# Research Development Fund, Annual Report - FY 2012 Angelo State

Title	Genetic Screen to Identify Genes Controlling the Development of Dopamine-Producing Cells	
Description	Funds were used to order, expand, and maintain Drosophila stocks and related materials and supplies in order to conduct CNS midline research.	
Purpose/Intent  To conduct a pilot experiment to discover new genes that may contribute development of a subset of dopamine-producing cells in the Drosop midline.		•
What makes this project a good investment for the state or institution?	This project has allowed the investigator to obtain preliminary data necessar to submit a proposal to the NSF. Additionally, it has supported ASU's goal to improve undergraduate research experiences.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 7,570
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 7,570

Purpose/Intent	To conduct pilot studies on the derivatizat its use as a new soluble polymer support	,
	synthesis processes.	
What makes this project a good investment for	This project has the potential to generate significant external funding, and the funds provided through the RDF allowed the investigator to obtain the preliminary data necessary to submit applications to national funding agencies.	
the state or institution?	preliminary data necessary to submit appl	•
the state or institution?	preliminary data necessary to submit appl	•
the state or institution?	preliminary data necessary to submit appl agencies.	ications to national funding
the state or institution?	preliminary data necessary to submit appl agencies.  Salaries/Wages for New or Reassigned FTEs	s 4,096
the state or institution?	preliminary data necessary to submit appl agencies.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 4,096 \$ 0
	preliminary data necessary to submit appl agencies.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	\$ 4,096 \$ 0 \$ 7,674

Title	In vitro Binding Studies of a Trans SECIS and to the Elongation Factor Se1B	S Element to a Selenoprotein mRNA
Description	Funds supported the purchase of small equipment and supplies necessary to carry out the study.	
Purpose/Intent  To create a novel E. coli expression system for human selenoprotein trans Sec insertion signal that will minimally restrict the amino seque expressed protein that will ultimately allow for more in depth studies selenoproteins.		ally restrict the amino sequence of the
What makes this project a good investment for the state or institution?	This project has the potential to generate external funding as well as publications in the field of biochemistry/molecular biology. It also enhanced existing outside partnerships and undergraduate student research experiences.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 11,841
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 11,841

Title	Spirited Women: Literary Representations of Women's Religion and Spirituality in Eighteenth Century Britain	
Description	Funds supported travel to the Huntington Library to examine unpublished correspondence and other manuscripts.	
Purpose/Intent	To conduct research on mid-eighteenth-crepresentations of religious and spiritual the information necessary to complete on subject.	pelief. This specific project provided
What makes this project a good investment for the state or institution?	Findings will be published in articles and eventually in a monograph, providir ASU will recognition on a national stage. Findings will also be incorporated within the investigator's courses on the subject.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ O
	Operating Expenses	\$ 3,970
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 3,970

Title	Study of the Angular Distribution of Radia on Thick Rhodium	ation Produced by Electrons Incident
Description	Funds supported the purchase of equipmout the research, including a mini- X-ray	
Purpose/Intent	or	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 5,982
	Staff Benefits	\$ O
	Capital Expenditures	\$ 6,518
	Total	\$ 12,500

Title	Carried forward		
Description	Funds carried forward to FY13		
Purpose/Intent	n/a		
What makes this project a good investment for the state or institution?	n/a		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 13,933	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 13,933	

Title	Thermal Analysis Equipment		
Description	Thermal Analysis Equipment		
Purpose/Intent	Used to do research on Polymer Nanocomposites		
What makes this project a good investment for the state or institution?	PI has been able to garner federal and industrial support for his research based on preliminary results		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 0	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 15,000	
	Total	\$ 15,000	

Title	Raman Flex 400 Spectometer	
Description	Raman Flex 400 Spectometer	
Purpose/Intent	Used to establish the Operando Spectroscopy Laboratory for researching a new method of constructing nano-sized catalytic particles.	
What makes this project a good investment for the state or institution?	Used to get preliminary results for research to seek external funding	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 109,455
	Total	\$ 109,455

Title	Dell PowerEdge R410 and Dell Optiplex 790		
Description	Dell PowerEdge R410 and Dell Optiplex 790		
Purpose/Intent	Equipment used by PI for Research		
What makes this project a good investment for the state or institution?	Equipment used by PI for Research		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 0	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 6,517	
	Total	\$ 6,517	

Title	ETC Disposable Parallel Plate Accessory Kit for AR 2000 Pheometers	
Description	Environmental Temperature Chamber Disposable Parallel Plate Accessory Kit for AR 2000 Pheometers	
Purpose/Intent	to make during test smoother by eliminating the risk of permanent plates	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 4,589
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 4,589

Title	Temperature Controller for Rheometer	
Description	Temperature Controller for Rheometer	
Purpose/Intent	Allows running experiments under multiple set-ups of different controlled temps	
What makes this project a good investment for the state or institution?	PI has several funded grants from NSF and private industry using equipment	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,065
	Staff Benefits	\$ 0
	Capital Expenditures	<b>\$</b> 0
	Total	\$ 1,065

Title	Stainless steel molds for Rheometer		
Description	Stainless steel molds for Rheometer		
Purpose/Intent	Used for running experiments		
What makes this project a good investment for the state or institution?	PI has several funded grants from NSF and private industry using equipment		
Financial	Salaries/Wages for New or Reassigned FTEs	<b>\$</b> 0	
	Salaries/Wages for Existing FTEs	\$ O	
	Operating Expenses	\$ 900	
	Staff Benefits	\$ O	
	Capital Expenditures	\$ O	
	Total	\$ 900	

Title	Items for Dome - Camera System	
Description	Items for Dome - Camera System	
Purpose/Intent	Used in research of development of instrumentation for measuring decoupled normal and lateral retention forces for systems of drops on surfaces	
What makes this project a good investment for the state or institution?	PI has several funded grants from NSF an funding	d will use equipment to seek more
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 6,057
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 6,057

Title	UV Ozone Cleaning System	
Description	UV Ozone Cleaning System	
Purpose/Intent	Removes an assortment of organic contamination form various types of substrates	
What makes this project a good investment for the state or institution?	nt for	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ O
	Operating Expenses	\$ 3,550
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 3,550

Title	Lab Supplies	
Description	Lab Supplies	
Purpose/Intent	Used in research of development of instrumentation for measuring decoupled normal and lateral retention forces for systems of drops on surfaces	
What makes this project a good investment for the state or institution?	Used to get preliminary results for research to seek external funding	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,265
	Staff Benefits	<b>\$</b> 0
	Capital Expenditures	<b>\$</b> 0
	Total	\$ 1,265

Title	PH Meter	
Description	PH Meter	
Purpose/Intent	Used in water research	
What makes this project a good investment for the state or institution?	PI has been able to garner federal and industrial support for his research in water purification	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 2,831
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 2,831

Title	Alternative Energy Instrumentation	
Description	Alternative Energy Instrumentation	
Purpose/Intent	Provide infrastructure for Energy Research	
What makes this projec a good investment for the state or institution?	<u>.                                    </u>	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 11,905
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 22,537
	Total	\$ 34,442

Title	Vertical Machining Center	
Description	Vertical Machining Center	
Purpose/Intent	Used by several faculty in Mechanical Engineering Department in their research	
What makes this project a good investment for the state or institution?	Used to perform federal, state and industry research	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 41,545
	Total	\$ 41,545

Title	Stair step grant matching	
Description	An NSF funded multidiscipline research project	
Purpose/Intent	Clerical support	
What makes this project a good investment for the state or institution?	This grant is designed to increase the number of talented at risk undergrad students in multi STEM disciplines	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 2,987
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 2,987

Title	Computer Science Lab		
Description	Computers and wiring for computer lab		
Purpose/Intent	Support for NVIDIA grant		
What makes this project a good investment for the state or institution?	University received		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 4,378	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 21,163	
	Total	\$ 25,541	

Title	Equipment Service Contract	
Description	Renewal of the service contract for the Scanning Electron microscope	
Purpose/Intent	Used in various funded research projects	
What makes this project a good investment for the state or institution?	This is one of the most utilized equipment used by researchers of College of Engineering and Arts & Sciences	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 9,112
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 9,112

Title	Start up Lab for Dr. Suying Wei		
Description	Microscale Combustion Calorimeter		
Purpose/Intent	Used for research to measure key parameters in composites.		
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 0	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 25,000	
	Total	\$ 25,000	

Title	AASCU Membership	
Description	Membership in AASCU to assist in funding proposal assistance	g opportunity identification and
Purpose/Intent	Membership in AASCU to assist in funding opportunity identification and proposal assistance	
What makes this project a good investment for the state or institution?	Enables Sponsored Programs Office staff to assist faculty in identifying research opportunities	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ O
	Operating Expenses	\$ 9,178
	Staff Benefits	\$ 0
	Capital Expenditures	\$ O
	Total	\$ 9,178

Title	Nanomaterials Lab	
Description	eXxpert 2610 5kN-Q Dual Column Table Top universal testing machine, Chemicals and Lab Supplies for Dr. John Guo	
Purpose/Intent	PI has been able to garner federal and industrial support for his research	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 2,726
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 22,500
	Total	\$ 25,226

Oxidized LDL ELISA	
Immunoassay for quantitative determination of Oxidized-LDL in human serum	
Used in research on cardiovascular disease risk factor by Health and Kinesiology Department	
Faculty will be able to further examine the CVD and provide useful high quality res	
Salaries/Wages for New or Reassigned FTEs	\$ 0
Salaries/Wages for Existing FTEs	<b>\$</b> 0
Operating Expenses	\$ 2,025
Staff Benefits	\$ 0
Capital Expenditures	\$ O
Total	\$ 2,025
	Jsed in research on cardiovascular disestinesiology Department  Faculty will be able to further examine the CVD and provide useful high quality resealaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures

Title	Patent Lawyers		
Description	Patent Lawyers		
Purpose/Intent Obtain patents on research			
What makes this project a good investment for the state or institution?	Enables University to license patented research		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 10,414	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 10,414	

Title	Matching for NSF grant	
Description	Tuition and fees for Summer Bridge course	е
Purpose/Intent	To strengthen the background in mathematics and computer science of new Bridge grant participants	
What makes this project a good investment for the state or institution?	Matching funds enabled us to receive 5year \$583,096 NSF grant	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ O
	Operating Expenses	\$ 7,376
	Staff Benefits	\$ O
	Capital Expenditures	\$ 0
	Total	\$ 7,376

Title	Salaries for Sponsored Programs Office	
Description	Salaries for Sponsored Programs Office	
Purpose/Intent	Assist faculty with the identification, preparation, submission and management of grants	
What makes this project a good investment for the state or institution?	Enables University to get more research funding	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 65,924
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 65,924

Title	Travel funds for Research		
Description	Dr. Narayanan's research agenda requires travel to collect data		
Purpose/Intent	For Dr. Narayanan to pursue his research.		
What makes this project a good investment for the state or institution?	Dr. Narayanan's research informs his classes as well as results in publications & presentations		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 2,000	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 2,000	

Title	Second Annual External Funding Workshop	
Description	Dr. Michael Odell, experienced grant-writer, was a speaker at the workshop.	
Purpose/Intent	Dr. Odell met individually with MSU aspiring grant-writers & spoke to the workshop participants.	
What makes this project a good investment for the state or institution?	Grant-writing expertise will provide a source of funding to support research.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,410
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	<b>\$ 1,410</b>

Title	iWorx Systems Inc.	
Description		
Purpose/Intent To facilitate research through gas analysis, electromyography, and electrocardiography.		s, electromyography, and
What makes this project a good investment for the state or institution?	This equipment will allow Dr. Wyatt to purother professors.	sue his research agenda, as well as
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 9,117
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 9,117

Title	SPIN membership	
Description	SPIN is a web-based listing of grant opportunities that can be sorted by topic and delivered by email.	
Purpose/Intent	SPIN allows MSU faculty to receive grant opportunities by email according to key words	
What makes this project a good investment for the state or institution?	Faculty do not have to spend time searching for grants.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,155
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	<b>\$ 1,155</b>

Title	Grant Management seminar	
Description	This was a seminar to train on grant management.	
Purpose/Intent	To provide additional training for our pre-award and post-award coordinators.  Competent grant management is critical to the receiving of funding.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	<b>\$</b> 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 634
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 634

Title	60-EA 3-Grant/Proposal		
Description	Materials for the External Funding Workshop		
Purpose/Intent	To educate MSU faculty on grant-writing strategies.		
What makes this project a good investment for the state or institution?	Additional grant funding will support additional research.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 248	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 248	

### RDF, Annual Report - FY 2012 Sam Houston State

Title	Office of Research & Sponsored Program Operations	
Description	This appropriation is to cover operational expenses of this office.  The purpose of the office is to promote all aspects of research and other creative endeavors at SHSU.	
Purpose/Intent		
What makes this project a good investment for the state or institution?	This office promotes research administration by providing administrative support in seeking and securing funding and ensuring SHSU is compliant with sponsor guidelines.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 180,542
	Operating Expenses	\$ 744
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	<b>\$ 181,286</b>

# RDF, Annual Report - FY 2012 Stephen F. Austin State

Title	Science, Technology, Engineering, and Mathematics (STEM) Research and Learning Center	
Description	Provide funding for the Science, Technology, Engineering, and Mathematics (STEM) Research and Learning Center to increase research capacity within the STEM disciplines and between STEM and non-STEM fields.	
Purpose/Intent	The STEM Center will enhance research communication and collaboration within the sciences as well as with other disciplines. Particular attention will given to facilitating research collaboration in partnership with industry, university faculty and graduate students, and stakeholders in the public sch system.	
What makes this project a good investment for the state or institution?	The primary goal is to conduct cutting-edge research related to STEM education with the ultimate goal of increasing the number of academically prepared students who pursue STEM careers. Faculty research efforts within STEM disciplines add to the current research base at state and national level to help address the urgent national call for research-based reform in STEM education.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 43,350
	Salaries/Wages for Existing FTEs	\$ 74,775
	Operating Expenses	\$ 15,148
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 133,273

Title	Center for Regional Heritage Research	
Description	Provide funding for the Center for Regional Heritage Research, which enables local cultural heritage research, coordinates related research projects, and makes these assets available to researchers across a variety of disciplines.	
Purpose/Intent	The goal of the Center is to bridge various research fields (including history, geography, archaeology, and natural resource interpretation) to encourage and coordinate heritage research projects and to initiate new interdisciplinary research projects.	
What makes this project a good investment for the state or institution?	East Texas became the gateway to Texas as Anglo-Americans from the upland south came to Texas on the Old Spanish trail known as El Camino Real de los Tejas, or the royal road to Texas. The Center for Regional Heritage Research at SFA is located in this gateway region and is situated to research and disseminate important chapters of the history of the State of Texas.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 74,601
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 5,529
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 15,415
	Total	\$ 95,545

Title	Waters of East Texas (WET) Center	
Description	Provide funding for the Waters of East Texas (WET) Center, an interdisciplinary research center that focuses on increasing coordinated research on water related resources of the east Texas region.	
Purpose/Intent	The WET Center encourages interdisciplinary, coordinated research and assessment projects at SFA on water related resources, ecosystems, and issues in the east Texas region.	
What makes this project a good investment for the state or institution?	East Texas water resources are increasingly important to the state as water demands continue to increase. Stephen F. Austin State University is well positioned, both geographically and technically, to become the expert institution on east Texas water resources, ecosystems, and issues. The WET Center will make SFA more competitive for outside research funding on water resources and will benefit east Texas by providing reliable science that will help state and local government agencies make decisions about management of east Texas water resources.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 121,964 \$ 0 \$ 9,775 \$ 0 \$ 5,087 <b>\$ 136,826</b>

Title	ORSP Research Development Specialist	
Description	Employ a Research Development Specialist to provide expanded support for research activities across the University.	
Purpose/Intent	The Research Development Specialist assists research centers and other research-oriented faculty at SFA with identifying external grant opportunities, developing sustainability plans, and editing and submitting research grant proposals.  This position enables the SFA research centers and associated faculty members to gain recognition, to find and apply for a greater number of grant opportunities, and to become self-sustaining entities that contribute to the research capacity of the University.	
What makes this project a good investment for the state or institution?		
Financial		
Financial	research capacity of the University.	ng entities that contribute to the
Financial	research capacity of the University.  Salaries/Wages for New or Reassigned FTEs	s 35,710
Financial	research capacity of the University.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 35,710 \$ 0
Financial	research capacity of the University.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	\$ 35,710 \$ 0 \$ 0

Title	Chemistry Microwave	
Description	Purchase a START Milestone microwave with departmental funds).	system (partial purchase leveraged
Purpose/Intent	Organic synthesis has evolved from simple chromatography. Modern organic experim reaction efficiency, which may remove the and in some cases provide reactions that faculty to conduct modern organic synthese equipment is required for the department.	nents involve studies to improve need for extensive chromatography, normally do not occur. In order for tic studies, more modern heating
What makes this project a good investment for the state or institution?	The purchase of the START microwave will give the chemistry department the capability to perform microwave heating which will have a tremendous impact on organic synthesis reactions for research by our students and faculty.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 9,000
	Total	\$ 9,000

Title	A continuing long-term investigation into status of the Chihuahuan mud turtle (Kin Presidio County, Texas	•
Description	Initiation of ecology and demographic study of K. hirtipes in livestock ponds near Plata, TX began in April 2007 and study continues. Continuing to study and expand the life history and conduct further assessments of the conservation status of K. hirtipes in southern Presidio County.	
Purpose/Intent	Continue life history studies initiated in 2007 due to the given urgency for ecological and population data on this endangered turtle.	
What makes this project a good investment for the state or institution?	Virtually nothing is known about the life history, ecology and conservation status of K. Hirtipes in Texas and such data are urgently needed to develop effective management plans. Subsequently, the only populations of K. Hirtipes in the United States are found at a few widely scattered sites in the Alamito Creek drainage of Presidio County, TX.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 5,067
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 5,067

Title	Effects of Prescribed Fire on Pronghorn in Desert Grasslands in the Trans-Pecos	
Description	Study pronghorn habitat on areas that have been burned anywhere from 1 to 5 years ago along with areas that have not been burned for over 50 years on the O2 and Catto-Gage Ranch in Brewster County, Texas.	
Purpose/Intent	This research will give land owners the knowledge needed to use fire as a viable management tool that will provide for wildlife and livestock.	
What makes this project a good investment for the state or institution?	Improving habitat through prescribed fire has the potential to improve pronghorn and mule deer health and possibly increase revenue through hunting.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 5,410
	Staff Benefits	<b>\$</b> O
	Capital Expenditures	<b>\$</b> O
	Total	\$ 5,410

Title	Home Range and Habitat Use by Black Bears (ursus americanus) In the Trans-Pecos, Texas	
Description	This study will evaluate the connectivity of dispersal corridors, habitat selection during dispersal, and mortality factors for black bears in the Trans-Pecos, Texas.	
Purpose/Intent	Results of this study will provide needed information on a keystone and umbrella species that is naturally recolonizing the Trans-Pecos of Texas.  It is anticipated that this study will continue for the next 5 years (at a minimum). This research project will increase our knowledge of black bear distribution, movement, and corridor use in western Texas and adjacent northern Mexico.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 6,910
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 6,910

