



## **ANTH701 Internship Proposal**

### **Developing an Intervention at a Community Clinic: How Latinas View their Gestational Diabetes Care and Treatment**

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**Abstract**

This goal of this 12-week internship is to contribute to improving the health of Latinas in the Washington, DC, metropolitan area by decreasing the prevalence of Gestational Diabetes Mellitus (GDM). Internship objectives include assessing the explanatory models of Latinas diagnosed with GDM who are patients at a community-based clinic in College Park, Maryland, and the staff at this clinic; developing and implementing a diabetes education awareness intervention; sharing knowledge with the clinic staff to provide culturally-relevant diabetes education to their patients; and writing and submitting a grant proposal for the community health clinic to receive funding for further diabetes education programs.

Nationwide, GDM occurs in five percent of Latinas (Fassett 2006). In 2003, 12 percent of Latinas living in Washington, DC, were diagnosed with GDM (McClure and Jerger 2005). Gestational diabetics are at increased risk for strokes and heart attacks, and their fetuses are at risk for developing life-threatening heart defects, growth problems, spina bifida, premature birth, and other defects. Research shows that Latinas who develop GDM are more likely to develop Type 2 diabetes mellitus in later life, as are their children (Carr, et al. 2006; Kim, et al. 2002).

Methods for data collection include reviewing patient charts, informal interviews with clinic staff, and participant observation, focus group discussions, and interviews with Latina prenatal patients while providing an overview of diabetes indicators and risk factors. These methods will help elicit Latina and staff explanatory models and will help develop useful strategies for and assess the cultural appropriateness of implementing an effective and sustainable diabetes education program.

GDM and Type 2 diabetes are preventable through regular exercise, maintaining a healthy weight, reducing carbohydrate intake, and monitoring blood sugar levels. Data collection, through interviewing of the Latina patients with GDM who currently receive care at the Pregnancy Aid Center in Greenbelt, Maryland, will aid in preparing a grant proposal so the Center can receive funding to implement a culturally appropriate diabetes education intervention for its Latina gestational diabetic patients.

## **I. Project Plan**

### *A. Project Overview*

The goal of this proposed internship is to contribute to improving Latina health through two objectives: learning how Latinas diagnosed with Gestational Diabetes Mellitus (GDM) view their condition and how that affects their health care and treatment, and developing a culturally relevant intervention that builds awareness about preventing GDM and Type 2 diabetes.

Although research on explanatory models and diabetes education interventions focus mainly on Mexicans and Mexican Americans, the Pregnancy Aid Center (PAC), a community-based clinic in College Park, Maryland, provides health services to Latinas of a variety of nationalities, including Salvadorans, Guatemalans, Mexicans, Bolivians, and Peruvians. Research gathered through participant observation, focus groups, and interviews during this internship will add to the anthropological and public health knowledge of diverse Latina populations in Prince George's County, Montgomery Country, and Washington, DC.

Engaging Latinas with GDM in a discussion of their explanatory models related to diabetes will help develop realistic and appropriate strategies for improving prenatal and postpartum Latina health, specifically decreasing Latinas' and their children's likelihood of developing Type 2 diabetes. Assessing the complexity of Latinas' explanatory models and determining whether or not these explanatory models can be condensed into one cultural consensus model is necessary in developing an effective diabetes education intervention. Collecting data on Latina and PAC staff explanatory models, as well as providing diabetes health education sessions, will aid in writing and submitting a grant proposal for PAC requesting funding to implement a culturally relevant diabetes education intervention as part of its prevention and treatment plan to reduce its significant number of Latina patients with GDM.

This internship will benefit the PAC director and staff, its Latina gestational diabetic patients, potential funders, and other community health clinics that have similar patient demographics. It will also increase anthropological knowledge of Latinas with GDM and diabetes education interventions.

## **II. Background**

### *A. Description of Who Diabetes Affects*

As of 2005, the Centers for Disease Control and Prevention estimates that 20.8 million Americans—seven percent of the U.S. population—have diabetes, up from 18.2 million in 2003. Nearly a third of these Americans are undiagnosed (Office of Minority Health 2005). Findings from the latest report show that nearly ten percent of Mexican Americans aged 20 and older have diabetes. Mexican Americans and Puerto Ricans, the largest Latino groups in the U.S., are nearly twice as likely to have diabetes than white Americans (Office of Minority Health 2005).

In 2001, diabetes was listed as the fifth leading cause of death among the U.S. Latino population (Anderson and Smith 2002). Within this population, diabetes is more prevalent in women than it is in men. Latinas with diabetes are nearly eight times more likely to develop peripheral vascular disease than non-diabetic women, and nearly four times more likely to be diagnosed with heart disease or a stroke (Office of Minority Health 2005).

Diabetes, including Type 2 and GDM, is more common in Latinas than in Whites (Office of Minority Health 2005). Nationwide, GDM occurs in four to seven percent of all prenatal women, which accounts for approximately 135,000 to 200,000 diagnosed cases each year. The prevalence rate of Latinas with GDM averages at five percent (Association 2007; Fassett 2006; Umar 2002). However, in 2003, 12 percent of Latinas living in the District of Columbia were diagnosed with GDM (McClure and Jerger 2005). Research does not indicate why the rate of GDM in the District is more than twice as high as the nationwide rate for Latinas, although studies show that Type 2 diabetes is associated with low socioeconomic status, obesity, inactivity, and stress (Reichenbach 2006; Schoenberg, et al. 2005).

Gestational diabetics are at risk for strokes and heart attacks, and their fetuses and newborns are at risk for developing life-threatening heart defects, fetal growth problems, spina bifida, premature birth, low birth weight, respiratory distress syndrome, among other serious health issues (Kieffer 2006; Umar 2002). In addition, research shows that 50 to 70 percent of Latinas with GDM may develop Type 2 diabetes within five to ten years after giving birth (Kjos, et al. 1995; Tucker 2003; Umar 2002). Children exposed to GDM are twice as likely to develop impaired glucose tolerance, or prediabetes, and Type 2 diabetes than children not exposed to

GDM (Carr, et al. 2006; Goran, et al. 2004; Kim, et al. 2002).

