

2007 Scholarship of Teaching Grants (STG) Application

Grant Application

Title of STG proposal: Heroes for the Homeless Innovative Strategies for Teaching Dental Students about Cultural Competency

Project Director

Name: Alicia Galvan

Title: Assistant Professor Director of the Advanced Educa

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Collaborators

Name: Kelly Halligan

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Name: Adriana Vargas

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Executive Summary

Discuss the educational problem and how your project will address the issue. Please reference the numbers and types of students the project will assist as well as the techniques used to evaluate the project. Be aware that the Executive Summary will be provided to *all* members of the Academic Center for Excellence in Teaching (ACET) Advisory Committee and will be used in the review process. *Please limit your summary to 200 words.*

Cultural competency is a set of interpersonal skills that provide understanding and appreciation of cultural differences between groups (Archibold, 1996). Cultural competence is a developmental process impacting health care delivery. The 2000 United States Surgeon General's Report found that vulnerable patient populations encounter difficulty receiving oral health care. The American Dental Education Association (ADEA) identified outcomes for dental school programs in 1997 and updated these in 2007. ADEA's document "Competencies for the General Dentist" help dental schools plan curricula. "Competencies" for graduating dentists include the development of effective communication and the provision of oral health care to the homeless population

Dental students at the UTHSCSA Dental School do not receive formal curricular experiences to help them understand the oral health needs of homeless populations. Grant funding via ACET represents a starting point for The UTHSCSA Dental School to address cultural competency training and oral healthcare provision for the homeless. Rotating groups of ten DSIV (senior) dental students will benefit from seminars, clinical and service learning experiences in local health clinics, homeless and food shelters. Evaluation will occur through rotation surveys, electronic journals, photo essays and powerpoint presentations developed by students to communicate knowledge acquired in this oral health care program.

Total amount of funding requested: \$10,000.00

Budget Request

Item (<i>itemize each below</i>)	Funds Requested
Consumable supplies: Disposable cameras	\$1,000.00
Equipment: Hand held radiograph machine, Scantron machine	\$4,000.00
Hourly rate services (e.g. software programming): Data analysis (Filemaker Pro) and WebCT Course Management System developed through UTHSCSA's Web CT Program. Expenses for fabrication of academic posters	\$4,000.00
Other expenses: Travel expense to the annual Special Care Dentistry and American Dental Education Association meeting for the student presenting the most outstanding presentation.	\$1,000.00
TOTAL (<i>calculated</i>)	\$10,000.00

Travel and equipment: Budget requests to support travel for presentations at meetings related to an STG project must be justified in the application. If the grant is funded, travel expenses may not exceed 10% of

the total award. If the project budget includes funds for purchasing equipment, the applicant must document that such equipment is not available or accessible at UTHSCSA.

Proposal Review Criteria

Your application is expected to answer each of the six questions below. Please complete each section.

1. Definition of the problem

Define the instructional problem addressed by the project. Indicate how the proposal relates to students' needs, is innovative, and takes advantage of interdisciplinary collaboration. Discuss research literature related to the problem.

The UTHSCSA Dental School is located in San Antonio, Texas which is the eighth largest city in the United States with a population of 1,215,725. The homeless in San Antonio are represented by 26,170 individuals who are mainly "street" and some shelter dwellers (City of San Antonio, Texas Mayor's Task Force on Hunger and Homelessness: Ten-Year Plan to End Chronic Homelessness, 2005.) This subpopulation of vulnerable patients are 12 times more likely to have dental problems than people with stable housing, and their problems are usually more severe due to a lack of access to emergency oral health care, preventive care, and restorative services (Surgeon General's Report: Oral Health in America, September, 2000) As stated by the 2000 United States Surgeon General's report, vulnerable populations such as the homeless lack access to healthcare. Furthermore delivery of care to these populations is perceived as difficult by dentists due to the transient nature of this population (Kuthy et.al 2005) An additional problem in the attainment of oral healthcare by the homeless are the lack of venues available that are staffed with dentists and auxiliary staff who are skilled to effectively communicate and understand social issues associated with this population (Smith et.al.,2006). These skills may be referred to collectively as cultural competency and are defined as a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations (Cross et. al., 1989; Isaacs & Benjamin, 1991). In order to combat oral healthcare disparities among the homeless, dental students require access to dental faculty to assist them with the development of cultural competency. Unfortunately in Texas, all three dental schools are devoid of cultural competency courses which may explain an overall reluctance for graduating dentists to provide oral healthcare to vulnerable populations such as the homeless. Consequently, a critical need exists to develop a formal curriculum to teach dental students how to effectively communicate and deliver dental care to these homeless patients. Until this need is met, oral health disparities among the homeless will continue to grow and dental students will lack competency in delivering oral health care to the homeless culture (Acosta,2000). The American Dental Education Association (ADEA) has explored a number of strategies to assist dental schools in developing and standardizing curricula with contemporary concepts that foster curricular innovation. The ADEA "Competencies for the New Dentist" identified the following competencies for dental students to acquire by the time of graduation that are applicable to planning and providing health care for homeless and other vulnerable patient populations:

1. Provide empathetic care for all patients
2. Evaluate social and economic trends and their impact on oral health care
3. Communicate orally, and in writing, with peers, other professionals, staff, patients or guardians, and the public at large
4. Educate staff in professional, governmental, legal, and office policies and professional responsibilities
5. Coordinate and supervise the activity of allied dental health personnel
6. Participate in improving the oral health of individuals, families, and groups in the community through diagnosis, treatment, and education.
7. Recognize the signs of abuse or neglect and report and refer as necessary
8. Use clinical and epidemiological data to diagnose and establish a prognosis for dental abnormalities and pathology

9. Discuss etiologies, treatment alternatives, and prognoses with patients and educate them so they can participate in the management of their own care
10. Develop and implementing a sequenced treatment plan that incorporates patients' goals, values and concerns
11. Provide patient education to maximize oral health.
12. Manage preventive oral health procedures
13. Manage dental care for disabled and special care patients.

Our group's project is innovative because it is the first course relative to oral health care for the homeless population formulated in Texas dental schools. The curriculum planned for dental students directly addresses the previously described ADEA competencies for general dental practitioners who are beginning their professional careers. This new curricular component will allow dental students to address issues related to cultural competency via provision of oral health care to San Antonio's homeless while documenting their community service-learning experiences via internet photo and written journaling (blogging). This project also takes advantage of interdisciplinary collaboration by involving educators from the UTHSCSA Departments of Community Dentistry, Dental Hygiene, General Dentistry and the School of Allied Health for the provision of seminars related to specific medical, dental and public health knowledge that will provide dental students with a conceptual and cultural foundation for treating the local homeless population. In addition these educators will also provide information relative to the nature, magnitude and distribution of the local homeless population and familiarize students with current and proposed programs, projects and policies to alleviate homelessness in San Antonio and nationally. Healthcare professionals in private practice sector and social care employees at various community health clinics, including the future homeless development center Haven for Hope and homeless shelters such as the Dwyer Avenue Center and in San Antonio will participate in this educational experience to help dental students develop an appreciation for the daily socioeconomic dynamics facing to the homeless culture and strategies for delivering health services for this component of our San Antonio community.

Research Literature cited:

- 1) Yoder K, A Framework for Service-Learning in Dental Education, *Journal of Dental Education*,
- 2) *Healing Hands*, Vol. 7, No. 3, June, 2003,
- 3) Gibson G, King T, Oral Health Needs and Access to Dental Care of Homeless Adults in the United States: A Review, *Special Care Dentistry*, Vol. 23(4): 143-147.
- 4) Strauss R, et. al., Reflective Learning in Community-Based Dental Education, *Journal of Dental Education*, Vol. 67 (11): 1234-1242.
- 5) Rubin R, Developing Cultural Competence and Social Responsibility in Preclinical Dental Students, *Journal of Dental Education*, Vol. 68(4): 460-467.
- 6) Kuthy R, et. al., Students' Comfort Level in Treating Vulnerable Populations and Future Willingness to Treat: Results Prior to Extramural Participation, *Journal of Dental Education*, December, 2005, Vol. 69(12): 1307-1314.
- 7) Rowland M, et.al., A Snapshot of Cultural Competency Education in U.S. Dental Schools, *Journal of Dental Education*, Sept., 2006, Vol. 70(9): 982-990.
- 8) Mofidi M., et.al., Dental Students' Reflections on Their Community-Based Experiences: The Use of Critical Incidents, *Journal of Dental Education*, May, 2003, Vol. 67(5): 515-523.
- 9) Smith C., et. al., Dental Education and Care for Underserved Patients: An Analysis of Students' Intentions and Alumni Behavior, *Journal of Dental Education*, April, 2006, Vol. 70(4): 398-408.
- 10) Competencies for the New Dentist, *Journal of Dental Education*, Council of Sections Task Force on Competencies and Foundation Knowledge, American Dental Educators Association, March 19, 2007.
- 11) Surgeon General's Report: Oral Health in America, September, 2000.
- 12) City of San Antonio, Texas Mayor's Task Force on Hunger and Homelessness: Ten-Year Plan to End Chronic Homelessness, January 13, 2005.
- 13) State of Texas Action Plan to End Chronic Homelessness, Texas Interagency Council for the Homeless, December, 2005.