Title	Tamarisk Biological Control on the Rio G Monitoring Diohabda sublineata Selection Athel.	<u> </u>
Description	Several species of beetles have been found to be effective biocontrol agents and have been found to have a low affinity for athel, this had yet to be tested in the field until this past year.	
Purpose/Intent	The goal of this project is to examine the selective choice and defoliation of Diohabda established in the area against saltcedar and athel, respectively.	
What makes this project a good investment for the state or institution?	Invasive tamarisk removal is the goal. The use of the tamarisk beetles could permanently suppress tamarisk by 75-85% without collateral damage to native flora, with low cost, and without need of re-application. It can also contribute to native ecosystem restoration and benefit several rare riparian species of the Rio Grande Basin of Texas.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 5,000
	Staff Benefits	\$ 0
	Capital Expenditures	<b>\$</b> 0
	Total	\$ 5,000

Title	Subsurface of the Shafter Area, Texas	
Description	Examination of newly drilled subsurface rock core from the Shafter area, Presidio County, Texas.	
Purpose/Intent	To determine changes occurred in the Marfa Basin at the Middle/Upper Boundary, a time when the Delaware Basin abruptly changed from normal marine conditions to restricted, hypersaline deposition.	
What makes this project a good investment for the state or institution?	This research will investigate the extent of environmental changes in the Marfa and Delaware Basins in Far West Texas at the Middle/Upper Permian boundary that could hold clues to the paleoclimatic situation coincident with a major extinction event which are also of emerging interest to modern petroleum geology.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,700
	Staff Benefits	\$ 0
	Staff Benefits Capital Expenditures	\$ 0 \$ 0

Title	The Isolation of the Principal Iron-Redu ferrireducens a Novel Thermophilic Gra	
Description	To begin the characterization of the entithermophilic, bacterial Fe (III)-reducing within Yellowstone National Park, Then the most prolific iron-reducers discover	isolate isolated from thermal soils from molitchobacter ferrireducens is one of
Purpose/Intent	This will begin the first full characterization of the enzymes of Fe(III)-red from within this branch of the bacterial domain and utilize classical biochemical as well as molecular techniques (gene expression analyses identify and better understand the functional enzymology of iron reduction within this novel group of bacterial.	
What makes this project a good investment for the state or institution?	Dissimilatory metal reduction, in particular iron reduction, Fe(III) to Fe(II), is thought to be one of the most important respiratory strategies in anaerobic soils and subsurface environments and has become a topic of interest due to its role in biogeochemical cycling, potential for applications in bioremediation, and its role in the evolution of microbial life.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 0
	Operating Expenses	\$ 4,500
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 4,500

Title	Continuation of Morphological Variation of cembroides and Pinus edulis): Are They	,
Description	Based upon extensive field observation, to (Mexican Pinyon Pine) in particular, and to Mexico Pinyon Pine) has proven difficult a number has been most emphasized, but	to a lesser extent P. edulis (New at best. The characteristic of needle
Purpose/Intent	To morphologically study vegetative and reproductive material of both field herbarium specimens of P. Cembroides and P. edulis in order to, not only better define these species, but also determine a suite of consistent characteristics to be used during field identification.	
What makes this project a good investment for the state or institution?	To be able to finally determine a suite of consistent characteristics to be used during field identification and to determine if leaf number per fascicle variation correlates with elevation as suggested by field observation.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 3,895
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 3,895

Title	Effects of harvesting on mortality, regrow South Texas population of Lophophora w	· ·
Description	Peyote cactus (Lophophora williamsii) is becoming scarce in its natural habitat, presumably due in part to poor harvesting techniques and an unsustainably high frequency of harvesting.	
Purpose/Intent	The objective of this study is to generate quantitative data showing the effects of harvesting on mortality rates in harvested vs. nonharvested plants, the size and number of new stems ("regrowth") of the cactus after harvesting, and the alkaloid content of such new stems compared to that of mature stems in a representative population of L. williamsii in South Texas.	
What makes this project a good investment for the state or institution?	The data from this study will be of broad interest to people in various disciplines, including economic botany, phytochemistry and analytical chemistry, and to sectors of the public to include the NAC and regulatory agencies such as DEA, FDA and the Texas DPS.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 4,878
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 4,878

Title	An investigation into the Prevalence of W	/ildlife Diseases in Pronghorn
Description  Recently, pronghorn populations have experienced unprecedented the Trans-Pecos and reached a 70-year low of 4,731 animals in 2 our partners, the Borderlands Research Institute, has initiated a reproject to jump-start the recovery of pronghorn in the Trans-Peco		low of 4,731 animals in 2010. With Institute, has initiated a restoration
Purpose/Intent	To evaluate the prevalence of wildlife dishemorrhagic disease) and assess the nupronghorn.	` • •
What makes this project a good investment for the state or institution?	. •	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 7,800
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 7,800

Title	Center for Big Bend Studies-Other	
Description	Center for Big Bend Studies fosters interdisciplinary diverse prehistoric, historic, and modern cultures of the borderlands region of the United States and Mexico with emphasis on the area encompassed by Trans-Pecos and north-central Mexico.	
Purpose/Intent	region's rich cultural legacy through dynamic programs involving research, education, public outreach and publication.  at makes this project ood investment for	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 69,447
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 69,447

Title	Borderlands Research Institute-Other	
Description	Borderlands Research Institute enhances the ability of ranchers, farmers, and citizens of Texas to conserve natural resources along the borderlands of Texas.	
Purpose/Intent	resources. Population growth, habitat fragmentation, and invasive species coupled with frequent droughts make conservation and management of the natural resources especially challenging.  What makes this project a good investment for	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 37,413
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 37,413

Title	Organized Research Program		
Description	The Organized Research Program provides financial support for the individual research projects of at least 16 faculty members across the university's colleges and academic disciplines.		
Purpose/Intent	Provide direct funding to the faculty for the university research mission.		
What makes this project a good investment for the state or institution?	The program supports the university's research mission by providing valuable start up funds for faculty research projects. Projects selected for funding are those that are likely to produce preliminary data needed to apply for external funding.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 120,707	
	Salaries/Wages for Existing FTEs	\$ 347,894	
	Salaries/Wages for Existing FTEs Operating Expenses	\$ 347,894 \$ 63,518	
		· · · · ·	
	Operating Expenses	\$ 63,518	

Title	Texas Institute for Applied Environment	ntal Research
Description	The office of Texas Institute for Applied Environmental Research (TIAER) is a multidisciplinary research institute authorized by the Texas Legislature that is tasked with conducting applied research on environmental issues, provide national leadership and policy development.	
Purpose/Intent	TIAER conducts scientific research, economic inquiry, and institutional, statutory and regulatory analyses to address pressing environmental issues facing the state and nation, and assists public entities in the development and implementation of policies that promote environmental quality.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures	\$ 0 \$ 171,790 \$ 387 \$ 0 \$ 0
	Total	\$ 172,177

Title	Grants & Contracts Administration	
Description	The Grants & Contracts Administration is responsible for preparing the financial reports of many of the research grants at Tarleton State University and entering the annual reports into the Sponsored Research Data Base for all grants and contracts.	
Purpose/Intent	To assure that Tarleton State University is regulations associated with each grant.	s complying with the rules and
What makes this project a good investment for the state or institution?	By making sure that all grants comply with the budgets established for the grant by the disbursing agency in charge of the grant, we are able to continue securing additional funding from the provider.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 30,926
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 30,926

Office of Institutional Research	
The office of Institutional Research provides partial funding for the existing Office of Institutional Research, a department whose mission includes university research development.	
Allow for the coordination of the general function of institutional research, conduct research to answer questions about and for the university, and design research strategies to collect, analyze and present data.  This project is an excellent investment for the state of Texas, A&M University System and Tarleton State University as it provides resources to conduct research on a broad range of higher education issues and provide information to the above mentioned entities. Information is also prepared for many other external organizations and individuals conducting various forms of research. Without these funds, it would be difficult for Tarleton to respond to these types of request.	
	The office of Institutional Research provide Office of Institutional Research, a departruniversity research development.  Allow for the coordination of the general from the conduct research to answer questions above research strategies to collect, analyze and This project is an excellent investment for System and Tarleton State University as research on a broad range of higher educt to the above mentioned entities. Informate external organizations and individuals confidently without these funds, it would be difficult for request.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits

### RDF, Annual Report - FY 2012 Texas A&M International

Title	Research Development Fund	
Description		
Purpose/Intent	Intended for supporting the operations of the university Office of Grant Resources.  The Office of Grant Resources works closely with the university faculty in the development of research related grant proposals.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 126,623
	Operating Expenses	<b>\$</b> 0
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 126,623

Title	Start-up funds (new faculty hires)	
Description	Unexpended funds to be used for start up	packages for new faculty hires
Purpose/Intent	Many of these are to fill vacant positions but some are new positions. To maximize research capabilities is important to hire individuals with strong potential to attract external research funding. Competitive start-up packages	
What makes this project a good investment for		
the state or institution?	maximize research capabilities is importa	nt to hire individuals with strong
the state or institution?  Financial	maximize research capabilities is importa potential to attract external research fund	nt to hire individuals with strong
	maximize research capabilities is importa potential to attract external research fund are a critical part of this.	nt to hire individuals with strong ing. Competitive start-up packages
	maximize research capabilities is importa potential to attract external research fund are a critical part of this.  Salaries/Wages for New or Reassigned FTEs	nt to hire individuals with strong ing. Competitive start-up packages
	maximize research capabilities is importa potential to attract external research fund are a critical part of this.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	nt to hire individuals with strong ing. Competitive start-up packages  \$ 0 \$ 0
	maximize research capabilities is importa potential to attract external research fund are a critical part of this.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	nt to hire individuals with strong ing. Competitive start-up packages  \$ 0 \$ 0 \$ 50,304

Title	Center for Texas Beaches and Shores	(Dr. Samuel Brody)
Description	Partial operating expenses for the Cen proposal development	ter for Texas Beaches and Shores for
Purpose/Intent	Research focuses on sustainable coastal management, climate change planning, natural hazards mitigation, fostering the development of resilient coastal communities, and using spatial tools to examine and disseminate data to coastal stakeholders and other interested parties.	
What makes this project a good investment for the state or institution?	funding to pursue external grants for CCTBS was able to obtain \$458,801 fromeans CTBS yielded a profit over 31 t Imagine if your stock portfolio had the has \$857,658 of external grant funding perspective, the base funding helped s last year and provided training on GIS information dissemination perspective,	m federal organizations last year. That imes the initial state investment. same returns. Also, the CTBS currently in effect. From an educational support at least four students during the and spatial data analysis. From an
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 14,300
	Operating Expenses	\$ 400
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 14,700

Title	Coastal surge barrier research (Dr. William Merrell)	
Description	Research related to the technical, economic and social aspects of a coastal surge barrier protecting the upper Texas Coast	
Purpose/Intent	gets hit by a major (category 3 or higher) hurricane every 15 years. Surge suppression using a coastal barrier would be a cost effective method to	
What makes this project		
a good investment for the state or institution?	gets hit by a major (category 3 or higher) I	nurricane every 15 years. Surge
the state or institution?	gets hit by a major (category 3 or higher) I suppression using a coastal barrier would	nurricane every 15 years. Surge
the state or institution?	gets hit by a major (category 3 or higher) is suppression using a coastal barrier would prevent such losses.	nurricane every 15 years. Surge be a cost effective method to
the state or institution?	gets hit by a major (category 3 or higher) is suppression using a coastal barrier would prevent such losses.  Salaries/Wages for New or Reassigned FTEs	nurricane every 15 years. Surge be a cost effective method to
the state or institution?	gets hit by a major (category 3 or higher) If suppression using a coastal barrier would prevent such losses.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	nurricane every 15 years. Surge be a cost effective method to \$ 0 \$ 13,500
	gets hit by a major (category 3 or higher) Is suppression using a coastal barrier would prevent such losses.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	nurricane every 15 years. Surge be a cost effective method to \$ 0 \$ 13,500 \$ 0

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Title	Visualization and Coastal Atlas Resea	rch (Dr. William Seitz)
Description	Salary for a programming assistant, R projects.	ob Gatlin, to support University research
Purpose/Intent	Researcher computational support an	d development
What makes this project a good investment for the state or institution?	research development award. In the p the campus research support level thr the entire campus community, includir Information Systems group, but also in support their computational needs. In Information System projects such as t regard to the Ike Dike, when the Rice enormous "coastal preserve" we were preserve would have on the tax base of visualization, Mr. Gatlin has demon interacting directly with any surface – Wii controllers and their IR transmission interact with projected PowerPoint prewer were exploring two new ideas using development of an inexpensive "table can interactively work on a common premotely and captured electronically as	a largely supplies this support through the last year, efforts have been directed at ough major network upgrades utilized by an projects headed by TAMUG's included work with multiple Pl's to addition, work continues on Geographic he Coastal Atlas. In particular, with University SSPEED center proposed an able to compute the impact such a of the communities involved. In the field strated an inexpensive tool for including virtual ones. Using only simple on/reception capabilities, we are able to esentations any screen (or even a wall). If this technology – first is the exercise system whereby many people roject with the results displayed as well. The second project will attempt in (or other) surface to explore ripple and
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 35,888
	Operating Expenses	\$ 0
	Staff Benefits Capital Expenditures	\$ 0 \$ 0
	Total	\$ 0 \$ 35,888
	Total	Ψ 33,000

Title	Research Assistant support (Drs. Jay Rooker and Antonietta Quigg)		
Description	Research Salary and supply support		
Purpose/Intent	Salary for a Research Assistant, Mike Dalton, to support function of ICP-MS and other lab instruments.		
What makes this project a good investment for the state or institution?	application of standard instrumental techniques as well as perform routine maintenance of research instruments. To allow Researchers more time to focus on their areas of expertise and know that their instruments are going to		
Financial	focus on their areas of expertise and know		
Financial	focus on their areas of expertise and know be functioning when needed.	v that their instruments are going	
Financial	focus on their areas of expertise and know be functioning when needed. Salaries/Wages for New or Reassigned FTEs	v that their instruments are going	
Financial	focus on their areas of expertise and know be functioning when needed.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	v that their instruments are going \$ 0 \$ 20,912	
Financial	focus on their areas of expertise and know be functioning when needed.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	\$ 0 \$ 20,912 \$ 0	

Title	Start-up funds (Dr. Wesley Highfield)	
Description	Start-up funding for new tenure-track Marine Sciences Assistant Professor.	
Purpose/Intent	Research support and advancement.	
What makes this project a good investment for the state or institution?	The benefit of this fund allocation from the State of Texas/TAMUG of is twofold. First, these funds have been used to support original research in the fields of natural hazard mitigation (related to hurricanes and floods), statistical and spatial analyses, and remote sensing-projects which are typically focused on Texas. Second, a large proportion of these funds will be spent to support graduate and undergraduate students. These students not only support research projects, but gather invaluable technical and research experiences.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 13,424
	Salaries/Wages for Existing FTEs	\$ 11,748
	Operating Expenses	\$ 4,828
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 30,000

Title	Start -up funds (Dr. Jhenny Galan)	
Description	Start-up funds for new tenure-track Marin	ne Sciences Assistant Professor.
Purpose/Intent	The startup fund is utilized solely for esta A&M-Galveston.	ablishing research efforts at Texas
What makes this project a good investment for the state or institution?	The equipment and tools, specifically high-efficiency workstations and computational chemistry software, that have been purchased as well as future purchases, contribute to the computing facility at TAMUG.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 15,000
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 10,000
	Total	\$ 25,000

Title	Equipment support for Sea Life Facility (Dr. Kim Reich)	
Description	Sea Life Facility equipment support.	
Purpose/Intent	Mechanical repairs to Sea Life Facility chiller and recirculation pump.  This facility is one of the largest & best designed facilities for controlled studies of marine systems and coastal lagoons in the Gulf of Mexico. Installing individual mesocosms (tanks, aquaria, etc.) and integrating them into the 40,000 gallon recirculating sea water system provides the means for TAMUG faculty to design studies that will increase understanding of the ecosystems of the Gulf of Mexico and the resources contained therein.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
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	Salaries/Wages for Existing FTEs	\$ 0
	5	,
	Salaries/Wages for Existing FTEs	\$ 0
	Salaries/Wages for Existing FTEs Operating Expenses	\$ 0 \$ 3,500

Title	Start-up funds (Dr. Cong Kang)	
Description	A new tenure track position in mathematics was created at TAMUG. The funds are provided as summer salary, money for travel for purposes conducive to mathematical research, as well as computer equipment and software. The summer salary allowed the recipient	
Purpose/Intent	This tenure-track position in mathematics will expand TAMUG's capabilities this area and may also enhance research activities in other areas. It will a give students the opportunity to explore this important component in their studies.	
What makes this project a good investment for the state or institution?	The primary mission of a university is the propagation of knowledge and the creation of new knowledge. It is in the best interest of all Texans to have their state universities staffed by faculty who have the necessary knowledge and proficiency (gained through their research experiences) to be competent and confident teachers in the classroom.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures	\$ 0 \$ 4,669 \$ 1,697 \$ 0 \$ 0
	Total	\$ 6,366

Title	Research Assistant for Institutional Review Board (IRB)	
Description	Graduate assistant reviews and evaluates research descriptions and issues related to human subjects.  An essential part of research is in the protection of human and animal subjects. This attention to the analysis of research designs assists Pis in ensuring all research follows ethical principles.  An essential part of research is in the protection of human and animal subjects. This attention to the analysis of research designs assists Pis in ensuring all research follows ethical principles.	
Purpose/Intent		
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 16,595
	Operating Expenses	\$ 0
	Operating Expenses Staff Benefits	\$ 0 \$ 0
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Title	Research Compliance / Grants and Contracts Specialist	
Description	Professional position responsible for all issues involved in responsible and ethical conduct of research.	
Purpose/Intent	The purpose of this position is to continua research issues related to the following: B care and use, export control, conflict of intresearch.	liosafety, human subjects, animal
What makes this project a good investment for the state or institution?	An essential part of research involves ethical principles and conduct. This professional provides a tremendous service to that purpose.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 38,164
	Operating Expenses	\$ 2,646
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 40,810

Title	"The South's Most Democratic College": A Rhetorical Analysis of Critical Race Narratives Surrounding Integration in a Southern, University Town (1960-1980)	
Description	Flovides scribiarly data for researchers of race relations post-integration on	
Purpose/Intent		
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 7,999
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,797
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 9,796

Title	A road Towards Light Driven Bio-Hydrogen Production	
Description	Studies the relationship of gas-liquid transfer in conventional bioreactors and its effect on the bioprocess for bio-hydrogen production.	
Purpose/Intent	Find a way to by-pass the gas-liquid mass transfer problem allowing for an economic single step bioprocess.	
What makes this project a good investment for the state or institution?	Provides research data to the energy sector to make the production of bio-hydrogen economically feasible.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 17,967
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 17,967

Title	Rab7 Localization and Unique Protein Interaction in SPG21-/-mice	
Description	Examine maspardin's role to growth factor receptor trafficking/study Rab7's function post signal disruption.	
Purpose/Intent	Determine the role of the protein Maspardin in the neurodegeneration of upper motor neurons and its role leading up to Mast syndrome.	
What makes this project a good investment for the state or institution?	Provides research data to the scientific community to solve the underlying causes of Mast syndrome.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 15,325
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 15,325

Title	Fast Quantification of Angiogenesis in Virtual Slides	
Description	Create an automated assessment software tool for analyzing angiogenesis.	
Purpose/Intent	Improve the accuracy and efficiency of assessing angiogenesis in solid tumors.	
What makes this project a good investment for the state or institution?	Frovides a solution to pathologists for improving the accuracy of assessing	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 9,333
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 2,226
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 11,559