Risk factors for GDM, like Type 2 diabetes, include obesity, high carbohydrate intake, high blood pressure, high cholesterol levels, lack of physical activity, and family history of diabetes (Gallivan and Kelly 2004). Also, women at risk for GDM may have given birth to at least one baby weighing nine pounds or more. Research shows that GDM and Type 2 diabetes may be prevented through regular exercise, maintaining a healthy weight, reducing carbohydrate intake, and monitoring blood sugar levels (Rosal, et al. 2005).

### *B. Medical Anthropological Theory Meets Latina Diabetic Explanatory Models*

Medical anthropology focuses on eliciting the patients' and the health care providers' views of the illness. The following are a sample of paradigms and approaches medical anthropologists have developed and implemented.

#### **Explanatory Model**

Kleinman's framework (1978) is an approach that has proved successful in previous diabetes research (Schoenberg, et al. 2005) and comprises an explanatory model that recommends eliciting a patient's views about their illness, cause, and treatment so that a health care practitioner can treat a patient effectively within the patient's own cultural sphere. He developed eight questions to help elicit a patient's explanatory model.

1. *What do you call the problem?*
2. *What do you think has caused the problem?*
3. *Why do you think it started when it did?*
4. *What do you think the sickness does?*
5. *How severe is the sickness? Will it have a short or long course?*
6. *What kind of treatment do you think you/patient should receive? What are the most important results you hope to receive from this treatment?*
7. *What are the chief problems the sickness has caused?*
8. *What do you fear most about the sickness?*

### **Cultural Broker Approach**

Van Willigen describes culturally competent health care professionals as having an “increased understanding and appreciation of cultural differences and the capacity to provide culturally appropriate services” (2003:129). Cultural competency and cultural brokerage are inextricably linked: “Cultural brokerage focuses on role,” he explains, and “cultural competence focuses on knowledge and practice” (2003:129).

Weidman (1976) defines the cultural broker approach in health care and argues that health care practitioners need to adopt a “transcultural perspective in developing strategies to close the gaps between needs and resources. In doing so, they will need to function much more as *culture brokers* than as bicultural citizens” (1976:3).

### **Collaborative Approach**

Van Willigen defines the collaborative approach as an “involved-in-the-action process” (2003:102). Schensul and Schensul explain that this approach comprises “researchers, program developers, and community members [who] are networked to do research for joint problem solving and positive social change” (Van Willigen 2003:101). An anthropologist’s work needs to provide research or data to the population under study. This information will contribute to the community’s development and improve community life. The collaborative approach emphasizes an extended time period to develop effective collaboration since so many parties are involved and since a certain level of trust needs to be built. It is vital for the anthropologist to show true commitment to the project from start to finish (Van Willigen 2003:102-103). Poland (1985) echoes Schensul and Schensul in that “collaborative agreements [with health care practitioners] must be discussed in advance.” She cautions that “physicians, like other professionals, tend to be territorial. Care must be taken not to usurp their territorial rights while maintaining one own’s autonomy. [But] collaboration can be very fruitful, in addition to giving the anthropologist both a powerful ally and access to funding agencies” (1985:63).

### **Community Partnership Research Approach**

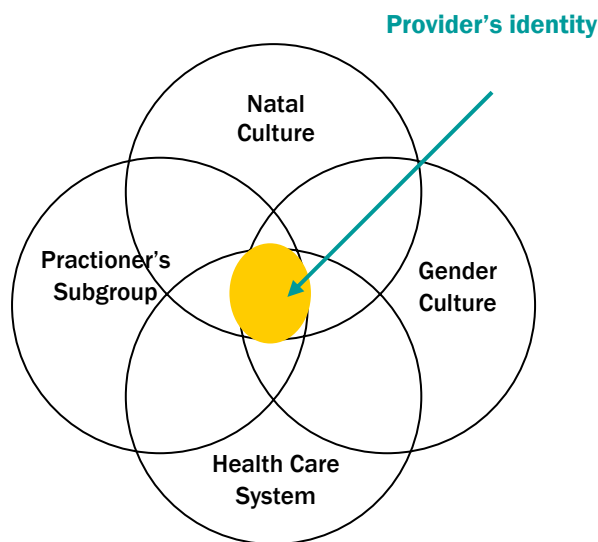
In developing a community-based intervention, Chrisman’s Community Partnership Research Approach (2005) proves a helpful framework. Although certain elements correlate with

the popular public health PRECEDE/PROCEED model, the Community Partnership Research Approach is a cyclical process rather than a linear one. This approach describes a five-step process that is constantly negotiated and cycles through a health, stakeholder, and resources assessment; a joint effort involving the community planning and prioritizing the intervention; implementing the intervention using community experts; ensuring sustainability through community experts and outreach for new participants; and evaluating and providing feedback to the community through developing an understandable analysis and integrating the evaluation with the assessment data.

### Culturally-based Systems Approach

Kawaga-Singer and Kassim-Lakha (2003) envision a paradigm shift from “culture as absent in health care” to a culturally-based systems approach. They illustrate this approach using the diagram shown below as Figure 1. The health care provider integrates his or her own culture, the patient and family culture, and the health care institution’s culture so that the provider is able to evaluate behavior relative to its cultural context, and so that the provider, patient, and patient’s family are able to reach mutually desired goals of medical care.

**Figure 1. Sources of Individual Provider’s Beliefs and Values (Kagawa-Singer and Kassim-Lakha 2003)**



Note: I modified this diagram slightly to broaden its applicability beyond physicians.

Kagawa-Singer and Kassim-Lakha (2003), like Freidenberg (2005), observe that when health care providers practice culturally competent health care, successful outcomes include patients and families having the ability “to promote, maintain, and/or regain mutually desired and obtainable levels of health within the realities of their life circumstances” (2003:580). Culturally competent health care “requires skilled clinicians who are sophisticated, aware, and skilled in culturally-based communication strategies,” as well as health care “agencies that are prepared to support their staffs in resolving such issues personally, professionally, and legally” (2003:584).

The approaches and paradigms described above, among other more medical anthropological theories, will be useful in collecting and analyzing the internship data and writing the grant proposal. I plan on tackling this vast literature through the next semesters.