- 14) Acosta O, Let's Ask the Homeless People Themselves: A Needs Assessment Based on a Probability Sample of Adults, *American Journal of Community Psychology*, Vol. 28(3), 2000.
- 15) Homelessness and Oral Health, *Opening Doors, Health Recourses and Services Administration Bureau of Primary Health Care*, Winter, 2001, Vol. 9(1).
- 16) Keselyak N, et.al., Evaluation of an Academic Service-Learning Course on Special Needs Patients for Dental Hygienic Students: A Qualitative Study, *Journal of Dental Education*, 2007, Vol. 71(3): 378-392.
- 17) Reisman, J. *Field Guide to Outcome-Based Program Evaluation*. Seattle, WA: Evaluation Forum. 1994.
- 18) Kirkpatrick DI. Evaluation of training. In: Craig R, Bittel I, editors. *Training and Development Handbook*. New York: McGraw-Hill

2. Design of the project

Describe what is planned, how it will be done, and who will do the work. Specify time lines for the proposed project.

This educational research study will assess the outcomes of implementing a service learning experience on oral health care for the homeless for senior dental students by testing the following hypotheses. Outcome measures to assess each hypothesis are described in the section titled: "Evaluation plan"

Hypothesis 1: After participating in a service learning course with a clinical rotation in which they learn about the health care needs of the homeless and provide dental care for this population, senior dental students will:

- (a) demonstrate increased knowledge of the living conditions, culture and unique dental care needs of the homeless than before enrolling in the course.
- (b) self-assess their confidence in providing assessment, prevention and emergent care for the homeless at a higher level than before enrolling in the course.
- (c) report that they are more likely to provide health care services for the homeless population during their dental practice career than before enrolling in the course.
- (d) indicate more positive attitudes about the responsibility of dentists to provide health care for the homeless in their community than before enrolling in the course.

Hypothesis 2: A service learning course focusing on the health care needs of the homeless will be positively evaluated as demonstrated by mean student evaluations of at least 4.0 on a five-point course rating form with the scale ranging from 1 = poor to 5 = excellent

Hypothesis 3: Students will actively participate in the course as demonstrated by the following:

- (a) 90% of enrolled students will post at least three reflection essays on the blog site established for this educational program.
- (b) 90% of enrolled students will complete a photo journal that illustrates their experiences during this course
- (c) Each group of senior students who participate in the course will work as a team to complete a "Heroes for the Homeless" PowerPoint presentation that illustrates their experiences and will present this information to freshmen, sophomore and junior students annually.

Design of the service learning experience:

Senior dental students will rotate through dental community centers and shelters one half day per week for an entire

semester; total clinical experience will be approximately 6 days (12 weeks X 0.5 days/week). They will take a pre- and post-rotation survey to assess their perceptions related to the items designated in hypothesis 1 a – d. Students will be expected to post reflection essays on the blog site established for this course; guidelines will be provided for construction of these reflection essays. Students will be requested to complete a photo journal that illustrates their experiences during this course. Each group of students will work as a team to complete a “Heroes for the Homeless” PowerPoint presentation that illustrates their experiences and will present this information to freshmen, sophomore and junior students annually to contribute to the education of other students about special needs populations and the oral health of underserved components of the San Antonio community. Debriefing seminars will be conducted by faculty (PI and collaborators of this project) at the mid-point and conclusion of the course to provide opportunities for students to discuss their experiences.