Title	Using Evidence to Make and Account	for the Decision to Not Vaccinate
Description	Sixty-six in-depth interviews (amounting to over 100 hours of interviews) were conducted. My trip to the AMA archives generated dozens of pages of notes and over 300 digital images of archival data that will be used for a future article I had enough time to travel to the University of Chicago to examine the archival collection of Morris Fishbein, one-time President of the AMA. This was an unexpected bonus trip that added to the richness of data already collected at the AMA.	
Purpose/Intent	This project examined human interaction in online computer-mediated group We sought to answer a number of questions regarding group behavior (e.g. how do groups form a status hierarchy in online groups?). The goals of the project were to (1) create a spider bot to collect and conduct secondary analysis on the texts, (2) build a corpus that can be provided to the scientific community, and (3) answer the researchers' questions regarding online grounteractions using the data collected.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 811
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 811

Title	Breaking Barriers for Beginning Hispani	c Farmers and Ranchers
Description	Collaborate with Texas AgriLife Extension Agricultural Workers in providing timely Hispanic farm workers and part-time far in expanding their involvement in farm of	and relevant training to beginning mers and ranchers who are interested
Purpose/Intent	This project utilized relevant sociological rural Hispanics involved in agriculture. Hemployed in large-scale dairy operations who seek to transition to full-time farm operaticipants were recruited for communi Sulphur Springs, Texas with additional to demonstration sites and at the Texas Adat the university farm. This project used Spanish, the primary language of participants	Hispanic farm workers, primarily s, and part-time farmers and ranchers or ranch owner-operators. These ty-based training held primarily in raining being held on farm-based &M University-Commerce campus and novel approaches including training in
What makes this project a good investment for the state or institution?	As Texas and the northeast Texas region continues to experience a change in demographics, more and more Hispanic individuals need guidance and support to become successful farmers and ranchers. This project tests new ideas to make this possible as well as directly effecting participants in the region and state.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 21,333
	Operating Expenses	\$ O
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 21,333

Title	Summer Graduate Research Assistant Support	
Description	Provide graduate assistantship funding for graduate student researchers during the summer semester	
Purpose/Intent	To provide support for research graduate assistants to work with faculty on research projects during the summer semester	
What makes this project a good investment for the state or institution?	Prepares Research Assistants with the knowledge to manage research projects towards their thesis/dissertation for graduation.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 39,999
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	<b>\$</b> O
	Total	\$ 39,999

Title	The Development of Recyclable Chira Asymmetric Reactions	I Ionic Liquid-Supported Catalysts for
Description	asymmetric transformations in organic recovered and recycled because they media. As a result, large amounts of c industry, which poses a disposal probl	are typically soluble in the reaction atalysts are typically used, especially in lem. In this research, a new series of ysts is developed and used to catalyze a
Purpose/Intent	The knowledge gained from this resear organic chemistry by providing fundam chiral organocatalysts influence the ou also determine the factors that influence	nental insights to better understand how utcomes of asymmetric reactions and
What makes this project a good investment for the state or institution?	The proposed research not only addresses a major aspect of chemistry in the development and study of new types of recyclable catalysts for asymmetric reactions, but due to the relevance of this research to everyday chemistry, it will also serve to increase the number of students in the STEM pipeline by recruiting, training and preparing a diverse population of mostly undergraduate students at a rural regional university that serves a low economical region of Northeast Texas for advanced study and careers.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 5,000
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 5,000

Title	Analyses of the diffraction data point	
Description	Analyses of the diffraction data point to prepare samples under different experimental conditions and testing the samples with the XRD Ultima IV.	
Purpose/Intent	Analyses of the diffraction data point to prepare samples under different experimental conditions and testing the samples with the XRD Ultima IV.	
What makes this project a good investment for the state or institution?	This research will contribute to the knowledge of diffraction will be reported in the literature and at conferences and the results will highlight the capability of the Physics department.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 585
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 585

Title	Identities & Imbroglios: Conflicts in Inte	rnet Fandoms
Description	The objective of the project is to exami computer-mediated groups. We seek to regarding group behavior (e.g., how do online groups?). The goals of the projecollect and conduct secondary analysis can be provided to the scientific communications regarding online group interest.	o answer a number of questions o groups form a status hierarchy in ct are to (1) create a spider bot to s on the texts, (2) build a corpus that unity, and (3) answer the researchers'
Purpose/Intent	The objective of the project is to exami computer-mediated groups. We seek to regarding group behavior (e.g., how do online groups?). The goals of the projecollect and conduct secondary analysis can be provided to the scientific communications regarding online group interest.	o answer a number of questions o groups form a status hierarchy in ct are to (1) create a spider bot to s on the texts, (2) build a corpus that unity, and (3) answer the researchers'
What makes this project a good investment for the state or institution?  This project served as a learning opportunity for both undergraduate graduate students. Currently 3 graduate students are working on the Once the data was collected, undergraduate students were given the opportunity to learn to code data, analyze and interpret data, and wrempirical results. We are currently writing a larger external grant prowill benefit the university based on this research. The results of the publication include both undergraduate and graduate students). The knowledge from the project will also further scientific theory regarding group beto The corpus of texts will be provided online for other researchers to a (this improves the image of the university and furthers knowledge of interaction).		e students are working on the project. duate students were given the vze and interpret data, and write ing a larger external grant proposal that research. The results of the project will presentations (these publications will ate students). The knowledge gained fic theory regarding group behaviors. line for other researchers to analyze
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	\$ 14,444 \$ 0 \$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 14,444

Title	Chiral Porphyrins: The Recognition of Chiral Guests	
Description	This objective of this project is to develop porphyrin compounds that are chiral. PI will utilize the chiral porphyrin compounds for the development of receptors that are specific for chiral anions and chiral amines.	
Purpose/Intent	This objective of this project is to develop porphyrin compounds that are chir. PI will utilize the chiral porphyrin compounds for the development of receptor that are specific for chiral anions and chiral amines.	
What makes this project a good investment for the state or institution?	The results of this work will assist in the development of sensors for chiral anions and amines, which will assist in the understanding of biological processes.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 665
	Staff Benefits	\$ 0
	Capital Expenditures	\$ O
	Total	\$ 665

Title	Layered Expansion Drawing and Sculpture Series	
Description	This project investigates the use of particular color palettes to reference architectural model making, while utilizing contemporary painting, sculpture and sculptural installation practices.	
Purpose/Intent	This project investigates the use of particular color palettes to reference architectural model making, while utilizing contemporary painting, sculpture and sculptural installation practices.	
What makes this project a good investment for the state or institution?	This research will contribute to the knowledge of color palettes will be reported in the literature and at conferences and the results will highlight the capability of the Art department.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,400
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,400

Title	Research Supplement Fund	
Description	Established to assist faculty with presenting, publishing, or other incidentals involved with increasing research capacity.	
Purpose/Intent	To position TAMU-CC faculty to be more competitive with federal proposals.  To increase federal dollars coming to Texas.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 217,172
	Operating Expenses	\$ 22,290
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 239,462

Title	Generation 1.5 Student Research	
Description	To request funding for attending the 2012 National Center for Education Statistics Data Conference in Washington D.C.	
Purpose/Intent	<ul> <li>To focus on the writing of Generation 1.5 students, and long-term U.S resident language learners.</li> <li>To gain necessary training to use educational databases to increase the research program.</li> </ul>	
What makes this project a good investment for the state or institution?	To gain working knowledge of the IES database. This knowledge will allow for a host of grants and research opportunities, including the AERA Grant Program.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,865
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,865

Title	Photovoltaic Solar Energy Development	
Description	To request financial aid assistance to participate in the 38th IEEE Photovoltaic Specialist Conference to be held in Austin, Texas, from June 3 - 8, 2012.	
Purpose/Intent	<ul> <li>To learn about current research activities taking place in the field with other institutions.</li> <li>To gain knowledge and a clear vision about potential research areas in the field.</li> </ul>	
What makes this project a good investment for the state or institution?	<ul> <li>If submitted research is funded, postdocs and graduate students will be hired to work on it.</li> <li>Enhance the University's visibility in research and scholarships assisting to recruit graduate students and posdoctoral fellows.</li> </ul>	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	<b>\$</b> 0
	Operating Expenses	\$ 2,065
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 2,065

Title	Networks in Environmental Policy and Management	
Description	The research involves studies about network structure and management as well as their political processes that can have great impact on environmental policy and management.	
Purpose/Intent	To study the network or organizations that manage the coastal eco-system for the Coastal Bend of Texas.	
What makes this project a good investment for the state or institution?	Contribute significantly to the disciplines of network theory and public administration.     Provide acute advice and guidance for practioners on the designs of networks.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 728
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 728

Title	Memory Theory Development	
Description	To further investigate into prevalent memory theory and establish a research program at TAMU-CC.	
Purpose/Intent	<ul> <li>To continue investigating the effects of orthographic neighborhood size and other measures of distinctiveness on memory retention.</li> <li>To continue investigating the effects of retrieval practice on both memory formation and forgetting.</li> </ul>	
What makes this project a good investment for the state or institution?	Further the field of human memory research and help to identify important components of the memory processes at work in the human mind.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 913
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	<b>\$</b> O
	Total	\$ 913

Title	Couns. Ed Psych Study Abroad Program	
Description	Dialect Behavioral Training (DBT) is an innovative behavioral health intervention that has been empirically proven to decrease self harm behavior and use of emergency services in clients diagnosed with Borderline Personality Disorder.	
Purpose/Intent	<ul> <li>•To fund DBT for a team of faculty members and fund a DBT program at the Counselor education university clinic.</li> <li>•To present research at the ACA Conference in San Francisco. Acceptance to this conference is extremely competitive. Only 32% of proposals were accepted this year.</li> </ul>	
What makes this project a good investment for the state or institution?	<ul> <li>Increase university visibility in research and scholarship opportunities, and serve to develop and grow the research program.</li> <li>Provide vital opportunities for networking and partnerships to increase research productivity related the presentation topic.</li> </ul>	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 689
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 689

Title	New Opera Production World Premier	
Description	This project will be a production of a new English language opera based on the subject matter involving immigrant population and culture in the states.	
Purpose/Intent	•To promote Taiwanese and Asian culture •Enhance the understanding between peo	
	•Provide students with opportunities to perform in this international operatic event in which they will not only develop their musicianship and artistry, but also work with international musicians and artists, sharing and exchanging their cultural experiences.	
	•Participate in the biennial "Chamber Opera Composition Competition" and the "Opera Production Competition" held by the National Opera Association.	
What makes this project a good investment for the state or institution?	•To provide bridges between the majority communities, to educate, and to even rein pluralism of American culture.	nforce a sense of pride in the
	•The world premier performance of this op Performing Art Center will raise the prominuniversity.	<del>-</del> ·
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 2,500
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 2,500

Title	Groundwater Resources Research using Resistivity Imaging Techniques	
Description	This research is mainly concerned with water resource evaluations including saltwater intrusion, submarine groundwater discharge, and groundwater-surface water interaction in coastal areas. Of importance in coastal environments is the use of electrical resistivity surveys that enable the delineation and characterization of groundwater seeps or submarine groundwater discharge to coastal embayment's and provides vertical and horizontal distribution of subsurface and surface water salinity contents.	
Purpose/Intent	<ul> <li>•To contribute to the knowledge base and development of the physical and contaminant hydrogeology using interdisciplinary approaches including geophysical techniques.</li> <li>•To improve the understanding of the factors controlling subsurface contaminant transport and the interaction between ground water and surface water.</li> </ul>	
What makes this project a good investment for the state or institution?	Enhance the university's visibility in research	
Financial	Salaries/Wages for New or Reassigned FTEs	<b>\$</b> 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 214
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 214

Title	Chamber Music on the Island	
Description	This proposal is structured in two parts; a series of chamber music performances performed by TAMU-CC faculty and guest artists, and an educational outreach program structured around each chamber concert. This proposal includes Latin American classical and popular music performances which are a great way to educate students about their history and culture.	
Purpose/Intent	<ul> <li>To provide artists with the opportunity to collaborate with other elite faculty both on and off campus.</li> <li>To provide artist the opportunity to become exposed not only to classical music in a more formal setting but also to music of Latin American heritage.</li> <li>To offer students a chance to work with professionals in an elite setting.</li> </ul>	
What makes this project	•Increase visibility of the university	
a good investment for the state or institution?	•offer unique recruitment opportunities for the faculty at TAMU-CC.	
Financial	Salaries/Wages for New or Reassigned FTEs	<b>\$</b> 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ O

Title	Ecological Restoration Research Develop	pment
Description	The proposal requests funds to support restoration of estuarine habitats, including and tidal wetlands.	
Purpose/Intent  •To chair a session at the 2012 Benthic Ecology Meeting to proving science-based strategies to inform coastal natural resource manality of the contract a web designer to create a faculty website to list resource interest, current projects, publications, current and former student information about and links to the FAMA, MARB and CMSS programmer.		al natural resource management aculty website to list research irrent and former students, and
	•To seek to partially defray the page char The goal was to identify suitable sites for Mission-Aransas Estuary, TX using a Ge methodology.	oysters reef restoration within the
What makes this project a good investment for the state or institution?	Enhance the university's visibility in researand to increase recruiting graduate stude	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,033
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,033

Title	Counselor Research	
Description	To request funds for recruiting potential masters and doctoral level students for the Department of Counseling and Educational Psychology	
Purpose/Intent	The purpose of this proposal is to seek an and doctoral level students for the Departr Psychology. The emphasis in this recruitm conference to seek individuals who are eth department is interested in matriculating state diverse client and student populations practice and profession.	nent of Counseling and Educational ent agenda is to attend a national nnically and culturally diverse. Our tudents who are representative of
What makes this project a good investment for the state or institution?	What makes this project a good investment is its alignment with the university's recruitment initiative of international students, recognizing these potential candidates may be from international parts of the world.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 511
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 511

Title	Functional Ceramic Nanoparticles	
Description	The proposal works on producing strategic ceramic nanoparticles using cheap precursors.	
Purpose/Intent	<ul> <li>To participate and present research in the world's largest nanotechnology event, Nanotech 2012, June 18-21 2012, Santa Clara, CA.</li> <li>To gain insight and learn about new advances in the field, challenges and future trends.</li> <li>To initiate more novel ideas for other future submissions.</li> </ul>	
What makes this project a good investment for the state or institution?	Enhance the University's visibility in research	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ O
	Operating Expenses	\$ O
	Staff Benefits	\$ 0
	Capital Expenditures	\$ O
	Total	\$ O

Title	Breast Cancer Related Lymphema (BCRL)	
Description	BCRL is a progressive chronic condition, particularly if it is not recognized and treated early. Several studies emphasize the lack of standardized lyphedema services in the United States compared to countries such as Canada and Europe. This research aims at examining adherence focusing on patients' with BCRL, using international best practice guidelines.	
Purpose/Intent	<ul> <li>To describe adherence to national guidelines used by health providers when providing services to elderly Texans receiving therapy for breast cancer related lyphedema.</li> <li>To describe variation in guideline adherence related to patient and provider factors.</li> <li>To compare the effectiveness and average cost of care of patients who receive guideline-adherence and non-adherent care.</li> </ul>	
What makes this project a good investment for the state or institution?	Enhance the University's visibility in research	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	<b>\$</b> O
	Staff Benefits	<b>\$</b> 0
	Capital Expenditures	\$ 0
	Total	\$ 0

Title	PSIP	
Description	The research is mainly concerned with managing fresh water resources and environmentally sensitive ecosystems in coastal and semi-arid regions. To do this, investigations in groundwater-surface water interaction are essential.	
Purpose/Intent	•To conduct preliminary research that would provide improved understanding of the extent of groundwater-surface water interaction and solute and geochemical exchange within the transition zone in a coastal area. •To analyze aqueous samples from groundwater wells, water column, and stream bed pore water for a large suite of isotopes and major elements.	
What makes this project a good investment for the state or institution?	The research associate will take lead in analyzing water samples using a Radon measuring instrument hosted at the Conrad Blucher Institute , TAMU-CC. This will enhance the image of the university.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	<b>\$</b> 0

	Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 <b>\$ 3,750</b>
	Operating Expenses	\$ 0
	Salaries/Wages for Existing FTEs	\$ 3,750
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
What makes this project a good investment for the state or institution?	•Enhance the University's visibility in research •Enhance the collaboration between TAMU-CC and UAH	
Purpose/Intent	<ul> <li>•To enhance the capabilities of decision-makers in South Texas, the Gulf of Mexico coastal region by generating a representative suite of new drought mitigation products derived from remote sensed thermal infrared (TIR) and other data.</li> <li>•To aim to spatially delineate groundwater discharge zones that empty into coastal environments in response to seasonal fluctuation of precipitation using ASTER (thermal infrared imagery - TIR) and Landsat data supported with resistivity soundings.</li> </ul>	
Description	This is a collaboration proposal of TAMU-CC and The University of Alabama in Huntsville (UAH) submitted to the National Aeronautics and Space Administration (NASA) in response to the 2011 A.34, Earth Science Applications: Water Resources call for proposals.	
Title	Thermal Remote Sensing and Resistivity and Drought Mitigation	Soundings for Freshwater Availability

Title	Experimental and Numerical Study of Spray Coating of Quantum Dot Based Photovoltaic Solar Cells	
Description	To request funds for Experimental and Numerical Study of Spray Coating of Quantum Dot Based Photovoltaic Solar Cells	
Purpose/Intent	<ul> <li>To extend the application of spray technology to solar cell fabrication of third generation.</li> <li>To simplify the fabrication procedure and reduce the production cost.</li> </ul>	
What makes this project a good investment for the state or institution?	Enhance the University's visibility in research	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ O
	Capital Expenditures	\$ 0
	Total	\$ 0

Title	Increased Utilization of LC-MS/MS capabilities at TAMUCC including 1) analysis of brevetoxins in moribund fish, 2) characterization of phospholipid composition from marine mammalian lungs and 3) Biofuel safety	
Description	To request funds for increasing Utilization of LC-MS/MS capabilities at TAMUCC including	
Purpose/Intent	To focus on: 1) analysis of brevetoxins in moribund fish 2) characterization of phospholipid composition from marine mammalian lungs 3) Biofuel safety	
What makes this project a good investment for the state or institution?	Enhance the University's visibility in research	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 0

Title	Content Literacy Instruction within Science Instruction.	
Description	To request funds for supporting research interest in Content Literacy Instruction within Science Instruction	
Purpose/Intent	•To involve classroom teachers teaching the content along with the literacy skills students need to learn. •To hire doctoral students enrolled in the Curriculum Studies or Literacy Studies track in the College of Education, Department of Curriculum and Instruction, to support the project.	
What makes this project a good investment for the state or institution?	Enhance the University's visibility in research.     Provide employment opportunities for doctoral students.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 1,250
	Operating Expenses	\$ O
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,250

Title	Youth Literacy Project	
Description	Augments the Early Childhood Developmen TAMU-CC campus serving early literacy neaccess to high-quality literature toward posts	eds of local children by providing
Purpose/Intent  Equipping caregivers with instructional strategies and materials to be children's acquisition of literacy skills prevents early schooling strugg allows student to increase likelihood of college attendance. Fostering motivation promotes lifelong learning. Sustained efforts will give both and their caretakers access to high quality texts that will, in turn, increase likelihood of college viability.		nts early schooling struggles and ege attendance. Fostering this lined efforts will give both children
What makes this project a good investment for the state or institution?	Enhance education support for children who live in Nueces County. Enhance early literacy to provide greater outreach, sustained efforts, and readily available books to combat the high illiteracy rates in the county. Partnering with the College of Education at TAMU-CC will allow for sustained efforts related to ongoing tutoring efforts with the children at the ECDC.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 0 \$ 0 \$ 0

