The 5th Annual Graduate Student Multidisciplinary Conference

Wednesday April 4, 2007

Organized by:

The Clark University Graduate Student Council
Dr. Blatt received his A.B. from Princeton University in 1957 and his M.S. and Ph.D. from Stanford in 1959 and 1965, respectively. After serving as a faculty member and department chair at Ohio State University he joined the Clark University as a Professor of Physics and Dean of Graduate Studies and Research in 1987. During his tenure as Dean he established the Graduate Student Council, and helped to get graduate representatives onto all major committees at Clark, giving the graduate student a voice on campus. His research focuses on high-energy gamma radiation from the capture of protons and cluster projectiles by light nuclei, which has led to the development of many cutting edge techniques used by physicists worldwide. His research interests have also led to the development of numerous courses for physics majors and non-majors alike that promote the importance of science in education. Over the years he has also worked with the Worcester public school district to promote strong scientific education, for students of all ages. Most recently, he has been exploring connections between the physics of light, visual perception, and artists' techniques over the centuries.
5th Annual
Graduate Student Multidisciplinary Conference
Clark University, Worcester, Massachusetts
Wednesday, April 4, 2007

Schedule of Events

9:00 – 9:30 Refreshments
Atrium

9:30 – 9:45 Dr Nancy Budwig, Dean of Graduate Studies
Opening Remarks
Grace Executive Conference Room

9:45 – 10:45 Paper Presentations Session I
Grace Executive Conference Room
Paper Presentations Session II
Lurie Executive Conference Room

10:50 – 11:50 Paper Presentations Session III
Grace Executive Conference Room
Paper Presentations Session IV
Lurie Executive Conference Room

11:50 – 1:00 Lunch for Presenters and associated Faculty/Staff
Rosenblatt Conference Room
Poster Session
Atrium

1:00 – 2:00 Paper Presentations Session V
Grace Executive Conference Room
Paper Presentations Session VI
Lurie Executive Conference Room

2:05 – 2:50 Paper Presentations Session VII
Grace Executive Conference Room
Paper Presentations Session VIII
Lurie Executive Conference Room

2:55 – 3:40 Paper Presentations Session IX
Lurie Executive Conference Room

3:45 – 4:30 Professor S. Leslie Blatt, Keynote Address
Travel Awards Presentation (GSC)
Grace Executive Conference Room

4:30 – 6:30 Reception sponsored by the Alumni Association
Harrington House

Presented by: The Graduate Student Council, and Graduate Studies School, Clark University.
Improvements in the use of the Relative Operating Characteristic (ROC) statistics
Benoit Parmentier (Geography, Advisor: Ron Eastman)

Modelers such as landscape ecologists, land change scientisit and remote sensor have used the Relative Operating Characteristic (ROC) statistic frequently to measure the accuracy of predictions of species presence, land change model and soft classified images. The ROC statistic is designed to compare a map representing a Boolean variable, for instance presence/absence, versus a rank variable, such as a predicted probability. Previous uses of the ROC statistic have failed to reap the tremendous information contained in the ROC curve because they have focused on the Area Under Curve (AUC) as the only summary statistic and have used randomness as the only baseline. Further, the current use does not take into account the estimation of uncertainty of the ROC curve. This paper proposes four improvements in the use of the ROC: 1) an estimation of the uncertainty of the Area Under the Curve (AUC) using the upper and lower bounds 2) a method to decide on the number and positions of the thresholds 3) a visualization of the information of the ROC curve as a map 4) presentation of concepts to interpret the shape of the ROC curve. For this study, we use data from the Plum Island Ecosystems study area in Northeastern Massachusetts, USA.

Method to Estimate the Land Transition Matrix from Two Erroneous Maps
Xiaoxiao Li (IDCE, Advisor: Robert Pontius)

This article presents methods to estimate a land cover transition matrix based on maps from two points in time. The land cover transition matrix indicates the amount of land that transitions from each category at time 1 to each category at time 2. Observed differences between the two land cover maps can be due to change on the ground or error in the maps. This paper offers methods to distinguish between these sources of differences. If the maps were perfectly correct, then the observed differences would indicate true land transition on the ground. This paper's methods consider the situation when the maps are not correct, and a confusion matrix indicates the structure of the errors in each map. We consider three different methods to estimate the land cover transition matrix while taking into consideration the error in the maps. Each method considers a different way to interpret the errors. The three methods provide a lower, middle, and upper estimate for each possible land transition. For situations where formal confusion matrices are not available, we perform sensitivity analysis to show how the suspected error in the maps influences the estimates of the land cover transitions. We illustrate the technique using land cover data from 1971 and 1999 in the Plum Island Ecosystems of Northeastern Massachusetts, which is a Long Term Ecological Research site of the National Science Foundation. Ultimately, the method produces maps that show the probability of any particular land cover transition, given the observed data and the confusion matrices.

The Choice of Exchange Rate Regime: A Dynamic Random Multinomial Logit Model
Dobdinga Fonchamnyo (Economics, Advisor: Amy Ickowitz)

We have used a dynamic random multinomial logit model to estimate the determinants of exchange rate regime choice. The results suggest regime choice persistence is attributed to true state dependence and unobserved heterogeneity. There is also evidence of high correlation between the intermediate and flexible regimes suggesting that the assumption of Independence of Irrelevant Alternatives (IIA) employed in simple multinomial logit models may be invalid. The results further confirm the importance of the Optimal Currency Area in discussing exchange rate regime choice. However, insufficient evidence exists to support the hollowing-out hypothesis. Lastly, our analyses show evidence of regime transition and no regime acts as a “closed set”.
The Structure of the Dual Labor Market of Sri Lanka
Samanmala Dorabawila (Economics, Advisor: Wayne Gray)

The perpetual conflict between good jobs and bad jobs has been common to any country even before the industrial revolution. According to the dual labor market theorists, the good jobs found in the primary sector were characterized with stable employment, good working conditions, high promotion possibilities and high wages. In contrary, the bad jobs were in the secondary sector with unstable employment conditions, bad working environments, very poor promotion possibilities and low wages. These labor market conditions are observable in the developed countries as well as developing countries. Although, similar conditions can prevail in a country like Sri Lanka, but the two sectors can consist of different magnitudes of determinants from other countries. Therefore this study performs a switching regression analysis of the dual labor market of Sri Lanka. In addition this will also enable to view how the dual labor market structures of the developing countries differ from the developed world, where most of the existing literature of the dual labor market is found except for Heckman and Hotz, 1986 paper of Panama (which uses a different technique). Analysis results infer that there are two clearly identifiable labor market sectors as primary and secondary sectors. Sri Lanka’s wage determination structure for the secondary sector is similar to the single equation wage model. The analysis results allow us to distinguish the structure of the dual labor market of Sri Lanka.

Graduate Student Reception

The Alumni Association and President & Mrs. Bassett cordially invite faculty, student and alumni of Clark University’s graduate programs to a reception at Harrington House after the keynote address and presentations of travel awards.