Week 1: Introduction to rotation

Students complete pre-course self-assessment and perceptions inventory
(Hypothesis 1)

Distribute and review syllabus, disposable cameras, contact list, facility list, Maps

Week 2: Calibration for camera usage, introduction to UTHSCSA website for blogging (reflection essays and photo journaling), and situational questions

Week 1-7: Seminars on homelessness by UTHSCSA Dental Department of Community Dentistry and Allied Public Health

Seminar on systemic and oral health problems of homeless people by UTHSCSA Dental pre and postdoctoral General Dentistry faculty and Dental Hygiene Faculty

Week 4-11: Treat homeless patients at Haven for Hope Affiliated Community Health Clinics, medical history taking, dental exam, and emergent treatment provision, (blog/photo journaling)

Week 9-16: Travel to Methodist ministries and San Antonio Area AIDS Foundation soup kitchens to serve meals, clinical services at Dwyer shelter (blog/pictures), clinical services at Haven for Hope associated Community Clinics (patient treatment, blog/photo journaling)

Wks 9 & 16: Debriefing sessions with faculty, discuss blog entries and experiences, turn in cameras, take post-service learning survey, present

“Heroes for the Homeless” powerpoint presentation to freshmen, sophomores and junior students.

Students’ Learning Objectives:

After participation in this course, senior dental students will be able to:

1. Explain the etiologies and culture of homelessness
2. Describe the incidence and demographics of homelessness in San Antonio
3. Demonstrate comprehension of the oral health needs and systemic health problems of the homeless population

4. Describe their personal attitudes about providing oral health care for the homeless population

5. Communicate their perceptions about providing care for the homeless population to fellow students by posting reflection essays on a blog site created for this course and submit a photo journal in PowerPoint format that illustrates their experiences in working with the homeless.

3. Potential impact

Discuss the effects the proposed changes will have on student learning including the number of students who are likely to be affected.

Previous studies with similar service learning and journaling projects have proven that these teaching techniques markedly enhance the possibility that graduating dental students will treat vulnerable patient populations in their future private practice by increasing their sensitivity to this social reality (References 4,5,6,16). Furthermore, these teaching strategies will also allow students to more predictably meet professional competencies identified by ADEA. While we anticipate that senior students will directly benefit from this service learning course, freshman, sophomore and junior students will indirectly benefit by learning about the seniors' experiences from the "Heroes for the Homeless" powerpoint presentations which they will be invited to attend. This will contribute to an underclassmen's' desire to participate in the course when they reach the senior year. Furthermore, as stated previously, this project is the first of its kind among the dental schools of Texas. Thus great potential exists that this project will serve as a teaching model for the other two Texas dental schools so that they may implement a cultural competency curricular component that address the oral healthcare needs of the homeless population ultimately impacting a greater number of dental students and future dentists.

4. Plan for continuation

Priority will be given to activities that will be continued beyond the initial funding period. Grants can be used as seed money to demonstrate the potential impact of the project and attract additional funding.

In his 2003 budget, President Bush placed ending chronic homelessness as a top objective, with the U.S. Conference of Mayors (USCM) subsequently adopting this goal. Thus, the San Antonio Mayor's Task Force developed the Ten Year Plan 2005 to end Chronic Homelessness. Consequently, select members of the San Antonio City Council recently developed a group to direct construction and staffing of a 16 acre homeless center on San Antonio's Westside called Haven for Hope. This group has already inquired about UTHSCSA's potential to provide for assistance in meeting the oral health needs of the homeless. Thus, the initial grant from ACET will serve as seed money to explore and assess the outcomes of a 2 year (Junior to Senior) service learning educational experience for dental students to meet the challenges of oral health care for the homeless. Based on the outcome of this service learning educational experience, a great potential exists for attracting additional funding for homeless oral healthcare from various local (City of San Antonio), state (Texas Dental Association), national (American Dental Association) and international (World Health Organization) entities. This additional funding will allow this project to secure a place for UTHSCSA in San Antonio as the authority on the provision of oral healthcare for the homeless while providing invaluable clinical experiences for dental students and dental faculty.

5. Plan for evaluation

Include a formative evaluation that provides information during the development of the project and a summative evaluation of the project outcomes.