Title	Fabrication of Polymer Solar Cells by Spary Coating	
Description	The project focuses on the low-cost fabrication of thin film polymer solar cells	
Purpose/Intent	To improve the manufacturing process of polymer thin-film solar cells using the spary technology, which is cost-effective and can be scaled up.	
What makes this project a good investment for the state or institution?	Preliminary results of this project would help write NSF proposals To provide employment opportunities to undergraduate students	
	•Enhance the University's visibility in research.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 0

Title	Situation-Aware Emergency Informatics: Novel on-the-move mobile infrastructure	
Description	This project is an integral part of a multi-phase research plan that aims at infusing situation-aware computing into the background environment. This research pushed the frontier and moves broadband networking, cloud computing, infrastrucreless communications, and human-computer interaction to the next level. It is a long-term effort that will inspire a vivid research agenda for 8-10 years. It is an attempt to improve the quality of life through seamless integration of a smart mobile infrastructure into human's life for enhance decision making	
Purpose/Intent	To focus on developing an on-the-move emergency networking platform with the site assessment, real-time information gathering, and augmented reality capabilities that meet the needs of future public safety and digital battlefield systems	
What makes this project a good investment for the state or institution?	•Contribute significantly to issues of national and international interests in computer science and related field. •Enhance the University's visibility in research.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 7,722
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 7,722

	Capital Expenditures  Total	\$ 0 <b>\$ 5,063</b>
	Staff Benefits	\$ 0
	Operating Expenses	\$ 63
	Salaries/Wages for Existing FTEs	\$ 5,000
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
What makes this project a good investment for the state or institution?	•The TRDF grant may lead to multiple proposal submissions to various funding agencies including the Welch Foundation, the ACS Petroleum Research Fund, and possibly the Environmental Protection Agency. •Enhance the University's visibility in research.	
	•Develop a robust mechanism by which the donor-acceptor interactions can be switch "OFF" state by changes in pH, upon exponsional application of reducing/oxidizing voltage,	ed between "ON" state and an
Purpose/Intent	urpose/Intent •To synthesize a series of $\pi$ -electron deficient bipyridinium-ba and $\pi$ -electron rich aromatic additives •To determine and quantitatively compare the effect of preorg donor-acceptor templation on detergency, interfacial surface thermodynamics of self-assembly of the detergents when com $\pi$ -electron rich additives	
Description	The proposed research aims to develop a donor-acceptor-based binary detergent bl response to external stimuli, namely pH c and an applied voltage.	ends which respond and activate in
Title	Template-Directed Detergency Activation Blends: A Pathway to the NSF Early Care	

Title	Orthographic Distinctiveness and Aging	
Description	The study will utilize recognition memory tasks to discriminating between item and relational processing in aging subject as compared to younger subject.	
Purpose/Intent	It is expected that the deficit in relational processing that is seen in aging subjects will become clear using these tasks. Once the deficit has been isolated, different types of orienting task will be used to manipulate the type of processing being utilized by subject during the memory tasks, which should allow us to investigate the magnitude of the relational processing deficit.	
What makes this project a good investment for the state or institution?	The link between language processing and learning and memory in the brain is currently a hot topic in research (e.g., January, Trueswell, & Thomspon-Schill, 2009) and it is completely unexplored in the realm of aging. This investigation is a significant contribution to the field of memory and aging research as, to date, no studies of this nature have been reported in literature.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 5,228
	Operating Expenses	<b>\$</b> O
	Staff Benefits	\$ 0
	Capital Expenditures	<b>\$</b> O
	Total	\$ 5,228

Title	Hyper spectral Imaging for Determining the Microorganisms in Lake Sediments	ne Microdistribution of
Description	Sediment content from lakes and other bodies of waters around the Coastal Bend area is of interest for multiple research groups. In particular, how information about the distribution of microorganisms in sediments can be correlated to water and other environmental quality is a challenging question	
Purpose/Intent	<ul> <li>To explore hyperspectral imaging technology as a fast, reliable and afford method to spatially and spectrally resolve and identify organisms and their arrangements in small sedimentary samples</li> <li>To support environmental health and quality assessment</li> </ul>	
	•To expand findings to a larger program the in engineering, life sciences and marine effederal funding initiatives.	
What makes this project a good investment for the state or institution?	The proposed work supports current engineering initiatives such as Unmanned Aerial Systems, and could be part of the payload that can be used for similar purposes as remote sensing in the Coastal Bend	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 583
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 583

Title	Effects of sub-lethal attack of Panulirus In Aplysia California	terruptus on feeding behavior in
Description	This proposal is to aim to examine the be on the expression od feeding in Aplysia	havioral effects of a predator attack
Purpose/Intent	•To explore the sub-lethal effect of a pred feeding •To explore the possibility that the presen even in the absence of an actual attack.	·
	•To explore the possibility that signals from feeding of non-attacked conspecifics.	m an attacked Aplysia could alter
What makes this project a good investment for the state or institution?	•One publication on this work is expected to be submitted to a journal such as "Current Biology." This enhances the image of the university in research. •Enhance Pis' CVs and their competitiveness for federal funding	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits	\$ 0 \$ 7,250 \$ 0 \$ 0
	Capital Expenditures Total	\$ 0 <b>\$ 7,250</b>

Title	Resubmission Proposal, NSF TUES 2012	
Description	Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics; titled, Transforming Computer Forensics Education: A Virtual Approach for the Hand-On Labs. The proposal is due May 27, 2012.	
Purpose/Intent	To develop a proposal for resubmission with a grant writer to address questions and perform multiple edits of drafts of all sections of the proposal.	
What makes this project a good investment for the state or institution?	Enhance the University's visibility in research.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	<b>\$</b> 0

Title	Mapping seagrass meadows in Corpus Christi Bay with high spatial resolution remote sensing imagery	
Description	Mapping seagrass meadows with high spatial resolution remote sensing imagery will require extensive data processing and validation based on extensive field sampling. Thus, PIs are requesting significant funds for personnel. Without the assistance from graduate students, this project will not be possible.	
Purpose/Intent	Pictures of seagrass under water will be taken and monitored using Worldview-2 data and eCongition software to assist in the analysis of the imagery. Spectrometers to conduct field spectro-radiometric measurements, and the use of TAMU-CC's Ocean Optics Jaz Modular Optical Sesing Suite from the Center for coastal studies will be used in addition to the ASD Portable Spectroadiometer from a colleague at the University of Texas at San Antonio .	
What makes this project a good investment for the state or institution?	Enhance the University's visibility in research.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 4,283
	Operating Expenses	\$ 288
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 4,571

Title	Applying stable isotopes to compare food versus natural habitats.	webs associated with restored
Description	The proposal aims to understand how well habitat functioning of natural oyster reefs.	restored systems replace the
Purpose/Intent	•To use stable isotopes as a tool to evaluate the habitat function provided by the restored versus natural habitats •To determine how oyster reef restoration changes the food resources available to consumers.	
	•To evaluate the food web structure on reshabitats.	tored versus natural oyster reef
What makes this project a good investment for the state or institution?	•Train a Ph.D student in support of the Marine Biology and Coastal and Marine System Science doctoral programs at TAMUCC. •Develop new collaboration with Dr. Brendan Roark at TAMU Stable Isotopes Facility that will lead to larger proposal submission.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ <b>0</b>

Title	Sensory Ecology Indirect Predators consulting for proposal resubmission	
Description	Last August, a proposal to NSF via the Biological-Oceanography Directorate entitled, "Using a Sensory Ecology Approach for Testing Indirect Predator Effects." The remainder of the funds will be used to gather more preliminary data and publish an additional paper on this topic before resubmitting the proposal in February 2013.	
Purpose/Intent	Purpose/Intent Enhance the University's research initiatives.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 819
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 819

Title	Cold Plasma Therapy	
Description	Recent research studies indicated that non- plasma) therapy has high potential for cance treatment and induction of apoptosis in cance examine the therapeutic potential of a nove employs a cold plasma microjet for the treat	er treat, identifying specificity in cer cells. The proposal is aim to I minimally invasive technique that
Purpose/Intent	<ul> <li>•To evaluate the effect of cold plasma therapy on proliferation and ap in cutaneous squamous cell carcinoma.</li> <li>•To determine cellular immune responses in cutaneous squamous ce carcinoma regulated by cold plasma therapy.</li> </ul>	
	•To perform phenotypic profiling of cold plas cutaneous squamous cell carcinoma develo	
What makes this project a good investment for the state or institution?	*Secure external grant funding within 1-2 years to continue to support and sustain the cold plasma cancer research at TAMUCC  •The research will provide a clear assessment of the function of cold plasma in cancer treatment, allowing for future research with other investigators.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	<b>\$ 0</b>

#### Title

Ethnic disparities in accessibility to health care facilities among older populations in the Costal Bend of Texas disclosed by spatial analysis.

#### Description

Health disparities refer to differences in access to or availability of facilities and services. These differences can affect people's ability to achieve good health, for example, how frequently a disease affects a group, and how many people get sick (CDC, 2011). Health disparities exist in all age groups, including older populations. One effort to eliminate health disparities is to provide high quality, equitable access to health care facilities to all groups of population, so that those who need health care are able to obtain it. In this project, we plan to study spatial accessibility to health- care facilities among older populations in the Coastal Bend of Texas. Spatial accessibility is a measure of potential for health care delivery by taking spatial factors (e.g., locations, distance and travel time) into account (Guagliardo, 2004). Our research hypothesis is that spatial analysis of access to health care facilities will indicate health disparities linked to ethnicity in this area.

#### Purpose/Intent

The purpose of this project is to examine spatial accessibility to health care facilities among older populations in the Coastal Bend of Texas. More specifically, there are three goals:

- •To assess the spatial segregation of older Hispanics
- •To measure the accessibility to health care facilities in a GIS environment; and
- •To examine the relationships between segregated older Hispanic populations and derived access values through spatial statistics methods.

# What makes this project a good investment for the state or institution?

- •Hispanics are a significant and growing sector of the older population in the Coastal Bend. Between 2000 and 2010, the percentage of the Hispanic population aged 65 and older grew from 40.7 percent (26,231) to 45.4 percent (35,634), an increase of 11.5 percent, significantly more than 7.1 percent growth of the total Hispanic population, which grew just 1.1 percent from 2000 to 2010 (Census, 2011; The Older Population, 2011).
- •Among older patients in the Coastal Bend, pneumonia and heart failure are among the top frequent diagnoses based on data from local hospitals (Meyer at al., 2010). Pneumonia is preventable, and early diagnosis and treatment are critically important to heart-failure patients. We believe that employing GIS to analyze access to health care facilities may indicate disparities in health outcomes among the older population due to socioeconomic and geographic (e.g., transportation) barriers; which, in turn, may lead to remedies that will enhance quality of life and increase life expectancy for the older people, especially Hispanics.

#### Financial

Salaries/Wages for New or Reassigned FTEs	\$ 0
Salaries/Wages for Existing FTEs	\$ 9,999
Operating Expenses	\$ 2,000
Staff Benefits	\$ 0
Capital Expenditures	\$ 0
Total	\$ 11,999

Title	Population status and ecology of batoid rays in the western Gulf of Mexico	
Description	Overfishing of apex predators has led to cascading effects in marine ecosystmes. The project is to aim to design a research program directed at increasing our comprehension of the population status and ecology of batoid fishes off the Texas coast	
Purpose/Intent	•To examine susceptibility of batoid rays to vertex of the susceptibility of batoid rays of the susceptibility of bat	I critical habitat of wGOM batoids of larger batoids from the wGOM
What makes this project a good investment for the state or institution?	•Enhance regional management •This would be the leverage for much larger federal funding	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 0

Title	Role of Rarity in Maintaining Ecological Integrity under Altered Freshwater Inflow Regimes	
Description	In the dogma of community ecology, a more biodiverse habitat is considered more stable. Ecosystem function is preserved because more organisms are available to adapt to changing ecosystem conditions. As niches are created or destroyed, biodiversity will vary, but the inherent value of having biodiversity to draw from to reestablish ecosystem function is an underlying value to the ecosystem.	
Purpose/Intent	To test the generally accepted view that one should ignore rare species when using multivariate analytical methods to explain observed community response to environmental change.	
What makes this project a good investment for the state or institution?	Enhance the University's visibility in research.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 0

Title	Trdf - Compliance Office	
Description	To assist with campus Compliance needs	
Purpose/Intent	To ensure that all projects meet institutional, state, and federal guidelines with regard to human subjects, animal testing, and other issues of interest.	
What makes this project a good investment for the state or institution?	To increase research activities at TAMUCC that meet all compliant regulations.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 51,000
	Operating Expenses	\$ 8,951
	Staff Benefits	<b>\$</b> O
	Capital Expenditures	<b>\$</b> O
	Total	\$ 59,951

Title	Office of Sponsored Programs Support	
Description	To support the Office of Research and allow assistance for faculty who are preparing proposals. This office assists with finding funding opportunities, proposal submissions and post award accounting.	
Purpose/Intent	To oversee all phases of proposal submis TAMU-CC more competitive for federal do federal regulations.	•
What makes this project a good investment for the state or institution?	Investing in Sponsored Programs is imperative to building research at TAMU-CC and Statewide.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	<b>\$</b> 0
	Operating Expenses	\$ 5,925
	Staff Benefits	<b>\$</b> 0
	Capital Expenditures	\$ O
	Total	\$ 5,925

Title	Trdf - S&E-Marb/Cmss	
Description	Provide Graduate Assistants with opportunities to assist with teaching about research methods on campus and to participate in various research projects.	
Purpose/Intent	To cultivate a stronger research environment for students at TAMUCC, particularly relating to Marine Biology and Coastal Marine System Science, and develop preliminary studies that can then be submitted for federal funding	
What makes this project a good investment for the state or institution?	To increase awareness and interest in research participation to leverage for federal funding to the state of Texas.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 219,100
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 219,100

Title	Trdf - Harte	
Description	Provide Research Assistants to assist with various research projects, particularly relating to Gulf of Mexico studies.	
Purpose/Intent	To gather data and develop preliminary studies that can then be submitted for federal funding.	
What makes this project a good investment for the state or institution?	To increase ability to submit proposals to federal agencies and increase federal dollars to the state of Texas.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 71,999
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 71,999

Title	Office of Sponsored Research Support	
Description	To support the Office of Research and allow assistance for faculty who are preparing proposals. This office assists with finding funding opportunities, proposal submissions and post award accounting.	
Purpose/Intent	To oversee all phases of proposal submit TAMU-CC more competitive for federal defederal regulations.	•
What makes this project a good investment for the state or institution?	Investing in Sponsored Programs is imperative to building research at TAMU-CC and Statewide.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 47,600
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 47,600

Title	Rdf - Center For Coastal Studies	
Description	To provide student support for Research Center.	
Purpose/Intent	To increase data collection/analysis and prepare preliminary projects for submission to federal agencies.	
What makes this project a good investment for the state or institution?	To increase ability to submit proposals to federal agencies and increase federal dollars to the state of Texas.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 41,324
	Operating Expenses	\$ 2,855
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 44,179

Title	Science and Engineering (S&E) Research Support	
Description	To provide support for faculty in the College of S&E by employing graduate students to assist with research development.	
Purpose/Intent	Graduate students work with faculty on various research projects to bring them to a level that would be competitive for federal proposals.	
What makes this project a good investment for the state or institution?	To increase federal dollars coming to Texas and TAMU-CC.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 42,599
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	<b>\$</b> O
	Total	\$ 42,599

Title	Gulf of Mexico Environmental Studies	
Description	To provide support for Gulf of Mexico studies by way of funding student researchers.	
Purpose/Intent	Increase ability to submit proposals to federal agencies.	
What makes this project a good investment for the state or institution?	Increase potential for federal dollars to the State of Texas.	
Financial	Salaries/Wages for New or Reassigned FTEs	<b>\$</b> 0
	Salaries/Wages for Existing FTEs	\$ 24,253
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 24,253

Title	Carried forward to FY 2013		
Description			
Purpose/Intent			
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 284,985	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 284,985	

Title	Carry Over Funds to be used for encumbr	ances	
Description			
Purpose/Intent			
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 7,360	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 7,360	

Title	Library Research Acquisitions  Subscriptions to electronic resources such as databases and electronic journals.	
Description		
Purpose/Intent	Support and facilitate research.	
What makes this project a good investment for the state or institution?	Electronic resources are more efficient, allowing the library to deliver a higher lever of service. Productivity is enhanced as researchers can access to information at anytime from any computer and spend less time getting library provided articles.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 15,461
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 15,461

Title	Natural Toxins Research Center	
Description	The Natural Toxins Research Center (Noresearch, research facilities, instrumentation operates a large serpentarium with approximation of the series of the Natural Toxins Research Center (Noresearch Cente	ation and serpentarium. The NTRC
Purpose/Intent	The mission of the NTRC is to provide g that will lead to the discovery of medical venoms.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 31,104 \$ 10,003
	Operating Expenses Staff Benefits	\$ 19,002 \$ 0
		\$ 0 \$ 0
	Capital Expenditures Total	\$ 50,106

Title	Title V Programs	Title V Programs	
Description	RDF funds were utilized to provide support for a portion of RDF designated grant personnel.		
Purpose/Intent	Supporting a portion of the salaries of RD allowed these personnel an opportunity the College with other university matters and personnel line item more cost efficient. Succonferences allowed the personnel an opportunity of the personnel and personnel skills as well as present the implementation of best practices offered Kingsville campus through professional profess	o assist the Dean of University I as well as making the grants upporting travel for trainings and oportunity to develop additional grant e data and results of the on the Texas A&M University –	
What makes this project a good investment for the state or institution?	Utilizing the RDF funds in this manner allowed University College, Texas A&M University – Kingsville and the state to reinvest in developing the institutional capacity to manage the existing RDF designated grants and leverage resources to develop the ability to explore and secure additional external funding.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 10,580	
	Operating Expenses	\$ 0	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 10,580	

Title	Gravity Independent Laundry System	
Description	This system is currently an ME senior design project partially sponsored by the Texas Space Grant Consortium.	
Purpose/Intent	The objective of the G.I.L.S. team is to create a system to wash dry, and disinfect the lightly soiled clothing of astronauts in a micro gravitational environment.	
What makes this project a good investment for the state or institution?	Conservation efforts have become increasingly more important in terms of federal programs and funding. This project provides preliminary data for advancing green energy systems and will allow the opportunity for individuals at TAMUK to conduct research in the area of green energy through providing support for project supplies and travel.	
		or green energy through providing
Financial		s 0
Financial	support for project supplies and travel.	
Financial	support for project supplies and travel.  Salaries/Wages for New or Reassigned FTEs	\$0
Financial	support for project supplies and travel.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 0
Financial	support for project supplies and travel.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	\$ 0 \$ 0 \$ 425

Title	Tattoos and Our College Campus	
Description	Understand the thought process for getting a tattoo.  The purpose of the proposed project is to survey students to understand the meaning of tattoos and what obtaining a tattoo signifies to 18-24 year old college students. Students will be surveyed, and tattoo artists will be interviewed as well. All of the information collected will be developed into an exhibit to be displayed on campus.  A Tattoo Exhibition will be established, which will illustrate the different facets of obtaining and maintaining a tattoo. It is especially important that young college students have more exposure to body art and the ramifications of obtaining it.	
Purpose/Intent		
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 520
	Staff Benefits	<b>\$</b> 0
	Capital Expenditures	<b>\$</b> 0
	Total	\$ 520

