



ENGAGED LEARNING FELLOWSHIPS - - - 2017-18 COHORT

98 projects in 19 countries, including Bolivia, Cambodia, England, Ethiopia, France, Indonesia, Jamaica, Mexico, Panama, Peru, Poland, Russia, Rwanda, Scotland, South Africa, South Korea, the United States, the United Kingdom, and the Zambia.

RESEARCH (57)

1. Fairouz Adams, SMU '18, is examining how a speaker's ethnicity colors the validity of his or her statements in the minds of the audience. (Major: PLSC; Mentor: Dr. Matthew Wilson)
2. Jay Appaji, SMU '19, is conducting a rhythm cognition study of South Indian pitched percussion, relatively new to the field of music psychology. (Major: MUSIC, EE; Mentor: Dr. Zachary Wallmark)
3. Noah Bartos, SMU '18 is designing a solid rocket motor, powered by sugar and potassium nitrate fuel, and capable of lofting an experimental rocket to an altitude of 10,000 feet. (Major: MATH, ME; Mentor: Dr. Paul Krueger)
4. Sam Biancheri, SMU '19, is testing and evaluating a variety of engines to determine which will be the best option for SMU's 2018 Formula SAE race car. (Major: ME, Mentor: Mr. Mickey Saloma)
5. Matthew Blake, SMU '18, is developing a portable sensor payload platform to collect and transmit environmental data in real time. (Major: EE, MATH; Mentor Dr. Villareal)
6. Trenton Blake, SMU '18, is designing the external features of an experimental rocket to provide desired aerodynamic drag and stability for its ascent to 10,000 feet above ground level. (Major: ME, Mentor: Dr. Paul Krueger)
7. Meredith Burke, SMU '19, is after the Guinness Book of World Records for the highest popping toaster, with the goal of sending toast higher than 15 feet into the air. (Major: MATH, ME, ART, Mentor: Dona Mularkey)
8. Madalene Caldwell, SMU '18, while seeking to provide high speed internet to rural areas is evaluating the need and demands of customers and potential profit to providers. (Major: EE; Mentor: Dr. Joseph Camp)
9. Sidney Eichelberger, SMU '20, is synthesizing and characterizing metal complexes that mimic the primary and secondary coordination spheres of biologically relevant metalloenzymes. (Majors: ARST, BIOCHM; Mentor: Dr. Isaac Garcia Bosch)
10. Rachel Forster, SMU '18, is comparing the electoral processes of United States and France to determine what the effect of direct election has on presidential sovereignty. (Major: FREN, SPAN, PLSC, Mentor: Mr. Thierry Tirado)
11. Tony Garcia, SMU '18, is researching the viability, cost effectiveness and marketability of a carbon-capturing drone. (Major: PSYC; Mentor: Dr. Duncan MacFarlane)

