the past few years to cultivate an ethic of sustainability that permeates the University. The timeline of events is not comprehensive. It focuses on student-led projects such as Energy Wars, the Local Food Campaign, and DePauw's first Carbon Footprint. With limited resources, students have developed considerable momentum for academic-, physical- and community-based sustainability initiatives. Sustainability-focused and sustainability-related projects have increased significantly in the past five years.

Anthony M. Baratta, *Political Science*, "Abortion's Role in the History of the Christian Right"

Some believe that anti-abortion sentiment was solely responsible for the success of the conservative political movement in the 1980s known as the Christian Right. In my paper I question that assumption by examining the extent to which Christian Right leaders used anti-abortion rhetoric from 1979 to 2009 to galvanize Americans into political action. The product of my efforts is a more nuanced account of the roles that abortion did—and did not—play in the Christian Right over the past three decades.

Katherine N. Blakey, *Musical Arts*, "Romanza" and "Allegro con fuoco," *Sonata for Clarinet and Piano*, Francis Poulenc (1899—1963)

Francis Poulenc's *Sonata for Clarinet and Piano* dates from 1962 and is one of the last pieces he completed. The piece is dedicated to the memory of one of his old friends, the Swiss composer Arthur Honegger. The two friends had belonged to the group "Les Six." This group was comprised of six composers working in an area of Paris, France whose music is often seen as a reaction against the musical style of Richard Wagner and impressionist music.

Patrick M. Brophy, *Chemistry and Biochemistry*, "Evaluation of the BCR sequential extraction procedure for carbonate rich sediments and soils"

Paul H. Elliott, *Computer Science*, "Automated Behavioral Analysis of Malware"

Malware, or software designed to corrupt a computer and its resources, represents a major security threat to modern computer systems. Sandia National Laboratory has developed a tool that analyzes malware behavior in a secure test environment, with the goal of producing valuable data for better-informed security measures. My project involved readdressing this tool, particularly with respect to how many malware samples it can analyze simultaneously, how taxing it is on system resources, and how well it communicates with other security-related tools. I was able to make improvements in all these areas, allowing the new version of the tool to run faster and more efficiently.

Julianna C. Goldsmith, *English (writing)*, "46165"

Julianna Goldsmith writes about the world around her: Small towns and the land between those small towns, the villains and lovers, inform each piece with a kind of reverence for the pains of both attachment and transience. Here is a writer who is just learning what it means to be human, to be conscious of one's age and home, to be cautious of definition while claiming identity. Goldsmith understands that each one of us is ruined, yet also in possession of a wisdom that moves us to create. She is from North Salem, Indiana and believes that the land makes the people and also the language.

Stacie M. Grissom, *English (writing)*, "The Valentine's Day Massacre"

"The Valentine's Day Massacre" is the story of the murders that took place up the road in Hollandsburg, Indiana in 1977. It tells the story of Betty Jane Spencer who survived that night while her son and three stepsons died before her eyes. It also shows the fear and paranoia that West Central Indiana felt during the two months it took police to track down and arrest the murderers. The story shows a terrible, cruel side of humanity, but also our ability to change, persevere, and overcome trauma despite the worst circumstances possible.

Eric T. Hawley, *Biology*, "Informatics, Genomics, and High Throughput Sequencing"

Bioinformatics and sequencing technologies have quickly become a fundamental part of biological research. With the ability to create and analyze more data in a cost effective and timely manner, the use of informatics tools have become a normal and essential part most research projects. Here I present work I conducted on the collection and generation of genomic data along with applications of that data.

E. Nicki Hewell, *Philosophy*, "The Problem With Psychopathy: Highlighting The Legal Treatment of Psychopaths in the United States"

This thesis highlights a pervasive philosophical problem that currently exists in the legal treatment of psychopaths in the United States. Psychopathy, a partially heritable mental disorder, frequently plays a causal role in the commission of crime by psychopaths. This causal relationship of their mental disorder to their crime should qualify them for the insanity defense, which would allow them to receive treatment at a mental hospital. However, research suggests that severe psychopathy is untreatable. Thus, we are left wondering: what ought we to do with psychopaths?