4:30 – 6:30
122 Woodland Street
Rabbi Leo Baeck has been revered as one the greatest Jewish figures of the Twentieth Century. He is praised for his theological genius, moral and ethical character, and his leadership during the Nazi era. He has not, however, been unanimously held in such high esteem. Leo Baeck has been criticized for withholding information from the Jewish public about the fatalistic implications of transports to the East, which he knew were destined for Auschwitz. This paper will first explore what information Leo Baeck had about the massacres and killing centers in the East compared with that of the general public. It will try to explain why Leo Baeck remained silent about this information.

As co-inhabitants of the Imperial Russian “Pale of Settlement,” the Jewish communities of Vitebsk and Grodno lived under the same political and economic system for over a century after the partitions of Poland. The violence of World War I, the Russian Revolution, and the Polish-Soviet War of 1920 cast the largely Yiddish-speaking “Vitebsker” and “Grodner” Jews into separate political spheres— the Soviet Union and the interwar Polish Republic. Growing Polish nationalism in the 1930s led to economic repression of, and popular expressions of antisemitism against, the Grodner Jews. Vitebsker Jews initially experienced a period of relative emancipation under Soviet rule, but during the course of the 1930s Jewish identity was suppressed in the increasingly monolithic Soviet system. As part of research for my dissertation comparing the experience of Jews in Vitebsk and Grodno before and during the Holocaust, I recently visited archives in Belarus to examine documents of the Jewish community board in Grodno and the Vitebsk Jewish Pedagogical Institute. Both institutions, while charged with different missions, were run by Jews for Jews. In my paper I will examine the differences and similarities in the perspectives and sense of identity of Polish and Soviet Jews as represented by these institutions, and how these characteristics influenced their response to increasing oppression in the decade before the Holocaust.

Many bicultural individuals, usually second-generation immigrants or exiles, who grow up and are raised with at least two main cultures and sometimes two languages from their early childhood on, oftentimes find themselves torn between two different worlds. Second generation Iranian American author Azadeh Moaveni depicts in her memoir Lipstick Jihad: A Memoir of Growing Up Iranian in America and American in Iran her struggle in her quest of identity and home. Sociopolitical turmoil in Iran, political conflicts between Iran and America, stigmatizations against Iranians and the Middle Easterners, difficult implications of exile, and the high marginalization of Iranians in America altogether complicate her case as an Iranian American and increase the dichotomy between her two worlds. Despite all efforts to fit in, each society rejects her as a full member, which is why she continuously and widely is “othered”. Through education, journeys, intense and direct experiences, and languages Moaveni ultimately starts to feel at peace with her cultural, linguistic and identity “in-betweeness” – regardless of the others’ images of her. In my thesis with a focus on Iranian Americans, first, I argue for the important acknowledgement of the hybrid “in-between” identities as a increasing part of our societies and, second, for the numerous and highly valuable assets of these identities for the people in question themselves as well as for the society at large. To support my thesis Moaveni’s memoir will be in the center of my analysis. In addition, I will use interviews, participant observations and multidisciplinary scholarly work.
Paper Presentation (Session III)
Grace Executive Conference Room
10:50 to 11:50 AM

And what will become of Wellington?: The Iron Duke and the American Republic
Alexander Marriott (History, Advisor Drew R. McCoy)

From 1807 to 1852, Americans paid peculiar attention to a man who represented aristocracy and British Toryism, Arthur Wellesley, the First Duke of Wellington. Why? This paper explores the reasons and occasions that American republicans observed the Iron Duke and their surprisingly positive reactions to a man who, on the face of it, represented everything they were against politically.

A Likkle This, A Likkle That: Sustainable Livelihoods and Marine Park Policy Implications For a Jamaican Fishing Community
Patrick Obrist (IDCE, Advisor David Bell)

Sustainable Livelihoods and Conservation are two concepts whose goals are often in conflict and difficult to reconcile. Sustainable Livelihoods in developing countries frequently extract natural resources from the environment, but this can deplete said resources. Conservation seeks to eliminate or limit this extraction process, though the restriction tends to adversely affect the livelihoods of people dependent upon it. Fisheries are one point of contention existing between the Sustainable Livelihoods and Conservation. Fishermen and their families are dependent upon access to marine resources to satisfy their food security needs and support their livelihoods strategies. Yet, fishing has a propensity to scare conservationists who see the oceans as over-exploited due to open access to resources. Marine parks and their regulation of marine access are part of conservationists’ solution. In the island-nation of Jamaica, the debate between sustainable fishing livelihoods and marine parks is a major issue. Employing the Sustainable Livelihoods Approach (SLA), I investigate a small Jamaican fishing community whose fishing grounds are located within a marine park to determine how best to merge both sides’ interests. I call for more application of the SLA when establishing marine parks, locally and internationally, because my findings indicate that the SLA is an important mechanism for equitably addressing both sustainable livelihoods and conservation objectives.

Recontextualizing the US Republic: How the emergence of a Haitian Republic shaped ideas of the early US Republic
KaMeika Murphy (History, Advisor: Wim Klooster)

Over the last decade, more historians have responded to the need to correct a ‘silence of the Haitian Revolution’ with research that re-examines the significance of the region’s first ‘black republic’. This increasing attention given to Haiti has, to a large extent, focused on the country’s relations with the US from 1804 into the 1860s; especially where it concerned the significance of a ‘black republic’ to slavery in the southern states of the US. Building on this renewed interest in the indelible link between the US and Haitian Republics, this paper offers an analysis of how the emergence of a Haitian Republic was integrated into ideas of the US Republic from 1804 into the 1820s. The paper argues that the US system of government, as an ideology and an institution, went through a clarification of republicanism that was largely reactive to Haiti as a Republic governed by blacks.

The "Delicate Interest:" American Relations with Haiti, 1798-1848
Alexander Marriott (History, Advisor Drew McCoy)

This paper explores the evolving nature of American diplomatic relations (or lack thereof) with Haiti from the time of John Adams and Thomas Jefferson to the end of the Polk administration. The trajectory is one of commercial dealing though non-recognition to a policy of outright racism along with efforts to actively undermine Haitian sovereignty.
Effect of Immigration in High-Skilled Labor Markets  
Ritashree Chakrabarti (Economics, Advisor: Junfu Zhang)

Immigration is a major component of demographic change in the United States. For many years the immigration issues were not widely studied, presumably because immigration was not an important source of U.S population growth, either absolutely or relatively. However, immigration to the United States began to change dramatically with the Amendments to the Immigration and Nationality Act in 1965. With the enactment of the 1965 Amendments the national-origins quota system was abolished which led to a higher numerical limit for immigration. It also opened the door to immigration from Asia, which had virtually been banned since the 1880s. Since 1940 the number of legal immigrants to U.S has increased at a rate of one million per decade. The current debate over the “immigration problem” is guided by issues related to the impact on the labor market opportunities of natives, economic benefits from immigration, and also how well immigrants adapt to the American economy. The recent political debate on immigration in the U.S as well as majority of work in the academic literature depicts immigration as a large inflow of uneducated workers. However immigrants are not simply concentrated among less educated workers, but also among highly educated workers. The influx of immigrants and their concentration in certain regions and occupations therefore raises the question of how immigration affects the natives’ wage rates. This paper focuses on the effect of immigration in the high-skilled labor markets across eighteen U.S cities, using occupation as a proxy for skill.