### **Research on Mexican American Women’s Explanatory Models of Diabetes**

With the exception of three studies (Arcury, et al. 2004; Mauldon, et al. 2006; Weller, et al. 1999), public health experts and medical anthropologists have focused their research on Mexican and Mexican American explanatory models (Brown, et al. 2002; Brown and Hanis 1999; Daniulaityte 2004; de Alba Garcia, et al. 2007; Finch, et al. 2001; Hunt, et al. 1998; Kieffer, et al. 2002; Poss and Jezewski 2002; Schoenberg, et al. 2005; Valenzuela, et al. 2003), which may or may not be applied as a cultural consensus model for Latinas from diverse cultures in Central and South America who live in the Washington, DC, metropolitan area and make up the majority of PAC patients.

Several factors play a role in Latinas’ health beliefs and behaviors, including personal, family, and community beliefs. Mexican and Mexican American women perceive that heredity, diet, exercise, and strong emotions [*susto* (scare or fright) and *coraje* (anger or rage)] play a role in diabetes (Arcury, et al. 2004; Daniulaityte 2004; de Alba Garcia, et al. 2007; Hunt, et al. 1998; Keiffer 2002; Schoenberg, et al. 2005). Kieffer et al. (2002) found that Mexican American women mentioned specific dietary practices, such as frequently eating sweet foods and fats and drinking sweet beverages as an integral part of their culture.

Attitudes about physical activity and its relationship to health and disease may influence Latinas’ participation in physical activity (Janz, et al. 2002). Kieffer et al. (2002) observed that

some Mexican American women do not believe a relationship exists between physical activity and the risk of diabetes; instead they believe dietary factors to be the primary cause. Other studies show that Latinas believe inactivity to be a cultural phenomenon that increases diabetes risk (Arcury, et al. 2004; Daniulaityte 2004; de Alba Garcia, et al. 2007; Hunt, et al. 1998; Janz, et al. 2002; Keiffer 2002; Kieffer, et al. 2002; Schoenberg, et al. 2005).

### *C. Applied Anthropology and Public Health Work*

#### **Community Level**

Research shows that active participation by community members—including patients, community health clinic providers, and health educators—in planning, designing, implementing, and evaluating a culturally-relevant intervention to build awareness about preventing GDM and Type 2 diabetes is integral to its success (Chrisman 2005; Doyle and Ward 2001; van Willigen 2003). To provide a successful outreach program, community health clinic staff, including medical directors, physicians and mid-level providers, need to work with community leaders and members, including patients, to recommend culturally-based diet and lifestyle changes (Valenzuela, et al. 2003).

In addition to community members collaborating together, the physical locale of the community is integral to a successful intervention. Community safety helps make regular physical activity possible. Latinas, in discussing with Kieffer et al. (2002) aspects of the community that would help motivate them to increase their physical activity levels, described neighborhoods where women felt free to walk, even at night, and where there were places for children to play. Community center-based group activities also help motivate intervention participants and provide social support for physical activity while addressing safety and other environmental concerns.

#### **Family Level**

Research shows that successful interventions for Latina/os provide diabetes education to the entire family and address prevention and treatment (Teufel-Shone, et al. 2005). Studies focusing on Puerto Rican and Mexican immigrants in the U.S. and Mexicans and Guatemalans in

their native countries describe family support as a key variable in ensuring compliance with dietary and other aspects of diabetes management (Mauldon, et al. 2006; Weller, et al. 1999).

By targeting the family social behaviors to change health behaviors, a successful intervention's objectives should include teaching family members how to improve nutrient intake, activity levels, and diabetes management/prevention for all family members (Teufel-Shone, et al. 2005). Mexicans in Guadalajara with good glycemic control, i.e. a hemoglobin (Hb) A1c level between four and seven percent, are reportedly more likely to have family support than Mexicans with bad glycemic control, or an HbA1c level above seven percent (de Alba Garcia, et al. 2007).

Implemented along the U.S.-Mexican border in southern Arizona, the intervention *La Diabetes y La Unión Familiar* focused on enhancing family members' social support of diabetic patients and increasing these family members' range of primary prevention behaviors. Using local lay health outreach workers, or *promotoras*, the program reached 72 patients and 177 family members, including children and grandchildren. Broadening Social Cognitive Theory (Bandura 2001) from individual to family, the intervention included teaching team building and communication skills to build and reinforce family communication and collective esteem and efficacy (Teufel-Shone, et al. 2005).

## **Individual Level**

Latinas' beliefs about physical activity and diabetes risk factors are an aspect of health belief and behavior that needs addressing in order to develop and implement a successful diabetes education intervention. Engaging Latinas who are at risk of developing or have GDM in a discussion of their diabetes-related health beliefs and behaviors can help in developing realistic and appropriate strategies for improving pregnant and postpartum Latinas' health. Discussions may include their perceptions of diabetes risk and impact; their nutrition and physical activity-related beliefs, attitudes, and practices; and factors influencing their nutritional meal intake and participation in physical activity during and after pregnancy (Kieffer, et al. 2002).

Conducted in Guadalajara, Mexico, de Alba Garcia et al. (2007) found that diabetics with an HbA1c level between four and seven percent continue to eat traditional food, such as corn tortillas, but have modified their behavior to eat these traditional foods in lesser quantities. Instead of eating three meals daily, they eat two meals a day and snack on fruits, they drink low-

calorie beverages like unsweetened tea and coffee, and they do not consume food prepared with a high degree of saturated fats. In addition, they have integrated exercise into their lives.

Studies provide several recommendations from Latinas in developing a diabetes health education program. These Latinas have recommended that an intervention addressing barriers such as communication (increasing English literacy), transportation (learning how to drive), nutrition (learning how to select and prepare healthy meals), and exercising safely (dance lessons for pre-natal women) would provide opportunities for women to expand their social networks (Kieffer, et al. 2002; Mauldon, et al. 2006).

In an intervention targeted at low literacy level Latino immigrants, researchers and participants developed soap operas, or *telenovelas*, to convey key diabetes-related messages. In addition, the participants helped create posters depicting food color-coded by category using graphic symbols based on traffic lights. Foods shown in the red category were high calorie, laden with carbohydrates and saturated fats (Rosal, et al. 2005).

### **III. Project Methodology**

#### *A. Internship Study Site*

This internship focuses on the Latina community in Prince George's and Montgomery Counties and the District of Columbia who access the Pregnancy Aid Centers in College Park, Maryland.