Rachel A. Hilgendorf, *Kinesiology*, "The effects of caffeine and taurine ingestion during a 1-km cycling time trial in trained college-age females"

The positive effects of caffeine ingestion on aerobic performance are fairly well established while the effects of caffeine on anaerobic performance remain equivocal. Taurine is also suggested to affect exercise performance. Reports of taurine's effect during exercise usually include caffeine in their treatment. The purpose of the present study was to determine the effects of caffeine, taurine, and the combination of caffeine and taurine on anaerobic cycling performance. Ten trained female cyclists performed a 1 km cycling time-trial after: 5 mg/kg⁻¹ caffeine, 3.5 g taurine, 5 mg/kg⁻¹ caffeine and 1g taurine, a placebo drink, or a control condition. Performance time, mean speed, mean power, peak power, rate of perceived exertion, and pre-and post-blood lactate were measured.

Despite the inherent limitations of sequential extraction procedures, sequential extraction remains popular, cheap, and efficient method for evaluating the potential mobility of metals in environmental samples and can give insight into the bioavailability of these metal species. The effect of high carbonate content within a sample was investigated for the first and second steps of the BCR sequential extraction procedure using SRM 2710 and SRM 2710a. Kinetic studies were conducted using semi-synthetic substrates and fully synthetic substrates. A set of recommendations for applying the BCR to carbonate rich sediments was also evaluated.

Caitlin R. Conley, *English (literature)*, "Painters of Portraits: Freedom and Being in *The Portrait of a Lady*"

What Isabel Archer most wants is the freedom to create her own identity, but she is surrounded by plotters who impose their own visions upon her; as a result of their machinations, she is petrified into a living piece of art. However, because Isabel sees art as an educational tool, this state teaches her both the joys and miseries of life, and as a result, by the novel's end, she has completed her education. The novel's incomplete ending shows that Isabel must be free from all artists, including Henry James, in order to satisfy her personal vision; in this way the novel is merely a prelude to the life that Isabel will create for herself.

Siobhan M. Deis, *Chemistry and Biochemistry*, "Microwave and ionothermal syntheses at elevated temperatures: Ni(II)/Gd(III) compounds and ionogels in EMIM(EtOSO₃)"

Ni (II), Gd (III)-ligand complexes that we synthesized at elevated temperatures in ionothermal bomb and microwave conditions in the ionic liquid differed from those synthesized at room temperature or in organic solvents. In an attempt to crystallize products in order to determine the structures, we found that the filtrates from the bomb and microwave reactions performed at 90°C and hotter form ionogels over night. Our group has optimized the synthesis of these ionogels and has begun to analyze them for potential uses in catalysis or conduction.

Ariel C. Detwiler, *Music Performance (bassoon)*, "Allegro con moto", "Aria: Largo cantabile", "Scherzo: Presto", *Sonatine pour Basson et Piano*, Alexandre Tansman (1897-1986)

Alexandre Tansman was born in Poland to a Hebrew family and grew up attending the Łódź Conservatory studying piano. After facing harsh criticism of his music in Poland, he moved to Paris in 1919, where he gave his debut recital as a solo pianist and composer and found great appreciation. He performed his first tour as a soloist in America with the Boston Symphony Orchestra under Koussevitzky in 1927. As Paris became occupied by German troops in 1940, he moved to Los Angeles and wrote numerous film scores, despite having just received his French citizenship. After the war ended, he did not hesitate to return to Paris in 1946. Great influences seen in Tansman's music include his Hebraic background as well as his great friendships with Stravinsky and Ravel. In his *Sonatine* for bassoon and piano, written in 1952, his use of impressionistic piano gestures, polytonality and strong rhythmic textures emerge after a long life of worldly influences. In 1983, he was awarded the Polish Medal of Cultural Merit.