Title	The Impact of Urbanization on the Maori people of New Zealand	
Description	Prior to World War II, the indigenous population of New Zealand, known as the Maori, were rural residents living outside of mainstream New Zealand society. However, during the war, there was a major Maori emigration to urban areas, greatly altering their political and social circumstances.	
Purpose/Intent	The purpose is to examine the effects of World War II related urbanization of the Maori, both socially and politically. This project will not only analyze the historical reasons behind this unique Maori urbanization experience, but als examine its impact on New Zealand's non-indigenous population groups as well.	
What makes this project a good investment for the state or institution?	Funding to support this project will provide a Texas A&M University-Kingsville student with the opportunity to travel to New Zealand for a study abroad opportunity and will allow the opportunity for this student to travel to the Texas A&M Pathways Symposium to present research findings.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 200
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 200

Title	Levels of Insulin-like Growth Factor Bindin Rats	ng Proteins in the Brain of Diabetic
Description  Diabetes affects the functioning of the central nervous hallmark of the diabetic condition is a breakdown of the throughout the body.		* ' '
Purpose/Intent	The purpose is to investigate the effects of hyperglycemia on the production of IGFBP 1-6 in the brain of streptozotocin induced in diabetic Wistar rats.  Diabetes research continues to develop and has grown increasingly in terms of federal funding. Providing funds to support research in this area opens doors for students at our institution to develop preliminary research that will be presented at the American Diabetes Association and pursue further research in this area.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 2,000
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 2,000

Title	Oak Tree Survey for TAMUK and Citrus Water	Irrigation Improvement for Saving
Description	This study will focus on irrigation efficient irrigation practices to alternative forms of the potential to be incorporated quickly in Grande Valley producers.	of flood irrigation practices that have
Purpose/Intent	undergraduate research project currently under the final stages of completion. A second undergraduate project focusing on water use and water savings in the South Texas citrus production will be performed and results presented at a professional meeting.  Provide important knowledge on how to best utilize limiting water supplies	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 800 \$ 0 \$ 0 \$ 800

Title	Behavioral Cross-Tolerance and Sensitization During Exposure to Acetone and Ethanol: Altered Neuronal Plasticity and Hyperactivity	
Description	This project will be to evaluate the study of cross-talk between different drugs using ethanol and acetone as model drugs of abuse in fruit flies. Exposure of wild-type Canton S flies initially to ethanol and subsequently to acetone will be examined to determine if there is cross tolerance to acetone induced sedation.	
Purpose/Intent	The purpose of this study is that it will examine the molecular mechanisms of tolerance and changes in neuronal plasticity, particularly altered locomotion and hyperactivity.	
What makes this project a good investment for the state or institution?	This research will provide preliminary data on cross-sensitization for the student to submit to the Comparative Biochemistry and Physiology Part C (Pharmacology and Toxicology) upon completion of the experiments. It will also allow for additional research to be performed based on the research findings.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 2,370
	Operating Expenses	\$ 2,280
	Staff Benefits	<b>\$</b> 0
	Capital Expenditures	\$ 0
	Total	\$ 4,650

Title	Density, Spatial Distribution, and Seed Continuous and Fragmented Forests in Conservation	• • •
Description	The project will take place in the tropical vegetation in this area consists of main semi-deciduous forests. 10 randomly put the site mapped with a GPS and the nedetermine if the distribution is clumped	ly lowland tropical forests and laced transects will be conducted with earest neighbor method will be used to
Purpose/Intent  The objectives are to: 1) quantify the density and abundance of latrin continuous and forest fragments; 2) determine the spatial distribution latrines; and to 3) evaluate seed species richness. The work will be a the tropical rain forest region of Lacandona, Chiapas, Mexico.		termine the spatial distribution of es richness. The work will be done in
What makes this project a good investment for the state or institution?	The information gathered in this study will be one component of a larger study evaluating the effectiveness of spider monkeys in seed dispersal in continuous and fragmented forests and will provide this graduate student with the opportunity to travel and obtain data that would not otherwise be attainable. These research findings have the potential to be published and/or presented at regional or national meetings.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 382 \$ 0 \$ 0 \$ 382

Title	Impact of Dietary Tannin Concentration on Ruminal Microbial and Intestinal Nematode Populations	
Description	The research in this proposal will be performed through an experiment that will arrange a completely randomized design with goat as the experimental unit.	
Purpose/Intent	The proposed study will evaluate the effect of dietary tannins on intestinal nematode and rumen microbial populations. Intestinal parasites have been shown to develop a resistance to chemical dewormers; consequently, it is necessary to evaluate alternative deworming methods.	
What makes this project a good investment for the state or institution?	The support for this project will allow the undergraduate to be exposed to specific laboratory equipment and techniques that we currently do not offer here at TAMUK which will further enhance his learning opportunities. It is anticipated that the work will be published in Small Ruminant Research, Animal Feed Science and Technology.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,500
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,500

Title	Inhibition of Angiogenesis by Snake Venom Disintegrins	
Description	Angiogenesis is the fundamental process by which new blood vessels are formed. Angiogenesis plays an important role in the growth and spread of cancer.	
Purpose/Intent	The objective of this research is to determine the effects of two recombinant disintegrins, r-Mojastin1 and r-CVV, derived from Crotalus scutulatus scutualtus and Cortalus viridis viridis respectively, on several steps of angiogenesis.	
What makes this project a good investment for the state or institution?	Research involving cancer has become a top priority for many funding agencies. With this project, it is anticipated that more information in learning about roles in physiological and pathophysiological processes, such as angiogenesis and cellular adhesion, as well as influencing arterial disease and cancer development will be established. The results will be published in a scientific journal, most likely the Journal of Venom Research on Toxicon.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 1,231 \$ 0 \$ 0 \$ 1,231

Title	Generation of Reporter Plasmid Construction gRICH70 Gene.	ct for Promoter Analysis of the
Description	Goldfish and zebrafish serve as optic nerve regeneration models (their study can lead to therapies to enhance nerve regeneration in the CNS of humans).	
Purpose/Intent	The objective of the proposed study is to analyze the regulation of goldfish RICH gene with reporter plasmid constructs.	
What makes this project a good investment for the state or institution?	A better understanding of the regulation of this gene will help understand the absence of nerve regeneration in humans, and provide targets for therapeutics intervention. The results of the proposed research will be presented locally and later at an SACNAS meeting in October. The funding to support this project will allow the graduate student to pursue a research opportunity in the area of nerve regeneration that would not otherwise be attainable.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	\$ 0 \$ 0 \$ 1,589
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,589

Title	The Effects of Commercially Available Holographic Bands on Strength, Balance, and Flexibility	
Description	All data obtained in this project will be collected in the Human Performance Laboratory. Thirty subjects will be recruited to participate in a single blind repeated measures equipment over three separate days. The dependent variables will be measurements of isometrics strength, static balance, and muscular flexibility. The independent variable will have three levels: holographic band, placebo band, and no band. The data will be analyzed using analysis of variance with repeated measures.	
Purpose/Intent	To measure the strength, balance, and muscular flexibility in subjects when wearing holographic bands.	
What makes this project a good investment for the state or institution?	Funding to support the purposed research project will allow the student to perform travel associated with the study that would not have been possible otherwise. Also, the research findings have great potential to be published in a journal such as the International Journal of Science Exercise.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ O
	Operating Expenses	\$ 933
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 933

Title	The Effects of Tobacco Usage on the Car Streptococcus mutans.	vity Causing Bacterium
Description	Streptococcus mutans is an organism that caries and is often a normal part of the ormutagen in bacteria.	
Purpose/Intent  The goal of this study is to compare S mutans isolated from tobacco non-tobacco individuals and the dental health of the individuals will documented to determine if there is a difference between the dental		ealth of the individuals will be
What makes this project a good investment for the state or institution?	The compilation of data from the surveys conducted through the study of microorganism data will hopefully lead to a better understanding of the role of tobacco usage in dental caries. A search of publications regarding the study of tobacco products results in little information. The principal investigator believes that the study will lead to a meeting presentation and publication for the undergraduate researcher.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 1,500 \$ 0 \$ 0 <b>\$ 1,500</b>

Title	Contagion.	
Description	This is a mobile application that will monitor the spread of a disease based on the actual data from an accredited government agency. The user will be aware of possible contaminated areas and be notified of hazard areas via push notifications from a web server.	
Purpose/Intent	research infungs will be dissertifiated tiffough publishing results and	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 954
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 954

Title	Novel Process for Reducing SO2 Emissions in Sulfuric Acid Manufacturing Plants	
Description	The research will involve running experiments in an existing laboratory-scale reactor system to study the reaction kinetics for the wet gas SO2 oxidation reaction over a range of feed compositions.	
Purpose/Intent	This research by an undergraduate student will study an alternate approach to the gas-phase oxidation of SO2 to SO3, in which steam is injected into the feed gas. The primary objective is to show how the thermodynamic limitation associated with a conventional dry gas process can be overcome so the resulting SO2 emissions are greatly reduced.	
What makes this project a good investment for the state or institution?	The data obtained through this study will lead to the development of a reaction kinetic and process model using ASPEN PLUS, which is a modern computer design simulation tool. Currently no publications have been developed on this topic so it will be of key interest to academic and industrial technologists, and a publication is anticipated to be developed through the findings produced by the project being funded.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 159 \$ 0 \$ 0 <b>\$ 159</b>

Title	SEM Study of REE in Badu Hill Minerals	
Description	The research is to evaluate and study minerals that are rare earth elements (REE) of the Badu Hill Pegmatite deposit south of Lake Buchanan in Central Texas.	
Purpose/Intent	To learn how to use the variable pressure Scanning Electron Microscope (SEM) in the Chemistry Department through the mapping of REE mineral phases in pegmatite samples. This specific proposal requests funds to for materials and supplies for studies utilizing SEM and travel to Vicksburg to work with Dr. Weiss at the Engineering Research and Development Center.	
What makes this project a good investment for the state or institution?	This research findings from this study will be presented at the Engineer Research and Development Center (ERDC), a US Army Corps of Engineers (USACE) laboratory, allowing the university to be recognized in conjunction with research evaluating the rare earth elements (REE) contained in this in this study. Findings will also allow the researcher to obtain additional funding to expand on the current research funded through this grant.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 257 \$ 0 \$ 0 <b>\$ 257</b>

Title	Prototype Water Turbine at the North	Kingsville Wastewater Treatment Plant.
Description	This project will incorporate environmental, mechanical, and electrical disciplines. Data will be collected such as water flow and dimensions of the effluent outfall and be applied to design a suitable hydroelectric power source.	
Purpose/Intent	The North Kingsville Wastewater Treatment Facilityis considering powering its UV light disinfection system by using its effluent outfall as a hydroelectric power source. Our objective is to design an appropriate system that is not only durable, but also able to comply with the dynamic year-round weather conditions of South Texas.  This project will assist in the improvement of Kingsville's Wastewater Treatment Facility and will provide the resources necessary to conduct the research on the local water turbine, as well as to travel to the International Conference on Environmental Science and Technology to present the research findings. This is beneficial to the state and our institution since it is providing funding that will allow research opportunities for undergraduate students to study more about the wastewater system and improvement of it.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 1,000 \$ 0 \$ 0 \$ 1,000

Title	Special Programs	
Description	Federal funded programs	
Purpose/Intent	Payroll to support 100% Federal Funded programming for TAMUK and supplemental time and effort. Travel related expenses for continuation of federal initiative at university and proposal writing. Equipment for communication for administrative office for department utilized for meetings, and facilitates research programs.	
What makes this project a good investment for the state or institution?	This project is a good investment in strengthening proposal development and effects yield increase in federal funding for the state and institution.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 23,035
	Operating Expenses	\$ 2,917
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 25,952

Title	Honors College Student Research	
Description	Purchase research chemicals and materials and instrumentation and technical services.	
Purpose/Intent	Purchase research chemical and materials and instrumentation and technical services for student research project with Chemistry faculty/department.	
What makes this project a good investment for the state or institution?	The project supported student undergraduate research with Chemistry faculty/department.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 684
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 684

Title	Dr. Helen Maria Viramontes Campus Visit	
Description	Author Campus Visit	
Purpose/Intent	Books were purchased for students in the humanities acquire new knowledge and skills for further research in their field.	
What makes this project a good investment for the state or institution?	The project supported students in the humanities acquire new knowledge and skills for further research in their field.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 200
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 200

Title	Site 55 Biological Field Station	
Description	A riparian woodland of approximately 58 ha surrounded by farms and Baffin Bay	
Purpose/Intent	To provide a natural field laboratory for terrestrial and special estuarine habitat studies.	
What makes this project a good investment for the state or institution?	- Table 1	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 2.142
	Operating Expenses	\$ 5,983
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 8,125

Title	Pathways Symposium	
Description	Pathways Symposium	
Purpose/Intent	The intent is to provide funding for students Pathways Research Symposium in College	, ,
What makes this project a good investment for the state or institution?	Research presentations will be given at the Pathways Research Symposium which will bring recognition to Texas A&M University-Kingsville and ultimately to the State of Texas. Research is needed to further the knowledge of the graduates from the State of Texas which will assist in obtaining future employment.	
	employment.	
Financial	Salaries/Wages for New or Reassigned FTEs	<b>\$</b> 0
Financial		\$ 0 \$ 0
Financial	Salaries/Wages for New or Reassigned FTEs	·
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	\$ 0 \$ 4,820

Title	Environmental Engineering	
Description	Remit Payment to the Texas Higher Education Coordinating Board	
Purpose/Intent	Reimbursement of consultant that evaluated the Environmental Engineering graduate program at TAMU-K as outlined in the HB 51 University Funding for Excellence in Specific Programs and Fields-Benchmark Award.	
What makes this project a good investment for the state or institution?	This consultation was to assist with grant preparation which will bring monies to the university.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,400
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,400

Title	Volume on Service-Learning in French	
Description	The funds are used to assist with the publication of Étudiants Sans Frontières (Students without Borders): Concepts and Models for Service-Learning in French. Ed. Jacqueline Thomas, American Association for Higher Education and Accreditation	
Purpose/Intent	A scholarly publication edited by Jacqueline Thomas, Regents Professor at Texas A&M University-Kingsville. The volume contains 16 contributors with diverse backgrounds and affiliations.  This project is the culmination of the research Dr. Thomas conducted on her sabbatical. This volume on service learning is the inaugural book-length publication of the American Association of Teachers of French, which has published a wealth of resources for its members over the past 15 years. It provides a resource for teachers of French to use in identifying service learning components that will enrich student learning.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 0
	Operating Expenses	\$ 500
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 500

Title	Plastinatuion of vertebrate animals	
Description	Developing a low cost minimum technology method to plastinate vertebrate animals.	
Purpose/Intent Randy Powell, Associate Professor at Texas A&M University-Kingsville materials in various mixtures, compounds, and chemicals to refine and develop a new technique that reduces the cost and technology to plast vertebrate animals.		and chemicals to refine and
What makes this project a good investment for the state or institution?	This project has obtained significant advancement in developing a low cost minimum technology process. An article documenting new formulations and mixtures has been submitted to: Journal of Plastination for the dissemination of information.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ O
	Operating Expenses	\$ 544
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 544

Title	Start-up funds for new faculty in the Dick Agriculture, Natural Resources and Hum equipment for on-going research in the r	nan Sciences and purchase of
Description	Research Development Funds designate provided to create opportunities for new research, develop creative activities in the establish research/educational projects the endeavors capable of establishing extern were enabled to work on projects, including journal article • two manuscripts accepted presented for review • participation in seconferences • exploration of opportunities a successful proposal for University Resordered for use in the college reproduction-going research and is expected to be	and existing faculty to conduct new neir field of research/teaching, or that could potentially lead to future nal funding. Specifically, new faculty ling development of: • one refereed of for publication • five manuscripts even research presentations at national tes for external funding • submission of earch Awards One incubator was explained.
Purpose/Intent	The purpose of this funding was to provide resources for faculty to develop and/or enhance their scholarship portfolios.  Research Development Funds provide faculty in the Kleberg College of Agriculture, Natural Resources and Human Sciences the means to obtain resources they need in order to promote their research and creative productivity. In doing so, research is able to expand and program development is enhanced.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 11,671
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 11,671

Title	Summer Research-College of Business	
Description	Research Development Funds were awarded during the summer to faculty members to conduct research.	
Purpose/Intent	The purpose of the funding was to provide resources for faculty to develop and/or enhance their portfolios and to maintain or achieve AACSB academically qualified status.	
What makes this project a good investment for the state or institution?	Research Development Funds provide faculty in the College of Business the means to obtain resources they need in order to conduct their research and creative productivity. This will also help us achieve AACSB accreditation.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 56,503
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 56,503

Title	College of Engineering	
Description	The RDF was used for equipment and supplies for the list of projects listed below to support research and education in the College of Engineering.	
Purpose/Intent	The RDF was used to support the followi Wind Farm Layout Design to Improve its Development of a Real-Time Air Pollutior 3. The Creation of Hybrid Discretization Not Study of Drought Monitoring for South Tesensing and Land Surface Modeling.	Life-Cycle Energy Efficiency. 2.  Alert System Using Smart Phones.  Model for Topology Design. 4. A Pilot
What makes this project a good investment for the state or institution?	The major role of all projects is to support cutting edge research in engineering and the education process for both professors and students.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 2,200
	Operating Expenses	\$ 20,215
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 22,415

Title	Start – Up Funds-College of Education	
Description	Research Development Funds designated for faculty start-up costs were provided to create opportunities for new and existing faculty to conduct new research, develop creative activities in their field of research/teaching, or establish research/educational projects that could potentially lead to future endeavors capable of establishing external funding.	
Purpose/Intent	The purpose of the funding was to provide resources for faculty to develop and/or enhance their scholarship portfolios.  Research Development Funds provide faculty in the College of Education the means to obtain resources they need in order to promote their research and creative productivity. In doing so, research is able to expand and program development is enhanced.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 2,573
	Staff Benefits	<b>\$</b> 0
	Capital Expenditures	\$ 0
	Total	\$ 2,573

Title	Office of Research and Sponsored Prog – Research Administration Support	grams / Office of Grants and Contracts
Description	These research development funds provided support for the operations of both pre- and post-award administration of sponsored projects for Texas A&M University-Kingsville.	
Purpose/Intent	As external funding is identified and obtained for research at the institution, it is vital for the appropriate policies (both of the funding agency, state and university) to be abided by. The support of these RDFs provided travel resources for research administrators, supplies, and partial salary support for research administrators working in the area of federal funding compliance.  The State of Texas and Texas A&M University-Kingsville provides both preand post-award research administration support for staff and faculty pursuing external funding to support research. These offices allow investigators to ensure all appropriate cost principles, compliance protocols, federal agency guidelines and other policies are being adhered to when necessary. The research administration offices also assist in identifying funding opportunities for researchers and processing proposal submissions, which increases the opportunity to secure external funding to enhance research endeavors at the institution.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	\$ 0 \$ 29,883 \$ 18,073
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 47,956

Title	Psychology & Sociology	
Description	Medical and Laboratory Equipment	
Purpose/Intent	Support for interdisciplinary academic research as collaboration and cognitive learning.	
What makes this project a good investment for the state or institution?	d investment for	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 8,005
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 8,005

Title	Physics Department Research Supplies	
Description	Field Spec Handheld Spectro-radiometer	
Purpose/Intent	Equipment to support research in the Physics and Geo-Sciences department.	
What makes this project a good investment for the state or institution?	Equipment will be used to support establishing a research program in Geo-Sciences. It has the potential lead to external funding.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 7,600
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 7,600

