**HAMILTON SCHOLARS 2014 to 2015**

**SUMMER**

**Division II**

Miles Fisher: “Autonomic Adjustments to Psychosocial stress: Markers of Psychological and Physical Health Risk? (Mentor: Thomas Ritz, Psychology)

Courtney Cox: “SMU CARe Project” (Mentor: Chrystyna Kouros, Psychology)

Daniel Trujillo: “SMU CARe Project” (Mentor: Chrystyna Kouros, Psychology)

Katie Bridges: "Victim and Perpetrator Status and Perceived Blame for Rape” (Mentor: Lorelei Simpson Rowe, Psychology)

**Division III**

Adam Gannon: “The Role of Peroxiredoxins in Alleviating Alzheimer’s Pathology” (Mentor Svetlana Radjuk, Biological Sciences)

Collette Marchesseault: “Drug Discover for Failed Cancer Chemotherapies.”  (Mentor: John Wise, Biological Sciences)

Mindy McClean: “Assembly and Application of Phospholipid Nanodiscs for the Study of P-glycoprotein (Mentor: Pia Vogel, Biological Sciences)

Camille Biard: “Computational Study of 1,2-dioxetane Chemiluminescent Molecules” (Mentor: Peng Tao, Department of Chemistry)

Rachel Crusius: “Classifying Signs of Regulator Interactions in Gene Networks” (Mentor: Brandilyn Stigler, Mathematics)

Jessica Otah: "Classifying Signs of Regulator Interactions in Gene Networks” (Mentor: Brandilyn Stigler, Mathematics)

**ACADEMIC YEAR 2014-2015**

**Division II**

Psychology

Courtney Cox: “SMU CARe Project” (Mentor: Chrystyna Kouros)

Daniel Trujillo: SMU CARe Project” (Mentor: Chrystyna Kouros)

Julia Pylant: “College Student Beliefs about Response to Sexual Violence” (Mentor: Lorelei Simpson Rowe)

Kate Bridges: “Victim and perpetrator Status and Perceived Blame for Rape” (Mentor: Lorelei Simpson Rowe)

Political Science

Steven Evans: “Non-Governmental Organization Decision-Making in Kenya.” (Mentor: Karisa Cloward)

Anika Reza: “U.S. Counter-terrorist Measures Before and After 9/11 and the Iraq War” (Mentor: Hiroki Takeuchi)

Sociology

Brandon Roselius: “Women’s Roles in Communist Legislatures in Eastern Europe, 1945-1989” (Mentor: Sheri Kunovich)

Kate Restino: “Women’s Roles in Communist Legislatures in Eastern Europe, 1945-1989” (Mentor: Sheri Kunovich)

**Division III**

Biology

Benjamin Dupree: “The role of the pentose phosphate pathway in longevity regulation by the p53 tumor suppressor” (Mentor: Johannes Bauer)

Rebecca Brady: “Functional and Transitive Similarities between the Human T-cell Leukemia Virus Type-1 (HTLV-1) p30II and Human Papillomavirus (HPV) E6 Oncoproteins” (Mentor: Robert Harrod)

Rachel Gardner: “Molecular Mechanisms of Oncogene-Activation by HTLV-1 p30II and HPV E6 Oncoproteins” (Mentor: Robert Harrod)

Collette Marchesseault: “Drug Discovery for Failed Cancer Chemotherapies –Modeling Mammalian P-Glycoproteins in Bacteria” (Mentor: John Wise)

Ketetha Olengue: “Computational Optimization of P-Glycoprotein Inhibitors to Help Failed Cancer Chemotherapies” (Mentor: John Wise)

Mindy McClean: “Assembly and Application of Phospholipid Nanodiscs for the Study of P-Glycoprotein” (Mentor: Pia Vogel)

Tyrell Russell: “Sensitization of Triple Negative Breast Cancer to Chemotherapies” (Mentor: Pia Vogel)

Zainab Fatima: “The Assembly of a Membrane-bound Enzyme: Respiratory Complex I” (Mentor: Steve Vik)

Kristina Lackey: “DNA Clones to make Transgenic Drosophila Lines” (Mentor: Rick Jones)

Chemistry

Kaley El-Arab: “Novel LOV Domains Integrating Light and oxidative Stress” (Mentor: Brian Zoltowski) (For Spring 2015)

Gretchen Hook: “Novel Methods for the Synthesis of Carboline Scaffolds” (Mentor: Ed Biehl)

Physics

Matthew Bruemmer: “A Study of Environmental Factors Affecting Material Storage for Next Generation Dark Matter Experiments” (Mentors:  Jodi Cooley and Stephen Sekula)

Daniel Gum: “Cross Discipline Study in Robotic Telescope Mechanics and Gamma-ray Burst Astrophysics” (Mentor: Robert Kehoe)

Ashleigh Miller: “Multi-wire Chamber and Multi-strip Gas Chamber Detectors in High Energy Physics Experiments” (Mentor: Jingbo Ye)