Portia T. Egan, *Psychology*, "The Impact of Work-Family Conflict on Emotional Labor and Stress"

The present research aims to bridge two related yet distinct literatures by investigating the relationship between emotional labor and work-family conflict. More specifically, the study assesses the role of work-family conflict in predicting emotional labor and stress, as well as the moderating effects of gender and job autonomy in these relationships. Approximately 200 DePauw University faculty and administrative staff members were surveyed. It is predicted that work-family conflict will be associated with increases in both emotional labor and stress, and that this relationship will be greater for women and individuals low in job autonomy.

Kevin D. Hoesley, *Religious Studies*, "The Pure-Faith of India: An analysis of Swami Dayananda Saraswati's spiritual mission to instantiate theological Modernity into late-19th century Hinduism through a radical-revivalist rereading of the four Vedic Samhitas"

Considered by many to be the "Luther of India," Swami Dayananda Saraswati (1824-1883) devoted his life and ministry to teaching the "Pure-Faith" expounded in the four Vedas, the oldest Hindu scriptures. My thesis seeks to analyze how Dayananda essentially "reformed" Hinduism – in light of 19th century theological norms - through revivalism of the Modern faith he discerned from his radical rereading of the Vedas. A faith which, according to Dayananda, made no mention of traditional practices associated with Hinduism, such as: polytheism, idol worship, and caste-segregation; but in its place promoted the scientific rationalism, democracy, and monotheistic deism.

Kyle K. Inman, *Musical Arts*, "Portals of Truth: Musical and Literary Responses to the 'Troubles' in Northern Ireland"

Without the means to channel experiences and understanding directly between conscious beings, artists persevere in efforts to convey the anguish, nightmare and background of "Troubles" Northern Ireland. This paper discusses the way in which music and literature explain the identities of political and sectarian communities that fuel civil unrest. It describes the nightmarish atmosphere established by doorstep executions and bombed-out buildings. It also considers arguments about artists' responsibilities for representations of the conflict. The conclusion opens the door to how music and literature can be used to draw Northern Ireland towards a shared future through its ability to open portals of truth.

Chelsey E. Jonason, *Conflict Studies*, "Restorative Justice: An Opportunity for the DePauw Community"

Restorative justice believes in the healing power of dialogue. By engaging victims in the process of justice, offenders learn why their action was harmful, how it affected the greater community, and how the offender can repair the harm. In the spring of 2010 I recognized the opportunity for restorative practices at DePauw. We live in a tightly intertwined community, and the actions of one student can have negative consequences for the whole community. By engaging each other in dialogue after an incident, we can embrace a learning opportunity and improve our relationships. My goal was to create a restorative justice program for DePauw through Community Standards. Using a conferencing model that includes offenders, victims, and their supporters, two student facilitators engage the group in dialogue that aims to identify the harm and how to repair it. My other aim was to create a practice space for students, a program for them to actively engage their academic theory and have experiences to draw from.

Gretchen M. Kasting, *English (literature)*, "Facing Off with the Perfect Drug: The Face, Perception and Drug Use in *Strange Case of Dr. Jekyll and Mr. Hyde* and Other Literature"

Through the examination of the face in literature related to psychedelics, narcotics, and stimulants, the enigma of Mr. Hyde's face, and the faces of other characters in *Strange Case of Dr. Jekyll and Mr. Hyde*, it becomes possible to see Dr. Jekyll's transformation as the ultimate example of the face-focus that appears in drug-related literature from both the perspective of the perceiver as well as the perceived.

Heidi N. Keiser, *Psychology*, "Flow Propensity, Student Satisfaction, and the Five-Factor Model: An Analogue Investigation of Employee Satisfaction"

The current study describes an analogue industrial/organizational examination of the inter-relationships among personality or dispositional traits (e.g., the Five-Factor Model (FFM) and need for achievement), indices of flow (e.g., the Dispositional Flow Scale-2; Jackson & Eklund, 2002), and outcomes in the workplace (e.g., student satisfaction and academic performance). Students and academic indices will serve as a proxy for employees and work-related indices. It is hypothesized that basic personality, including need for achievement, will predict flow, which in turn will predict student satisfaction.