According to the latest demographics (from 2005), of the nearly 320,000 of documented Latinos who live in the state of Maryland (5.7 percent of Maryland's population), nearly 100,000 (32 percent) live in Prince George's County (2007c) and approximately 126,000 (39 percent) live in Montgomery County (2007b), comprising over 71 percent of the Latinos living in Maryland. Over 47,430 documented Latinos reside in the District of Columbia (2007a); Latinos comprise 8.6 percent of the District's population. The majority of Latino residents immigrated from El Salvador, Mexico, Guatemala, Peru, and Bolivia (Schifferes 2003). The 2005 census data does not account for the thousands of undocumented Latin American immigrants who reside or use health services in the District and the two bordering Maryland counties.

Established in 1974, Pregnancy Aid Centers (PAC) is located in College Park, Maryland, and caters to low-income adolescents and women who live in Prince George's and Montgomery

Counties and the District. With funding from federal and private agencies, PAC provides women's reproductive and sexual health care and treatment, from pre- and post-family planning to breast and cervical cancer screenings to sexually transmitted disease and HIV testing. PAC also provides social services, such as adoption assistance and emergency food for mothers and their newborns (Centers 2006; Jelacic 2006).

As part of the qualitative methods course I took in Fall 2006, on the suggestion of my advisor Dr. Judith Freidenberg, I conducted participant observation at the PAC and informally interviewed its director and founder, Mary Jelacic. Having established a relationship with Ms. Jelacic and having spent hours observing the patients, staff, and clinic layout, I feel that PAC provides a wonderful opportunity for me to establish rapport with its Latina patients.

### *B. Study Population*

More than 800 patients access PAC's services yearly, ranging in age from 12 to 42 years, with the majority from 15 to 25 years old. Half of PAC's patients have immigrated from Central and South America, and most reside in low income neighborhoods in Prince George's County, Montgomery County, and the District of Columbia (Centers 2006).

Of its current prenatal patients, PAC has approximately 100 with GDM, and about 90 percent of these patients are Latinas. Given the time constraints, it will not be possible to interview all 90 of the patients, so in order to get a sample population, I will randomly select 20 patient charts (20 percent) of prenatal Latinas who are at risk for developing or who have been diagnosed with impaired glucose tolerance (prediabetes) or GDM.

My initial reason for working with Latina diabetic patients is personal. My best friend, a Chicana from California, was diagnosed with Type 2 diabetes in 2004. On paper, her diagnosis should not have been surprising given her food choices, lack of physical activity, stressful graveyard shift work schedule, and family history of diabetes, but as she confided, she really did not think that she would ever get diabetes. A year later, I met my sister-in-law's new Cuban American boyfriend, and he had been diagnosed with Type 1 diabetes at a young age and then diagnosed with Type 2 diabetes as an adult. He also said that despite his lifestyle he thought he was not susceptible to Type 2 diabetes. Their statements really hit home that even two highly intelligent adults who are aware about diabetes and its indicators would still be surprised at their

diagnosis. Observing them constantly thinking about and negotiating their food choices and debating whether or not they need to check their glucose levels or take their insulin at certain times each day makes me consider how many other people are impacted in the same way.

Living in the Washington, DC, area for the past seven years, I have observed the number of Latinos residing in the area and feel this is an excellent opportunity to work with Latinas in providing education about diabetes and, hopefully, helping to them avoid having to live with the same daily, if not hourly, health concerns as my friends.

### *C. Data Collection*

This internship's data collection methods will comprise the following activities:

- 1. Review patient charts.** Throughout the first two weeks of this internship, I will review PAC's patient medical records to determine the exact number of current Latina patients who have risk factors for, or have been diagnosed with, GDM. Out of the charts of patients with risk factors or GDM, I will randomly sample 20 charts (approximately 20 percent) to elicit a model to work from. This model could include patients who have GDM are between a certain age range, or patients with GDM who have borne two children or more, or patients with GDM immigrated from a specific region of Latin America.
- 2. Interview staff to elicit their explanatory models.** Concurrently during the first two weeks, I will conduct one-on-one interviews with the PAC staff, including the director, midwife, and physician, to introduce the intervention and assess their own explanatory model of GDM. Providers are the ones to diagnose and treat the patients and have a direct impact on building the patients' awareness of diabetes. As indicated in the medical anthropology paradigms described above, eliciting the providers' explanatory models will provide a wealth of data on diabetes care and treatment.
- 3. Build awareness about GDM.** Latina patients with GDM have a standing appointment at PAC on Friday after prenatal care, which provides an excellent opportunity to provide an overview of GDM, including its indicators and effects, while the patients sit in the waiting

room. (This wait can be up to two to three hours, based on personal observation.) In addition, the Friday afternoon appointment time will provide the occasion to elicit information in informal group discussions about their views on gestational diabetes prevention, care, and treatment. The PAC director has identified a bilingual staff member as wanting to become a lay health outreach worker, or *promotora*, and she will be available to translate the discussions.

During these sessions throughout the internship process, I will observe the patients and try to establish a rapport with at least ten Latina patients (ten percent), in order to informally interview these patients to elicit their diabetes explanatory models. If a patient needs transportation for her mandatory three-hour glucose screening, I will offer to drive the patient to the offsite lab. This will provide more opportunities to establish a rapport with and interview patients.

Structured interviews will take place either on- or off-site with five to ten Latina diabetic patients (five to ten percent). (I chose this range of numbers in light of time constraints and feasibility of establishing enough rapport for the patients to feel comfortable talking with me.) The content of the formal interviews will be based on the themes presented in the informal interviews and group discussions. These formal interviews will be about two hours in length and will be digitally recorded.

In addition, using my graphic design skills, I will create announcements, flyers, and other creative diabetes educational materials in Spanish and English based on materials developed by the National Diabetes Education Program and American Diabetes Association, to be posted in the PAC waiting and exam rooms.