The evaluation plan for this project will be based on strategies proposed by Yoder, Kuthy, Mofidi, Smith and Keselyak (1,6,8,9,16) for assessment of service learning experiences by dental students and dental hygiene students. Based on recommendations by Reisman and Kirkpatrick (17-18), we will utilize both quantitative and qualitative outcomes to

provide a multi-dimensional evaluation of the research hypotheses. Table one provides a description of the outcome measures for each of the research hypotheses. Assessment of hypothesis 1 (a – d components) will consist of a 30 item questionnaire administered online to all enrolled students at the beginning and conclusion of the course and, as a control group, to all other senior dental students during the 2nd week of September and the 4th week of April. This questionnaire will consist of 18 knowledge questions, 4 confidence assessment items, 4 items related to future intentions/willingness to treat and 4 attitude clarification items. All sections of the questionnaire (knowledge, confidence, intention to treat and attitudes) are based on published data collection instruments as described in Table One. The investigators will pilot-test the instrument in the summer of 2007 prior to the inception of the project with 20 senior dental students.

STRATEGIES FOR EVALUATION OF RESEARCH HYPOTHESIS

Hypothesis 1(a,b,c): After participating in a service learning course with a clinical rotation in which they learn about the health care needs of the homeless and provide dental care for this population, senior dental students will:

(1.a) demonstrate increased knowledge of the living conditions, culture and unique dental care needs of the homeless than before enrolling in the course

OUTCOME MEASURES (1a): 18-item knowledge assessment will be completed by course participants (experimental group) at beginning and end of the course and all other seniors (controls) at beginning and conclusion of the academic year.

DATA ANALYSIS (1a): (1) performance of students enrolled in the dental care for the homeless course will be compared pre and post course to students who are not enrolled, and (2) comparison of the pre and post rotation performance of the enrolled students.

*The knowledge assessment is based on Gibson and King; Oral Health Needs and Access to Dental Care of Homeless Adults in the United States: A Review. *Special Care Dentistry*. 2004; 23(4) and Acosta O. Let's Ask the Homeless People Themselves: A Needs Assessment. *Am J of Community Psychology*. 2000; 28(3).

(1.b) self-assess their confidence in providing assessment, prevention and emergent care for the homeless at a higher level than before enrolling in the course

OUTCOME MEASURES(1b): A 4-item confidence assessment that requests self-evaluation of skills related to providing care for homeless patients will be completed by course participants (experimental group) at beginning and end of the course and all other seniors (controls) at beginning and conclusion of the academic year.

DATA ANALYSIS (1b): (1) pre and post course comparison of confidence self-assessments of students enrolled in the dental care for the homeless courses to students who are not enrolled, and (2) comparison of the pre and post rotation confidence self-assessments of the enrolled students.

*The confidence self-assessment scale is modeling after a rating form developed to evaluate student confidence reported in Hendricson, Wood, et al. in *Implementation of a Physician Education Intervention: The Childhood Asthma Project*. *Archives Ped Adoles Med*, 1994; 148(6).

(1.c) report that they are more likely to provide health care services for the homeless population during their dental practice career than before enrolling in the course.

OUTCOME MEASURES(1c): Four questions that request assessment of the students' intentions/willingness to provide care for homeless patients during their future practice career will be answered by course participants (experimental group) at beginning and end of the course and all other seniors (controls) at beginning and conclusion of the year.

DATA ANALYSIS(1c): (1) comparison of intention (willingness) to treat responses of students enrolled and not enrolled in the dental care for the homeless course, and (2) comparison of the pre and post intention to treat responses of the enrolled students.

*The intention/willingness to treat scale is based on an assessment instrument reported by Kuthy, et al. in Students' Comfort Level in Treating Vulnerable Populations and Future Willingness to Treat. *J Dental Education*, 2005; 69(12).

(1.d) indicate more positive attitudes about the responsibility of dentists to provide health care for the homeless in their community than before enrolling in the course

OUTCOME MEASURES(1d):Four questions that request "agree – disagree" responses to statements about dentists' responsibilities for providing care for homeless patients will be answered by course participants (experimental group) at beginning and end of the course and all other seniors (controls) at beginning and conclusion of the academic year.