Yavor S. Kovachev, *Economics and Management*, "Comparison of Estimation Techniques for Optimal Hedge Ratios with Gold Futures: an Application to COMEX and the Korea Exchange"

A number of empirical techniques for the estimation of optimal hedge ratios have been proposed in the econometric literature. While all of the existing techniques have theoretical justification there is no distinctly superior method that can consistently outperform all models. This study provides an empirical comparison of two estimation techniques in the context of hedging market risk with Asian Gold Futures from The New York Mercantile and Commodities Exchange, Inc. as well as gold futures contracts from the Korea Exchange. The main conclusion is that the GARCH (Generalized AutoRegressive Conditional Heteroskedasticity) model can significantly outperform OLS (Ordinary Least Squares) especially when large random volatility shocks are present.

Robert K. B. McBlain, *Asian Studies*, "The Buddha's Light and the Woman's Smile"

Buddhism—like many world religions—has developed and changed over the course of its history. Many major figures within the religion underwent changes, but none more so than the figure of ultimate compassion, Avalokiteshvara. From male to female, transcendent to descendent, he ran the gamut of change. "The Buddha's Light and the Woman's Smile" examines this change and how it has manifested in the Humanistic Buddhism of FoGuangShan.

Vanessa L. Mock, *Biology*, "Drug Development and Nicotine Dependence"

Nicotine dependence leads to an estimated 8 million deaths each year worldwide. Current drugs used to treat nicotine dependence, such as Chantix®, reduce the craving for nicotine, but have considerable side effects. To find better drugs, the zebrafish is used as preclinical model organism in this project. Using a behavioral assay, chemicals have been identified that blunt the response of zebrafish larvae to nicotine significantly. The newly identified chemicals have not been used previously for nicotine dependence therapy and may offer a new line of treatment in the future. The results further validate the use of zebrafish for drug discovery.

Tamana Ogawa, *Conflict Studies*, "The Global Order in Local Relief: Exploring the One Million Baht Fund in Nong Tao, Thailand"

In 2001, the Prime Minister Thaksin of Thailand implemented One Million Baht Fund, which distributed one million baht to each community in rural areas and cities. This goal of this project was to bring everybody "happiness" by giving them an opportunity to make investment, earn profit and contribute to Thailand's GDP growth. Yet, my field research in one of the recipients communities, Nong Tao Village, revealed that borrowers would spend money on non-consumption expenditures and thus further became indebted. Furthermore, interviews with villagers revealed that the Fund contributed to weakening of human relationships within the community. This paper traces these problems back to the international economic order established in Bretton Woods. This international economic order and ideology influenced Thaksin's value system and led him to implement the Fund, thus incorporating the village into the international economic order.

Elizabeth A. Orsborn, *Music Performance (voice)*, "Je marche sur tous les chemins", "Obéissons quand leur voix appelle", *Manon*, Jules Massenet (1842-1912)

Act III: Manon appears in the crowd and tells her admirers about her philosophy to live only for the moment, caring not what happens afterwards. After all, there is little time in youth. One should spend it loving, singing, and dancing. The text reads as follows: *I walk on all roads/Like a sovereign/They bow, they kiss my hand, / Because I'm the beauty queen!/I am queen!/My horses run fast. / In front of my adventurous life/The nobles bow down ... / I'm beautiful, I'm happy!/I'm beautiful!/Around me is blooming! I go to everything that attracts me!/And if Manon should never die, / That would be my friends, in a burst of laughter!/Ah! Ah! Ah! Ah! Ah! Ah! Ah! / Obey when their voices call/With tender love,/Always, always, always, / While you're beautiful, use without counting your days, all your days! / Take advantage of our youth,/Amended in the spring days; / Love, laugh, sing constantly/We're still only twenty years!*

Elizabeth F. Palmer and Elizabeth H. Buehler, *Psychology*, "The Pursuit of Happiness: The Effect of Positive Psychology Interventions on Subjective Well-Being in College Students"

The present study aimed to increase levels of subjective well-being (happiness) and decrease levels of depression in college students. To study this, levels of happiness and depression for an experimental and control group were measured in pre and post-test sessions, which were 13 days apart. Experimental participants engaged in a variety of nightly positive psychology interventions, focusing on character strengths, gratitude, positive emotion, and goal-setting. We analyzed the results using 2X2 Mixed ANOVAs in an attempt to find a significant increase in happiness and decrease in depression levels in the experimental group, and consistent scores in the control group.

