



University of Detroit Mercy
College of Engineering & Science

*84th Annual
Slide Rule
Dinner Dance*

Saturday March 19, 2016

University of Detroit Mercy

Mission Statement

The University of Detroit Mercy, a Catholic university in the Jesuit and Mercy traditions, exists to provide excellent student-centered undergraduate and graduate education in an urban context. A UDM education seeks to integrate the intellectual, spiritual, ethical and social development of students.

College of Engineering and Science

Mission Statement

It is our mission to serve the Detroit area, the national and the world communities through the education of professional engineers, scientists, and mathematicians, and through the discovery, application and dissemination of knowledge. The college will discover and apply knowledge, which effectively addresses the critical opportunities and challenges of the urban and industrial communities. It will do so in active and intimate partnerships with industry and government. We will be helpful, courteous, and professional in all internal and external interactions.

Program

Greeting

Yuxiao Hu
President, Engineering & Science Student Council

Welcome

Dr. Gary Kuleck
Dean, College of Engineering and Science

Invocation

Dr. R. Gerard Albright, SJ
Professor, Biology

Dinner

Presentation of Awards

Dr. Gary Kuleck
Dean, College of Engineering and Science

Dr. Nassif Rayess
Assistant Dean, College of Engineering and Science

Dr. Katherine Snyder
Associate Dean, College of Engineering and Science

Student “Masters of Ceremony”

Yuxiao Hu & Lauren May

Tau Beta Pi Society Organization Honoree

Katelyn Shelley - Class of 2010' 2011'

College of Engineering & Science All - Star Awards

College of Engineering & Science Department Service Awards

Purple Shaft Award

Faculty of the Year Awards

Student of the Year Awards

End of Program

Award Recipient Photographs

Dancing

Social Hour

Honoring

Tau Beta Pi Society



Tau Beta Pi is the only engineering honor society representing the entire engineering profession. It is the nation's second-oldest honor society, founded at Lehigh University in 1885. It was established to mark those students in the field of engineering who have conferred honor upon their Alma Mater by distinguished scholarship and exemplary character or by their attainments in the field of engineering as alumni.

There are now collegiate chapters at 244 US colleges and universities, 42 active alumni chapters in 16 districts across the country, and a total initiated membership of approximately 564,000.

At the University of Detroit Mercy, Tau Beta Pi was established on January 20, 1941, to symbolize the scholarship and distinction of the college. The Tau Beta Pi chapter here at the University of Detroit Mercy has honored many outstanding engineering students and professionals alike in its 75 year history. **The National Engineering Honor Society dedicated a Tau Beta Pi statue in honor of Clement J. Freund. Clement J. Freund was the Dean of Engineering at UDM from 1932-1962, a professor of Engineering from 1932-1965.**

Tonight in honor of all of the hard work, dedication and outstanding contributions to Academia and the field of Engineering we would like to salute Tau Beta Pi Society and all of its wonderful members on their 75th Anniversary.

2016 marks the 75th Anniversary of the Michigan Delta Chapter at University of Detroit Mercy. The Chapter was established on January 20, 1941. Since its establishment a total of 1,822 University of Detroit Mercy students have been inducted into Tau Beta Pi Society.

Honoring Tau Beta Society

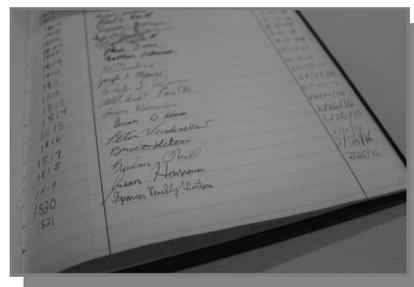
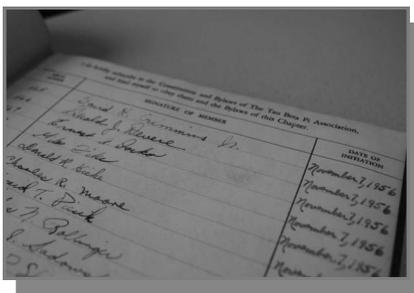
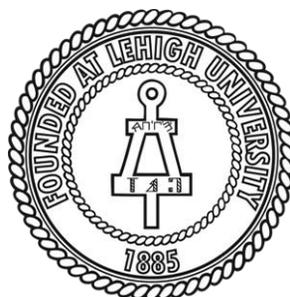