12. Greg Guggenmos, SMU '19, is developing a detailed plan for pretrial reform in Oak Cliff and West Dallas addressing the injustice and biases in the current system. (Major: STATSC, Mentor: Mr. Steven Denson)
13. Haley Hannenberg, SMU '18, is designing the mechanical system of a fully functional self-driving car to be used as a tour guide to visitors of the Lyle School of Engineering. (Major: ME; Mentor Dr. Sheila Williams)
14. Ophelie Herve, SMU '18, is researching how humans walk to produce a portable lower-limb sensing system that measures the kinematic and kinetic behavior of human locomotion. (Major: ME; Mentor: Dr. Dario Villareal)
15. Kasi Holcomb-Webb, SMU '19, is researching compounds that re-establish drug sensitivity to multi-drug resistant cancers to influence how scientists should approach cancer cures. (Major: BIOLSC; Mentor: Dr. Pia Vogel)
16. Page Hurley, SMU '19, is examining the relation between friendship-quality in college students, and the overall effects on their psychological well-being. (Majors: BIOLSC, PSYC; Mentor: Dr. Chrystyna Kouros)
17. Neha Husein, SMU '19, is researching diversity at the University of KwaZulu-Natal in order to educate people about university life in South Africa without media bias. (Major: MKTG, HMRTS, Mentor: Dr. Bradley Klein)
18. Katie Ibrahim, SMU '18, is studying the impact of theatre reviews and criticism of a 21st century social media audience. (Major: THEA; Mentor: Dr. Gretchen Smith)
19. Claire Johnson, SMU '18, is managing the planning and development phases of fully functional self-driving car to be used as a tour guide in the Lyle School of Engineering. (Major: ME; Mentor: Dr. Ali Beskok)
20. Ian Johnson, SMU '19, is building a mobile application for performing image style transfer on-device on mobile hardware. (Major: CS; Mentor: Dr. Mark Fontenot)
21. Michael Keay, SMU '18, is designing, manufacturing, and integrating a dual-deployment recovery system for an experimental rocket. (Major: ME, MATH; Mentor Dr. Volkan Otugen)
22. Grace Kuang, SMU '18, is studying the effects of drumming used in a music therapy context with different populations of people in Jamaica. (Major: MUTY, Mentor: Dr. Zachary Wallmark)
23. Theresa Lam, SMU '18, is researching if viruses in freshwater systems can provide a historical record of past pollution. (Major: BIOL, Mentor: Dr. Fredrick Olness)
24. Joshua Lauer, SMU '20, (Major: CS, Mentor: Dr. Tony Cuevas) will develop a lightweight, low cost, virtual reality glove solution for accurate and real time finger tracking.
25. Ethan Leong, SMU '19, is realizing a working prototype of a machine that will more effectively and efficiently produce reeds for oboes. (Major: MUSIC; Mentor: Dr. Dona Mularkey)
26. Jasmine Liu, SMU '18, is studying new types of variable stars and supernovae by using ROTSE-I and ROTSE-III data archived by SMU. (Major: PHYS, MATH, Mentor: Dr. Robert Kehoe)
27. Xihe Liu, SMU '18, is designing a bacterial flagellar forest that is capable of autonomously sensing and actuating in response to the environment. (Major: ME; Mentor: Dr. MinJun Kim)
28. Neil Martin, SMU '18, is quantifying previously learned information about potential and manifest risk factors using the method of bootstrapping the variance across all sample sizes to efficiently and effectively learn from completed projects. (Major STATSC; Mentor: Dr. Monnie McGee)

29. Qiao Mi, SMU '18, is developing a user interactive system for a fully functional self-driving car to be used as a tour guide in Lyle School of Engineering (Major: EE, MATH; Mentor: Dr. Bruce Gnade)
30. Justin Musser, SMU '18, is researching tethering fluorescent dyes and molecular cargos to help track the navigation of the robots into cells to improve their therapeutic capabilities. (Major: BIOLSC; Mentor: Dr. Alexander Lippert)
31. Amanda Oh, SMU '20, is investigating the religious division within the Protestant Anglican Church and its political implications. (Majors: HIST, PLSC; Mentor: Dr. Kathleen Wellman)
32. Ololade Oluwasemiloore Okunlola, SMU '18, is researching new pathways in the Endoplasmic Reticulum (ER) involved in the pathogenesis of Alzheimer's disease. (Major: BIOLSC, Mentor: Dr. Sveta Radyuk)
33. Ashmi Patel, SMU '18, is developing a portable sensor payload platform to collect and transmit environmental data in real time. (Major: ME, BIOMED; Mentor: Dr. Dario Villareal)
34. Priya Patel, SMU '18, is synthesizing compounds to manipulate the chemistry, and light sensitive proteins, to enhance therapies for cancer, diabetes, and other neurological disorders. (Major: BIOCHEM; Mentor: Dr. Brian Zoltowski)
35. Payton Price, SMU '18, is visiting *Conseil Européen pour la Recherche Nucléaire* (CERN) in Geneva, Switzerland to enhance his work on application specific integrated circuit (ASIC) chips for the phase-1 upgrade of run 2 at the Large Hadron Collider (LHC). (Major: PHYS, MATH; Mentor: Dr. Jingbo Ye)
36. Atticus Pelitera, SMU '18, is fabricating a well-performing rear suspension for a race car to compete in the 2018 Formula SAE competition. (Major: ME; Mentor: Dr. Dona Mularkey)
37. Myria Perez, SMU '18, while working at a Smithsonian institution will be creating and producing an exhibit based on SMU paleontological research, to open at the Smithsonian's National Museum of Natural History and present to the country of Angola. (Major: GEOL; Mentor: Dr. Louis Jacobs)
38. Jennifer Reese, SMU '18, while seeking to provide high speed internet to rural areas is researching directional antennas that will relay wireless internet to user devices. (Major: EE; Mentor: Dr. Joseph Camp)
39. Silvia Rivera, SMU '18, is investigating the efficacy of the handicrafts industry as a source of poverty alleviation and empowerment for the global poor through an in-depth case study of the artisans in Chiapas, Mexico. (Major: INTLST, SPAN, BA; Mentor: Dr. Eva Csaky)
40. Nicole Rueb, SMU '18, is researching *C. elegans*; inducing mutations into their DNA and studying the resulting phenotypic effects. (Major: BIOLSC, STATC, Mentor: Dr. Fredrick Olness)
41. Tolulope Salako, SMU '18, is reanalyzing brain activity to evaluate the potential role that different musical pieces may improve emotional affect and regulate emotion. (Major: BIOLSC, PSYC, HNS, Mentor: Dr. Fredrick Olness)
42. Adrienn Santa, SMU '18, is researching and analyzing effects of an absorption refrigeration cycle for cooling purposes. (Major: MATH, ME; Mentor: Dr. Ali Beskok)
43. Matt Shaw, SMU '18, is developing a system called Ujux written in Java and Pure Data that allows humans and machine to improvise music together. (Major: CRCOMP; Mentor: Dr. Courtney Brown)
44. Hyun Shin, SMU '18, is exploring the similarities and differences of music therapy in the United States and Korea with a goal of compiling generic resources for music therapists who want to work internationally. (Major: MUTY; Mentor: Dr. Daniel Tague)

