

Best-in-Show Winners

"The undergraduate research award winners exemplify the best in experiential learning, with guidance from their faculty mentors. We applaud the commitment and persistence of these students and their mentors in creating new knowledge, advancing the UTSA research enterprise and pursuing excellence in undergraduate scholarly achievement,"

said Dr. Thomas Coyle, director of the UTSA Office of Undergraduate Research.

2018 BEST-IN-SHOW

COLLEGE OF ARCHITECTURE, CONSTRUCTION AND PLANNING (CACP)

Omar Aguirre

Multireligious Center
Faculty Mentor: Neda Norouzi

Desiree Igho-Orere Stephanie Jalomo

Designing A Modern Mental Health Facility
in Texas
Faculty Mentor: Neda Norouzi

**Andrea Poore
Christie Thompson-Pellicier**
Architecturally Re-Designed healthcare
Faculty Mentor: Neda Norouzi

COLLEGE OF BUSINESS (COB)

**Luis Atkinson
Carlos Cruzportillo
Nancy Hernandez
Jacontance Williams**
Designing Effective Distribution Network
for a New Product Line
Faculty Mentor: Mark Leung

Ivan Arreola
Improvements and Analysis for Gene Set
Enrichment Analysis
Faculty Mentor: David Han

**Erica Perez
Justin Pons**
Managing Predictable Variability and
Planned Promotion of Nintendo Switch
Supply Chain
Faculty Mentor: Mark Leung

COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT (COEHD)

**Morgan Butler
Gabrielle Cortez
Joaquinita Johnson**
Children Transitioning from Oral to Written
Argumentation: Signaling Meaning through
Punctuation in Writing: PART II
Faculty Mentor: Rosalind Horowitz

Christopher Terrazas
An Investigation of Middle School English
Language Arts Classroom Libraries
Faculty Mentor: Janis Harmon

Ana Trevino
UTSA DACA Students and the Resources
Provided to Them
Faculty Mentor: Cassandra Allen

COLLEGE OF ENGINEERING (COE)

Drishya Dahal
Tic Tac Toe Playing Robotic Arm
Faculty Mentor: Pranav Bhounsule

**Joseph Galloway
Gerardo Aaron Rios**
Mechanics and Control of Pumping
a Playground Swing and Robotic
Implementation
Faculty Mentor: Pranav Bhounsule

Joel Gomez
Understanding the Uncertainty in Nature's
Design of Trabecular Bone
Faculty Mentor: Xiaodu Wang

COLLEGE OF LIBERAL AND FINE ARTS (COLFA)

Emily Corley
Engagement-based single stimulus
preference assessment
Faculty Mentor: Bryant Silbaugh

Mollianne Flood
Math and Music: A Study of Intonation
Faculty Mentor: Kasandra Keeling

Sydnee Garcia
Equal, Not Equitable: Bexar County Education
Faculty Mentor: Sofia Bahena

COLLEGE OF PUBLIC POLICY (COPP)

Joshua Barrera
Sanctuary Cities in the United States
Faculty Mentor: Megan Augustyn

**Ayesha Meghani
Amanda Mosley**
Sexual Assault on College Campuses – A
Comparative Case Study
Faculty Mentor: Patricia Jaramillo

COLLEGE OF SCIENCES (COS)

Joshua Anderson
Functional Analysis of Homologs of
Intermediate Metabolism and DNA uptake
in *Borrelia burgdorferi*
Faculty Mentor: Janakiram Seshu

Arturo Galindo
Study of Self Ordered Nanoporous Anodic
Aluminum Oxide Membranes by Annealing
Faculty Mentor: Carlos Monton

Javier Valencia
The Role of the Vacuolar type ATPase in the
Pathophysiology of *Borrelia burgdorferi*
Faculty Mentor: Janakiram Seshu

**HONORS COLLEGE: COLLEGE OF LIBERAL
AND FINE ARTS (COLFA)**

Emma Copisarow

Effects of HEXECO & VARK on College
Student Metacognition & Success Practices
Faculty Mentor: Fred Previc