The Nation’s Capital Urban Design and Security Plan  
Kevin Keenan (Geography, Advisor: Susan Hanson)

Drawing from the planning traditions of equity, advocacy, community participation, and concern for special topics or phenomena affecting a society, four theoretical propositions related to terrorism and planning are derived. Using an analytic construct of place, a conceptualization of urban vulnerability-reduction, and a qualitative, critical and extreme single case study method, these theoretical propositions are evaluated against the National Capital Urban Design and Security Plan. The results of this analysis suggest a refocusing of planning and terrorism studies around emergent theories concerning: (1) advocacy and radical scholarship; and (2) risks-hazards-vulnerabilities scholarship.

Corruption and Culture: What development agencies are really missing!  
Jason Coleman (IDCE, Advisor: David Bell)

With the increased pressure of globalization and a universal push to see economic prosperity in developing countries, there has been a shift towards implementing policies that address governing institutions and the basic structures of good governance and corruption, termed "anti-corruption." This includes improving accountability and transparency by using a universalistic policy approach, which by all accounts turns a blind eye to the local cultural context. I will argue that governmental and non-governmental organizations lack this cultural approach when creating their own anti-corruption policies, and in addition, will present options that will fit anti-corruption strategies for specific countries.

From Socialism to Neoliberalism? Historical-Geographical Overview of India’s Economic Transition  
Waquar Ahmed (Geography, Advisor: Richard Peet)

This paper examines the evolution of India’s economic policy regime by embedding it in the social, political, and economic transformation of the country. It analyses the transient nature of the state-society coalitions, and its impact on the economy, till the initiation of the market centered liberalization policy in 1991. A key aspect of this concerns change in development discourse at the global level and the simultaneous modification and re-imagination of the role of the Indian state, as an agent facilitating development, at the national level. I will focus on the objectives and goals of the developmental state of India after the end of colonial occupation, and how the transition from Keynesianism to neo-liberalism as the dominant developmental discourse at the global level has impacted India’s economic policy.
Both the Self-Organizing Map (SOM) and fuzzy ARTMAP neural network are trained based upon competitive mechanism and use the "winner-take-all" rule. This paper proposes nonparametric measurements for these two recurrent computational neural networks to handle spatial uncertainty in remotely sensed imagery classification. These soft algorithms are neuron-triggering/committing-frequency based and are grouped into two types, i.e., Commitment and Typicality, expressing in the first case the degree of commitment a classifier has for each class for a specific pixel and in the second case, how typical that pixel's reflectances are of the ones upon which the classifier was trained for each class. Two measures are designed for each of the two neural network models, i.e., SOM Commitment (SOM-C) vs. SOM Typicality (SOM-T) and ART Commitment (ART-C) vs. ART Typicality (ARTT). To evaluate these proposed algorithms, soft classifications of a simulated imagery were undertaken, in which the sub-pixel components and their contributing reflectances are perfectly known. Conventional soft classifiers such as Bayesian posterior probability classifier and Mahalanobis typicality classifier were used as a comparison. Correlation analysis and Principal Components Analysis (PCA) was employed to explore the relationship between these different measures. Results indicate that significant similarities exist among the ART-C, SOM-C and the Bayesian posterior probability classifier, and moderate similarities exist among the ART-T, SOM-T and the Mahalanobis typicality classifier. ART models distinguish themselves from all others due to its special features.

**Predator Detection from the Start: How Embryonic Threespine Stickleback Learn to Recognize Predators.**

*Justin Golub (Biology, Advisor: Susan Foster)*

The ability to use cues from the surrounding environment in learning to avoid predation can greatly enhance survival. Egg predation, common in most ecosystems, puts sedentary eggs or embryos, and mobility-limited juveniles at the greatest risk of predation. Therefore, the ability for embryos to learn to recognize predators would allow individuals to respond accordingly after hatching. If natural selection favors learning over innate predator recognition, individuals exposed to the dietary cues of native and novel embryo predators during development should show increased recognition of these predators after hatching. Threespine Stickleback were exposed to native and novel predator cues as both embryos and fry. Fry showed stronger response to predators on a non-embryo diet if they had been exposed to that predator on an embryo diet during their development. Controls showed no change in response. This indicates that developing embryos can learn to recognize predators, enhancing post-hatching survival.

**Going Blind : A Physical Study of the Rods in the Eye**

*Kryngle Daly (Physics, Advisor: Ranjan Mukhopadhyay)*

The rods in the human eye are responsible for contrast and sight at low light levels. The outer segment of the rod consist of modified photoreceptor cells that resemble a stack of pancakes, and an ongoing process of pancake shedding and creation happens daily. Vision problems occur when more pancakes are shed faster than they are created. To understand these complications a metropolis style simulation was created to minimize the energy functional of the pancake geometries.
Brownfields pose considerable challenges for many former industrial cities in New England. Contaminated properties compromise public health, create blight, and drive local businesses into surrounding areas. In the face of urban decline, brownfield redevelopment offers a promising economic and environmental alternative. Federal and state brownfields policies help developers and lending institutions overcome the financial and legal obstacles associated with contaminated properties by modifying cleanup standards, promoting new remediation techniques, and offering financial incentives and liability relief. This government assistance does not mitigate on-site contamination, but it encourages developers to take the risk of redeveloping brownfields. Little research has investigated public response to this strategy. This paper discusses how public fear of residual contamination after redevelopment could theoretically jeopardize economic and community revitalization. Relevant communities include neighborhoods in proximity to brownfields with residents who would potentially use redeveloped sites. To look at community perceptions of brownfield redevelopment, this paper suggests applying a modified version of Slovic’s psychometric survey, which would produce quantitative measures of perceived risk for brownfield redevelopment. Exploring risk perceptions associated with contamination will allow policymakers to better understand how public response might affect brownfield redevelopment.

Got an Idea for a Social Event?

The Graduate Student Council welcomes all ideas for proposed GSC sponsored events. If you are interested in creating or organizing a social event for graduate students please contact GSC@clarku.edu or one of the GSC Co-Presidents and they will direct you as to how to properly submit your idea. While funding is limited we are looking for new ideas for graduate student social events.
Prevailing Winds, The 19c Connection Between the Azores and the United States
Elizabeth Fisher (History, Advisors: Janette Greenwood and Wim Klooster)

My research focuses on the Azorean crewmembers of the 18th and 19th century American whalefishery and tracks the steps of this Portuguese community into settlement in the United States. In the 18th century, the tiny island of Nantucket, fifteen miles southeast of Cape Cod, Massachusetts, developed one of the most lucrative industries in the world; the whalefishery. During the antebellum era, the center of the fishery shifted to mainland Massachusetts in the city of New Bedford. Yankee captains and agents relied on foreign labor from the start of the fishery, but patterns of overseas recruitment increased tremendously during the antebellum period and continued through the industry’s slow death in the 1920s. Tracking the experience of Azoreans on American ships sheds light on racial and ethnic relationships, particularly through social and working interaction between the crew. After the voyage, many Azoreans settled in New England and sent for their families. Today, southeastern New England is home to the largest Azorean population in the world. Other groups linked Portuguese Imperialism, including Brazilians and Cape Verdians, have settled in the area, attracted to the strong communities and kinship networks established by Azoreans in the 19th century. This is the story of how and why the Portuguese came to America and what their story can tell us about American perceptions of race and ethnicity from the 18th century to the present day.