45. Elena Skaribas, SMU '19, is examining differences in either motion or social brain areas in autism by scanning autistic individuals using fMRI while they're viewing short videos of ballet dance. (Major: BIOLSC, PSYC; Mentor: Dr. Fredrick Olness)
46. Parker Smith, SMU '19, is developing a rear sub frame with mounts for the differential, suspension control arms and shock mounts to be used in SMU's 2018 Formula SAE race car. (Major: ME, Mentor: Mr. Mickey Saloma)
47. Cydney Snyder, SMU '19, is analyzing the civil rights history curriculum in California and Texas to outline what is different, what is missing, and what needs to be changed. (Major: PPOL, PLSC, HMRTS, Mentor: Dr. Bradley Klein)
48. Anna Sobchak, SMU '18, is designing a bicycle sidecar to safely accommodate a physically disabled passenger while the sidecar is moving, tilting, or stopping. (Major: MATH, ME; Mentor: Dr. Edmond Richter)
49. Anthony Spearman, SMU '18, is using photo-switch chemistry to improve upon the Lippert lab's novel volumetric 3D digital light display. (Major: CHEM; Mentor: Dr. Alexander Lippert)
50. Scott Styslinger, SMU '18, is designing the chassis and mounting mechanism for a power-assisted bicycle sidecar that can support a variety of physical disabilities. (Major: MATH, ME; Mentor: Dr. Edmond Richter)
51. Pooja Tewari, SMU '20, is characterizing bacteria of fecal origin in local brooks and streams to understand what organisms are present and absent, and if they are bacteriophages. (Major: BIOLSC; Mentor: Dr. Fredrick Olness)
52. Jakob Wells, SMU '18, is developing a series of navigation solutions for a fully functioning self-driving car to be used as a tour guide in the Lyle School of Engineering. (Major: MATH, EE; Mentor: Mr. Joseph Cleveland)
53. Danielle Wilson, SMU '19, is examining the psychological reactions individuals have to artificial intelligence in the workplace. (Major: PSYC; Mentor: Dr. Miguel A. Quinones)
54. Arthur Work, SMU '18, is using a multi-disciplinary approach to develop a crowdfunding campaign. (Major: FINA, Mentor: Mr. James Hart)
55. Luke Yeom, SMU '19, is exploring the forces that cause business owners in Bali's tourist market to sell homogenous products to provide a way to improve economic development. (Major: FINA; Mentor: Dr. Ryan Murphy)
56. Mackenzie Young, SMU '19, is researching antimicrobial inorganic polymers to reduce and inhibit rates of post-operative infection in hip, knee, and breast implant patients. (Major: CHEM, Mentor: Dr. Patty Wisian- Neilson)
57. Karly Zrake, SMU '18, while studying abroad, she is comparing gender views held by SMU and South African college students and how these views become more salient through interaction and exposure over time. (Major: ANTH, HMRTS, Mentor: Dr. Bradley Klien)

COMMUNITY SERVICE (11)

1. Rachel Gan, SMU '19, is developing and leading a music therapy program that will explore the role music plays in Jamaican culture. (Major: MUTY, Mentor: Mr. Daniel Tague)
2. Uroob Haris, SMU '18, is providing technology training to populations served by the International Rescue Committee in Dallas. (Major: CHEM, BA, Mentor: Dr. Karin Quinones)