4. **Analyze interview data.** During weeks 3 and 4, I will transcribe the staff interviews and group discussions, and analyze and code the text for themes using ATLAS.ti.
5. **Develop intervention.** Throughout week 5, I will work with the bilingual staff member the PAC director has identified as wanting to become a lay health outreach worker, or *promotora*, and will conduct focus groups with the Latina patients with GDM to test the appropriateness and appeal of specific features of interventions described above and from instruction materials and programs from the Maryland Cooperative Extension (MCE)

Expanded Food Nutrition Education Program (2007), as well as the National Diabetes Education Program's *Prevenamos la diabetes tipo 2: Paso a Paso* (2007a) and *Si Tiene Diabetes, Cuide Su Corazón* (2007b). Throughout the duration of the internship, I will attend as many diabetes education workshops in the Washington, DC, area as possible, to gain more knowledge and collect training materials and informational brochures. I will provide a training session with the *promotora* to share the materials and build her awareness of diabetes. Training the *promotora* will help to ensure the program's sustainability after my internship ends.

6. **Provide education sessions.** On Friday afternoons from weeks 6 through 12 at the PAC, the *promotora* and I will provide one- to two-hour diabetes education workshops, including nutrition and exercise sessions, for the PAC gestational diabetic patients and any friends or family members who transported them. To avoid potential barriers with childcare, all children, including infants, are welcome to attend. Considering that the PAC waiting room allows only 10 to 20 people, these workshops may be better conducted in the PAC backyard, weather permitting. The workshop materials and curriculum will be based on analysis of focus group discussions and interviews with the Latina patients.
7. **Monitoring and evaluation.** The *promotora* and I will distribute questionnaires before and after the diabetes education sessions to assess and evaluate the participants' knowledge levels. I will conduct informal interviews with fellow participants to learn about the participants' opinions of the programs and their progress. Data collected and analyzed will be used to write the grant proposal requesting funding for a culturally appropriate intervention and will help provide understanding on how the participants have and will utilize the skills taught during the intervention.

I will also do as much participant-observation as possible during the sessions that I am not leading. Although at the present time I do not have the funds for a digital video camera, it would be an interesting aspect of this internship to record sessions and participant discussions.

I will review patient charts, follow up with PAC staff, and contact patients who attended the intervention workshops one month and three months after they have given birth to follow

up on their health and whether or not they have adapted any of the skills learned during the intervention presently and if they have any indicators of diabetes such as lack of nutritional eating habits and physical activity, as well as HbA1C and BMI levels.

In regards to the internship overall, I plan on meeting with my supervisor, the PAC director, weekly to discuss the week's activities and review past activities. I will share a weekly schedule with the director and my advisor updating milestones as I accomplish them. For my own personal records, I will maintain a daily journal.

- 8. Prepare grant proposal.** During weeks 10 to 12, I will discuss the interview and group discussion analysis results with the PAC director and work with her in prioritizing PAC needs, which will assist in identifying potential funders and drafting a grant proposal. I will also work with my advisor and the PAC director in writing and submitting a proposal to one or more funding agencies requesting a grant for a gestational diabetes education intervention.
  
- 9. Present final analysis.** During week 12, I will write an end-of-internship report for my advisor, Dr. Judith Freidenberg, and I will present the preliminary internship analysis to the PAC staff during a brown bag lunch. In May 2008, I will present my internship results at the University of Maryland Department of Anthropology graduate colloquium. It is my hope and expectation that I will present my results at a national anthropological and/or community health conference, and I will also write analysis in article format and submit to anthropology and public health journals for publication in Spring 2008.

Pending approval, this internship is ready to proceed. Ideally, the internship will follow the schedule outlined below. You will note that from weeks 1 to 3, I am only available to work 20 hours per week, as I have a contract with my current employer to work 20 hours a week through May 30. After May 30, I will be available to the PAC for 40 hours per week. See Figure 2 for the internship timeline.

**Figure 2. Internship Timeline**

Week	Activity
Throughout internship period	<ul style="list-style-type: none"> <li>• Participant observation of focus group discussions</li> <li>• Provide transportation to offsite laboratory for patients' glucose screening</li> <li>• Attend offsite diabetes education workshops</li> </ul>
Week 1: May 14–18	<ul style="list-style-type: none"> <li>• Review patient charts and randomly select 20 patients to interview</li> <li>• Start interviewing staff and patients</li> </ul>
Week 2: May 21–25	<ul style="list-style-type: none"> <li>• Continue interviewing staff and patients</li> </ul>
Week 3: May 28 – June 1	<ul style="list-style-type: none"> <li>• Analyze interviews</li> </ul>
Week 4: June 4–8	<ul style="list-style-type: none"> <li>• Continue analyzing interviews</li> </ul>
Week 5: June 11–15	<ul style="list-style-type: none"> <li>• Collaborate on training materials with Health Action Team</li> <li>• Develop and post flyers announcing Friday afternoon diabetes education discussions</li> </ul>
Week 6: June 18–22	<ul style="list-style-type: none"> <li>• Start Friday afternoon diabetes education sessions</li> </ul>
Week 7: June 25–29	<ul style="list-style-type: none"> <li>• Continue Friday afternoon diabetes education sessions</li> </ul>
Week 8: July 2–6	<ul style="list-style-type: none"> <li>• Continue Friday afternoon diabetes education sessions</li> </ul>
Week 9: July 9–13	<ul style="list-style-type: none"> <li>• Continue Friday afternoon diabetes education sessions</li> </ul>
Week 10: July 16–20	<ul style="list-style-type: none"> <li>• Begin discussions with PAC director to identify potential funders</li> <li>• Continue Friday afternoon diabetes education sessions</li> </ul>
Week 11: July 23–27	<ul style="list-style-type: none"> <li>• Start developing grant proposal</li> <li>• Continue Friday afternoon diabetes education sessions</li> </ul>
Week 12: July 30 – Aug. 3	<ul style="list-style-type: none"> <li>• Present preliminary internship analysis to PAC staff at brown bag lunch</li> <li>• Write and submit grant proposal (depending on proposal deadlines)</li> <li>• Write end-of-internship report for Dr. Freidenberg</li> <li>• Continue Friday afternoon diabetes education sessions</li> </ul>
Fall 2007	<ul style="list-style-type: none"> <li>• Analyze internship data</li> <li>• Evaluate patients via charts and staff and patient interviews</li> <li>• Write and disseminate end-of-internship report for PAC director</li> <li>• Continue to submit grant proposals</li> </ul>
Spring 2008	<ul style="list-style-type: none"> <li>• Continue to analyze internship data</li> <li>• Present final analysis at UM Dept. of Anthropology graduate colloquium</li> <li>• Present at national anthropological and/or community health conference</li> <li>• Submit article for publication in anthropology or community health publication</li> </ul>

*D. Ethical Considerations*

Ethical considerations may include a potential conflict of interest involving my own status as a U.S. citizen and interviewing possible undocumented immigrants. However, a subject's immigration status is not of importance to this study, and if an undocumented immigrant status is divulged during an interview, then this information will not be included in the data collection.