DATA ANALYSIS (1D): (1) comparison of attitudinal responses of students enrolled and not enrolled in the dental care for the homeless course, and (2) comparison of the pre and post responses of the enrolled students.

*The attitude assessment scale is based on an instrument reported by Keselyak, et al. in Evaluation of an Academic Service Learning Course on special Needs Patients for Dental Hygiene Students: A Qualitative Study. *J Dental Education*, 2007; 71(3).

HYPOTHESIS 2: A service learning course focusing on the health care needs of the homeless will be positively evaluated as demonstrated by mean student evaluations of at least 4.0 on a five-point course rating form with the scale ranging from 1 = poor to 5 = excellent

OUTCOME MEASURES HYPOTHESIS 2: Compile and review annual summary of evaluations submitted by enrolled students. Students will complete the standard dental school course evaluation administered by the Testing Center as well as an evaluation which requests participating students to self-assess accomplishment of the learning objectives and evaluate specific course activities such as patient care, the reflection blog, photo journal and the debriefing seminars.

HYPOTHESIS 3: will actively participate in the course as demonstrated by the following:

(3.a) 90% of enrolled students will post at least three reflection essays on the "Heroes of the Homeless" blog site established for this course

OUTCOME MEASURES (3A):Monitor postings to "Heroes of the Homeless" blog and tabulate number of reflection essays contribution by each participating student.

(3.b) 90% of enrolled students will complete a photo journal that illustrates their experiences during this course

OUTCOME MEASURES (3B):Document percentage of enrolled students who submit photo journals that adhere to guidelines for this program component.

(3.c) Each group of senior students who participate in the course will work as a team to complete a "Heroes for the Homeless" PowerPoint presentation that illustrates their experiences and will present this information to freshmen, sophomore and junior students annually.

OUTCOME MEASURES (3C):

Collect PowerPoint presentations developed by each group of enrolled students.

Document dates of "Heroes for the Homeless" presentations made to freshmen, sophomore and junior students.

6. Plan of Information Dissemination

Include the conference, journal or other peer reviewed source in which the results from the study will be shared with other professionals. **Please note:** Plans for IRB approval will have to be discussed with all members of the project. The intent of the IRB is to foster high ethical standards in the conduct of research and to assure that uniform criteria are applied to protect the human subjects who take part in research. Although IRB approval is NOT necessary when submitting the proposal, IRB approval will be necessary before dissemination of results to peer reviewed outlets.

The methods, data and outcome accumulated through this project will be submitted for peer review in the form of manuscripts to the Journal of the American Dental Association, the Texas Dental Journal, the Journal of Dental Education, the Special Care Dentistry Journal, the Journal of the American General Dentistry Association, and the Journal for Evidence-Based Dental Research. Locally, the medical and dental findings from this project will also be highlighted in hospital based learning courses given to UTHSCSA and the Audie Murphy VA general practice dentistry residents and continuing education courses given to dentists and dental auxiliary personnel dealing with specific dental conditions associated with certain medical diseases(i.e. HIV/AIDS,liver disease) given by the PI and collaborators of this project through the UTHSCSCA Department of Continuing Education which provides speakers for local, national and international dental conferences. Ultimately the project will provide information with which to generate an academic poster for visual presentation and an oral presentation at the national level at annual Special Care Dentistry meetings, the official organization of the American Association of Hospital Dentists, The Academy of Dentistry for Persons with Disabilities, and the American Society for Geriatric Dentistry. The poster and oral presentation will also be presented at annual meetings of the American Dental Education Association. The poster and oral presentation will be completed by outstanding dental students matriculated in the course along with faculty mentorship by the PI and collaborators of this project.

7. Budget/Cost Sharing

Include a justification of the budget so that it is clear why each item requested is essential.

1. Consumable Supplies:

Disposable cameras will be used for obtaining images for use in students' photo journals.

2. Equipment:

Cultural Assessment, Morbidity Assessment, and student education require handheld radiograph machine and scantron machines for diagnosing, capturing and storing data.

3. Hourly Rate Services:

Data obtained from this study will need to be organized in a data organization computer software program. Students' e-journals will be written on a private blog cite developed through UTHSCSA's Web CT Program. The development of this private blog site will require an initial start-up cost and maintenance fees for the website.