JooYoung Park, *Chemistry and Biochemistry*, "Surviving Exposure to Arsenic and Other Toxic Metals: Revealing the Crystal Structure of a Metal-Detoxifying Protein"

Over-exposure to toxic metals such as Arsenic, Cadmium, and Lead can result in severe health complications for humans, including cancer, neurodegenerative diseases, and death. In fact, all organisms are subject to the lethal effects of toxic metals. However, one category of organisms – Archaea – are able to survive in the most extreme conditions. One such organism, called *Methanosarcina acetivorans*, resides in soils heavily contaminated with toxic metals. It turns out that *M. acetivorans* has a protein that is involved in a sophisticated system of sequestering and removing metal ions from the cell. Our research reveals the crystal structure of this fascinating protein, which provides us with a better understanding of how metal-dependent transcription factors differentiate between a variety of toxic metals, and consequently, how this protein confers resistance to toxic metals.

Bridget C. Parker, *Music Education*, "When I Grow Up: My Student Teaching Experience at Hamilton Southeastern Junior High"

I spent this semester student teaching at Hamilton Southeastern Junior High, in Fishers, IN, in the band department. Quickly assuming the role of director for 4 bands and a general music class, I knew it was going to be a notable semester. Through amazing lessons taught and beautiful music made this semester, I learned that teaching music is my fate. I gained an immense amount of knowledge that I need for my own classroom, but I know that I will never stop learning. I thank DePauw for this marvelous opportunity to fulfill my dream.

Minnu Paul, *Economics and Management*, "Klinik La Konpasyon (Clinic of Compassion)- Non-Profit Healthcare Clinic in Jacmel, Haiti"

Klinik La Konpasyon will be the first formal modern health care service in the La Montagne area of Jacmel, Haiti. The government has donated fourteen acres of land and an operating license to start the clinic. The mission of KLaK is to bring modern medical care to destitute communities. The vision of the clinic is to care for its patients, to alleviate the root causes of disease in their communities, and, increase social welfare through health, education and microcredit. The services include dental, general medicine, gynecology, nutrition, health education, laboratory and pharmacy. KLaK intends to extend the service line to include obstetrics and general surgery and to strengthen the microcredit foundation once the clinic is well established

Katherine A. Pickering, *History*, "Oral Histories of Complicity and Resistance during Normalization Period Communism in Czechoslovakia"

Czech memory of resistance to Communism has been expressed by the life of just one man, dissident writer and former president, Vaclav Havel. Though his trials under the Communist government were indeed extraordinary, they bear little resemblance to the everyday lives of Czech citizens and their expressions of resistance. Oral histories give a more personal account of the Czech experience under Communism and illustrate the nuances of resistance and complicity as each person understood them. Acts of resistance were not only meant to send a message to those in power, but were also an assertion of individual power; if these small acts by ordinary people helped make them feel that they had a little control in a system in which the individual was controlled, it can be understood as an act of resistance. This project explores individual memories of life in Communist Czechoslovakia in the 1970s, as well as the ways in which Czechs expressed and remember their resistance to that system.

Yujiao Qin, *Physics and Astronomy*, "Effects of Downconverted Photon Spectra on Virtual State Spectroscopy"

Research in two-photon absorption (TPA) improves our understanding of atomic physics and quantum optics. TPA probability is affected by a process called spontaneous parametric downconversion (SPDC). We found out that the different spectral characteristics of the entangled photons have a significant effect on the TPA probability, especially on our ability to observe modulations in the cross-section for TPA. Entangled photon sources used for such experiments will need to be spectrally narrow, perhaps no wider than roughly 1% of the frequency of the pump. Since downconversion sources of entangled photons typically have a wider spread in frequencies than this, spectral filtering of entangled photons will probably be necessary to observe cross-section modulations with sufficient precision to do virtual state spectroscopy.

