## **Gaylord Donnelley Prize 2014**

• Abigail Bok, Environmental Studies (Advisor: Helen Siu) Organically Urban: Cultivating alternative landscapes of living in Guangzhou, China

This paper investigates increasing involvement by members of Guangzhou's urban middle classes in alternative agriculture activities, specifically in the context of recent decades of economic and social change and rising food safety concerns. Using ethnographic field research methods and a conceptual framework drawn from social theory and relevant anthropological literature, I specifically explore urban middle class engagement with the TianDiRenHe organic rice social enterprise, the urban farm Paradise Eco-Farm, and the nongjiale agro-tourism farm Green Island Farm. I conclude that these sites of alternative agriculture activities have become new urban "landscapes of living", places where urban middle class people have actively exercised their agency over social structures in order to form distinctive consumption spaces and have then engaged as intentional participants in those spaces in order to cultivate self-identity, social connection, and peace of mind. These acts of cultivation reflect the dynamic tension for the Chinese middle classes between contestation against and complicity with the social and political status quo.

## Natalia Garza, Environmental Studies (Advisor: Adrienne Ettinger) The Untold Side of Uranium: Using a Statistical Analysis of the Continuous NHANES to Explore the Decline in Reproductive Health of the Navjao Population

Currently, there are over 1,000 abandoned uranium mines speckling all 27,400 square miles of the Navajo Reservation, as well as abandoned mills. Neither of these structures, used as a means to secure a vast nuclear supply of uranium during the Cold War, were properly shut down when the uranium market began to decline in the 1980s. As a result, uranium and uranium tailings were free to roam the land as water and air carried them across the Reservation. Now the Navajo population, previously thought immune to cancer, is experiencing reproductive cancers and birth defects at an alarming rate. Although there are many in the community that believe the *leetso*, translated as the yellow monster in Navajo, is to blame for this trend, many others blame obesity and other lifestyle factors in the population. The lack of consensus fragments the power to bring environmental justice to the Navajo; thus, through the analysis of the National Health and Nutrition Examination Survey (NHANES), the association between uranium and reproductive health was investigated in the national population to help add to growing body of knowledge. The target population for this analysis is women between the ages of 20 and 54. In the logistic regression, it was found that period irregularity and endometriosis had a statistically significant association with uranium in certain models. Moreover, success of births and age of endometriosis diagnosis decreased with increasing exposure to uranium and were also statistically significant associations in certain models. Despite the many limitations, it is clear that relationship between uranium and reproductive health cannot be easily dismissed and its continued investigation will be incredibly valuable for the Navajo nation.

## Angela Lee, Environmental Studies (Advisor: John Wargo) Dietary Transition of Korean-Americans

The purpose of this thesis is to research the catalysts that play a role in the Korean American's transition from their traditional Korean diet to a more Westernized one, even though the Korean

diet is generally much healthier than the typical American diet. To address this inquiry, I apply scholastic articles on acculturation, books on the Westernization of immigrants, and my own data I had collected from interviews with recent Korean American immigrants in Irvine, California and New Haven, Connecticut. I also integrate the role of Korean restaurant managers in maintaining Korean foods and culture. My analysis proposes that the driving factors of Korean Americans' dietary transition and choices are personal taste, texture and appearance, food availability, accessibility and cost, social and cultural coercion from neighbors and family members, and acculturation. In conclusion, to address the health and cultural issues that have developed from the dietary transition, policy-makers, nutrition specialists and communities should create initiatives that increase food availability and accessibility to ethnic food markets, educate immigrants about the nutritional value of ethnic foods, and teach them modern approaches to preparing ethnic foods.

## James Shirvell, Environmental Studies (Advisor: Gisella Caccone) Evaluating the Genetic Structure of the Leptospirosis Transmitting Rat Population of Salvador, Brazil

I evaluated the genetic structure of the leptospirosis transmitting rat population of Salvador, Brazil, in order to determine more effective eradication unit sizes. The genetic makeup of the rat population is linked to eradication efforts because knowing the makeup will define strategies that are empirically based. I describe the background of leptospirosis, from its disease agent, settings and modes of infection, and then lay out my research. I determined that there are distinct populations of rats in the Pau da Lima favela, different from the results of the Kajdacsi et al (2013), but that more sampling locations are needed to determine how rat migration works in Salvador. I conclude that the advanced eradication unit sizes are a start to limiting the spread of leptospirosis, but must be coupled with changes in the sanitation infrastructure of Salvador to provide long-term success.