Through patients' medical records, I will have access to confidential health information, as determined by Health Insurance Portability and Accountability Act (HIPAA) regulations.

However, unless the subject signs a consent form (Appendix D), I will only use pseudonyms and not include any personally identifying information, such as birth dates and addresses.

#### **IV. Internship Products**

In addition to interviewing Latina patients with GDM and developing the intervention, the internship will produce the following:

1. A grant proposal requesting funding for this diabetes education intervention at the Pregnancy Aid Centers;
2. End-of-internship report that will be distributed to the director of the Pregnancy Aid Centers;
3. Post-internship analysis for internship review committee chair and advisor Dr. Judith Freidenberg;
4. Brown bag lunch presentation for the Pregnancy Aid Centers staff to build awareness of the issues and complexities surrounding Latinas with GDM;
5. Presentation at the Department of Anthropology graduate colloquium;
6. Presentation at a national conference, such as the Society for Applied Anthropology (SfAA) or the American Public Health Association (APHA); and
7. Article for publication in professional anthropology, community health, or diabetes journal.

#### **VI. Source of Funds**

The Pregnancy Aid Centers does not have the budget to fund this internship. In order to pay daily expenses, bills, etc. over the course of the internship, I have estimated that I will need to earn nearly \$5,200 for the period of June to August 2007. See Appendix A for the itemized budget. I will search for any potential grants that may provide funding for this project.

## Appendix A. Budget

	JUN	JUL	AUG	TOTALS
<b>Income Categories</b>				
Take Home Pay				0.00
Gifts Received			100.00	100.00
Refunds/Reimbursements				0.00
Savings Withdrawal				0.00
eBay sales	20.00	20.00	20.00	60.00
Amazon.com sales	10.00	10.00	10.00	30.00
Other Income				0.00
<b>TOTAL INCOME</b>	<b>30.00</b>	<b>30.00</b>	<b>130.00</b>	<b>190.00</b>
<b>Deductible Expenses</b>				
<b>Business Expenses</b>				
Unreimbursed				0.00
Office At Home	15.00	15.00	15.00	45.00
<b>Health</b>				
Medical Insurance	30.00	30.00	30.00	90.00
Medicine/Drug	15.00	15.00	15.00	45.00
Doctor/Dentist/Optometrlist				0.00
<b>Total Deductible Expenses</b>	<b>60.00</b>	<b>60.00</b>	<b>60.00</b>	<b>180.00</b>
<b>Non-Deductible Expenses</b>				
<b>Auto/Transportation</b>				
Fuel	30.00	30.00	30.00	90.00
Service				0.00
Transportation	10.00	10.00	10.00	30.00
Other				0.00
<b>Clothing</b>				
Clothes / Shoes	20.00	20.00	20.00	60.00
Laundry / Dry Cleaning	20.00	20.00	20.00	60.00
<b>Daily Living</b>				
Dining / Eating Out	50.00	50.00	50.00	150.00
Groceries	100.00	100.00	100.00	300.00
Personal Supplies	20.00	20.00	20.00	60.00
<b>Education</b>				
Tuition	4,308.00	1,842.00		6,150.00
Books	300.00	300.00		600.00
<b>Entertainment</b>				
CD/DVD				0.00
Books/Magazine	15.00	15.00	15.00	45.00
Movie Rental	7.50	7.50	7.50	22.50
Other Entertainment				0.00
Gifts Given			100.00	100.00
<b>Loan Payments</b>				
Credit Card Payments	50.00	50.00	50.00	150.00
Educational Loan	250.00	250.00	250.00	750.00
<b>Wedding</b>				
Dress & Alterations	800.00		300.00	1,100.00
Invitations & Postage			300.00	300.00
Other Wedding			500.00	500.00
<b>Non-deductible Expense</b>				
Rent Expense	655.00	655.00	655.00	1,965.00
<b>Savings</b>				
Emergency Fund				0.00
Transfer To Savings				0.00
Investments				0.00
Other Savings Expense				0.00
<b>Utilities</b>				
Electricity	50.00	50.00	50.00	150.00
Cell phone	30.00	30.00	30.00	90.00
Water/Sewer	5.00	5.00	5.00	15.00
Vacation/Travel			500.00	500.00
<b>Total Non-Deductible Expenses</b>	<b>6,720.50</b>	<b>3,454.50</b>	<b>3,012.50</b>	<b>13,187.50</b>
<b>TOTAL EXPENSES</b>	<b>6,780.50</b>	<b>3,514.50</b>	<b>3,072.50</b>	<b>13,367.50</b>

## Appendix B. Institutional Review Board Application

### UNIVERSITY OF MARYLAND, COLLEGE PARK Institutional Review Board Initial Application for Research Involving Human Subjects

Name of Principal Investigator (PI) or Project Faculty Advisor Judith Freidenberg Tel. No. 301-405-1420  
(NOT a student or fellow; must be UMD employee)

Name of Co-Investigator (Co-PI) \_\_\_\_\_ Tel. No. \_\_\_\_\_  
Department or Unit Administering the Project Anthropology  
E-Mail Address of jfreiden@anth.umd.edu E-Mail Address of \_\_\_\_\_

Where should the IRB send the approval letter? 1111 Woods Hall  
Department of Anthropology

Name of Student Investigator Jackie Donaldson Tel. 240-505-8104  
E-Mail Address of Student Investigator jdonaldson@anth.umd.edu

Check here if this is a student master's thesis  or a dissertation research project   
Project Duration (mo/yr – mo/yr) 06/07 -- 08/07