Photo Here: University of Detroit Mercy
Tau Beta Pi Bent and seating to honor the
Society along with the Chapter Roll Book
from 1956—2016



Undergraduate and Graduate Research Posters

An Automated, Personal Hand Stretching Device for People with Muscle Atrophy & Contractures

By: Colin Cashner, Alhan Vazquez
George Holman, Molly McClelland

Exploring the Use of Bamboo as a Reinforcement Element in Masonry Construction

By: Aubin Fossouo

Development of the Wheelchair-Stroller

By: Alden Kane

Congratulations to Fall 2015

Undergraduate and Graduate Research Posters

Rampvelator: A Powered Ramp for Power Wheelchairs

By: Molly Laird, Austin Ross
Heriberto Pacheco, Raymon Okonski

A Prodrug Approach to Metal Ion DE corporation

By: Chris Niedek, Jaramys Mosley
Hamzeh Charafeddine, Jenna Ramey,
Brandon Wilxks

Research Symposium Award Winners

Undergraduate and Graduate Research Posters

**Synthesis of a Series of Novel Molecules
Utilizing 2,6 Diaminotoluene, 1,3-
Diaminobenzene, or 2,5-Diaminopyridine**

By: Sara Tinawi

**Synthesis of a Series of Multi-Dentate
Podand Ligands and Initial Complexation
Trials with Transition Metal Cations**

By: Jenna Payne

Jennifer Roehl

Congratulations to Fall 2015

Undergraduate and Graduate Research Posters

Fuel Cell Polymer Degradation Method

By: Kim Utterback

Malcolm Spicer

Degradation of Fuel Cell Membranes: Attachment of H Radicals to A Model Molecule for Sulfonated PSU

By: Helin Jacksi

Kim Utterback

A Prodrug Approach to Metal Ion Decorporation

By: Chris Niedek, Jaramys Mosley,

Hamzeh Charafeddine, Jenna, Ramey,

Brandon Wilks, Mariam Ibrahim, Nolan Kirkman

Research Symposium Award Winners

2016 Engineering & Science

All-Stars!



Mark Ottenbriet

In 1965 Mark Ottenbriet took Comparative Anatomy with Father Albright in what is now the Architecture Building. Thus began Mark's inauguration as a "Golden Standard" within the Biology Department. Athletically distinguishing himself as a Titan on the Men's Baseball Team, Mark intellectually distinguished himself in 1970 earning a Master's of Science and later in 1973 his Ph.D. at Wayne State University. During this time he honed his teaching mastery as a visiting professor at

the University of Michigan and adjunct professor at Wayne State's Department of Pediatrics and Wayne County Community College. As a researcher at Wayne State University's Child Research Center, Mark worked on chromosomal banding techniques and DNA finger printing of hematopoietic culture lines. This research continued at the University of Detroit when he was hired in 1984 as an assistant professor. Many things have changed in Mark's professional life. Mark's steadfast dedication to the academic excellence instilled in him as an undergraduate student, and his contribution of time and talent to the momentous reputation of the Biology Department and University. Taking on an active role during the merger, Mark played a critical role in creating a departmental family of academics which continued on when he assumed the role as Chair of the Biology Department. During this time he set the stage for the successful future the Biology Department currently benefits from. Through his actions he unified efforts that resulted in increased enrollments and a department ready for continued renovations. As President of the UID-MPU, he characteristically united efforts between the faculty and the administration laying down the groundwork for solidarity of what was two institutions, but what is now the one. He is the "go to man" and the "man you can count on" when problems need to be resolved with calm faith and steadfast perseverance. As in his days on the playing field, he steps up to the plate with his best efforts for a home run. His mentorship is sought by faculty and students alike in his professional golden years, not defined by time, but through admiration as a "Golden Standard".



Brandon Herzog

I graduated from University of Detroit Mercy in 2012 with a Bachelor's degree in Computer Science with a dual major in mathematics. While attending U of D Mercy I interned for Continental Automotive Inc. working on various applications ranging from code generation tools, to wireless communications and controls of a vehicle and trailer system. I now work at Continental as a full time employee as the function owner of the Trailer Reverse Assist technology. I have a very diverse passion with main areas of interest in application development and home improvement projects.

2016 Engineering & Science

All-Stars!



Zachary Bolton

From Belding, Michigan, Zachary Bolton attended University of Detroit Mercy pursuing great things. He raced through school, as a 4-year letterman on the Track & Field team.

