ENGAGED LEARNING
SPRING SYMPOSIUM

February 6 and 7, 2017

ENGAGED LEARNING
STUDENT PRESENTATIONS

Hughes-Trigg Student Center Forum

Monday, Feb 6
9:30 Research
3:15 Environmental Engineering

Tuesday, Feb 7
9:00 Creative
12:00 Mechanical & Electrical Engineering

Open to All • Buffet Lunch
ENGAGED LEARNING WEEK - MONDAY, FEB 6

9:15 Welcome by Susan Kress, Executive Director of Engaged Learning

9:20 Introductory Remarks by Dr. Robert Kehoe, Director of Undergraduate Research

RESEARCH

9:30 Panel 1
Understanding the Molecular Basis of Brain Degeneration
Joseph Di Pane ’17 – BIOLSC, HIST; Mentor: Dr. Santosh D’Mello
Investigating peroxiredoxin impact on AMP production, redox state, and lifespan
Noah Earland ’17 – BIOLSC; Mentor: Dr. William Orr
Detailed Analysis of Polycomb Response Elements
Evan Caston ’17 – HLTHSOC, BIOLSC; Mentor: Dr. Richard Jones

9:45 Panel 2
Rhodamine-Derived Optical Switch for Three-Dimensional Image Generation
Shreya Patel ’17 – CHEM; Mentor: Dr. Alexander Lippert
Development of a Chemiluminescent Spray for the Detection of H25
Stefan Raicevic ’17 – CHEM; Mentor: Dr. Alexander Lippert
Synthesis of Bismuth-Containing Polymers
Sarah Seger ’17 – EE; Mentor: Dr. Nicolay Tsarevsky

10:00 Panel 3
Your Right to Health: A Maternal-Child Health Toolkit
Dominique Earland ’17 – HRTS, BIOLSC; Mentor: Dr. Bradley Klein
Affecting Change Through Empowerment
Hannah Norris ’17 – HLTHSO; Mentor: Dr. Carolyn Smith-Morris

10:45 Panel 4
The Future of Beta-Lactamase
Shilpa Kudva ’17 – BIOL, MUSIC; Mentor: Dr. Peng Tao
Monosodium Glutamate: Healthy or Harmful Food Addictive?
Duyen Le ’17 – MATH; Mentor: Dr. Teresa Strecker
MONDAY, FEB 6, cont.

12:00  Panel 5

Concorde, America, and the Quest for Supersonic Travel
Jake Moon ’17 – ADV; Mentor: Dr. Laurence Winnie

Society’s and the Art Market’s Perceptions of Pre-Columbian Aesthetics and Styles
Morgan Fatora ’17 - FINA Mentor: Dr. Adam Herring

What To Do With Your Body When You’re Done With It
Marco Miranda ’17 – ENVENG; Mentor: Dr. Wenjie Sun

12:30  Panel 6

Movement, Privilege, and Power: Migration as a Transnational Human Right
Hope Anderson ’17 – HMRTS, HIST, SOCI; Mentor: Dr. Brad Klein

Asia’s Contested Waters: The East & South China Seas
Claire Huitt ’17 – PLSC, PPOL, ECO; Mentor: Dr. Hiroki Takeuchi

Muslim Integration: A comparative study of London and Dallas
Syed Rizvi’17 – PLSC, HMRTS; Mentor: Dr. LaiYee Leong

Comparative Democratization in Argentina & Uruguay
Michael Robertson ’17 – PLSC, ENGL; Mentor: Dr. Luigi Manzetti

1:00  Panel 7

The Association between the DSM-5 pathological personality traits and Violence
Marissa Jennings ’17 – PSYC; Mentor: Dr. Michael Chmielewski

Characterizing the Evolution of Medical School Curriculum in London
Haley Stutts ’17 - BIOLSC, HLTHSOC; Mentor: Dr. Carolyn Smith-Morris

1:15  Panel 8

Regulation of Waste in Region 6 by the EPA
Uma Lad ’17- ENVSCI; Mentor: Dr. Bonnie Jacobs