Correlation Between Climate Change Practices and Performance in U.S. Corporate
Jia Liu (IDCE, Advisor: Joseph Sarkis)

Based on survey “Carbon Disclosure Project”, this paper examines linkage between S&P 500 companies’ climate change practices and corporate performance. Various indicators which include climate risk perception, climate belief, regulatory pressure, number of technologies, emission disclosure and reduction are selected to assess company’s climate response. Financial performance and environment performance are two areas to be investigated as corporate performance.
Primary methodology: statistical computing

Agents in the Atlantic, The American Foreign Service in the Azores During the Early Republic
Elizabeth Fisher (History, Advisors: Janette Greenwood and Wim Klooster)

During the American Revolution, the framers of the republic lost all diplomatic agents stemmed from the colonial connection with the British Empire. The eyes of the world looked on at the new United States, predominately with the expectation of impending failure. For the United States to survive in a world of imperialism and empire, the creation of a successful foreign service was imperative. My research tracks the creation of the fledgling foreign service, particularly though the position of consuls. Throughout the 19th century, the position of consul was viewed by many as a curse, rather than a blessing. The system was chaotic and communications were slow, forcing many a consul to retire the post within three years. There was, however, one American family in the Atlantic World community and economy that thrived as consuls in the Azores for three generations. Why did the Dabney consuls experience relative success where so many others failed? Their story is atypical, but sheds light on the struggles and successes of the American Foreign Service, the everyday functions of the consul, the tremendous socioeconomic impact consul presence had on the local host nation, and the relationship between Americans and the rest of the Atlantic World.

Environmental Sustainability in Higher Education: Stakeholder Perception and Behavior at Clark University
Stephanie Parent (IDCE, Advisor: Rob Goble)

This paper looks at environmental sustainability in higher education through a case study of Clark University. It focuses on the nexus between policy, technology and the individual and how perceptions and relationships influence these various areas. This case study included a survey of the Clark University community – students, faculty, staff and administrators – to determine interests, values, and behavior related to campus environmental sustainability. The perceptions and reflection gained from this community allow us to determine how Clark University is doing in regard to environmental sustainability from the eyes of its own stakeholders.
Paper Presentation (Session VII)
Grace Executive Conference Room
2:05 to 2:50 PM

Change starts here: Participatory oral history for community development
Erin Anderson (IDCE Advisor: Laurie Ross)

The severe urban decay and social disorganization that characterizes many inner-city neighborhoods requires innovative strategies that will build residents power to come together and solve local problems. This presentation considers the ways in which community-based oral history projects carried out in a participatory fashion might serve as such a strategy for community development. Documenting a pilot project in participatory oral history in the Main South neighborhood of Worcester, it analyzes the model’s implications as an organizing tool in struggling urban neighborhoods. Defining community development as the pursuit of solidarity and agency, this presentation demonstrates the potential for storytelling in an action-driven community context to contribute to individual efficacy, problem-articulation, and collective identity. Analyzing the challenges restricting the pilot project from reaching its ultimate goal of mobilizing tangible, solution-oriented, grassroots action, it presents practical recommendations and potential applications of the participatory oral history model for different areas of community development.

The Gendered Effects of the Politics of Choice and Recognition: Village Committees for Development and Management in Malidino Biodiversity Community Reserve, Senegal
Solange Bandiaky (Women’s and Gender Studies, Advisor: Dianne Rocheleau)

Men and women have different relationships with institutions (International institutions, the state, local governments, and traditional authorities) and access to resources. However in environment project design and implementation gender differences and power relations are overlooked. Even though the strategies of intervening agencies are based on participation which aims for community involvement in natural resource management, this paper argue that participatory approaches and processes are insufficient to result in gender equity. There are other factors that shape gender distribution of voice and material benefits that even a fair process will not overcome. The choice and recognition of Village Committees for Development and Management to be in charge of natural resources such as land, forests, and non-timber forest products in Malidino reserve are in fact inconsistent with democratic decentralization objectives. Participatory approaches and mechanisms used by the forestry service and the World Bank to facilitate participation in the reserve management give discretionary power to traditional leaders who are not accountable to the population and have poor records in serving women. The main questions for the present study include: what are the participatory approaches and processes in Malidino reserve? What is the gender distribution of outcomes in the decision processes, in access to forest resources and land, in economic activities around the reserve, in biodiversity conservation, and in rural community empowerment and social change? The study is based on extensive ethnographic research in the communities living around the reserve mainly in Dialamakhan village, which involved participant observation, interviews, and focus group discussions.

Profits, Politics and Purity: The restructuring Malaysian pig industry
Harvey Neo (Geography, Advisor: Jody Emel)

Malaysia is unique as the pig industry is controlled by ethnic Chinese, and the country is purportedly Islamic, and led by Malay-Muslim political elites. Through first hand interviews (with pig farmers as well as industry officials and NGOs) and archival research, this study explicates the problems that threaten the continual survival of the Malaysian pig industry. While the pig industry has faced several past and existing problems (for example, the Nipah virus attack in the late 1990s, the vagueness in the regulation of the industry and the lack of land rights amongst the farmers), it is argued that increasing religiousity in Malaysia (both in the social and political realm) is the biggest, most complex challenge that needs to be resolved. There are various options that the pig industry as a whole can do to better secure their survival. These include restructuring their lobbying organization, pressing on for greater clarity in regulation as well as pushing for legally designated pig farming areas. However, the success of these initiatives (particularly the call for land security) very much depends on the prevailing debate on, and the use of, religion in contemporary Malaysia. This study represents the first attempt in analyzing the Malaysian pig industry from a socio-political point of view and emphasizes the importance of culture and religion in the production of food.
Behind Closed Gates: The Survival of Jewish Women "Passing" as Aryans in the Holocaust
Adara Goldberg (Holocaust and Genocide Studies, Advisor: Deborah Dwork)

Whereas in the Holocaust, Jewish women were uniquely targeted for genocide as a gender as well as on the wider scale of their "racial identity," it is imperative to stress that some of the same gender-specific qualities which were intended to hinder female survival in fact directly contributed to the resistance and survival of many Jewish women. The purpose of this paper is not to suggest that either gender group suffered more or less under Nazi terror; instead, it argues that unique factors contributed to the female experience of the Holocaust. In this paper, I shall assert that survival in the Holocaust, particularly for Jews who lived out the duration of the War by hiding their true identity and “passing” as Aryans, was not random or based solely on sheer luck or opportunity. Rather, surviving on the Aryan side amongst collaborator populations required courage, strength and a combination of individual factors, including language skills and appearance. While both Jewish men and women chose to try their luck at survival in “visible” hiding, women were, on the whole, better equipped emotionally, mentally, and physically to survive as “masked Aryans,” and served more successfully as couriers, agents of resistance in the public sphere, and social players than men did. I shall argue that Jewish women possessed gender-specific qualities and skills that served as powerful agents which directly contributed to their prospects for survival in the Holocaust.