UDM's outstanding academic program positioned him for an international internship with Continental in Berlin. Now, in his 11th year at Continental, he continues working with global teams focused on autonomous driving and connectivity between the car and the cloud. Work has led him to 12 countries in just the past 8 months and a patent for his invention, REACT, which increases automobile safety. Outside of work, Zack enjoys woodworking, basketball, visiting art museums, and spending time with his family, friends and fiancée. He also enjoys running and counts a sub 3 hour Boston marathon to his athletic accomplishments. He remains committed to UDM: Racing as an alumnus in steeplechase, presiding over the Titan Athletic Club Board, and advocating for the College of Engineering and Science. "You've got to be true to your school" he explained during his commencement speech to UDM's 2015 class. Encouraging graduates to "Mentor the youth, reach out on LinkedIn, and give back! This will ensure the sustainable value of the product you and I all now have, a University of Detroit Mercy degree."



Scott Douglass

I am currently the Assistant Engineer working on the M-1 rail project in my 9th year with the Michigan Department of Transportation. After around six years at the State it became apparent that I wasn't pursuing my passions. Detroit is one of the most unique cities in the world and I wanted to be part of shaping it. I went back to UDM to receive a Masters in Community Development and to work on a regional transit study. Through the transit study I have multiple published papers on transit. Creating a transit system in Detroit that is practical, reliable and seen as a real option for riders has become my personal mission and passion. M-1 rail is the city's and my professional first step in changing a culture and bringing real options to Detroit. My Community Development perspective looks at the process of creating transit and understanding that it is equally important to consider the impacts redevelopment is having on the neighborhoods of Detroit. True development comes when communities rise with and benefit from progress and are not displaced by it.

2016 Engineering & Science

All-Stars!

Thomas Stoltz



Mr. Stoltz received a B.S. in Electrical Engineering from Michigan State University in 1997, and M.S. in Electrical Engineering from the University of Detroit Mercy in 2003. He has two decades of industry experience at several companies, small and large. His range of experience includes: manufacturing product design, corporate research, and engineering management in automotive powertrain controls, distributed generation, high efficiency hydraulics, and transmissions for heavy trucks. His core expertise is in embedded computing hardware for control of energy systems; however, he enjoys practicing and teaching a broad range of engineering disciplines. Mr. Stoltz is currently Chief Engineer at Eaton in Vehicle Technology and Innovation and is an Adjunct Professor of Electrical Engineering at the University of Detroit Mercy. Mr. Stoltz has taught over 50 credit hours and over 170 students. He has been a member of the Electrical Engineering industrial advisory board since 2003 and has hired a few of his students. He has nine US patents and is a registered Professional Engineer in the State of Michigan. He enjoys flying gliders and is an FAA certified flight instructor. Tom and his wife Heather are currently building an energy efficient home of their own design in Allen Park, Michigan.

Amy Hamlin



Dr. Amy Hamlin received a B.S. in Chemistry from the University of Detroit Mercy in 2009 and a Ph.D. in Chemistry from the University of California, Berkeley in 2014. During her time at UDM she was a member of the Chemistry Club and Engineering and Science Student Council holding various leadership positions in each organization. She served as a UDM Presidential Ambassador and a Women in Science and Engineering Mentor while also working as a laboratory assistant and performing undergraduate research in Prof. Matt Mio's lab. As a graduate student, she worked in Richmond Sarpong's group studying the total synthesis of natural products. Her graduate work resulted in several original research publications. From 2011 to 2014, she served as the graduate student representative on Graduate Education Advisory Board of the American Chemical Society (ACS) where she worked with the ACS to help better serve other student members. She has also contributed several articles to *in Chemistry* magazine, the ACS's publication for undergraduates. After completing her graduate studies she returned to the Detroit area and is now a Senior Process Development Scientist at Ash Stevens, a pharmaceutical manufacturing company in Riverview, MI, and is an active member of the Detroit Local Section of the ACS.

COLLEGE OF ENGINEERING & SCIENCE
DEPARTMENT AWARDS

MATHEMATICS & SOFTWARE ENGINEERING

Mathematics & Software Engineering Departmental Service Award

SPENCER KEASHLY WARTERS

Presented in recognition of outstanding service to the Department, College and University throughout the student's academic career.