Project Title How Latinas View Their Gestational Diabetic Care and Treatment

Sponsored Project Data	Funding Agency <u>Pregnancy Aid Center</u>	<b>ORAA Proposal</b>
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*(PLEASE NOTE: Failure to include data above may result in delay of processing sponsored research award at ORAA.)*

**Vulnerable Populations:** The proposed research will involve the following (Check all that apply): pregnant women , human fetuses , neonates , minors/children , prisoners , students , individuals with mental disabilities , individuals with physical disabilities

**Exempt or Nonexempt (Optional):** You may recommend your research for exemption or nonexemption by completing the appropriate box below. For exempt recommendation, list the numbers for the exempt category(s)

Exempt---List Exemption Category \_\_\_\_\_ Or  Non-Exempt

**If exempt, briefly describe the reason(s) for exemption. Your notation is a suggestion to the IRB Manager and IRB Co-Chairs.**

**Date** \_\_\_\_\_ **Signature of Principal Investigator or Faculty Advisor** *(PLEASE NOTE: Person signing above accepts responsibility for the research even when data collection is performed by other)*

**Date** \_\_\_\_\_ **Signature of Co-Principal Investigator**

**Date** \_\_\_\_\_ **Signature of Student Investigator**

**Date** \_\_\_\_\_ **REQUIRED Departmental Signature**  
Name \_\_\_\_\_, Title \_\_\_\_\_  
*(Please also print name of person signing above)*

**I. Abstract**

The purpose of this research is to improve Latina health by learning how Latinas view their gestational diabetic care and treatment. With this knowledge, a culturally relevant intervention could be developed and implemented that provides education about preventing diabetes.

Nationwide, Gestational Diabetes Mellitus (GDM) occurs in five percent of Latinas (Fassett 2006). In 2003, 12 percent of Latinas living in Washington, DC were diagnosed with GDM (McClure and Jerger 2005). Gestational diabetics are at risk for strokes and heart attacks, and their fetuses are at risk for developing life-threatening heart defects, fetal growth problems, spina bifida, premature birth, among other life threatening defects. Research shows that Latinas who develop GDM are more likely to develop Type 2 diabetes mellitus in later life, as are their children (Carr, et al. 2006; Kim, et al. 2002).

GDM and Type 2 diabetes are preventable diseases through regular exercise, maintaining a healthy weight, reducing carbohydrate intake, and monitoring blood sugar levels. Data collection, through interviewing of the Latina gestational diabetic patients who currently receive care at the Pregnancy Aid Center in Greenbelt, Maryland, will aid in preparing a grant proposal so the Center can receive funding to implement a diabetes education intervention for its Latina gestational diabetic patients.

**II. Subject Selection***A. Subjects and Recruitment*

Subject will comprise Latinas who have been diagnosed with gestational diabetes and are currently under the care and treatment of the Pregnancy Aid Center in Greenbelt, Maryland. The Pregnancy Aid Center health providers will mark each gestational diabetic patient's chart to distinguish between diabetic and non-diabetic patients.

*B. The Subjects' Special Characteristics (e.g., age, sex, race, ethnic origin, religion, or any social or economic qualifications)*

The subjects will be Latinas, including native born Latin Americans or second generation American-born Latinas who are low income and uninsured. They will be pregnant, diagnosed with gestational diabetes at 24 weeks, and patients of the Pregnancy Aid Center in Greenbelt, Maryland.

*C. Selection Reasoning*

Latinas diagnosed with GDM are at high risk for developing Type 2 diabetes, among other life threatening complications, as discussed above. With the high prevalence rate of Latinas with GDM in the Washington, DC area, this group may benefit from this study the most if the Pregnancy Aid Center receives funding for a culturally relevant diabetes education intervention.

*D. Number of Subjects*

Under this study, I will recruit 20 subjects with GDM who regularly visit the Pregnancy Aid Center for prenatal care.

**III. Procedures**

Initially, I will read the charts of the Latina patients who have been diagnosed with GDM. These records are not publicly available and are subject to HIPAA regulations. After familiarizing myself with their medical history and recommended treatment for GDM, I will interview the subjects for approximately two hours during their visits to the Pregnancy Aid Center for prenatal care. At the beginning of each interview, I will discuss the latest research on GDM to familiarize the subject with GDM and its significant role in the subject's current and future health status and the subject's fetus's growth and development.

**IV. Risks and Benefits**

Risks to the subjects may include revelations that they are undocumented immigrants. The interviews may bring up matters that are uncomfortable for the patient regarding their diabetes care and treatment. They may not be willing to discuss their family history of diabetes, or they may fear stigma associated with diabetes.

However, these risks may be minimized through discussion of the latest GDM research that I will present before the interview. Benefits to the subjects include being able to discuss their feelings, fears, and anxieties about GDM in a safe, confidential environment.

Also, if the results of this study are successful in obtaining funding for the Pregnancy Aid Center to provide diabetes education to its patients, then the subjects and their fetuses may decrease their chances for developing complications while pregnant or Type 2 diabetes at a later date.

**V. Confidentiality**

I will record each formal interview using an MP3 recorder. While transcribing the interviews, I will use pseudonyms for each patient interviewed. All recordings and transcriptions will be stored on my personal laptop to which I have sole access. This password-protected laptop is stored in my home office at 1537 East West Hwy, Apt 201 in Silver Spring, MD. I will return all the data collected to the Pregnancy Aid Center, which abides HIPAA regulations.

**VI. Information and Consent Forms**

I will obtain consent from the subjects using a consent form, which will be provided in English and Spanish. See attached for the forms in each language.

**VII. Conflict of Interest**

A potential conflict of interest may involve my own status of a U.S. citizen and interviewing possible undocumented immigrants. However, a subject's immigration status is not of importance to this study, and if an undocumented immigrant status is divulged during an interview, then this information will not be included in the data collection.

**VIII. HIPAA Compliance**

I will use HIPAA protected health information and have read the information provided on the UMD IRB Website.

**IX. Research Outside of the United States**

Not Applicable.

**X. Research Involving Prisoners**

Not Applicable.

**XI. References**

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2006 Type 2 Diabetes Risk After Gestational Diabetes. *In* Small Steps, Big Rewards: Prevent type 2 diabetes. Bethesda, MD: U.S. Department of Health and Human Services' National Diabetes Education Program.