4. Other Expenses: Expenses for fabrication of academic posters to communicate project findings, instructional media costs such as adobe photoshop for students to build their power point presentation and fabrication of course information packages

5. Travel: Students will be able to present a poster presentation of their experiences at a national meetings.

Project Director Biosketch

Submit a NIH biographical sketch of the Project Director below.

Galvan, Alicia Gregoria
UTHSCSA Department of General Dentistry Postdoctoral Division
Assistant Clinical Professor
A. EDUCATION
1998 B.S. Biology University of the Incarnate Word San Antonio, TX

2002 D.D.S. UTHSCSA Dental School

2003-2004 Chief Resident UTHSCSA Dental School/University Hospital
General Practice Residency

2003-2004 San Antonio Center for Microbiology
Fungal Microbiology Intern

2002 – 2003 UTHSCSA Dental School
General Practice Residency

B. APPOINTMENTS

7/2005 – present Assistant Clinical Professor
Director, Advanced Education
in General Dentistry Residency
Program
Department of General Dentistry
Postdoctoral Division
UTHSCSA

7/2004 – present Assistant Clinical Professor
University Hospital
Department of Hospital Dentistry
San Antonio, Tx

7/2004 – 7/2005 Assistant Clinical Professor
Deputy Director
Advanced Education in General Dentistry Residency Program
Department of General Dentistry
Postdoctoral Division
UTHSCSA

C. AWARDS

5/2004 “Trying to Make a Difference” Resident Award: The University of
Texas Health Science Center at San Antonio, Department of General
Dentistry, Postdoctoral Division, San Antonio, TX

5/2002 Graduated Cum Laude from the University of Texas Health
Science Center at San Antonio Dental School, San Antonio, TX

5/2002 Award for Excellence in Clinical Dentistry: The
University of Texas Health Science Center at San Antonio Dental
School, San Antonio, TX

5/2002 Student Award: International College of Dentists

5/2002 Student Award: Academy of Oral Medicine

D. Peer-Reviewed Publications

Sullivan, J.T., Lares, R.R., and Galvan, A. G. 1998. *Schistosoma mansoni* infection inhibits maturation of ovotestis allografts in *Biomphalaria glabrata* (Mollusca: Pulmonata). *Journal of Parasitology* 84: 82-87.

Sullivan, J.T., Galvan, A.G., and Lares, R.R., 1998. Survival of heterotrophic headfoot transplants in *Biomphalaria glabrata* (Mollusca: Pulmonata). *Invertebrate biology*. 118: 63-67.

Galvan, A.G., Lares, R.R., and Sullivan J.T. 1998. Rescue of *Schistosoma mansoni* in the head-foot of resistant snails by transplantation into susceptible snails. *American Zoologist* 38: 101A

Galvan, A.G., Lares, R.R., and Sullivan J.T. 1997. Fates of different types of allografts in a mollusc. *Proceedings of the Society for Experimental Biology and Medicine* 215: 113.

Sullivan, J.T., Galvan, A.G., and Lares, R.R. 1996. Development of gonadal primordium transplants in *Biomphalaria glabrata* (Mollusca: Pulmonata). *American Zoologist* 36: 70A.

E. Research

2/2005- 12/2005 Enrolled patients in a study and collected saliva samples from head and neck cancer patients receiving concomitant radiation and chemotherapy for mycological testing and antifungal susceptibility evaluation of Nystatin to *Candida glabrata* at the Cancer Therapy and Research Center San Antonio, TX

9/2003 – 3/2004 Antifungal susceptibility testing of *Candida glabrata* yeast isolates to Nystatin: San Antonio Center for Medical Mycology, San Antonio, TX

Pilot Research

8/2002 – 12/2003 Tested the Septodont Safety Plus Syringe on Advanced Education General Dentistry Clinic Patients: Dr. Geza Terezhalmi (Principal Investigator) The University of Texas Health Science Center at San Antonio, San Antonio, TX

Clinical Trials:

1/2004 – 1/2005 Clinical Evaluator for McNeill Pharmaceuticals, Benzylamine Anti-inflammatory Mouthrinse Study: Cancer Therapy and Research Center, San Antonio, TX

Approval certification

AGG - By initialing this field, I affirm that my Department Chair has approved this project.