Sally M. Reasoner, *Political Science*, "A Fresh Perspective, A Look at the 2010 Election Through the Freshmen Class"

The 2010 election marked a period of fundamental change for the Republican Party. With the Tea Party becoming a growing presence in the political scene, the Republican Party was taken back to its conservative roots. My project takes a look at the movement through the lens of the nineteen newly elected freshmen to the Indiana House of Representatives. Making up one third of the Republican caucus, the freshmen, which embody more traditionally conservative ideologies, have the power to impact the agenda of the Statehouse, but will they? "A Fresh Perspective" seeks to explore this political shift through an analysis of the outspoken, driven freshmen class that has set out to change "politics as we know it?".

Kervory Samuel, *Computer Science*, "Estimation of a RF Signal Source"

Improvised Explosive Devices (IEDs) are explosives that may be triggered remotely by radio signals sent from cell phones or other devices. This work focuses on determining if a moving target is getting closer or farther away from IEDs activated using electronic devices. The IED devices emit low frequency signals, which are often difficult to detect. In this work, two antennas placed at a fixed small distance apart and mounted on the moving target were used to measure the power emitted by the IED transmitters and compute a ratio of the power received at both antennas. The ratio of the power received by the antennas approaches 1 as the moving target moves farther away from the IED transmitter. This is because the power received by an antenna decreases exponentially as the distance between the antenna and the transmitter increases. Therefore, the distance between the two antennas becomes less significant when both antennas are significantly farther from the IED transmitter.

Amy Y. Sato, *Biology*, "MRI/MRS to Assess Muscle Atrophy and Recovery After Nerve Crush"

We attempted to develop a noninvasive MRI/MRS technique that can track metabolite markers for muscle disuse and atrophy. The right sciatic nerve of C57bl/6 mice was injured, followed by recovery for 21 days. Nerve crush was chosen instead of denervation of the sciatic nerve to provide us the opportunity to measure for recovery. The recovery was assessed by measuring wet weight for the gastrocnemius, plantaris, and soleus muscle, which revealed significant recovery in the third week post-injury. Localized Magnetic Resonance Spectroscopy (MRS) measured the time water molecules took to change from a uniform orientation in alignment with the magnetic field to a random orientation. The time from order to random orientation was influenced by the nature of the microenvironment that revealed tissue quality on the lateral gastrocnemius. Several metabolites were quantitated post-nerve crush and statistical differences were obtained for creatine and taurine. As early as day 2, the total water intensity showed significant increases that persisted to day 21. Glycogen levels were monitored using Chemical Exchange Saturation Transfer (CEST), and it too showed statistically significance differences for the early muscle wasting at day 2 that continued till day 21. Time course analyses suggested a correlation between these analytes and disease progression leading to recovery. To check the validity of the MRS glycogen measurement, we biochemically determined the glycogen concentrations for tissue lysates as a function of time. We further confirmed the activity of genes related to the glycogen synthesis pathway (GYS1, GYS2, GSK3b, Pygm) in the nerve crush and control tissues for days 1, 3, 8, and 15 of recovery. The gene activity for GYS1, GYS2, GSK3b, and Pygm confirmed the irreconcilable differences between the biochemical measurements and the results of the MRS technique. We also analyzed gene expression related to the mobilization of taurine to validate the MRS. The change in mRNA levels of Slc6a6, taurine transmembrane transporter activity, indicated the MRS measured changes in taurine levels is consistent with these gene changes. Therefore that data suggest that ¹H-MRS could be used as a means for detecting taurine and may pose limitations for other metabolic markers in determining the recovery of muscle tissue in longitudinal, clinical studies after atrophic insult.

Eliza J. Scanlon, *Education Studies*, "Student Exposure to Human Rights Education at DePauw University"

The qualitative research conducted herein examined the extent of student exposure to human rights education at DePauw University, both in and out of the classroom. On-line surveys were administered and one-on-one interviews were conducted to assess not only students' opinions about and knowledge of human rights, but also the presence of human rights education in classes and at campus events. Data collection also included the observation of classes across disciplines and participation in campus events to supplement student input. The study is significant due to its contribution to the knowledge base about the existence of human rights education on campus, a key DePauw mission.