Title	The Creation of Hybrid Discretization Model for Topology Design.	
Description	This project aims at creating a hybrid discretization model and establishing a topology design framework.	
Purpose/Intent	The proposed framework will lead to innovative mechanisms. Applications to the design of wind energy generators will be explored.	
What makes this project a good investment for the state or institution?	The findings from the project will provide the preliminary research results for submitting two proposals to NSF.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 8,999
	Operating Expenses	\$ 0
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 8,999

Title	Formation of a Culturally Sensitive Food Frequency Questionnaire for midlife and Older Mexican Americans	
Description	Community-based participatory research and evaluate a culturally sensitive FFQ for This project will have a four-phase design Advisory Group (MACAG) made up of a rexperts and community leaders will be for study. Second, focus groups will be utilize food preparation, selection, and frequence food items. Third, a culturally tailored FFC and English using the results of both the Finally, the FFQ will be field tested within appropriateness.	or older Mexican American adults.  n. First a Mexican American Cultural multidisciplinary team of content rmed to guide the progression of the ed to determine common methods of y of consumption of identified cultural Q will be produced in both Spanish MACAG and the focus groups.
Purpose/Intent	The purpose of this project is to create a culturally sensitive food frequestionnaire to assess the nutrition needs of older Mexican American southern Texas region.	
What makes this project a good investment for the state or institution?	This project is a good investment for the institution because it will provide the opportunity for undergraduate students to participate in research. In addition it will provide preliminary data which will be used as part of a larger NIH grant proposal with the aim of assessing the reliability and validity of the instrument as well as assess the cultural food patterns, using pattern analysis, of mid-life and older Mexican Americans.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 2,001
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 2,001

Title	Optimal Estimation and Prediction of Harmful Algal Blooms for Gulf of Mexico using Sequential Assimilation of Multi-source Spatio-temporal Satellite Observations	
Description	We propose to investigate the Kalman filter theory as an analytical framework for sequentially assimilating satellite observations and in situ measurements to enhance our capability in modeling and predicting the spatio-temporal evolution of coastal marine ecosystems.	
Purpose/Intent	1) To design and develop a high-resolution marine ecosystem modeling and prediction system for the Gulf of Mexico within the Kalman filter framework incorporating spatio-temporal observations from MODIS, SeaWiFS and MERIS. 2) To analyze and identify appropriate spatial resolution (scale) and data assimilation frequency that maximize the overall modeling performance while ensuring the computational efficiency by developing a kernel-based ensemble Kalman filter algorithm; and 3) To examine spatio-temporal variability of phytoplankton biomass, nutrient loads, and primary productivity in the Gulf of Mexico and to determine the timing, extent, duration, intensity of harmful algal blooms.	
What makes this project a good investment for the state or institution?	The successful accomplishment of this project will provide numerous opportunities for external funds from local governments and federal grants. Specifically, we will target NASA's Ocean Biology and Biogeochemistry Program and Texas Sea Grant College Program.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 6,556
	Operating Expenses	\$ 2,335
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 8,891

Title	A pilot study of drought monitoring for South Texas based on satellite remote sensing and land surface modeling	
Description	The project will • Optimize the input satellite data by image fusion techniques; • Study the spatial variability of drought by numerical simulations; • Implement and optimize the parallel computation of the hydrologic modeling. High resolution simulation of the hydrologic modeling heavily relies on the high performance computation; • Investigate the relationship of regional drought and climate changes.	
Purpose/Intent	for affined a substantial impact on the ecosystem and agriculture of the	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 2,000
	Operating Expenses	\$ 236
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 2,236

Title	Developing Water Saving Irrigation Strategies to Increase Water Use Efficiency in Citrus	
Description	use efficiency in citrus, including partia technique that consists in keeping half other half is allowed to dry. The use of amount of water needed and increases	of the rootzone well-irrigated while the PRD in other fruit trees reduces the swater use efficiency, however, the use ly investigated. This knowledge is very
Purpose/Intent	rootzone drying (PRD) practices in the sensors to measure tree water uptake	h responses of grapefruit trees to partial field. • to test several ecophysiological and water use efficiency. • to assess d by leaching of nutrients in citrus under
What makes this project a good investment for the state or institution?	Water availability is an important concern for the economy in the state of Texas since under serious drought conditions our state would not have enough water to meet the needs of its people, its businesses and its agricultural enterprises. Many growers are not interested in changing into more efficient irrigation systems because the cost of the water is low compared to other states in the USA, but Texas is a fast-growing state and the increase in population and competition for water resources in the Lower Rio Grande Valley will probably increase the cost of the water for agricultural purposes in the next few years. The results of this projects are going to be very important to improve agronomical results and to determine the suitability of using new strategies that can apply irrigation in a most efficient way.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 0
	Operating Expenses	\$ 10,996
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 10,996

Title

Description

Determining the Effect of Habitat Quality on Populations of American Alligators

The American alligator (Alligator mississippiensis) is an endemic species characteristic of the Gulf coast and lower Atlantic coastal plains of North America (Conant and Collins 1998). The American alligator inhabits rivers, swamps, marshes, lakes, bayous, as well as ephemeral bodies of water, which are representative of the aforementioned area of the country (Conant and Collins 1998). The American alligator was declared an endangered species in 1967, and was given federal protection through the Endangered Species Preservation Act of 1966 (USDI 1967). Market hunting, poaching, and wetland habitat losses resulted in a reduction of this species throughout the southeastern and Gulf coast states during the late 1800s and early 1900s (McIlhenny 1935). Specifically in the state of Texas, the American alligator received total protection in 1969, and was later classified as endangered after the passage of the Texas Endangered Species Act in 1973 (Thompson et al. 1984). After nearly 20 years of being listed as endangered, the American alligator was reclassified throughout the state of Texas as threatened due to Similarity of Appearance in 1983 (USDI 1983). Nevertheless, it wasn't until 1987 that American alligators were reclassified as threatened throughout the entirety of its range (USDI 1987). Federal protection has allowed the American alligator to repopulate, flourish, and even expand its traditional range throughout the Gulf coast (Conant and Collins 1998). The restoration of the American alligator throughout the southern United States has been attributed to strict harvest regulations, intensive management strategies, and wetland conservation (Saalfeld et al. 2008). Thompson et al. (1984) also accredited the alligator's come back to not only the passage of the Endangered Species Acts (1969, 1973), but also to modifications of the Lacey Act in 1969 which expanded protection to reptiles. Thompson et al. (1984) also highlights the importance of the essential elimination of alligator hide markets in the United States, as well as the strong protective classification in concurrence with regulations controlling international commerce through the Convention on International Trade in Endangered Species of Wild Fauna and Flora. The changes in the population status of the American alligator have initiated periods of research interest, particularly 1960-1980's (Webb et al. 2006). Research during this time was generated as a result of declining abundance, and was followed by another proliferation of research associated with the species' recovery in the late 1980's-1990's. Reese (1915), compiled information related to the biologic, physiologic, and embryologic functioning of American alligators. McIlhenny (1935), covers a wide variety of information relating to life history characteristics and observational data of the general ecology of American alligators. Although there has been a tremendous amount of research on alligators since the publication of these books, they still provide a comprehensive and basic reference to the species, and are still cited in numerous works today. American alligators are long lived species, experience variable growth rates, and reach sexual maturity at minimum size rather than age (Wilkinson and Rhodes 1997). It also is thought that variable growth rates occur across changing geographic regions, population densities, and habitat quality (Brandt 1991). The relationship between size and age is an important life-history trait of crocodilians (Webb and Smith 1987), because it allows age at maturity and senescence to be measured, and is directly related to the age structure of the population (Wilkinson and Rhodes 1997). Exploring growth patterns, growth rates, and age structure of American alligators throughout their range is essential to sound management (Wilkinson and Rhodes 1997). Through examination of growth patterns among wild

populations of American alligators, the suitability of different habitats can be identified (Brandt 1991). There has been documentation of growth rates in wild populations in several states throughout its range, including Florida (Hines et al. 1968, Dietz 1979, Jacobson and Kushlan 1989, Rice 2004), Louisiana (McIlhenny 1935, Nichols et al. 1976, Chabreck and Joanen 1979, Rootes et al. 1991, Elsey et al. 1992), North Carolina (Fuller 1981, Klause 1984), South Carolina (Bara 1972, Murphy 1977, Brandt 1991), and Texas (Hayes 1992, Webb et al. 2006). Some of the least studied aspects of American alligator ecology is habitat use, habitat preference, and how quality of habitat effects populations across their range. It is known that alligator habitat use and activity may vary according to gender, age class, and season (Chabreck 1965, Joanen and McNease 1970, Goodwin and Marion 1979, Taylor and Neal 1984, Rootes and Chabreck 1993). American alligators that inhabit coastal areas have been known to utilize marshes and wet prairies interspersed with shallow open water and canals (Hines et al. 1968, Joanen and McNease 1972, Morea et al. 2002). American alligators in inland habitats often are more variable and diverse in regards to life history than their coastal counterparts, and are often found in bottomland hardwood wetlands, river and creek drainages, shallow emergent wetlands, and deep and shallow open water in both natural and manmade lakes and reservoirs (Joanen and McNease 1984, Ryberg et al. 2002). Optimum habitat for American alligators was outlined by Newsom et al. (1987) in coastal Louisiana and Texas as 20–40% open water, high interspersion, and ponded water

Purpose/Intent

Brandt (1991) and Wilkinson and Rhodes (1997) state that American alligator growth rates vary by geographic region, alligator density, and more specifically by habitat quality. These effects on growth rate are widely assumed; however, few studies have been conducted to test and verify this hypothesis. In addition, there is little data that exist on age and sex structure, growth rates, and size throughout the American alligators range (Wilkinson and Rhodes 1997). Kushlan (1974) investigated the role of American alligators in wetlands of southern Florida, while Goodwin and Marion (1978) studied the species' habitat preferences in north-central Florida. Our knowledge of American alligators in Texas are based on research that investigated habitat use in East Texas by Webb et al. (2006), ecology and population dynamics by Hayes (1992), as well as populations and habitat by Crouch (1974). Newsom et al. (1987) developed habitat suitability models for the state of Louisiana. Subalusky et al. (2009) examined ontogenetic niche shifts in the American alligator and the establishment of connectivity between aquatic systems in Georgia. However, researchers have yet to pose the question of how habitat effects populations of American alligators, nor have scientists investigated possible correlations between American alligator population density and the areas that they inhabit. The goal of this research is to acquire additional data in this specific area of American alligator ecology and will help to better manage this species throughout its range. Texas experienced a severe drought during 2011 causing high evaporation rates, decreasing water availability, and increasing brackish conditions of water. The effects of such water quantity and quality fluctuations are assumed, but documentation is needed to verify the extent of effects this drought has had on American alligators. There is a dearth of information about American alligators from southern Texas. Statewide management strategies for alligators are based upon data from harvested populations. Population demographics of alligators are thought to vary by habitat type, habitat condition, geographic region, and alligator density (Brandt 1991). However, a generalized population model and management plan may not be appropriate for the American alligator. Such an approach potentially could lead to management decisions counter to healthy alligator populations, thus returning alligator populations back to "endangered

status" levels. The impacts of harvest on a long-lived species such as the American alligator may not be realized on short time scales (i.e., delisting to present day), therefore, alligator management strategies should not rely on a "one-size fits all" plan. In support of this, Webb et al. (2006) had findings that highlight the need for populations of American alligators to have regionally specific management approaches. Therefore, we propose to investigate habitat quality and quantity on populations of American alligators in south-central Texas. We believe such data will be useful to aid management plans to become more site-specific or regionally-specific and fill-in gaps of knowledge in alligator ecology of southern Texas. Our research objectives include: 1. To investigate the effects of water quality, habitat type, and habitat quantity on American alligator density and age structure. 2. To assess the effect of density on growth rates of American alligators 3. To determine alligator nesting success at various water qualities, quantities, and population densities from bodies of water subject to this study. Based on a review of the literature, our hypotheses include: 1. Alligator abundance will occur non-monotonically with water quality and water quantity (i.e., low water quality and quantity will result in low alligator abundance, as quality and quantity improve – alligator abundance will increase up to a point where larger alligators occur resulting in a reduction in alligator abundance). 2. Water quality will have a greater effect on alligator abundance than water quantity. 3. Alligator nest success will increase with water quality and quantity to a threshold level, at which nest success will stabilize. 5. Alligator abundance will decrease as the quantity of habitat types decrease. and 6. High population densities will result in decreased growth rates and nesting success.

What makes this project a good investment for the state or institution?

TAMUK is providing seed money so a larger alligator project can be submitted to Texas Parks and Wildlife Department at a future date. This money also is supporting our undergraduate research program, which is highlighted by TAMUK.

Financial

Total	\$ 3,100
Capital Expenditures	\$ 0
Staff Benefits	\$ 0
Operating Expenses	\$ 0
Salaries/Wages for Existing FTEs	\$ 3,100
Salaries/Wages for New or Reassigned FTEs	\$ 0

Title	Development of a Real-time Air Pollution Alert System Using Smart Phones	
Description	Integrated alert system using smart phones and air quality forecasting models	
Purpose/Intent	timely and effective air quality information to users through location-aware mobile devices, evaluate the effectiveness of the developed air pollution alert system for multi-users (>100 users) environment, extend this technology for other disastrous scenarios such as tornadoes, flooding, earthquake, etc. and develop collaboration between TAMUK and potential funding agencies and promote interdisciplinary research and education in areas of Computer Sciences, Wireless Communication and Environmental Services.  Based on the interactions with governmental agencies, PIs see a great future	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 1,440
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,440

Title	Exploring Synergism of Nerve Regeneration Proteins zRICH and GAP43	
Description	In mammals, damage to the nerves in the central nervous system (CNS) leads to degeneration and loss of function. In humans, this lack of capacity leads to a number of permanent medical conditions after injury to the axons of neurons in the CNS caused by trauma or disease.	
Purpose/Intent	The study of axonal GAPs is necessary regeneration, and to develop therapies to CNS injury.	
What makes this project a good investment for the state or institution?	Outcome of this research would be the establishment of procedures that can be utilized to test further combinations of pro-regeneration proteins, with the goal of developing potent combinatorial therapeutic approaches to achieve nerve regeneration in the CNS of humans with neural stem cells.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 1,400
	Operating Expenses	\$ O
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,400

Title	Molecular characterization of methicillin resistant Staphylococcus species in university athletes.	
Description	To characterize at the molecular level the 44 methicillin resistant CoNS strains isolated from athletes to determine relatedness with isolated MRSA strains. There has not been a molecular analysis of the MRSA strains and MR-CoNS strains isolated within one athletic setting or individual.	
Purpose/Intent	To identify the methicillin-resistant CoNS species isolated from university athletes, characterize at the molecular level the 44 methicillin resistant CoNS strains isolated from athletes to determine relatedness with isolated MRSA strains previously characterized and determine the mechanism of transfer of the mecA cassette from the methicillin resistant CoNS species to the methicillin sensitive S. Aureaus. The long-term goal is to contribute to research to better understand the development of antibiotic resistance to lead to better therapeutic treatment for S. aureus infections.	
What makes this project a good investment for the state or institution?	The University grant would allow for the studies to be completed yielding publications which would help support the resubmission of the MBRS grant in 2012.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 1,656
	Operating Expenses	\$ 670
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 2,326

Title	Study of Calcium Distribution in Transgenic Citrus Plants with Broad Spectrum Disease Resistance	
Description	Huanglongbing (HLB) is the most dangerous citrus disease worldwide which is known to cause devastating economic damage to citrus industry for more than hundred years in Asian countries. Recently the disease was reported from Mexico which has close proximity to the US citrus producing states. There is no known cure for HLB, thus there is a necessity for a more permanent solutions to this disease.	
Purpose/Intent	To visualize cytosolic Ca2+ distribution in plant cells of transgenic and non transgenic plants. The results obtained will be very crucial in our ongoing research projects of elucidating the underlying mechanisms of how transgenic plants prevent cytosolic Ca2_ overloading. The CRDF has established the Citrus Advanced Technology Program to search internationally for solutions to HLB, citrus canker and other critical Florida citrus diseases through sponsored research.	
What makes this project a good investment for the state or institution?	The long term goal of our ongoing studies is to face the challenges posed by several exotic citrus diseases such as HLB and citrus canker and sustain the citrus industry. This will fit with the goals of CRDF to achieve short-to-intermediate term solutions as well as longer term solutions to diseases.	
Financial	Salaries/Wages for New or Reassigned FTEs	<b>\$</b> O
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,748
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,748

Title	Analysis of Large Wind Farm Layout Design to Improve its Life-cycle Energy	
Description	DOE's Office of Energy Efficiency and Renewable Energy invests in clean energy technologies that strengthen the economy, protect the environment, and reduce America's dependence on foreign oil. DOE announced funding over the next five years to speed technical innovations, lower costs, and shorten timeline for deploying offshore wind energy systems.	
Purpose/Intent	With an aim to improving the life-cycle offshore wind farms, and to analyze the layout design and its life-cycle energy developing the wake flow models of lar dynamics method, improving the4 curre wake flow effects and wind farm operate eventually increasing wind farm's life-cycle main expected outcome from this "sinterdisciplinary program that will serve proposals to external agencies.	e correlation between large wind farm efficiency. The PI will focus on ge wind farms using computational fluid ent wind farm layout by reducing the cional and maintenance cost, and ycle energy efficiency. The PI will use seed" project to develop a strong
What makes this project a good investment for the state or institution?	· · · · · · · · · · · · · · · · · · ·	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 1,999
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,999

Title	Development of electronic database and collection backlog assistance for the TAIC Herbarium	
Description	One of the most undervalued and neglect natural history collections. These collection invertebrates are rich with taxonomic, get historical information dating back well over for understanding and properly managing South Texas and indeed due to our strate hemisphere.	ons of plants, insects, vertebrates and ographic, temporal, numerical, and er 100 yrs. This information is crucial the biodiversity and ecosystems of
Purpose/Intent	waking specimen data available to the scientific community is increasingly	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 2,453 \$ 1,874 \$ 0 \$ 0

Title	Expression and Isolation of Recombinant Channels	t Crotamines: Their Role on Ion
Description	In light of biomedical research and patienthe search for new drugs that target ion or research. Nearly 50 million Americans exsome form of disability (Gibson, 2010). A effective, and non- habit forming are of keindustry (Rizzi et al, 2007). Venom of the (Crotalus oreganus helleri) contains maninterest. Crotamine is one major componspecies which exhibits analgesic properti	channels is a mainstream focus of sperience chronic pain, leaving them inalgesic agents that are safe, ey interest to the pharmaceutical southern Pacific Rattlesnake y proteins and enzymes of biological ent found in the venom of this snake
Purpose/Intent	To express and isolate the recombinant of produced from the venom gland of the So recombinant crotamines on Na+ channels provide important information regarding their sequences, as well as provide an erextensively used in research and therape chronic pain. These objectives fall within which its purpose is to provide research fand increase the number of individuals frunderrepresented in biomedical research	outhern Pacific Rattlesnake, and test s. These recombinant proteins will heir activities and how they relate to ndless supply of material that can be eutically as a safe alternative to the scope of NIH/SCORE grant in funds to improve the nation's health om groups currently
What makes this project a good investment for the state or institution?	The study herein will generate enough dain a peer-reviewed journal and write a NII express and isolate the remaining crotam similar or distinct activities on ion channe therapeutic agents as pain relievers. This student an opportunity to attend a 10-day Physiology class at Cold Spring Harbor L (http://meetings.cshl.edu/courses/c-ion12 students to electrophysiological approach	ata to submit a research manuscript H/SCORE grant which will propose to nines and determine if they contain also and whether they can be useful a project will also provide a graduate (June 6-26, 2012) Ion Channel aboratory
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 0 \$ 0 \$ 1,622 \$ 0 \$ 0 \$ 1,622