Using barometry to constrain depths in the Transverse Ranges
Madi Weaver ’17 – GEOPHY; Mentor: Dr. Rita Economos

1:30  Panel 9

Improving Goal Attainment among Early Career Allied Health Professionals
Dylan De Muth ’17- CHEM, ECO; Mentor: Dr. Eric Bing

Improving Academic Outcomes and Overall Well-Being among Students with ADHD
Kaitlin Ostling ’17 – HLTHSOC; Mentor: Dr. Eric Bing

Can Meditation Impact Gender Differences in Implicit Visual Processing?
Katie Price ‘17 – PSYC; Mentor: Dr. Alan Brown
COMMUNITY ENGAGEMENT

2:00  Panel 10

Health Education for Refugees with the Integration of ESL Software  
Michael Park ’17 – MGMT, BIOLSC; Mentor: Dr. Karin Quinones
Technology Literacy Training for Refugees  
Anna Landreneau’17 – MKTG; Mentor: Dr. Karin Quinones
Technology Literacy Training For Refugees  
Kovan Barzani ’17 – PP, ECO, MGMT; Mentor: Dr. Karin Quinones

2:30  Panel 11

Out of Classroom Education for Dallas Young Scholars  
Steven Altmaier ’17 – REFINA; Mentor: Dr. Karin Quinones
Big iDeas Jumpstart  
Josh Thomas ’17 – ME; Mentor: Mr. Mickey Saloma

3:00  Panel 12

Unfair Fair Park?  
Kayla Graves ’17 – HIST; Mentor: Dr. Lucas Kirkpatrick
Green City Initiative: A Comparative Study  
Wendy Alyea ’17 – CHEM, ENVENG; Mentor: Dr. Elaine Heath

ENVIRONMENTAL ENGINEERING

3:15  Panel 13

Water the World: From SMU to Bolivia  
Andrew Timmins ’17 – ME; Mentor: Dr. Andrew Quicksall

3:30  Panel 14

In-situ Remediation and Distribution Network in Rwanda: Solar Power  
Sam Coday ’17 - EE; Mentor: Dr. Andrew Quicksall
In-situ Remediation and Distribution Network in Rwanda: Electrical Control System  
Nathaniel Johnson ’17 – EE; Mentor: Dr. Andrew Quicksall
In-situ Remediation and Distribution Network in Rwanda: Chlorine Disinfection  
Holly McCuistion ’17 – ENVENG; Mentor: Dr. Andrew Quicksall
In-situ Remediation and Distribution Network in Rwanda: Iron Remediation  
Rachel Masters ’17 – ENVENG; Mentor: Dr. Andrew Quicksall
In-situ Remediation and Distribution Network in Rwanda: Water Resources  
Tara Baumgartner ’17 – ENVENG; Mentor: Dr. Andrew Quicksall
ENGAGED LEARNING WEEK - TUESDAY, FEB 7

**CREATIVE**

9:00  Panel 1

*New Music For Stage*
Gillian Perry ’17 – FILM, MUCM; Mentor: Dr. Lane Harder

*Traveling Exploration Artist Residency*
Sally Kim ’17 – ASAG; Mentor: Mr. Brian Molanphy

*Mustangs for Fair Labor*
Samantha Butz ’17 – ADV, FASHMD; Mentor: Mr. Willie Baronet, Temerlin

9:30  Panel 2

*Pioneers: Women, Theatre, Politics*
Leslie Ballart ’17 – THEA; Mentor: Dr. Gretchen Smith

*Brothers of a Mother Tongue*
Dalton Fowler ’17 – THEA; Mentor: Dr. Gretchen Smith

9:45  Panel 3

*Boy*
Lawrence Jiang ’17 - MNO, FILM; Mentor: Dr. Mark Kerins

*Stories*
Jessica Cole ’17 – ART, FILM; Mentor: Dr. Mark Kerins

10:00  Panel 4

*Data Structures from a New Perspective*
Brittni Watkins ’17 - CRCOMP; Mentor: Mr. Ira Greenberg