Joshua W. Schlake, *Political Science*, "Wartime Opposition as the Protector of Civil Liberties"

This paper explores the role of public opinion in restraining presidents' hands to restrict civil liberties during wartime. Times of war offer opportunities for broad expansions of presidential prerogative. The extensions of these powers, however, often come at the expense of individuals' civil liberties. The institutions that otherwise serve as external checks on presidential power, most notably Congress, the courts, and public opinion, fail to do so during wartime. This paper seeks to determine whether the waning support for a war also leads to decreased support for the restrictions on civil liberties associated with the war in addition to a curtailment of presidential power.

Emily H. Smedra, *History*, "Raised Hands: Education as an Avenue for Agency in Japanese American Internment Camps"

The majority of works concerning the US internment of Japanese Americans during World War Two, whether the historians are purposeful in their intent or not, present the historical event in a manner in which the internees appear as no more than mere victims of an unfortunate situation. Although in retrospect the internment of 110,000 innocent persons of Japanese ancestry was a violation of due process and equal citizenship, when the internees are viewed as mere victims, the fact that they were also strong-willed individuals who were agents in shaping aspects of their daily lives, is negated. This presentation offers a new perspective on the internment experience through the lens of education. It will be seen that even though the War Relocation Authority (WRA) – the sector of government in charge of overseeing the operation of the camps – imposed strict rules and regulations, the internees were able to shape the education system in various manners.

Katharine M. Sowar, *Education Studies*, "High School Students' Pressures Outside the Classroom"

This qualitative research study explored the pressures on high school students outside of the classroom, and the extent of their teachers' awareness of these pressures. Focus groups with students and teacher interviews were the primary data collection modes; these were analyzed in to ascertain the relationship, if any, between students' espoused pressures and teacher awareness of these pressures. Since students' personal lives outside the classroom have a direct bearing on achievement and engagement in school, the study has major implications for assisting teachers with processes for developing stronger communication with their students.

Andrea J. Spencer, *Music Performance (voice)*, "Una voce poco fa", *Il Barbiere di Siviglia*, Gioachino Rossini (1792-1868)

Rosina has fallen in love with a young man she knows only as Lindoro. In this aria, Rosina sings of her plans to outwit Bartolo, her guardian, and meet the young man who has captured her heart. The text reads as follows: *A voice a short time ago / Resounded here in my heart; / My heart is already wounded, / and it was Lindoro who pierced it. / Yes, Lindoro shall be mine, / I swear it, I shall win! / My guardian will refuse. / I'll sharpen my wits, / at last he'll give in, / and I shall rest content. / I am docile, respectful, / I am obedient, sweet, loving. / I let myself be ruled, I accept guidance. / But if you touch me where I'm most sensitive, / I will be a viper, and a hundred traps / I'll set before I'm through.*

Lauren A. Taylor, *Music Education*, "Music Education Student Teaching Experience"

I had been dreaming about student teaching for four years. I would be received with open arms and ignite a passion for music within each of my students just as previous teachers had done for me. What actually happened, however, made me question my desire to teach and forced me to re-examine my entire teaching philosophy. I am coming out of this experience a much stronger teacher, firmly grounded in my beliefs. In this presentation, I will outline my journey from college to classroom in the choral department at Hamilton Southeastern Junior High School in Fishers, Indiana.

Peter K. Terlep, *Computer Science*, "Scaling the Novel Algorithm for Time Synchronization (NATS) in Wireless Sensor Networks"

A wireless sensor network (WSN) is generally a cluster of sensor nodes. Each wireless sensor node is essentially a small, self-contained computer that can take readings about its environment and communicate with other nodes. Nodes are often deployed in large numbers creating vast networks. Due to compromises made in node design for reasons of cost and power-efficiency, clock drift amongst nodes can be a problem. Thus, a time synchronization protocol is prudent where there is a need for chronologically-valid data or coordinated action within a network of nodes. Here I propose a low-power, scalable synchronization protocol for intermittently-on WSNs that tackles some of the challenges otherwise ignored by other literature in the field of time synchronization.