Passive Witnesses? Bystanders during the Holocaust in Romania; Revisiting the Diaries of the Romanian Jewish Survivors
Stefan Ionescu (Holocaust & Genocide Studies, Advisor Deborah Dwork)

After the collapse of communism there was a growing interest in Holocaust and Genocide studies in Romania in relation to concepts such as intolerance, responsibility, guilt and remembrance. In spite of this interest, few scholars had time to analyze the relevant survivors’ personal documents, such as diaries. Most of the researcher’s have focused primarily on the perpetrators, victims and ‘technical’ aspects of the Holocaust. Thus, less is known about the bystanders and their attitudes towards Jews and anti-Jewish measures during the Holocaust.

What were the patterns of behavior of the Romanian gentiles towards their Jewish neighbors during the Holocaust in Romania? What were the gentiles’ attitudes towards the anti-Semitic persecutions implemented in WWII Romania? Did these attitudes changed during the war and if so, how did they change?

In my paper I will focus on the gentile bystanders’ attitudes towards their Jewish neighbors during WWII, seen from the perspective of the Jewish personal narratives (diaries). These attitudes varied from active persecution to indifference and sometimes help and rescue. I argue that the attitudes of the Romanian gentiles towards the Jews were influenced not only by their personal relationships but also by the anti-Semitic prejudices prevalent in the society in 1930s and 1940s. Further, the personal interests of the gentiles – for example the probability of gaining Jewish property, jobs or avoiding the retributive justice after the war - directly contributed to the various attitudes towards the Jews.

Growing Up in Post-War Oswiecim: Calling the City Known as Auschwitz Your Hometown
Jody Manning (History, Advisor: Thomas Kuehne)

Visitors to the Auschwitz-Birkenau State Museum normally stay in the city of Krakow, situated an hour drive east of the town of Oswiecim. Yet, many are unaware of the fact that there is an actual city called Oswiecim, with people who call this town, know as Auschwitz, their home. The residents of Oswiecim understand and presumably know the history of the Auschwitz-Birkenau Death Camp. At the same time, it is difficult to comprehend what it must be like to call this city your hometown, unless, of course, one lives there. How does one handle the subject when it is in their backyard? What must it be like to live with this symbol of ‘evil’ as a constant reminder?

My central focus is how ‘Auschwitz’ has affected the everyday lives of high school to college-level young adults with varying social, political and economic backgrounds who have grown-up in Oswiecim. This focus facilitates a better understanding of the second or third generation of populace who has no actual ties to the war or camp. Diverging from current research approaches on ‘Holocaust Memory’ and its legacy, I argue that this history has affected not only those who were connected to the former camp, but continually has a profound effect upon the community who lives around this place. Such research has rarely been explored, examined, or discussed among Holocaust historians. Amongst other things, the study shows that the youth perceive that memory has affected the ‘natural’ development of their city.
Exile is an old issue. Everybody understands, or seems to understand, whatever, what an exile is. For there is a general understanding that exiles are people who live in another country than their native country for various reasons, the obvious ones being politics and religions. Thus, as exile is someone who is not a native of a country where s/he lives. By displaying the cases of exiles who become so within their native countries, especially in the U.S., this paper questions the usual definition of the term and asks for the broader understanding of the situation of exiles: exiles include any one who feels not at home in a place where s/he lives. For this, the works of the contemporary authors like those of Thomas Pynchon's and Bharati Mukherjee's are interpreted and analyzed because their fictions dramatize these situations of internal and external exiles.

Lumberjack Work Culture - The Traditional Workplace During the Age of Modernity
Adam Tomczik (History, Advisor: Amy Richter)

Loggers in the Northwoods of Maine and Minnesota retained surprising continuity in their workplace culture from the 1830s through the 1930s. Songs, stories, food, dances, games, hiring practices, wages, and "tricks" remained virtually unchanged across generations, even as the United States economy and the lumber industry itself modernized with mechanization and rationalized bureaucracy. The lumberjacks' distinctive culture, spanning time and geography, represented a final bastion of the American frontier.

Know What’s Going On.

Keep informed about events, seminars and workshops for graduate students through GradNet email. If you are not subscribed to GradNet please contact GSC@Clarku.edu or check out our website (http://clarku.edu/students/gsc/gradnet.html) for subscription information. Be sure to also keep an eye out for grad student listings on student digest (http://www.clarku.edu/intranet/studentdigest/).
Poster Presentations
Atrium
11:50 to 1:00 PM
GIS and Brownfield Redevelopment in Worcester, MA
Claire Brill (IDCE, Advisor: Pontius R. Gilmore)

Geographic Information Sciences can be utilized as a decision support tool for brownfield redevelopment. The use of GIS is important to presentation and analysis of data. This poster illustrates the application of GIS to brownfield redevelopment in Worcester, MA and demonstrates the inter-disciplinary nature of GIS.

Identifying land cover change in the Olomouc region, Czech Republic
Tomas Vaclavik (IDCE, Advisor Yelena Ogneva-Himmelberger)

The Olomouc region in the Czech Republic has undergone significant changes in the past several decades, such as the change in a political system of the country in 1989. Although the political and cultural transformation is generally recognized as an important driver of land use, there have been few studies conducted that would empirically assess and quantify land use/land cover changes in the Czech Republic, especially in the context of the post-socialistic transformation (Fanta et al. 2004, Zemek et al. 2005). In this study, I present an approach for identifying major land use/land cover changes in the Olomouc region applying remote sensing techniques to compare data from multispectral satellite sensors acquired twelve years before and twelve years after the revolution in 1989. I pay closer attention to specific trends in land cover changes: changes in agricultural areas, forest areas, and residential development. The results support initial assumptions that the land cover will reflect the changes in human perception of landscape and natural resources, such as smaller need for intensive agriculture, shift to environmental friendly management of forested areas, or increasing development and suburbanization.

Number Concept and Use of Numerical Notation in Turkish Preschool Children
Doga Sonmez, (Psychology, Advisor: Marianne Wiser)

Two major achievements in young children’s number development are cardinality (the last count word represents the numerosity of a set) and conservation. Based on the Give-a-Number task, Carey (2006) and Wynn (1990) claim that (American) children achieve cardinality around 42 months. However, Sophian (1996) found they do not count to compare sets until two years later, an achievement she suggests is related to conservation. In this study, we seek to compare these skills in the same group of children. We distinguish between Carey’s and Wynn’s “Cardinality 1” (understanding that each count word represents one more object than the previous count word) and “Cardinality 2” (an explicit understanding that the last number word in a count represents the numerosity of a set), and we relate their developments, as well as the development of conservation and of early numerical notations. The Participants were 60 Turkish children attending daycares, from three age groups (3-, 4-, and 5-year-olds). The tasks were: Give-a-Number (Cardinality 1), Compare Sets (Cardinality 2), Write-Something-on-the-Box (“So you will know how many toys are in the box” and later use own notations to check; Munn, 2002).