Title	Applications of Recombinant Snake Venom Derived Components in Hemostatic Disorders	
Description	Heart disease and stroke are two of the States (American Heart Association, 20 people died of heart disease in 2005, a from stroke in the U.S. Stroke is also the disability affecting many from the South contain many factors in their venoms the which are critical pathways associated	2009). It was reported that 652,091 and over 143,579 people die each year ne leading cause of serious long-term neastern U.S. Venomous snakes nat affect hemostasis and fibrinolysis,
Purpose/Intent	venomous snakes as well as modify the not enough snakes in the world to cont biomedical molecules from snake veno from venom is a laborious process resu	ms, and purification of these molecules ulting in very small quantities of end ne many of these molecules and further s to increase yield, improve specificity, rinolysis, which are critical pathways
What makes this project a good investment for the state or institution?  Venom proteins have provided and will continue to provide valuable exploring many aspects of hemostasis. Opportunities in diagnosis a treatment, as well as novel fundamental knowledge on how these paffect hemostasis and fibrinolysis will become available as we continue explore and investigate these important venom molecules. This result allow the opportunity to train students in biomedical research. The swill present this research at professional meetings, publish in a reference proposals.		Opportunities in diagnosis and al knowledge on how these proteins ecome available as we continue to t venom molecules. This research will n biomedical research. The students al meetings, publish in a referred
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures	\$ 0 \$ 1,153 \$ 5,595 \$ 0 \$ 0
	Total	\$ 6,748

Title	Carried forward to FY 2013		
Description			
Purpose/Intent			
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 403,125	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 403,125	

## RDF, Annual Report - FY 2012 Texas A&M-Texarkana

Title	Relationships amongst diachonic thinking and temporal cognition in children's emerging math abilities	
Description	Gifts for 50 children between the ages participated in the Research Study invabilities to sequence events in forward the past and use it to predict the future early math skills.	estigating whether or not children's and backward order and to think about
Purpose/Intent  Many children in American schools fall behind in math. Since 1 thinking abilities and math abilities have decreased in our school Research was to determine if the lack of critical thinking played a much larger role in children's development of math skills.		re decreased in our school systems. of critical thinking played a small role or
What makes this project a good investment for the state or institution?	This was an excellent investment for the state of Texas. The results suggest that, yes, these abilities play a role in emerging math abilities. In fact, different tasks for each concept played different/stronger roles in the children's ability to learn math! The study has been submitted to the Society for Research in Child Development (SRCD), which publishes the journal Child Development.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures	\$ 0 \$ 0 \$ 500 \$ 0 \$ 0
	Total	\$ 500

## RDF, Annual Report - FY 2012 Texas A&M-Texarkana

Title	Reconsidering Source Memory	
Description	This project investigated the differences 50 children ages 5-10 years old. Each cl participation. Researchers have argued memory." There has been an argument and neurologists as to whether or not the In this study, I investigated the neuropsy	hild was given a gift for their over what constitutes "source between developmental psychologists eir tasks measured the same concept.
source memory needs to be expand is applied in court to suggest wheth may remember source information (or imagined that something was sai		who said something or did something done). This project attempted to e memory" and investigate whether or
What makes this project a good investment for the state or institution?	tment for	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 250
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 250

## RDF, Annual Report - FY 2012 Texas Southern

Title	Research Enhancement and Compliance Programs	
Description	Educational workshops on laboratory safety, use of animals, radiation, and biohazardous substances in research for research community of TSU. State and federal agency reporting, registrations and assurance renewals. Research protocol submission, review and approval processes. Management and maintenance of research animal care facilities. Research Week Program.	
Purpose/Intent	To ensure research compliance with state and federal governing agency guidelines policies and procedures. To showcase research activities at TSU. To enhance internal and external research collaborations and networking.	
What makes this project a good investment for the state or institution?	Ensures compliance with state guidelines policies and procedures. Ensures state employee safety. Promotes high quality research. Enhances extramural funding opportunities for the university	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 25,938
	Operating Expenses	\$ 24,950
	Staff Benefits	\$ O
	Capital Expenditures	\$ 7,814
	Total	\$ 58,702

## RDF, Annual Report - FY 2012 Texas Southern

Title	Research Seed Grant Program		
Description	Coordination of application submission, review and award processes for Seed Grants. Administer seed grant procurement processes. Conductance of procurement workshops for awardees.		
Purpose/Intent	To provide research funds to faculty to conduct pilot studies via which the findings will serve as platforms to seek extramural funding		
What makes this project a good investment for the state or institution?	Enhances extramural funding opportunities for the university		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 35,138	
	Operating Expenses	\$ 37,046	
	Staff Benefits	\$ O	
	Capital Expenditures	\$ O	
	Total	\$ 72,184	

## RDF, Annual Report - FY 2012 Texas Southern

Title	Faculty Development Travel Grant Program		
Description	Faculty Development Travel Application submission, review, award and administering processes.		
Purpose/Intent	To afford faculty members the opportunity to widely convey research activities by presenting at national conferences and meetings		
What makes this project a good investment for the state or institution?	Enhances extramural funding for the university		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 25,938	
	Operating Expenses	\$ 6,123	
	Staff Benefits	<b>\$</b> 0	
	Capital Expenditures	<b>\$</b> 0	
	Total	\$ 32,061	

## RDF, Annual Report - FY 2012 Texas State University - San Marcos

Title	Faculty Startup		
Description	Research equipment and other startup costs.		
Purpose/Intent	Research equipment and other startup costs.		
What makes this project a good investment for the state or institution?	Funding state of the art equipment and laboratories allows us to retain top faculty to instruct and perform research.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 384,132	
	Salaries/Wages for Existing FTEs	\$ O	
	Operating Expenses	\$ 308,399	
	Staff Benefits	\$ O	
	Capital Expenditures	\$ 242,314	
	Total	\$ 934,845	

## RDF, Annual Report - FY 2012 Texas State University - San Marcos

Title	Office of Research Commercialization and Industry Relations		
Description	Center allows Texas State scientists to commercialize their breakthroughs in nanotechnology.		
Purpose/Intent	Center allows Texas State scientists to commercialize their breakthroughs in nanotechnology.		
What makes this project a good investment for the state or institution?	Center allows Texas State to make critical contributions to the nation in the fields of energy, security, and health science.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 45,266	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 117,770	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ O	
	Total	\$ 163,036	

# RDF, Annual Report - FY 2012 Texas State University - San Marcos

Title	Service and Maintenance Contracts		
Description	Pays for service, maintenance and calibration of research equipment.		
Purpose/Intent Pays for service, maintenance and calibration of research equipment.			
What makes this project a good investment for the state or institution?	Maintains state of the art equipment in research labs.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 51,848	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 0	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 15,238	
	Total	\$ 67,086	

# RDF, Annual Report - FY 2012 Texas State University - San Marcos

Title	Grant Support		
Description	Provides supplemental funding for grant r	esearch.	
Purpose/Intent Provides supplemental funding for grant research.			
What makes this project a good investment for the state or institution?	Leverages institution's ability to get new or continuing research grants.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 42,371	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 51,300	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 3,716	
	Total	\$ 97,387	

### RDF, Annual Report - FY 2012 Texas State University - San Marcos

Title	Center for Archeological Studies		
Description	Provide curation service for applied anthropology research.		
Purpose/Intent	Provide curation service for applied anthropology research.		
What makes this project a good investment for the state or institution?	Having a curation facility on campus is important for meeting current research needs and critical for building a PhD program in applied anthropology		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 49,391	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 83,518	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	<b>\$ 132,909</b>	

Title

#### PROJECT 1 - INDIVIDUAL INVESTIGATOR SUPPORT

Description

Texas Tech University is investing in individual research investigators in an effort to build nationally recognized areas of research excellence.

Purpose/Intent

To enhance the national reputation of research at Texas Tech University and for the state, the university is investing in individual research investigators in select disciplines in an effort to increase extramural research funding and facilitate interdisciplinary research groups and projects. These research development funding (RDF) investments provide unique opportunities for investigators to launch focused research initiatives.

What makes this project a good investment for the state or institution?

An example where RDF funds have been invested to promote excellence in research at Texas Tech is Dr. Katharine Hayhoe's research group in the TTU Climate Science Center (CSC). Dr. Hayhoe is an Associate Professor in the Department of Political Science and a director of the TTU CSC. She is a nationally and internationally-recognized expert on regional climate change impacts who has served on committees and authored reports on the implications of climate change for the National Academy of Science, the U.S. Global Change Research Program, the Environmental Protection Agency, the Dept. of Transportation, and the U.S. Fish and Wildlife Service. Dr. Hayhoe served as a contributor and expert reviewer to the Nobel Peace Prize-winning Intergovernmental Panel on Climate Change.

Climate science is a highly interdisciplinary field involving complex physical modeling, detailed statistical analyses, and awareness of both human and natural impacts and responses to change. Dr. Hayhoe has used RDF funds to build an unusual and highly effective research group across Biological, Atmospheric, Computer, Geo and Political Sciences, Environmental Toxicology, Geographic Information Systems, Meteorology, Natural Resource Management, Statistics, and Public Administration. Dr. Hayhoe and the research team have been able to conduct cross-cutting research that has been leveraged into external awards from the National Science Foundation (NSF) Science, Engineering and Education for Sustainability; Department of Defense's Strategic Environmental Research and Development Program; and the Dept. of Interior South Central Climate Science Center. Current opportunities on climate-related hazards in the Gulf Coast are being leveraged to the National Oceanic and Atmospheric Administration (Climate and Societal Interactions program) with projected changes in ice storm frequency and impacts out to the NSF Division of Environmental Biology.

The TTU CSC, which includes a team of cross-disciplinary faculty and graduate students, provides critical educational opportunities for students at both the undergraduate and graduate level. The team has built a network of nearly 100 affiliated regional faculty and researchers. Short courses offered on climate science and educational opportunities offered by the CSC have included access to climate data and projections by the research group, sparking extensive collaborative activity around funding opportunities at a regional and national level.

The emerging leadership of Texas Tech in the area of climate variability and climate change impacts is already paying clear dividends in generating external funding, offering rigorous academic training of students with cross-disciplinary expertise, and helping to develop policy decisions that will allow the state and nation to address critical environmental concerns. For example, the Llano River Field Station of TTU at Junction in coordination with the CSC is leading an EPA study of how to coordinate scientists, landowners

and state officials to manage healthy watersheds. At Big Bend National Park, the CSC is working with national park resource managers to develop strategies that will allow restoration of low elevation grasslands and decrease siltation problems in the Rio Grande.

Another example where RDF funds have been invested to promote excellence in research at Texas Tech is the research lab headed by Dr. Jerzy Blawzdziewicz. Dr. Blawzdziewicz is a Professor in the Department of Mechanical Engineering. Favoring a transdisciplinary approach, Dr. Blawzdziewicz has developed an internationally recognized research program in the areas of microhydrodynamics, microstructured materials, and biological physics.

Fundamental investigations on microhydrodynamics of particulate flows provide theoretical basis for the development of miniaturized fluidic devices for medical and biological testing and for high throughput drug screening. Dr. Blawzdziewicz's studies of microstructured materials resulted in new techniques for controlling material structure on sub-micron scale and nanoscale, for example in applications for fuel-cell technology.

In the area of biological physics Dr. Blawzdziewicz investigates locomotory behavior of a nematode Caenorhabditis elegans (a model organism) to provide insights into mechanisms underlying muscular dystrophy. While these studies are an important contribution to biological and medical sciences, another essential area that will be impacted by his results is research on muscle strength loss experienced by astronauts in microgravity environment. These theories will also be used to design smart artificial crawlers with potential applications ranging from combating chronic wound infections to environmental cleanup of biohazards.

Dr. Blawzdziewicz's Soft Matter Lab provides research opportunities to graduate and undergraduate students and postdoctoral fellows, with special emphasis placed on underrepresented minorities. The state and university resources invested in his lab are leveraged to obtain funding from NSF, NASA and other federal agencies.

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Salaries/Wages for New or Reassigned FTEs	\$ 1,257,563
Salaries/Wages for Existing FTEs	\$ 0
Operating Expenses	\$ 408,576
Staff Benefits	\$ 0
Capital Expenditures	\$ 7,373
Total	\$ 1,673,512

Title

#### PROJECT 2 - INFRASTRUCTURE RESEARCH SUPPORT

Description

Texas Tech University is strengthening the growth of multidisciplinary and collaborative programs through infrastructure research investment.

Purpose/Intent

Texas Tech University is making key investments into infrastructure research at the university to bolster existing research programs, support the continued growth of multidisciplinary programs, and offer incentives for research productivity.

What makes this project a good investment for the state or institution?

A primary example is the research support provided to the Energetic Material Combustion Laboratory at TTU led by Dr. Michelle Pantoya, Professor, Edward E. Whitacre Jr. College of Engineering, Department of Mechanical Engineering. The laboratory advances nano-energetic material synthesis and combustion characterization. The formulations developed exhibit dramatically increased ignition sensitivity, reactivity, and tunability over conventional explosives, propellants and pyrotechnics. The main goals of this program are to integrate fundamental research in chemical synthesis and modeling, combustion and reaction characterization, diagnostic development at relevant time and length scales, and environmental impact analysis in order to develop higher performance propulsion and ordnance systems for national security. Projects range from developing nano-energetics that neutralize spore forming bacteria (such as anthrax) to developing flares for cloud seeding and drought mitigation (Texas Weather Modification Association). Patented formulations are becoming incorporated as primers for ordnance, and as underwater energy generation systems (case-less munitions). Research and technology development advance all branches of the U.S. Department of Defense including the Defense Threat Reduction Agency and the Department of Homeland Security.

RDF funding investment has also been made into the Texas Tech Neuroimaging Institute (TTNI). This institute is a multiuser neuroimaging facility that promotes cutting-edge interdisciplinary research among Texas Tech University and Texas Tech University Health Sciences Center (TTUHSC) faculty and students. The focal point of the facility is the state-of-the-art 3-Tesla Siemens Skyra MRI machine. This unit is one of only a few found in the United States and will be pivotal in the acceleration of neuroscience research at Texas Tech University. The institute provides researchers with brain and body imaging technologies, including structural and functional magnetic resonance imaging (fMRI), diffusion tensor imaging, spectroscopy and simultaneous EEG-fMRI. Additionally, TTNI serves as a transdisciplinary research, education, and collaborative research and development center for use not only by the university and regional community, but the expansive West Texas area, as well.

A central focus of the TTNI is to investigate how training and intervention can alter the structural and functional characteristics of the brain, with an emphasis on the improvement of self-control and cognitive, emotional and social development in those with autism spectrum disorders. The institute is also involved in the identification of the brain mechanisms associated with the prevention and intervention effects of attention-deficit disorder (ADHD); post-traumatic stress disorder (PTSD); mood disorders; addiction; cancer; aging; and the development of expertise, such as mathematical or musical giftedness. This facility is key infrastructure in enabling TTU to address and leverage funding opportunities for issues in neuroscientific fields of significant importance for the State and our nation.

Financial	Salaries/Wages for New or Reassigned FTEs	\$ 666,494	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 241,819	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 17,161	
	Total	\$ 925,474	

# RDF, Annual Report - FY 2012 Texas Tech

Title	Unexpended Balance Carry Forward		
Description			
Purpose/Intent			
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 1,564,815	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 1,564,815	

# RDF, Annual Report - FY 2012 UT at Arlington

Title	Faculty Salary Support		
Description	Salaries paid to Faculty working at UT Arlington, including the Colleges of Engineering, Science, Nursing, Education and Schools of Urban and Public Affairs, Social Work, Architecture, etc.		
Purpose/Intent	To enable the retention of outstanding reemployment at other institutions.	esearch faculty who are sought for	
What makes this project a good investment for the state or institution?	This investment lowers faculty turnover with faculty recruitment.	rates and the expenses associated	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 1,993,579	
	Operating Expenses	\$ 0	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 1,993,579	

# RDF, Annual Report - FY 2012 UT at Arlington

Title	Graduate Research Assistant Salaries	
Description	The research experience gamed by these students is a critical part of their	
Purpose/Intent		
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 428,245
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 428,245

# RDF, Annual Report - FY 2012 UT at Arlington

Title	Research Technicians and Research Support		
Description	Salaries for Research Technicians and Research Support		
Purpose/Intent	The purpose of these funds is to pay research technicians and other research support positions who provide a valuable research support role to our research faculty.		
What makes this project a good investment for the state or institution?	They provide valuable research support which contributes to the University's research mission.		
Financial	Salaries/Wages for New or Reassigned FTEs	<b>\$</b> 0	
	Salaries/Wages for Existing FTEs	\$ 594,553	
	Operating Expenses	\$ 0	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 594,553	

### RDF, Annual Report - FY 2012 UT at Brownsville

Title	Research Development Fund Annual Report - FY 2012		
Description	These funds were utilized for salaries and operating expenses for research related activities.		
Purpose/Intent	Research development funds provide full and partial support for faculty and staff conducting research and research related activities.		
What makes this project a good investment for the state or institution?	These funds promote increased research capacity at our campus by supporting research and research related efforts and initiatives where institutional funds are limited.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 451,256	
	Operating Expenses	<b>\$</b> O	
	Staff Benefits	\$ 0	
	Capital Expenditures	<b>\$</b> O	
	Total	<b>\$ 451,256</b>	

Title	Research Development – Behavioral & B	rain Science
Description		
Purpose/Intent	Modern non-intrusive methods for monitoring real-time functioning of the human brain have led to issues requiring the definition of normal brain function. A goal of this institute is to define the concept of a "healthy" brain as well as developing techniques for the brain as well as developing techniques for the early detection of non-healthy functioning.  Results of this research will have major positive effects upon human health, and will create possible commercial applications, and will reduce burdens upon social service agencies.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 19,780
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 19,780

Title	Research Development – Center for Vital Longevity	
Description		
Purpose/Intent	Research scientists at the Center for Vibrain-imaging technologies and research to understand and improve the vitality of working to identify a neural signature in predict who will and will not age well conformed a large with age. And they are investigated mental stimulation on memory and	th techniques in cognitive neuroscience of the aging mind. Center scientists are middle-aged adults that will help gnitively and who might be at risk of the appear. They are working to and retrieved and how these processes ating the effects of physical exercise
What makes this project a good investment for the state or institution?	The ultimate goal of the Center's wide-ranging studies is to advance our understanding of the aging mind and to improve the long-term cognitive healt and vitality of present and future generations. Their focus holds particular importance to our society, which has a higher proportion of older adults than ever before.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 214,108
	Operating Expenses	\$ 75,185
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 289,293

Title	Research Development – Economic Political & Policy Sciences	
Description		
Purpose/Intent	Economics Political and Policy Sciences pro allows the student to understand social pher perspective and to provide students with the necessary to study interesting and importan influence what government does, the respor government, and the consequences of what for individual and community well-being.	nomena from an economics substantive and analytical skills t questions about how citizens as ibilities and effectiveness of
What makes this project a good investment for the state or institution?	Research Development funds provide faculty the support to teach students to be able to think critically about choices in the face of limited resources in order to understand more clearly the choices available to society and the economic consequences of decisions.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ O
	Total	\$ 0