3. Alison Machabee, SMU '18, is using dance to generate positive social change in impoverished communities in Panama and Dallas. (Major: DANC; Mentor: Ms. Patty Harrington Delaney)
4. Miranda Macias, SMU '20, is directing and overseeing the education program under *Bridge the Gap Chamber Players*, a nonprofit organization. (Major: MUED; Mentor: Dr. Sarah Allen)
5. Nicole Ng, SMU '19, is establishing a nonprofit organization for the purpose of collecting data for use in meta-analysis in medical research. (Majors: BIOCHM, STATSC; Mentor: Dr. Lynne Stokes)
6. Naomi Samuel, SMU '19, is organizing and providing female care packages, including those for menstrual health, in rural schools in Ethiopia. (Major: ENGL; Mentor: Dr. Stephanie Amsel)
7. Harrison Schumann, SMU '19, is serving as art director for *Bridge the Gap Chamber Players*, an organization that supplies high quality music, from many genres, to the Dallas community. (Major: GEOPHY; Mentor: Mr. Lane Harder)
8. Mirka Serrato, SMU '18, is organizing *The Women Ambassadors Forum* at SMU to enhance leadership qualities and capabilities of young women leaders worldwide. (Major: BA; Mentor: Ms. Luisa M. del Rosal)
9. Aleena Taufiq, SMU '18, is expanding the *Geared Up* program to different states to serve students in military-based communities and schools. (Major: MATH, ME; Mentor: Ms. Kristine Reiley)
10. Lauren Vandergriff, SMU '20, is expanding an existing afterschool music education program, called *Bridge the Gap Chamber Players*, to additional schools in the Dallas area. (Major: MATH; Mentor: Dr. Tom Tunks)
11. Angela Wang, SMU '18, is creating a rape-survivor resource toolkit for friends and family members of sexual assault victims to be distributed throughout the Dallas-Fort Worth community. (Major: HRTS, BIOCHM; Mentor: Ms. Valerie Erwin)

INTERNSHIPS (6)

1. Terrance Alexander, SMU '19, is analyzing Cambodia's microloan culture to understand how microfinance has changed, and will change, the lives of entrepreneurs and small businesses. (Major: FINA, Mentor: Dr. Nathan Walcott)
2. Luke (Lewis) F. Collins III, SMU 19, is researching issues relevant to the Military Service Initiative, a domestic policy department of the George W. Bush Presidential Institute. (Major: PHIL, PSYC; Mentor Ms. Emily Casarona)
3. Ryan Cross, SMU '18, through a research placement at Hunt Consolidated, Inc., he is writing a whitepaper on the renegotiation process of the North American Free Trade Agreement (NAFTA) and its impacts on the energy industry. (Major: INLST, PLSC; Mentor: Dr. Victoria Farrar-Meyers)
4. Ezra Feron, SMU'19, is researching the development of private equity funds in East Africa, in relation to the greater continent. (Major: FINA; Mentor: Mr. Jack Miao)
5. Jessica Jancose, SMU '18, while interning at a Peruvian NGO, she is advocating for women's rights; performing a research project through IFSA Butler's "Peruvian Social Realities" course; and is writing a blog documenting her experiences. (Major: HMRTS; Mentor: Dr. Nia Parson)
6. Rachael Rodgers, SMU '18, while interning with *Engineers Without Borders*, she is evaluating the sustainability of water resource projects in Bolivia and Rwanda to determine sustainability and benefits. (Major: CE; Mentor: Dr. Andrew Quicksall)

CREATIVE WORK (24)