Biodiversity in Rural Landscapes
Susan Aragon (Geography, Advisor: Diane Rocheleau)

How do we conserve biodiversity while at the same time caring about the wellbeing of the rural and indigenous farmers? To answer this question we first have to understand how the ecological processes are carry out in rural landscapes. We studied the vascular flora close to the Paleontological Forest of Piedra Chamana, located in the District of Sexi, Cajamarca Department, in the Northwestern Andes of Peru. In the summer of 2005 we began vegetation inventory. Our objectives were to: a) describe the plant community composition and structure; b) analyze the co-occurrence of the plant species, looking for instances of competition or facilitation; c) assess the various disturbance factors and their effect on the vegetation; and d) evaluate the conservation needs in the area and formulate suggestions regarding measures that would both help to support the rural community and contribute to the forest conservation. We report 119 species in 96 genera and 43 families. The natural vegetation forms a broadleaf sclerophyllous forest with epiphytic components and abundant vegetal cover at the ground level. There is representation of species of dry forest associations as well as elements of more humid forest. The conservation status of this forest is precarious and it is needed to take urgent measures to protect and restore the tree cover in order to maintain the biodiversity present and to maintain the well being of the peasant communities who depend on the productivity of this forest.
The EPR Paradox and Why Quantum Mechanics should bother you
Kryngle Daly (Physics, Ranjan Mukhopadhyay)

The EPR (Einstein, Podolsky, and Rosen) Paradox originally caused concern with Einstein's "Spooky Action at a Distance". This was later resolved by learning that no information could be sent through "Spooky Action at a Distance" and Causality was preserved. Physicist David Bohm then presented new problems with the paradox. This is a review of the problems, and why they should be of concern.

Experience induced increases in discrimination for the familiar taste of a sugar require very brief experience and reverse within 22-34 days.
Kristina Gonzalez (Biology, Advisor: Linda Kennedy)
Additional Authors: Allison Whalen, Virginia Mike, Todd P. Livdahl, Linda M. Kennedy

Experience induced changes are known in taste identification of monosodium glutamate, sensory detection of glutaraldehyde, and psychophysical and fMRI responses to novel taste stimuli. Yet whether such plasticity occurs for the highly familiar taste of sugar remained unconfirmed. We tested the taste induction hypothesis for sugar, using a counterbalanced design, consisting of two treatment conditions and three pre-treatment test conditions. First, 150 participants were either not tested [no pre-test] or tested. Those tested tasted paired glucose solutions and water [glucose pre-test], or water and water [sham pre-test], and indicated ‘the sugar’ of each pair. All then briefly treated their tongues with a fructose solution or water once each day for 10 days. On Day 11 or 12, all were tested as before, with glucose and water. Glucose pre-test, fructose treated participants either continued or stopped treatment for another 10 days and were tested again at 22-33 days. The results show that (1) experience with fructose significantly increases discrimination for the taste of the sugar, glucose (2) there are no significant differences in the sugar discrimination between groups of randomly assigned subjects before treatments (3) a single session of 5 brief tastings has an effect on the discrimination when tested 11-2 days later and (4) without continued treatment, the increased discrimination reverses after 22-34 days. Supported by a NSF Graduate Fellowship to KMG. We thank Bio 040 2004 students for assistance.

Critical fields, vortex melting and the irreversibility line in quasi 2D organic superconductors.
Braunen Smith (Physics, Advisor: Charles Agosta)
Additional Authors: Kyuil Cho and Charles Agosta

We have measured the critical field and aspects of the vortex structure in anisotropic organic superconductors using pulsed and dc fields up to 50 and 45 T respectively and at temperatures down to 55 mK. In all cases we measured the penetration depth using the tunnel diode oscillator technique. When the sample is oriented with the conducting planes parallel to the applied magnetic field, we have found that the irreversibility line does not extrapolate to the high fields predicted by Mola et. al. [1] based on their measurements and the use of the Tinkham equation. We also find that many signatures of the vortex system, such as jumps, melting and hysteresis are absent in this parallel sample orientation. In addition, when using a pulsed field apparatus we have consistently measured lower critical fields than we find from the use of dc field apparatus. We assume this is due to a time constant associated with the vortices entering and leaving the sample, but not all of our data supports this claim. [1] M.M. Mola, S. Hill, J.S. Brooks, and J.S. Qualls, Phys. Rev. Lett. 86, 2130 (2001).

Comparing land cover classifications with harmonic analysis to understand land use changes in Central Mexico.
Zachary Christman (Geography, Advisors: B.L. Turner and John Rogan)

Analyses of land cover changes can be both bolstered and hindered by the diversity of the regions under consideration. Though coarse resolution imagery, at scales of 1 to 8 km per pixel, has the ability to aid in these understandings by providing a level of generalizability among spectrally distinct but spatially adjacent areas, this mixedness can confuse classifications or obscure changes in the landscape. The temporal variation of each location throughout its annual cycle and interannual trajectory can aid in classifying the type of land cover. Harmonic analysis offers an additional method of chronicling these changes, through the separation of overlapping trends that contribute to the net change. By comparing the temporal variation associated with the discrete land-cover classes with their associated patterns through the period 2000-2006, this study seeks to isolate and describe the distinct patterns of land-cover change, in order to better inform classifications of land cover and land use for change detection in the highly diverse and rapidly changing region of central Mexico. Results of this effort will aid in the validation of the NASA MODIS Land Cover product, as well as calibrating a land-use legend for the 2007 classification of the Lerma-Chapala-Santiago watershed.
This purpose of this study was to study the correlations between identification, forgiveness and quality-of-life for survivors of the Rwandan Genocide. It was hypothesized that survivors would feel a significant level of unforgiveness towards genocide bystanders from their communities. Secondly, it was hypothesized that unforgiveness would negatively correlate with an inclusive social identification in survivors. Thirdly, it was hypothesized that unforgiveness would be negatively correlated with a desire to interact with bystanders but positively correlated with inclusive identification. Finally, inclusive identification interaction with bystanders would be positively correlated with a positive view of the future and a negative view of the present but negatively correlated with nostalgic view of the past and unforgiveness.

One hundred and twenty genocide survivors were asked to complete the TRIM-18 to measure levels of unforgiveness felt towards genocide bystanders. In order to measure perceived quality-of-life before, during and after the Genocide, participants completed a modified Cantrell scale. Finally, identification was measured by asking participants to list the words, which they used to identify themselves. Individuals that used more inclusive terms when identifying themselves had significantly less unforgiveness towards bystanders than survivors who used more exclusive terms of identification. Survivors who had more unforgiveness were less likely to want to meet with bystanders. The desire to meet with bystanders was positively correlated with the use of inclusive language in identification ($r = .32$). Those who used inclusive language were more likely to want to hold a meeting with the two groups.