**HONORS COLLEGE: COLLEGE OF LIBERAL
AND FINE ARTS (COLFA)**

Raven Douglas

Before and After the "Texas Voter ID Law":
How Did SB 14 (82 R Impact Voter Turnout
Among Communities of Color During the
2014 Midterm Election?
Faculty Mentor: Walter Wilson

**HONORS COLLEGE: COLLEGE OF
SCIENCES (COS)**

Stephen Hernandez

mTOR promotes BBB breakdown and
regulates tight junction proteins in an
Alzheimer's disease mouse model
Faculty Mentor: Veronica Galvan, UT Health SA

2017 BEST-IN-SHOW

Shannon Roberts

"Faunal Analysis of the 2016
Archaeological Field School"
Anthropology

Monica Martinez

"Municipal Annexation as a Mechanism for
Suburban Expansion in San Antonio, Texas
1939-2014"
Architecture/Construction Science &
Management

Amanda Martinez

"Determining Putative Enhanced
Microglia Responses Against Pulmonary
Cryptococcosis"
Biology

Sandra Ramos

"Targeting Virulence for Antifungal Drug
Development: Characterization of a Small
Molecule Inhibitor of Candida albicans
Filamentation and Biofilm Formation"
Biology

Grecia Gonzalez

"Synthesis of Silk Scaffold for Biomaterial
Application"
Biomedical Engineering

Tyler Nelson

"The effect of jasmonic acid on anthocyanin
pigment accumulation in wildtype and
mutant Arabidopsis seedlings"
Chemistry

Kara Thompson

"Where Are We? A Critique on the Inclusion
of Biracial-Black Characters in the Coretta
Scott-King Book Awards for Authors from
2007-2016"
Communication

Bilal Siddiqui

"Recovering From Microprocessor
Transient Faults"
Computer Science

Elizabeth Hatch

"An examination of the influence of
procedural justice on inmate behavior"
Criminal Justice

Aires Ngunza

"Polymer Infiltration Toughened
Hydroxyapatite Biomaterial Hybrids by Bio-
inspired Materials Design"
Electrical and Computer Engineering

Sophia DiGonis

"Common Ground: How Language is
Connected to Music"
English

Allison Saenz

"Puestos Aparte: Legal Segregation in San
Antonio, 1920s-1940s"
History

Cynthia DeMunbrun

"Preparation of Pre-Service Teachers to
Work in Inclusive Environment"
Interdisciplinary Learning & Teaching

Audrey Ramirez

"Shoulder Elevation in Manual Wheelchair
Users and Able-bodied Individuals"
Kinesiology, Health, & Nutrition

Tarun Palpati

Chelsea Taylor

Kimberly Van

Christopher Weiss

Josephine West

"Strategic Analysis of Evolving Dynamics in
E-Commerce Retailing"
Management Science & Statistics

Briggitt Blanco

William Cerda

Mujtaba Mohammad

"Performance Drivers and Efficiency-
Responsiveness Tradeoffs in an Integrated
Supply Network"
Marketing

Adam Burrows

"Neural Networks"

Mathematics

Stephanie Meier

"Characterizing Entrainment and Mixing in
Density Currents using Flow Visualization"
Mechanical Engineering

Maria Macedonio

"Language and Attitudes: A Study of
Attitudes Towards the Spanish Language at
The University of Texas in San Antonio"
Multidisciplinary Studies

Linda McNulty

"Blood, Pollution, and Purity in the Homeric Epics"
Philosophy & Classics

Geronimo Robles

"Metal hydride composites as hydrogen
fuel sponges"
Physics & Astronomy

Monica Pepping

"Aging in Mexico: A Case Study of U.S.
Senior Citizens and the quality of Life in San
Miguel de Allende"
Political Science & Geography

Yesenia Yanez

"Identity Conflict on Facebook"
Psychology

Annie Ma

"Cross-National Analysis of Socioeconomic
Factors for Suicide"
Sociology

Richard Giddens, Jr.

"(Re)viewing & (Re)membering Violence:
Testimonios of Queer & Trans Tejan@x
Sexual Assault Experiences"
Women's Studies