Mathematics & Software Engineering Undergraduate Student of the Year

BRENNEN MOLONEY

Presented to an undergraduate student in mathematics or software engineering, departments who has shown excellence in performance and strong enthusiasm and dedication to the field of mathematics/software engineering.

Mathematics & Software Engineering Graduate Student of the Year

HAOWEN FU

Presented to a graduate student in the mathematics or software engineering departments, who has shown excellence in performance and strong enthusiasm and dedication to the field of mathematics/software engineering.

MECHANICAL ENGINEERING

Jiunn P. Chiou Memorial Scholarship Award

JOSEPH GIACCHINA

A monetary award presented to a junior or senior student for outstanding scholastic and professional achievement in Mechanical Engineering.

COLLEGE OF ENGINEERING & SCIENCE
DEPARTMENT AWARDS

Canjar Design Award

MOLLY LAIRD
AUSTIN ROSS
EVAN JEFFRIES

DESIGN & FABRICATION OF A PORTABLE POWER RAMP

A monetary award presented to the students who have best demonstrated aptitude, motivation and effective participation in a design project that is beneficial to society.

CIVIL ENGINEERING

*The Aldo Colandrea / Civil, Architectural, Environmental (CAE)
Departmental Service Award*

YUNCONG (MICHAEL) PANG
ZHE LI (JAY)

Presented in recognition of outstanding service to the Department, College and University throughout the student's academic career.

BIOLOGY

Biology Department Service Award

SAVANN'AH J. FIJAL

Presented to the student who has excelled in support of the Biology Department through service activities during the time spent as a Biology major.

CHEMISTRY & BIOCHEMISTRY

Biology Department Service Award

MICHELLE WU

Presented to the student, as chosen by the faculty, who has excelled in support of the Department through service activities during the time spent as a Chemistry and Biochemistry Major.

DEPARTMENT SERVICE AWARDS

ELECTRICAL ENGINEERING

Electrical & Computer Engineering Department Service Award

ANNA ROSE PERIYAPPURATHU

Presented to the student who has excelled in support of the Electrical & Computer Engineering Department through service activities during the time spent as an EE or Comp. Eng. major.

Electrical & Computer Engineering Undergraduate Student of the Year Award

MIKAEL PAULIK

Presented to an undergraduate student in electrical & computer engineering field, who has shown as excellence in performance and a strong enthusiasm in and dedication to the field of electrical/computer engineering.

Electrical & Computer Engineering Graduate Student of the Year Award

GERARDO ISAAC OLIVARES SALAZAR

Presented to an graduate student in electrical & computer engineering field, who has shown as excellence in performance and a strong enthusiasm in and dedication to the field of electrical/computer engineering.

Warner Design Award

VIKEN YERANOSIAN
CHRISTINE HILLEBRAND
THEODORE CHASE
NAYAN PATEL

A plaque awarded to Electrical Engineering Students for excellence in design. Harry Warner was the first chair of Electrical Engineering and served the College for 30 years.

STUDENT ORGANIZATIONS AWARDS

American Society of Civil Engineers Award

BRIAN O'HARA

Presented to the ASCE member who provides outstanding service and dedication to the organization.

STUDENT ORGANIZATIONS AWARDS

Biology Club Service Award

STEPHANIE FUDALLA

JOSEPH SAMONA

This award is presented to the member of Biology Club who provides outstanding service and dedication to the organization.

Chemistry Club Service Award

THERESA DIERKER

SABINA KURTOVIC

Presented to the member of Chemistry Club (Student Members of the American Chemical Society), as chosen by his or her peers, who has provided outstanding service and dedication to the organization over multiple academic years.

IEEE Student Organization Service Award

ADAM FUCHS

Presented to the member of Institute of Electrical/ Electronic Engineer Student Organization who provides outstanding service and dedication to the organization.

Society of Women Engineers Service Award

GRACE BURNSIDE

Presented to the member of SWE who provides outstanding service and dedication to the organization.

Pre-Dentistry Student Club Service Award

ALAA ANBARI

Presented to the member of Pre-Dentistry Student Club who provides outstanding service and dedication to the organization.

Pre-Physicians Assistant Service Award

ELLE PRESLEY

To the Pre-PA/5-Year PA student who not only displays a personal drive toward becoming a physician assistant, but also assists fellow students in achieving both academic and professional growth toward the PA Profession. This student expresses leadership through informational seminars, interactions with PAs of various specialties, working with the William Beaumont Society, and volunteering both in a clinical and charity setting.