**Acknowledgments**

Special thanks to Nancy Budwig, Dean of Graduate Studies and Research, for her continuing support and advocacy for Graduate Students and Graduate Research.

Denise Robertson, and her student assistants for their assistance in making this conference possible, and helping the Graduate Student Council with its day to day operations; we would not be able to complete half of what we do without your help.

Professor Les Blatt for sharing his time and insight with us.

The faculty and staff of all the graduate programs at Clark: for providing a constructive and intellectually stimulating academic environment, without which we could not have done this research.

The Alumni Association for their continuing support by sponsoring the Graduate Conference Reception.

President and Mrs. Bassett for opening their home as a wonderful conclusion to the day’s events.

Cheryl Marc and the staff of Curry Printing, Jennifer Griffiths, Michael McKenna, and Joanne MacMillan of the Events Planning office.

Thanks to the Graduate Student Council for their energy, enthusiasm, and time investment in planning and organizing the Multidisciplinary conference, as well as all the many other GSC sponsored events. You do a great service for the Clark Graduate Student community, creating an intellectual, and social environment for all graduate students to come together. Special thanks to the students of the Conference Planning committee and Travel Award Committee for their hard work making this conference possible.
<table>
<thead>
<tr>
<th>Name</th>
<th>Program</th>
<th>Email</th>
<th>Presentation Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waquar Ahmed</td>
<td>Geography</td>
<td><a href="mailto:wahmed@clarku.edu">wahmed@clarku.edu</a></td>
<td>Session IV</td>
</tr>
<tr>
<td>Erin Anderson</td>
<td>IDCE</td>
<td><a href="mailto:eranderson@clarku.edu">eranderson@clarku.edu</a></td>
<td>Session VII</td>
</tr>
<tr>
<td>Susan Aragon</td>
<td>Geography</td>
<td><a href="mailto:saragongeo@yahoo.com">saragongeo@yahoo.com</a></td>
<td>Poster</td>
</tr>
<tr>
<td>Solange Bandiaky</td>
<td>Women's and Gender Studies</td>
<td><a href="mailto:sbandiaky@clarku.edu">sbandiaky@clarku.edu</a></td>
<td>Session VII</td>
</tr>
<tr>
<td>Claire Brill</td>
<td>IDCE</td>
<td><a href="mailto:cbrill@clarku.edu">cbrill@clarku.edu</a></td>
<td>Poster</td>
</tr>
<tr>
<td>Ritashree Chakrabarti</td>
<td>Economics</td>
<td><a href="mailto:rchakrabarti@clarku.edu">rchakrabarti@clarku.edu</a></td>
<td>Session IV</td>
</tr>
<tr>
<td>Elizabeth Fisher Chase</td>
<td>History</td>
<td><a href="mailto:echase@clarku.edu">echase@clarku.edu</a></td>
<td>Session VI</td>
</tr>
<tr>
<td>Zachary Christman</td>
<td>Geography</td>
<td><a href="mailto:zchristman@clarku.edu">zchristman@clarku.edu</a></td>
<td>Poster</td>
</tr>
<tr>
<td>Jason Coleman</td>
<td>IDCE</td>
<td><a href="mailto:jcoleman@clarku.edu">jcoleman@clarku.edu</a></td>
<td>Session IV</td>
</tr>
<tr>
<td>Kryngle Daly</td>
<td>Physics</td>
<td><a href="mailto:kdaly@clarku.edu">kdaly@clarku.edu</a></td>
<td>Session V &amp; Poster</td>
</tr>
<tr>
<td>Samannmala Dorabawila</td>
<td>Economics</td>
<td><a href="mailto:sdorabawila@clarku.edu">sdorabawila@clarku.edu</a></td>
<td>Session I</td>
</tr>
<tr>
<td>Dobbina Fonchamnyo</td>
<td>Economics</td>
<td><a href="mailto:dfonchamnyo@clarku.edu">dfonchamnyo@clarku.edu</a></td>
<td>Session I</td>
</tr>
<tr>
<td>Josh Franklin</td>
<td>Holocaust &amp; Genocide Studies</td>
<td><a href="mailto:Jfranklin@clarku.edu">Jfranklin@clarku.edu</a></td>
<td>Session II</td>
</tr>
<tr>
<td>Adara Goldberg</td>
<td>Holocaust &amp; Genocide Studies</td>
<td><a href="mailto:adgoldberg@clarku.edu">adgoldberg@clarku.edu</a></td>
<td>Session VIII</td>
</tr>
<tr>
<td>Justin Golub</td>
<td>Biology</td>
<td><a href="mailto:jgolub@clarku.edu">jgolub@clarku.edu</a></td>
<td>Session V</td>
</tr>
<tr>
<td>Kristina M. Gonzalez</td>
<td>Biology</td>
<td><a href="mailto:kgonzalez@clarku.edu">kgonzalez@clarku.edu</a></td>
<td>Poster</td>
</tr>
<tr>
<td>Stefan Ionescu</td>
<td>Holocaust &amp; Genocide Studies</td>
<td><a href="mailto:sionescu@clarku.edu">sionescu@clarku.edu</a></td>
<td>Session VIII</td>
</tr>
<tr>
<td>Ubaraj Katawal</td>
<td>English</td>
<td><a href="mailto:ukatawal@clarku.edu">ukatawal@clarku.edu</a></td>
<td>Session IX</td>
</tr>
<tr>
<td>Kevin Keenan</td>
<td>Geography</td>
<td><a href="mailto:kkeenan@clarku.edu">kkeenan@clarku.edu</a></td>
<td>Session IV</td>
</tr>
<tr>
<td>Jeff Koerber</td>
<td>Holocaust &amp; Genocide Studies</td>
<td><a href="mailto:jkoerber@clarku.edu">jkoerber@clarku.edu</a></td>
<td>Session II</td>
</tr>
<tr>
<td>Xiaoxiao Li</td>
<td>IDCE</td>
<td><a href="mailto:xli@clarku.edu">xli@clarku.edu</a></td>
<td>Session I</td>
</tr>
<tr>
<td>Zhe Li</td>
<td>Geography</td>
<td><a href="mailto:zheli@clarku.edu">zheli@clarku.edu</a></td>
<td>Session V</td>
</tr>
<tr>
<td>Jia Liu</td>
<td>IDCE</td>
<td><a href="mailto:jliu@clarku.edu">jliu@clarku.edu</a></td>
<td>Session VI</td>
</tr>
<tr>
<td>Jody Manning</td>
<td>History</td>
<td><a href="mailto:jmanning@clarku.edu">jmanning@clarku.edu</a></td>
<td>Session VIII</td>
</tr>
<tr>
<td>Alexander Marriott</td>
<td>History</td>
<td><a href="mailto:amarriotto@clarku.edu">amarriotto@clarku.edu</a></td>
<td>Session III</td>
</tr>
<tr>
<td>KaMeika Murphy</td>
<td>History</td>
<td><a href="mailto:kamurphy@clarku.edu">kamurphy@clarku.edu</a></td>
<td>Session III</td>
</tr>
<tr>
<td>Harvey Neo</td>
<td>Geography</td>
<td><a href="mailto:hneo@clarku.edu">hneo@clarku.edu</a></td>
<td>Session VII</td>
</tr>
<tr>
<td>Patrick Obrist</td>
<td>IDCE</td>
<td><a href="mailto:pobrist@clarku.edu">pobrist@clarku.edu</a></td>
<td>Session III</td>
</tr>
<tr>
<td>Stephanie Parent</td>
<td>IDCE</td>
<td><a href="mailto:sparent@clarku.edu">sparent@clarku.edu</a></td>
<td>Session VI</td>
</tr>
<tr>
<td>Benoit Parmentier</td>
<td>Geography</td>
<td><a href="mailto:bparmentier@clarku.edu">bparmentier@clarku.edu</a></td>
<td>Session I</td>
</tr>
<tr>
<td>Hamil Pearsall</td>
<td>Geography</td>
<td><a href="mailto:cpearsall@clarku.edu">cpearsall@clarku.edu</a></td>
<td>Session V</td>
</tr>
<tr>
<td>Rebekah Phillips</td>
<td>Psychology</td>
<td><a href="mailto:rphillips@clarku.edu">rphillips@clarku.edu</a></td>
<td>Poster</td>
</tr>
<tr>
<td>Arezu Rahimi</td>
<td>English</td>
<td><a href="mailto:arahimi@clarku.edu">arahimi@clarku.edu</a></td>
<td>Session II</td>
</tr>
<tr>
<td>Braunen Smith</td>
<td>Physics</td>
<td><a href="mailto:braunen@physics.clarku.edu">braunen@physics.clarku.edu</a></td>
<td>Poster</td>
</tr>
<tr>
<td>Doga Sonmez</td>
<td>Psychology</td>
<td><a href="mailto:dsonmez@clarku.edu">dsonmez@clarku.edu</a></td>
<td>Poster</td>
</tr>
<tr>
<td>Adam Tomczik</td>
<td>History</td>
<td><a href="mailto:atomczik@clarku.edu">atomczik@clarku.edu</a></td>
<td>Session IX</td>
</tr>
<tr>
<td>Tomas Vaclavik</td>
<td>IDCE</td>
<td><a href="mailto:tvaclavik@clarku.edu">tvaclavik@clarku.edu</a></td>
<td>Poster</td>
</tr>
</tbody>
</table>
# 2006-2007 Graduate Student Council Members