*Design of Digital Music Synthesizers*
Conrad Appel ’17 – CPE; Mentor: Dr. Scott Douglas

*Dance as the Mirror of Society*
Olivia Schmid ’17 – DANCPF; Mentor: Ms. Myra Woodruff

11:00  Panel 5

*The Effect of Korean Entertainment on American Health and Beauty Standards*
Arianna Santiago ’17 – EE; Mentor: Dr. Hye Jin Yoon

*The Observed and Self-Reported Benefits of Creative Music Making with Adult Females in a Weight Loss Program*
Nilisa Pozo Ortiz ’17 – MUTY; Mentor: Dr. Robert Krout

*The Annual Report: An Editor’s Guide to Creating Yearbooks*
Alicia Smiley ’17 - ENVENG; Mentor: Mr. Jay Miller
TUESDAY, FEB 7, cont.

MECHANICAL & ELECTRICAL ENGINEERING

12:00  Panel 6
DC Induction Motor
Rory Brogan '17 – EE; Mentor: Dr. Behrouz Peikari

DC for the Developing World
Yasaman Sahba ‘17 – EE, Mentor: Dr. Carlos Davila

Automotive Wind Power Generation
Andrew Posada ‘17 – ME; Mentor: Dr. Carlos Davila

Energy Analysis of Habitat for Humanity Homes in Taos, New Mexico
Camille Aucoin ’17 MATH, EE; Mentor: Dr. David Doyle

12:30  Panel 7
Low Cost Bioelectric Impedance Analysis Device
Mar McCreary ’17 – ME; Mentor: Dr. Ahmet Sabuncu

Low Cost Bioelectric Impedance Analysis Device
Danya Hoban ‘17 – ME; Mentor: Dr. Ahmet Sabuncu

Low Cost Bioelectric Impedance Analysis Device
Allison Garcia ‘17 – EE; Mentor: Dr. Ahmet Sabuncu

1:00  Panel 8
Software and Electrical Design for an Autonomous Drone Delivery System
Edward Li ‘17 – EE; Mentor: Dr. Carlos Davila

Mechanical Design of an Autonomous Drone Delivery System
Austin Flanagan ‘17 – ME; Mentor: Dr. Carlos Davila

1:15  Panel 9
Control System Design in Wheeled Baton Robot
John Lujano ’17 – ME; Mentor: Dr. Yildirim Hurmuzlu

Mechanical Design of a Wheeled Baton Robot
Gwen Ward ’17 – ME; Mentor: Dr. Yildirim Hurmuzlu

1:30  Panel 10
Formula SAE Front Suspension Design
Ari Colton ’17 - ME ; Mentor: Dr. Dona Mularkey

Formula SAE Spring and Damper
Theeban Ganeshan ’17 – ME; Mentor: Dr. Dona Mularkey

Formula SAE Steering
Austin Haldeman ’17 – ME; Mentor: Dr. Dona Mularkey
TUESDAY, FEB 7, cont.

2:00  Panel 11
Testing Oxidative Stress through pH of Exhaled Breath
Rory Quigley ’17 – ME; Mentor: Dr. Dona Mularkey

2:20  Panel 12
From Street to Stage
Deepa Liegel ’17 - DANCPF; Mentor: Dr. Shelley Berg

ENGAGED LEARNING WEEK - FRIDAY, FEB 10

YOU ARE INVITED!
Join us on Friday, Feb 10, at 10 am for a special presentation by Dr. Gayle Slaughter, Ph.D., Senior Associate Dean for Graduate Education and Diversity, Baylor College of Medicine, Baylor University.
Dr. Slaughter will speak on how Engaged Learning activities in college can lead to career success in her talk “From Dirt Roads to the Oval Office.”
SMU recognizes students who actively engage in research, service, internships and other creative, entrepreneurial activities related to their studies that have enhanced their academic experiences.

Engaged Learning challenges students to learn beyond the classroom, taking an active role in their education by bringing their disciplinary training and intellectual capital to bear on issues in real-world settings. Students may realize their own project ideas or participate in engaged learning activities offered by various SMU departments, offices and programs.