1. Kendall Barnes, SMU '19, is composing, producing, and performing an original piece of music that connects musical elements of Bali, Indonesia to musical elements and techniques that she is currently learning at the Meadows School of the Arts (Major: Music; Mentor, Mr. Jamal Mohamed)
2. Allison Barta, SMU '20, is identifying and coordinating shoot locations, managing student auditions, and co-producing a feature film titled, "The Book of Job." (Major: Film; Mentor, Mr. Troy Perkins)
3. Averie Bishop, SMU '18, is constructing a peer-designed sexual education curriculum, specifically for women of color, to be disseminated world-wide on YouTube. (Major: HRTS; Mentor Dr. Bradley Klein)
4. Sam Black, SMU '19, is creating a theater performance piece that will focus on the morality and ethics that are presented and tackled in the themes and choices of work in the English and American theatres. (Major: THEA; Mentor: Dr. Gretchen Smith)
5. Al Bouchillon, SMU '19, is serving as co-producer and cinematographer for a feature film titled, "The Book of Job." (Major: FILM; Mentor Mr. Troy Perkins)
6. Brian Boydston, SMU '20, is launching an advertising campaign for Bridge the Gap Chamber Players, an organization that is devoted to making music available to the general public. (Major: MUED; Mentor Mr. Kevin Thomas Gunter)
7. Sydney Clark, SMU '18, is focusing on rap music's poetic lyricism and style and its place in black culture. (Major: ANTH, BIOLSC, ENGL; Mentor: Mr. David Haynes)
8. Rachel Cocks, SMU '18, is directing a narrative short film called *Deadly Sins* that tells the story of a murder investigation on Halloween night that exposes a trail of corruption. (Major: FILM; Mentor Mr. Troy Perkins)
9. Jacquelyn Elias, SMU '18, is using big data to develop a data visualization that graphically displays the frequency that the U.K. news outlets reports on the European Union. (Major: CRCOMP, JOUR; Mentor: Mr. Ira Greenberg)
10. Jacob Estrada, SMU '18, is writing and directing a live-action short science fiction film, *Androids*, that deals with themes of loneliness, isolation, and loss. (Major: FILM; Mentor: Mr. Troy Perkins)
11. David Fice, SMU '19, is co-producing and working on the business-side (i.e. finance and distribution) of a feature film titled the "Book of Job". (Major: FILM; Mentor: Mr. Troy Perkins).
12. Michael Garcia, SMU '19, is directing a short film that explores the difference in the movement styles of actors and dancers based on whether they were trained in America or Russia. (Major: THEA, Mentor: Dr. Gretchen Smith)
13. Ferdos Heidari, SMU '18, is exploring the influence of American plays and productions on the development and globalization of Korean performance genres in the last three decades. (Major: THEA, Mentor: Dr. Gretchen Smith)
14. Caroline Hamilton, SMU '18, is exploring the history, profession, and art of modern social theatre in London by walking in the footsteps of five famous and unique actors as a basis for her own performance piece. (Major: THEA; Mentor: Dr. Gretchen Smith)
15. Blaze Hubbell, SMU '18, is exploring genres and techniques of experimental physical theatre in London, Edinburgh, and Moscow to create an original performance piece of her findings. (Major: THEA; Mentor: Dr. Gretchen Smith)

16. Sidra Ibad, SMU '18, is writing a book of personal narratives and memoirs by a refugee community in Dallas in order to bridge the community and promote understanding. (Major: BIOCHM , Mentor: Dr. Liljana Elverskog)
17. Julia Jalowiec, SMU '18, is creating an exhibit of socially relevant sculptures, paintings, and drawings to help acquaint underserved, low-income, families to the arts. (Major: ARST, Mentor: Mr. Brian Molanphy)
18. Madeline Khare, SMU '18, is serving as a creative art director and curating locations, costumes, and props for the production of four advertisements. (Major: ADV; Mentor: Mr. Willie Baronet)
19. Kendall Kramer, SMU '18, is producing four spec (fake) commercials, a single ad for Converse, and a three-ad campaign for Pandora Radio. (Major: FILM; Mentor: Dr. Mark Kerins)
20. Gordon Lum, SMU '18, is making a short documentary about a SMU student field trip to Holocaust camps in Poland over the winter holiday, 2016. (Major: FINA; Mentor: Dr. Serge Frolov)
21. Jessica Ma, SMU '18, is exploring the use of text in a variety of theatrical performances to inform the creation of a personal performance piece. (Major: THEA; Mentor: Dr. Gretchen Smith)
22. Kendell Miller-Roberts, SMU '18, is choreographing a dance piece portraying the effects of mass gun violence in America and to be performed by a group of SMU dance majors. (Major: DANC; Mentor: Dr. Bradley Klein)
23. Benjamin Woodruff, SMU '18, is conducting an extensive 3-D print as well as the design and production of a robotic prototype from specs given by Lockheed Martin. (Major: MATH; Mentor: Dr. Sheila Williams)
24. Roderick Woodruff, SMU '19, is writing and staging a solo performance piece to showcase his newly-found "masculine" range as an actor, first as a young boy, then to an adult man, and ending with an old man. (Major: THEA; Mentor: Dr. Gretchen Smith)