## Officers

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Justin Golub</td>
<td>Co-President</td>
<td><a href="mailto:jgolub@clarku.edu">jgolub@clarku.edu</a></td>
</tr>
<tr>
<td>Tara Arthur</td>
<td>Co-President</td>
<td><a href="mailto:tarthur@clarku.edu">tarthur@clarku.edu</a></td>
</tr>
<tr>
<td>Mahesh Ramachandran</td>
<td>Treasurer</td>
<td><a href="mailto:mramachandran@clarku.edu">mramachandran@clarku.edu</a></td>
</tr>
<tr>
<td>Andy Coniglio</td>
<td>Secretary</td>
<td><a href="mailto:wconiglio@clarku.edu">wconiglio@clarku.edu</a></td>
</tr>
<tr>
<td>Braunen Smith</td>
<td>Communications Officer</td>
<td><a href="mailto:braunen@physics.clarku.edu">braunen@physics.clarku.edu</a></td>
</tr>
</tbody>
</table>

## Department Representatives

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Wilson</td>
<td>Biology</td>
<td><a href="mailto:anwilson@clarku.edu">anwilson@clarku.edu</a></td>
</tr>
<tr>
<td>Shlomit Klopman</td>
<td>Biology</td>
<td><a href="mailto:sklopman@clarku.edu">sklopman@clarku.edu</a></td>
</tr>
<tr>
<td>Martin Marinov</td>
<td>Economics</td>
<td>mm <a href="mailto:marinov@clarku.edu">marinov@clarku.edu</a></td>
</tr>
<tr>
<td>Emily McGinn</td>
<td>English</td>
<td><a href="mailto:emcginn@clarku.edu">emcginn@clarku.edu</a></td>
</tr>
<tr>
<td>Genie Giaimo</td>
<td>English</td>
<td><a href="mailto:GGiaimo@muse.clarku.edu">GGiaimo@muse.clarku.edu</a></td>
</tr>
<tr>
<td>Beniot Parmentier</td>
<td>Geography</td>
<td><a href="mailto:bparmentier@clarku.edu">bparmentier@clarku.edu</a></td>
</tr>
<tr>
<td>Diana Ojeda</td>
<td>Geography</td>
<td><a href="mailto:dojeda@clarku.edu">dojeda@clarku.edu</a></td>
</tr>
<tr>
<td>Alexander Marriott</td>
<td>History</td>
<td><a href="mailto:amarriott@clarku.edu">amarriott@clarku.edu</a></td>
</tr>
<tr>
<td>Patrick Obrist</td>
<td>IDCE</td>
<td><a href="mailto:pobrist@clarku.edu">pobrist@clarku.edu</a></td>
</tr>
<tr>
<td>Charleen Richards</td>
<td>IDCE</td>
<td><a href="mailto:chrichards@clarku.edu">chrichards@clarku.edu</a></td>
</tr>
<tr>
<td>Ranjit Chacko</td>
<td>Physics</td>
<td><a href="mailto:rchacko@clarku.edu">rchacko@clarku.edu</a></td>
</tr>
<tr>
<td>Scott Robison</td>
<td>Physics</td>
<td><a href="mailto:srobison@clarku.edu">srobison@clarku.edu</a></td>
</tr>
<tr>
<td>Ingrid Sarmiento</td>
<td>Psychology</td>
<td><a href="mailto:isarmiento@clarku.edu">isarmiento@clarku.edu</a></td>
</tr>
<tr>
<td>Rebekah Phillips</td>
<td>Psychology</td>
<td><a href="mailto:rphillips@clarku.edu">rphillips@clarku.edu</a></td>
</tr>
<tr>
<td>Nikeshia Russell</td>
<td>GSOM</td>
<td><a href="mailto:nrussell@clarku.edu">nrussell@clarku.edu</a></td>
</tr>
</tbody>
</table>

---

**Join the Graduate Student Council**

Be part of a thriving graduate student led organization on campus. By being part of the Graduate Student Council you have the opportunity to participate in the social, academic and administrative decisions affecting your life as a student at Clark. For more information visit our website:

http://www.Clarku.edu/students/gsc
Conference Organizers: Tara Arthur, Justin Golub, Benoit Parmentier, Mahesh Ramachandran and Ingrid Sarmiento
Conference Booklet organized by: Justin Golub

*Printed on Recycled Paper with No Chlorine Bleaching used in the Recycling Process*