ENGINEERING & SCIENCE STUDENT

COUNCIL AWARDS

Linsenmeyer Award for Service

SHELBY MAURICE

Presented to the student who by his/her activity has excelled in his/her support of the College of Engineering and Science and the University

The Joyce E. Patouhas Service Award

YUXIAO (Yaya) HU

Presented to a student who has stood out in his/her service and dedication to the Engineering & Science Student Council (ESSC) and the college at large. The award was re-named in 2002 to honor Joyce E. Patouhas for her love and dedication to ESSC and the college. This award will carry her name for as long as ESSC remains active.

E & S Student Council Organization Service Award

THE CHEMISTRY CLUB

Presented to the student organization for outstanding service to ESSC and the College.

Arthur C. Haman Service Award

CHRISTOPHER SASSAK

Presented to the faculty/staff member who through his/her own initiative in the past year has helped student organizations better the University and the neighboring community.

Cornerstone Award

DR. SHUVRA DAS

This award was created in 2001 to honor a person who has truly dedicated themselves to the College. It was modeled after St. Peter who was the cornerstone of the Catholic Church. This person has been a foundation and has given many years of service for the betterment of the college. He/she has been an inspiration to students and faculty alike, and has left a distinctive influence on the college that will last for many years to come.

TEACHER OF THE YEAR

Presented to the teachers who have displayed professional excellence, strong dedication to the University of Detroit Mercy, and a sincere interest in the educational advancements of their students. These nominees have been evaluated by the students as the best in teaching ability and participation in student centered activities:

Engineering Teacher of the Year

Nominees are:

Dr. James Lynch
Dr. Mark Schumack
Dr. Nassif Rayess

Science Teacher of the Year

Nominees are:

Dr. Matthew Mio
Dr. Greg Grabowski
Dr. Kendra Evans

And of course.....

The Purple Shaft Award

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By his/her loving students, this honor is bestowed upon the teacher who tortured his/her students with homework, quizzes, exams, and projects beyond human comprehension for the entire year.

STUDENT OF THE YEAR

Engineering Student of the Year

Presented to the most outstanding graduating engineering student. Designation as recipient of the Engineering Student of the Year award is based upon the candidate's academic achievements, leadership capabilities, personality, and extra-curricular activities. These nominees exemplify the necessary characteristics and were considered by their peers worthy of the distinction.

The Nominees are:

**Martha Dunbar
Nathan Takacs
Sarah Wickman**

Science Student of the Year

Presented to the most outstanding graduating chemistry, biology, mathematics or computer science student. Designation as recipient of the Science Student of the Year award is based upon the candidate's academic achievements, leadership capabilities, personality, and extra-curricular activities. These nominees exemplify the necessary characteristics and were considered by their peers worthy of the distinction.

The Nominees are:

**Theresa Dierker
Sandra Alias
Shelby Maurice**

*The College of Engineering and Science would
like to thank the following corporate sponsors
for making this event possible:*

FCA

FIAT CHRYSLER AUTOMOBILES



Go Further

The Engineering and Science Student Council would like to thank the following people for their time and effort in making the 84th Annual Slide Rule successful.

Dr. Gary Kuleck, Dean

Dr. Katherine Snyder, Associate Dean

Dr. Nassif Rayess Assistant Dean

Dr. Shuvra Das

Arneshia Austin

John Powell

Debra Phillips

College of E&S Faculty & Staff

Outreach Dept, Deans Office, Chemistry, and Biology Office

Club Venetian

Top That Event Planning

PACE Custom Printing

Michigan Graphics & Awards

Engineering & Science Alumni Board

Music Provided by:

Pro DJ Services

Engineering & Science Student Council

for Academic Year 2015-2016

Board:

President - Yuxiao (Yaya) Hu

V. President - Lauren May

Secretary - Reem Bazzi

Treasurer - Rama Zouabi

Public Relations Officer - Destiny Kacir

Members:

Kaylah Berndt

Adam Fuchs

Kayla Lapworth

Nayan Patel

Angela Tuscany

Shahad Zoma

Shannon Donahue

Sabina Kurtovic

Danielle Maxwell

Frankie Rider

Viken Yeranosian



*Thank you so much for joining us
this evening for the 84th Annual
Slide Rule Dinner!*



**We look forward to seeing you
at the 2017**

**Slide Rule Awards Dinner
March 2017**