Kim, Catherine, Katherine M. Newton, and Robert H. Knopp  
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## Appendix C. Participant Informed Consent Forms

<p><b>Identification of Project/Title</b></p>	<p><b>How Latinas View Their Gestational Diabetes Care and Treatment</b></p>
<p><b>Statement of Age of Subject (Please note: Parental consent always needed for minors.)</b></p>	<p><i>I, the participant, state that I am over 18 years of age, and agree to participate in a program of research by Dr. Judith Freidenberg in the Department of Anthropology at the University of Maryland, College Park.</i></p>
<p><b>Purpose</b></p>	<p><i>The purpose of this research is to investigate how Latinas with gestational diabetes manage their health care and treatment.</i></p>
<p><b>Procedures</b></p>	<p><i>The procedures involve one- to two-hour interviews, which will be tape recorded. These interviews will involve questions and conversations about how you take care of yourself and how you view this health care facility.</i></p>
<p><b>Confidentiality</b></p>	<p><i>All information collected in this study is confidential, and any digital recording of this interview will be kept and accessed only by the investigator. The digital recordings will be destroyed by May 30, 2008.</i></p> <p><i>I understand that I will not be identified by name, or by other indicators of identity, unless I agree to have my name used, as indicated by my initials below.</i></p> <p><i>I agree and prefer to have my name used in investigator reports where I am cited or quoted.</i></p> <p style="text-align: right;"><i>Initials _____ Date _____</i></p>
<p><b>Risks</b></p>	<p><i>I understand there are no foreseeable risks associated with these interviews.</i></p>
<p><b>Benefits, Freedom to Withdraw, and Ability to Ask Questions</b></p>	<p><i>The research is designed to help the investigator learn more about Latinas and gestational diabetes care and treatment. I understand I am free to ask questions or withdraw from participation at any time and without penalty.</i></p>
<p><b>Contact Information:</b></p> <p><b>Contact Information of Investigator</b></p> <p><b>Contact Information of Institutional Review Board</b></p>	<p><i>Principal Investigator: Judith Freidenberg Phone (301) 405-1420, email <a href="mailto:jfreiden@anth.umd.edu">jfreiden@anth.umd.edu</a></i></p> <p><i>If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) <a href="mailto:irb@deans.umd.edu">irb@deans.umd.edu</a>; (telephone) 301-405-0678</i></p>

**Participant's Name,  
Signature**

NAME OF PARTICIPANT \_\_\_\_\_

**Contact Information and Date**

Signature of Participant \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

Date \_\_\_\_\_

**Titulo del Proyecto**

**How Latinas View Their Gestational Diabetes Care and Treatment**

**Declaración del edad del sujeto  
(Se necesita consentimiento de padres de menores.)**

*Yo, el/la participante, confirmo que soy mayor de 18 años, y he aceptado a participar en esta investigación, conducida por Dr. Judith Freidenberg en el Departamento de Antropología en la Universidad de Maryland, College Park.*

**Propósito**

*El propósito de esta entrevista es investigar cómo Latinas con diabetes de la gestación maneja su cuidado de la salud y su tratamiento.*

**Procedimiento**

*El estudio requiere entrevistas personales con una duración de aproximadamente de una a dos horas, que serán grabadas. Estas entrevistas contienen preguntas acerca cómo usted se cuida y que opinión esta tiene sobre esta clínica.*

**Confidencialidad**

*Entiendo que toda información que resulte de esta investigación es estrictamente confidencial, y cualquier grabación digital de esta entrevista será guardada y alcanzada solamente por la investigadora. Las grabaciones digitales serán destruidas antes el 30 de mayo de 2008.*

*Mi identidad no será revelada sin mi autorización y mi correspondiente firma.*

*Acepto a que mi nombre sea usado según aparece en la investigación.*

*Firma \_\_\_\_\_ Fecha \_\_\_\_\_*

**Riesgos**

*Entiendo que no hay riesgos previsibles asociados con esta investigación.*

**Ventajas, libertad a retirarse, y capacidad de hacer preguntas**

*El objetivo de esta investigación es entender la relación entre Latinas con diabetes de la gestación y cómo manejan el cuidado de salud y su tratamiento.*

*Entiendo que es mi derecho pedir información acerca de, o dar por terminada la entrevista sin consecuencias ninguna para mi persona.*

**Información sobre investigadora**

*Investigadora: Judith Freidenberg  
Teléfono (301) 405-1420, email [jfreiden@anth.umd.edu](mailto:jfreiden@anth.umd.edu)*

**Información sobre  
Institutional Review Board**

*Si usted tiene preguntas sobre sus derechos como participante en esta investigación o desea divulgar investigación, contacte la oficina del Institutional Review Board, Universidad de Maryland, College Park, Maryland, 20742; (email) [irb@deans.umd.edu](mailto:irb@deans.umd.edu); (teléfono) 301-405-0678*

**Nombre y firma de  
participante**

NOMBRE DE PARTICIPANTE \_\_\_\_\_

FIRMA DE PARTICIPANTE \_\_\_\_\_

Teléfono \_\_\_\_\_ Email \_\_\_\_\_

FECHA \_\_\_\_\_

## Appendix D. Letter of Agreement

### *Internship for Jackie Donaldson with the Pregnancy Aid Centers*

**Responsibilities.** The intern's responsibilities will include:

1. Provide diabetes education to Latina patients;
2. Write and submit a grant proposal requesting funding for a diabetes education intervention program;
3. Train staff member(s) identified as promotora(s) on diabetes education;
4. Provide patient transportation to offsite glucose screenings;
5. Attend offsite diabetes education workshops;
6. Present preliminary internship findings at a staff brown bag lunch; and
7. Distribute an end-of-internship to the PAC director.

The intern reserves the right to publish her research findings.

**Schedule.** The intern will complete the above responsibilities between the period of May 14 and August 3, 2007. The intern will work part time (20 hours per week) from May 14 to June 1 and full time (40 hours per week) from June 4 to August 3.

\_\_\_\_\_  
Mary Jelacic, PAC Director and Founder and Internship Supervisor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Dr. Judith Freidenberg, MAA Advisor

\_\_\_\_\_  
Date

\_\_\_\_\_  
Jackie Donaldson, Intern and MAA Candidate

\_\_\_\_\_  
Date

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