

ISE Teams:

Team 01: *Impact of Non-Unique Color Codes*

Advisor: Dr. Mary Fendley

Amwaj Albahar, Abdullah Baqer, Abrar Farag, Kelly Heitkamp

Team 02: *Perduco Group Forecasting Methods*

Advisor: Dr. Xinhui Zhang

Mshari Alsalah, Jessy Eid, Kaylee Greenawalt, Manhal Helou

Team 03: *Algorithm for Real Time Airborne Chemical Measurement Data*

Advisor: Dr. Mary Fendley

Nathaniel Bare, Angela Hall, Mallorie Rybak, Jaclyn Seigal

Team 04: *Kroger Call Center Scheduling*

Advisor: Dr. Xinhui Zhang

Mohammed Alenazi, Abdullah Almohatrish, Faisal Almutairi, Raad Alsharif, Fahad Boali

BME Teams:

Team 1: *Hybrid Cooling Vest for Multiple Sclerosis Patients* *Advisor: Mr. Joseph D'Angelo*

Ryan Clark, Shelley Gooden, James Mauer, Alaa Sada

Team 2: *Classical Eyeblink Conditioning Apparatus*

Advisor: Dr. Caroline Cao

Rachel Harris, Taylor Guay, Abdurahman Kahil, Munjed Milhem

Team 3: *Knee Brace with a Controller-Driven Locking Mechanism*

Advisors: Mr. David Kender

Tin Do, Trung Do, Joanna Fadel, Francisca Fajardo

Team 4: *Toluene Detection System*

Advisor: Dr. Julie Skipper

Lazette Carter, Eric Cheatwood, Reem Hassan, Evan Helton

Team 5: *Analysis of Cognition Using a COTS EEG Headset*

Advisor: Dr. Julie Skipper

Aaron Johannes, Kevin Moy, Kelly Muterspaw, Elyse Patrick

Team 6: *EEG Based Biofeedback Device*

Advisor: Dr. Julie Skipper

Qamar Alsabi, Abdulrahman Binothman, Blake Ellender, Julietta Gomez, Riza Ingalls

Team 7: *Delivering Aerosols and Gases Generated in Occupational Environments to in-vitro Models*

Advisor: Dr. Jeffrey Hudson

Peter Blake, Seth Guillozet, Alex Terry, Philip Thompson

Team 8: *Smartphone-Oriented Cancer Screening System*

Advisor: Dr. Ulas Sunar

Mohammed Alshagha, Mohammed Khan, Mohsin Khanzada, Seth Thomas

Team 9: *Smart Foot*

Advisor: Dr. Tarun Goswami

Samuel Deroy, Ronald Richardson, Sean Saffle, Jaspreet Singh

Team 10: *Cross-Crawl Ambulatory Device*

Advisor: Dr. Tarun Goswami

Courtney Ballard, Alexander Kreider, Vanessa Madrigal, Ashley Miller

Team 11: *Physiologic Lumped Resistance and Compliance Elements to Model Arterial Vasculature*

Advisor: Mr. Ben Schmitt

Sahar Alselami, Amjad Alzawad, Fadel Elaiw, Aaron Stokes, Taylor Wright

Team 12: *Pediatric Chewing and Swallowing Device*

Advisor: Dr. Joe Tritschler

Kaylee Eakins, Charles Harding, Cassondra Wallwey, Brittany Woods

Team 13: *Unassisted Oral Cleaning Device (UOCD)*

Advisor: Dr. Ping He

Michael Collier, Mary Farrow, Mikayla Padgitt, Skylar Rountree

Team 14: *A Pressure Monitoring Device for External Abdominal Compression*

Advisor: Dr. Ping He

Noor Alghafli, Ghadeer Almaskeen, Abdulrizaq Alsomali, Riyadh Alzahrani, Alex Williams

Team 15: *Noninvasive Electrode Edge Effect Reduction and Description Strategy for Brain Stimulation*

Advisor: Dr. Michael Weisend

Leah Burch, Cassidy Duckett, Daniel Marshall, Mason Vilardo

Team 16: *Amputee Limb Scanner with iPad APP*

Advisor: Dr. Michael Weisend

Fahad Alenazi, Khaled Alenzy, Saud Almutairi, Naif Alrasheedi