Jaclyn M. Tormoehlen, *Kinesiology*, "Optimal Time of Day to Exercise"

Previous reports suggest that oxygen consumption does not follow circadian rhythmicity, while a few show it to be higher in the afternoon. The present study examined heart rate, running economy, and rating of perceived exertion during submaximal running at two different times of day. The purpose was to determine whether oxygen consumption during submaximal running differs between the morning and afternoon. Twenty recreationally-active college students between the ages of 18 and 22 were recruited as subjects. Subjects completed submaximal running tests at two different times of day. Subjects ran at six different velocities while oxygen consumption and heart rate were continuously measured. Rating of perceived exertion was collected each minute.

Seth J. Tsui, *Music Performance (trombone)*, "Ghosts of Extinct Elephants"

The North African Elephant was one of the first recorded species that humans have directly caused to go extinct. This majestic creature was the type Hannibal used in his Carthaginian army against the Romans. Through widespread human use, the North African Elephant became extinct by the 2nd century. This piece represents the majesty and power of this once mighty creature, and the tragedy of its loss. I composed this piece as part of a three-movement suite that depicts elements of North Africa from ancient to modern times. I played and recorded every instrument in the backing track myself; the track includes piano, violins, synthesizers, drums, and improvised percussion sounds.

Alexandra E. Walker, *Sociology and Anthropology*, "Humanitarianism and Identity: Implications of Refugee Resettlement Agencies' Education Programs on Identity"

This study focuses on refugee resettlement and identity with the goal of understanding the implications of education programs and their affect refugees' sense of identity. Delving into the nuances of two refugee resettlement agencies' education programs, the purposes and goals of these programs are made clear. Refugees' descriptions and perceptions of the classes they attend shed light on the relationship between education programs and identity. In this paper, I complicate the notion of refugee identity and bring to light how identity is affected by education programs as well how refugees use the information learned in these programs to carve out new identities shaped by past and present experience

Ryne K. Weppler, *Economics and Management*, "Simplifying Loss Aversion in the Lifeguarding Problem"

Loss aversion, the tendency for individuals to bear risk to avoid losses but not to acquire gains, even when the expected value of the two problems is the same, challenges the economical assumption that humans behave with perfect rationality. In this study, participants played a computer game that simulated being a lifeguard trying to save a drowning victim. The results support loss aversion, which we propose may simply be an aversion of pain, not some complicated probabilistic calculation.

Briana N. White, *Biology*, "Directed Seed Dispersal of Cedar Trees in a Disturbed Environment"

Effective seed dispersal is crucial for successful reproduction in plants. The directed dispersal hypothesis predicts that seeds will be dispersed to specific locations in which the seedlings have high survivorship. This is potentially an important method by which disturbed ecosystems recover. In the DePauw University Nature Park, the pattern of cedar saplings and sycamore trees appears to indicate that directed dispersal of cedar seeds by birds may be occurring. We surveyed all the cedar trees in a disturbed one hectare field in the Nature Park. Just over 50% of the cedar trees in this area were found under the canopy of a sycamore tree, although sycamore canopies represent far less than 10% of the overall area. Therefore birds appear to be the primary method of dispersal. The cedar saplings have survivorship that is dependent on their position under the sycamore trees. They are more likely to survive if they are protected from warm season sun and/or exposed to cool season sun. Furthermore, the saplings are clustered in the inner part of the canopy, which is more shaded during the summer. Our data supports the directed dispersal hypothesis, indicating that birds drop cedar seeds from perches in sycamores into "microenvironments" that result in high seedlings survivorship.

Stephen K. Worden, *Political Science*, "Coming in from the Rain: The Exercise of Plastic Power in Post-Colonial Nigeria"

After gaining freedom from Britain in 1960, Nigeria, like so many other post-colonial African countries, found itself in a perilous situation as it attempted to depart from the colonially-constituted present without

being blown backwards into the past. Through the lens of Friedrich Nietzsche and Wendy Brown, I seek to illustrate the alternative political possibilities that Nigeria could engender by taking a long, calculated gaze into its past – a past that has been silenced by nearly two centuries of British oppression.