2012 AU Summer Scholars and Artists Fellowship Recipients

Maria Briscione

College of Arts and Sciences: Biochemistry, Minor: Psychology

Faculty Mentor: Anthony Riley, Department of Psychology, College of Arts and Sciences

Project Title: The Role of Serotonin in Cocaine-Induced Taste Aversions

Abstract: Although the rewarding effects of cocaine are well categorized, the mechanisms underlying its aversive effects are less understood. Pharmacological antagonism of the serotonin receptor will determine serotonin's possible role in mediating cocaine's aversive effects. Specifically, the present experiments will use the 5-HT3 receptor antagonist, tropisetron, in order to assess any role of this receptor subtype. If a drug's potential for abuse is limited by the magnitude of its aversive effects, then further investigation of the aversive properties of drugs is justified. The AU Summer Scholars and Artists Fellowship will allow me to spend the summer conducting this research.

Jaim Coddington

School of International Service: International Studies

Faculty Mentor: Eve Bratman, School of International Service

Project Title: Sylvan Jewel: Exploring Iracambi's Environmental Education Program in Minas Gerais

Abstract: This study is crucial in determining the Iracambi Atlantic Rainforest Research Centre's viability as an agent for effective environmental education, specifically in community forest management (CFM) of the Mata Atlântica rainforest. The research also evaluates the potential implementation of Iracambi-style CFM programs elsewhere in Brazil, especially in the Amazon rainforest, as well as in deforestation-endangered regions across the globe. Through semi-structured interviews of rural smallholders, Iracambi staff, members of the Rural Workers' Union, the University of Viçosia, and EMATER, the State Agricultural Extension Agency, this research assesses Iracambi's unprecedented role in Mata Atlântica community forest management.

Sean Dugdale

School of International Service: International Studies, Chinese/East Asian Studies *Faculty Mentor*: Ken Conca, School of International Service

Project Title: Water Wars: Institutional Effectiveness and Perception as Determinants of Conflict in Water Scarce States

Abstract: Newspapers and media more consistently depict water scarcity as a defining feature of the 21st century, yet support for the assumption that water scarcity generates conflict is inconsistent. Studies have been limited in methodology and often contradict one another. This study, building on the Institutional school, explores how the quality of institutions acts as the operant condition that determines when conflict over water can occur. A process-tracing approach is applied to two longitudinal case studies of Djibouti and Uzbekistan in 1999. This study concludes strong support for the critical role of institutions in governing these intrastate water conflicts.

Kathleen McGarrity

School of International Service: International Studies; Economics *Faculty Mentor*: Lauren Feldman, School of Communication

Project Title: World of Warmcraft: International Climate Policy Coverage on The Daily Show and The Colbert Report

Abstract: The goals of this project are to analyze the coverage of international climate change issues in both *The Daily Show* and *The Colbert Report*, and to compare this coverage with that of traditional news sources. The focus on international aspects of climate policy is influenced by the approaching 2012 UNFCCC COP meeting, which will redefine the international climate regime post-Kyoto. *The Daily Show* and *The Colbert Report* are analyzed because these programs have been shown to give more time to climate stories than does traditional news. The quality of programming on these shows will impact the American climate discourse.

Andrew Merluzzi

College of Arts and Sciences: Psychology

Faculty Mentor: Anthony Riley, Department of Psychology, College of Arts and Sciences

Project Title: Assessing the Ability of Morphine to Induce Taste Aversions in Adolescent Lewis and Fischer Rats: A Behavioral, Pharmacological and Neurochemical Analysis.

Abstract: Adolescence is a developmental period of particular importance given the host of neurobiological changes that occur during this stage of development. Examining the aversive effects of morphine in adolescent and adult Lewis and Fischer rats may reveal how the interplay between genetics and maturation leave adolescents especially vulnerable to drug abuse. Behavioral, neurochemical, and physiological data will be collected to further elucidate the phenotypic variances between the two strains and will shed light on any possible pharmacokinetic or pharmacodynamic differences mediating the aversive effects of morphine.

Sara Norton

College of Arts and Sciences: Psychology; Minors: Biology, Language and Area Studies *Faculty Mentor*: Bryan Fantie, Department of Psychology, College of Arts and Sciences

Project Title: Source Memory in Individuals with Closed Head Injury

Abstract: About 1.7 million Americans sustain a traumatic brain injury (TBI) each year. Although the best predictor of recovery from a TBI is the strength of the survivor's social network, the preponderance of research on the sequelae of TBI has focused on cognition (e.g., verbal memory, language, problem-solving), while emotional and social processes have been largely overlooked. This project seeks to examine the effects of TBI on a particular type of nonverbal memory (source amnesia), and an under-researched functional domain (affect and emotion), both having separate and converging practical implications for rehabilitation, recovery, and the quality of life for TBI survivors.

Erika Robbins

College of Arts and Sciences: Psychology, Minors: Spanish Language, Justice *Faculty Mentor*: Laura Juliano, Department of Psychology, College of Arts and Sciences

Project Title: Expectancies for Energy Drinks

Abstract: This project is designed to examine college students' expectancies about energy drinks. To do this, we will develop a measure of energy drink expectancies as no comprehensive measure currently exists. Two small pilot studies will be conducted to develop the measure and then the measure will be administered to 300-400 participants and an exploratory factor analysis will be conducted to identify themes. Other variables including energy drink use, alcohol use, tobacco use, caffeine use, gender, sports participation, and age will be evaluated. As energy drink consumption is on the rise and is associated with negative health effects, it is important to understand students' motivations for energy drink consumption and the situations that promote use.

Mariya Tsyglakova

Kogod School of Business: Business Administration, Specialization: Finance, Minor: Mathematics *Faculty Mentor*: Jennifer Oetzel, Department of International Business, Kogod School of Business

Project Title: What Types of Firms Join Business Networks Aimed at Addressing Violent Conflict in Countries Where They Operate?

Abstract: Long-lasting peace is the basis for sustainable economic development. Recognizing the importance of long-lasting peace, businesses form networks, which promote peace building and conflict resolution. In spite of the importance of such networks in building peace and facilitating dialog between conflicting sides, to date no study comparing these networks has been conducted. The goal of this project is to find out what types of firms join business networks aimed at addressing violent conflict in countries where they operate, to compare networks in different geographic areas, to analyze member companies' characteristics, and to better understand what motivates companies' managers to adopt peace-building strategies.