Title	Research Development – Engineering	and Computer Science
Description		
Purpose/Intent	circuits and systems, bioengineering,	at inspires the pursuit, creation and owing areas: Analog and mixed-signal human communication technology, urity, materials characterization, micromaterials, devices and systems, and biosensors, RF/microwave
What makes this project a good investment for the state or institution?	The Jonsson School, created in large part to serve the demands of the Dallas area high-tech community, has capitalized on its unique location and is becoming an integral part of the North Texas 'economic engine.' Research Development funds aid in developing the relationships between UTD and industry which benefit our students, the Jonsson School and industry by providing career opportunities for graduate students, co/op/internship opportunities for students, and potential creation of research partnerships.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 2,438,626
	Operating Expenses	\$ O
	Staff Benefits	\$ O
	Capital Expenditures	\$ O
	Total	\$ 2,438,626

Title	Research Development - School of Nat	ural Sciences and Mathematics
Description		
Purpose/Intent		
What makes this project a good investment for the state or institution?	The academic and research programs in the School of Natural Sciences and Math create the environment for excellence in student achievement and cutting edge research in the biological, geological, mathematical and physical sciences. Through this research, it will ensure that the North Texas region continues to grow as a science, mathematics, and educational destination, as a source of scientific talent, and as an incubator of new technologies.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 1,280,063 \$ 10,231
	Operating Expenses Staff Benefits	· · ·
	Otali 201101110	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,290,294

Title	Research Development - Management	
Description		
Purpose/Intent	The purpose of the Research Development funds is to assist the School of Management in furthering its academic excellence goals by providing supplemental funds to conduct research that will enhance management knowledge.	
What makes this project a good investment for the state or institution?	Research Development funds provide support to the Jindal School of Management's mission to meet the challenges of a rapidly changing, technology-driven, global society.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 25,243
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 25,243

Title	Research Development - Research	
Description		
Purpose/Intent	The Office of the Vice President for Research Sponsored Programs (OSP), Research C Development (ORD) and Technology Cor These functions are all vital to ensuring the enterprise at UT Dallas.	ompliance (ORC), Research nmercialization (OTC) operations.
What makes this project a good investment for the state or institution?	The four offices operating under the OVPR umbrella (OSP, ORC, ORD, and OTC) directly support faculty members in the development and submission of research proposals, negotiation of award contracts, facilitation of compliance with federal, state and local laws and regulations related to research, and the commercialization of technologies developed by UT Dallas faculty members. All of these functions are integral to the operations of a top tier research university and to the continued development and growth of high quality research in the state.	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 25.760
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 25,760

Title	Carried over		
Description			
Purpose/Intent			
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 123,944	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 123,944	

Title	Research Equipment	
Description	Funds were allocated for acquisition, maintenance and support of research equipment in the Colleges of Science, Engineering, and Liberal Arts and Health Sciences.	
Purpose/Intent	UTEP continues to expand its research a in the STEM disciplines. As part of these of scientific instruments which are heavily projects. In order to avoid service interrupt were placed in yearly maintenance contraequipment was also acquired replacing or	efforts, UTEP has acquired a number used for sponsored research otions, several of these instruments acts using RDF Funds. New
What makes this project a good investment for the state or institution?	These RDF investments have helped UTEP in building research capacity an becoming more effective in securing competitive research funding.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 85,416
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 435,460
	Total	\$ 520,876

Title	Grant Cost Shares	
Description	Cost share for major sponsored projects	
Purpose/Intent	Research development funds were invested to cover the committed and voluntary cost shares for national competitive federal grants sponsored by the National Science Foundation, The National Institute of Health, the Office of Naval Research and the Air Force Office of Scientific Research.  Cost sharing projects not only help principal investigators to meet the needs of the grant but also show institutional support to the agencies where the return on investment is beneficial to UTEP, the students, and the researchers involved.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 54,160
	Salaries/Wages for Existing FTEs	\$ 114,302
	Operating Expenses	\$ 72,981
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0

Title	Veterinary Services	
Description	Operating support for Veterinary Services Office	
Purpose/Intent	In recent years, UTEP has aggressively expanded its research agendal increase capacity in biomedical and health related research. As part of efforts, UTEP recently completed the new Biosciences building, which animal research facilities, vivaria, and Biosafety Level 3 containment far These research facilities also demand that the all research dealing with animals (funded and unfunded) be in compliance with animal welfare regulations of the Office of Laboratory Animal Welfare (OLAW) of the Understand of Health and Human Services. RDF funds were used to capital and operating expenditures in support of the Veterinary Service Office.	
What makes this project a good investment for the state or institution?	The RDF investment will allow the execution of biomedical and health -related research to be in compliance with OLAW federal regulations	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 18,250
	Salaries/Wages for Existing FTEs	\$ 133,773
	Operating Expenses	\$ 108,097
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 260,120

Title	Institutional Animal Care and Use Committee	
Description	Operating support for the Institutional Animal Care and Use Committee (IACUC)	
Purpose/Intent  The purpose of the IACUC is to assure that UTEP researchers care use animals in ways judged to be scientifically, technically, and human appropriate. The committee provides research oversight and evaluate institution's animal care and use program and facilities by ensuring content with federal regulations related to the proper care, use, and humane of animals used in research, testing and education. The IACUC also assistance to investigators in fulfilling their obligation to plan and containing research in accordance with the highest scientific and ethical principles.		ntifically, technically, and humanely research oversight and evaluation of the am and facilities by ensuring compliance proper care, use, and humane treatment and education. The IACUC also provides their obligation to plan and conduct
What makes this project a good investment for the state or institution?	The RDF investment will allow the execution of animal related research to be in compliance with the Public Health Service Policy on Humane Care and Use of Laboratory Animals; United States Department of Agriculture-Animal and Plant Health Inspection Service; U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training; and Code of Federal Regulations, 1989, Title 9, Parts 1, 2, and 3 (Animal Welfare Final Rules).	
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Conital Expenditures	\$ 0 \$ 74,237 \$ 14,770 \$ 0 \$ 0
	Capital Expenditures  Total	\$ 89,007

Title	Start-up packages	
Description	The University uses these funds to provide support for newly hired faculty who are expected to establish funded research programs.	
Purpose/Intent	The intent of this program is to attract new in order to increase the level of research excellence. The funds are used for salaric post-Docs, research technicians, laborate and operating expenses required to operating purpose of research production.	funding and enhance institutional es and wages for faculty members, ory assistants, capital expenditures,
What makes this project a good investment for the state or institution?	These investments have helped UTEP in building research capacity and becoming more effective in securing competitive research funding. This enables the hiring of strong faculty who will enhance the standing of the institution and contribute to it's research and instructional missions.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 275,351
	Salaries/Wages for Existing FTEs	\$ 226,985
	Operating Expenses	\$ 162,228
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 15,758
	Total	\$ 680,322

Title	Research Initiatives	
Description	The University uses these funds to provide transitional salary and support for newly hired faculty and faculty that need to be retained for their research credentials.	
Purpose/Intent	The intent of this program is to retain existing faculty and attract new, high competitive research faculty in order to increase the level of research fundand enhance institutional excellence. The funds are used for capital expenditures, operating expenses, and salaries and wages for research assistants, post-Docs and laboratory technician and salaries for faculty members.	
What makes this project a good investment for the state or institution?	These RDF investments have helped UTEP in building research capacity and becoming more effective in securing competitive research funding. This enables the hiring of strong faculty who will enhance the standing of the institution and contribute to it's research and instructional missions.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 48,225
	Salaries/Wages for Existing FTEs	\$ 474,016
	Operating Expenses	\$ 119,513
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 293,256
	Total	\$ 935,010

Title	University Research Institute	
Description	Funding program to individuals in full t productivity is an expected requiremen	·
Purpose/Intent	The University Research Institute provides funding assistance to those full time individuals that have submitted proposals to the Faculty Research Senate Committee and meet all requirements. Funding assistance is awarded to those proposals that assist in the development of new junior faculty members, assist in the development of research programs that will attract external sources of funds, and make maximum use of resources and facilities available within UTEP.  The URI's have been one of the most important means to support research	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs	\$ 0 \$ 4,648
	Operating Expenses	\$ 43.756
	Staff Benefits	\$ 43,750 \$ 0
	Capital Expenditures	\$ 0 \$ 0
	Capital Experiultures	in U

Title	Center for Research Entrepreneurship & Innovative Enterprises	
Description	CREIE works with UTEP researchers to commercialize their ideas by providing services such as best-in-class innovation practices; technology, intellectual property and patent strategies; licensing strategies, market research; business strategy and plan development; company formation, organization structures and capitalization strategies; fundraising; incubation; and recruitment strategies.	
Purpose/Intent The purpose of CREIE is to be the single portal to assist innovation, entrepreneurship, technology transfer, and		•
What makes this project a good investment for the state or institution?	The outcomes of CREIE not only have enhanced tech transfer operations, but also are expected to contribute to the economic development of the El Paso Region.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 149,223
	Operating Expenses	\$ 4,590
	Staff Benefits	<b>\$</b> O
	Capital Expenditures	\$ 0
	Total	\$ 153,813

Title	Strategic Hires		
Description	The strategic hires program provides funding to Colleges to recruit outstanding and high-profile faculty researchers who are aligned to the educational and research mission of the University.		
Purpose/Intent	The purpose of the program is to provide agility to the University in the strategic recruitment of outstanding faculty who advance the University to attain a National Research University status.  The recruitment of high-profile faculty members is one way to enhance the caliber of research at UTEP and to increase the quality of education the students deserve.		
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 150,000	
	Salaries/Wages for Existing FTEs	\$ 117,500	
	Operating Expenses	\$ O	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 267,500	

Title	Research Centers Support	
Description	This program provides start-up and transitional support for the establishment of research centers with an aggressive extramural funding agenda.	
Purpose/Intent	The purpose of these funds are to provide start-up and transitional support to develop the infrastructure of the Center for Space Exploration Research and Technologies and the Future Aerospace Science and Technology Center. These two centers have secured multiple grants from federal agencies and aerospace industry partners with obligations exceeding \$7 million.	
What makes this project a good investment for the state or institution?	The investment is effectively used to leverage extramural funding, which in turns, provides support for the educational and research mission of the University.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 251,851
	Operating Expenses	\$ 14,174
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 266,025

Title	College of Sciences Because Faculty C	tart up and Continuing Support
	College of Sciences Research Faculty Start-up and Continuing Support	
Description	The fund proceeds in FY 2012 were allo research-oriented College of Sciences fa advancement of the research enterprise	aculty at UTSA and to promote the
Purpose/Intent	This effort promoted emerging research resources to equip and establish laborat performing investigative roles, and initiat support of System's initiative to increase fund contributed to supporting faculty in interest and expertise to enhance and bralso supported personnel costs, purchas materials for use in developing research	ories, defray costs for personnel te or sustain early stage research in research capabilities. In addition, the evolving their respective areas of roaden UTSA research base. The fund se of supplies, equipment and
What makes this project a good investment for the state or institution?	During FY 2012, the College of Science Development Funds to provide financial endeavors of new and existing faculty m garnered new extramural funding totaling through the Research Development Fun investment: (B. Arulanandum) \$426,311 (NIH), \$1,500 from Mendoza Group, and Defense (DOD); (J. Bush) \$57,904 from Department of Agriculture; (B. Chen) \$60 (Cole) \$346,710 from NIH, and \$45,112 from NIH; (D. Kurtz) \$329,118 from NIH; Foundation; (C. Paladini) \$523,854 from University of Maryland Baltimore County Foundation (NSF); (Z. Tonzetick) \$60,000 \$289,000 from NIH; (F. Wormley) \$220,800 (J. Zhao) \$250,346 from NIH and \$75,000	resources to support the research embers. The College of Science g \$4,141,484 for faculty supported ds resulting in a 365% return on from National Institute of Health \$650,859 from Department of US Forest Service, and \$5,000 from 0,000 from Welch Foundation; (G. from MBI; (B. Hermann) \$319,254 (R. LeBaron) \$10,000 from Medtronic NIH; (R. Sandhu) \$200,000 from and \$200,421 from National Science of from Welch Foundation; (N. Wicha) 500 from NIH and \$70,595 from DOD;
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits Capital Expenditures Total	\$ 1,104,966 \$ 28,510 \$ 160,633 \$ 0 \$ 6,442 <b>\$ 1,300,551</b>

# RDF, Annual Report - FY 2012 UT at San Antonio

Title	College of Engineering Research Initia	tives/Start-up Packages
Description	The fund proceeds in FY 2012 were all research-oriented College of Engineeri advancement of the research enterpris	ng faculty at UTSA and to promote the
Purpose/Intent	research support to faculty in the form	y of Texas at San Antonio is to provide of additional funding to purchase upplies, and to provide salary support for toral fellows, laboratory technicians,
What makes this project a good investment for the state or institution?	During FY 2012, the College of Engine Development Funds to provide financial endeavors of new and existing faculty regarnered new extramural funding totalist through the Research Development Fundational Labs; (Y. Feng) \$50,000 from Krishnaswami) \$8,333 from University NSF and \$64,984 from Texas Departm \$44,541 from USAA and \$150,000 from NIH and (A. Trickett) \$105,000 from Cleans of the Polysian Provided Head (A. Trickett)	al resources to support the research members. The College of Engineering ng \$765,387 for faculty supported ands: (F. Chen) \$70,000 from Sandia Princeton University; (H. of Minnesota; (X. Liu) \$19,654 from ment of Transportation; (L. Shephard) m SunEdison; (L. Tang) \$252,875 from
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits	\$ 145,986 \$ 68,155 \$ 59,163 \$ 0
	Capital Expenditures Total	\$ 7,598 <b>\$ 280,902</b>

### RDF, Annual Report - FY 2012 UT at San Antonio

Title	Colleges of Architecture, Business, Education and Human Development, and Liberal and Fine Arts Research Initiatives	
Description  The fund proceeds in FY 2012 were allocated research-oriented faculty at UTSA and to proceed faculty at UTSA and UTSA and UTSA and UTSA and UTSA and UTSA at UTSA and UTSA an		
Purpose/Intent  The purpose/intent of the research development funds program with colleges is to provide research support to faculty in the form of additifunding to purchase laboratory equipment, materials and supplies, a provide salary support for graduate research assistants, post doctors and faculty summer salary support for research.		o faculty in the form of additional nt, materials and supplies, and to arch assistants, post doctoral fellows,
What makes this project a good investment for the state or institution?	During FY 2012, these colleges expended \$106,481 in Research	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 72,855
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 33,626
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 106,481

Title	Research Conferences and Competitions	
Description	Funds were allocated to increase the average capabilities and growing support for UT various events and issuing publications promote collaborations. UTSA is actived through effective strategies and through programs. The university's success at gin UTSA's pursuit of Tier One status. For research conferences and competitions in important areas of national interest.	SA's research programs by holding that highlight research activities and ly working to increase its visibility development of nationally competitive garnering national recognition is critical
Purpose/Intent	The University of Texas at San Antonio by promoting the importance and visibil and encouraging collaborations across	ity of the institution's research activities
What makes this project a good investment for the state or institution?	UTSA's established research visibility in the life sciences is clearly projected to continue to increase as is its pre-eminence in research and training of Hispanic students. Important areas of national interest and visibility include health disparities, cyber security, bioengineering, military medicine, international finance and economics, neuroscience, energy and sustainability, infection genomics, and nanoscale physics. Communicating UTSA's research mission, values and messages is key to increasing support for research activities, establishing new and maintaining existing partnerships, and generating interest in our research activities.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0 \$ 0
	Salaries/Wages for Existing FTEs Operating Expenses	\$ 0 \$ 22.817
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 22,817

### RDF, Annual Report - FY 2012 UT at San Antonio

Title	eRA Compliance Portal System	
Description	Funds were allocated to support the Off works with researchers to navigate and federal, state, and local regulations that academic institutions. UTSA is impleme research compliance. This currently covis being expanded to cover IRB and IBC decrease effort and turnaround time for accuracy.	comply with the complex maze of impact research undertaken at enting electronic management of vers conflict of interest and IACUC and C. These automated services will
Purpose/Intent	formalish and the same that for the same that and the same and the same that	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ O
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 106,550
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 106,550

#### Title

#### Commercialization Alliances and Tech Transfer

#### Description

UTSA continues to build an extensive commercialization program that is committed to enabling technology-based economic development in the South Texas region. UTSA's Office of Commercialization and Innovation was created to bring together the many elements of the university's technology commercialization ecosystem, including the Center for Innovation Technology and Entrepreneurship; the Institute for Economic Development; Southwest Research Institute: Texas Biomedical Research Institute: the Office of Research Integrity; and the Office of Sponsored Project Administration. It is also supported by Startech, a private, not-for-profit Texas corporation that assists researchers, inventors and entrepreneurs in marketing their technologies. Growth in partnerships for stimulating, enabling, and easing the transfer of technologies from researchers to companies continues to be the hallmark of UTSA's progressive commercialization practices, with the goal of reducing all barriers to tech transfer and increasing the percentage of UTSA technologies and IP in the hands of companies moving products and services to market.

#### Purpose/Intent

Research Development Funds were used to pay for services provided by a regional technology transfer office within the UT System whose mission is to provide comprehensive and integrated technology development services using effective protection and commercialization strategies to stimulate and capitalize on its intellectual property portfolio, thereby achieving maximum economic and humanitarian value. It helps facilitate UTSA's mission in areas of technology transfer, commercialization, and university-industry partnerships by increasing the depth and success of partnerships with private companies and units of government.

What makes this project a good investment for the state or institution?

At the end of FY12 UTSA saw a 29% increase in the number of patent applications filed and revenues received from intellectual property owned by UTSA increased 120 percent over the prior year. Three start-ups with substantial operations in Texas were also formed in FY12 to commercialize UTSA intellectual property. The University continues to expand its on-campus incubation of student and faculty start-ups and partner commercialization companies. These have resulted in SBIR funding, technology licenses, increased research funding, and equity positions in companies that are actively raising investment uprounds. Additionally, master agreements for commercialization of research and intellectual property have been developed with regional commercialization partners. By facilitating a contracting pipeline and the development of faculty-conceived products, UTSA is fostering and encouraging the research of new and cutting edge technologies and hopes to recruit more top-notch faculty who will help the university achieve its goal of becoming a premier public research university.

#### Financial

Total	\$ 304,299
Capital Expenditures	\$ 0
Staff Benefits	\$ 0
Operating Expenses	\$ 304,299
Salaries/Wages for Existing FTEs	\$ 0
Salaries/Wages for New or Reassigned FTEs	\$ 0

## RDF, Annual Report - FY 2012 UT at Tyler

Title	Research Development Fund Annual Report	
Description	Increase Research Enhancement Budget  These funds enable the university to make several small faculty research grants. Such grants are aimed at helping faculty members generate initial results necessary to successfully obtain funding from extramural grant sources.	
Purpose/Intent		
What makes this project a good investment for the state or institution?	These funds provide seed money for research projects and provide institutions the ability to acquire resources that would otherwise be unattainable through standard appropriations.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 65,497
	Operating Expenses	\$ 90,851
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 60,000
	Total	\$ 216,348

### RDF, Annual Report - FY 2012 UT of the Permian Basin

Title	Support of Research Administration and Graduate Research Assets	
Description	Salaries for research administration and graduate research assets, and support for research office	
Purpose/Intent	The primary purpose is to support research and sponsored program administration	
What makes this project a good investment for the state or institution?	Support Services for research admin are a critical component of successful faculty and grant applications	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 137,787
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ O
	Staff Benefits	\$ O
	Capital Expenditures	\$ 0
	Total	\$ 137,787

### RDF, Annual Report - FY 2012 UT-Pan American

Title	Research Development Fund	
Description	Monies received from the research development fund may only be used for the support and maintenance of educational and general activities, including research and student services, that promote increased research capacity at the institution.	
Purpose/Intent	For the support and maintenance of E& research capacity at The University of T	·
What makes this project a good investment for the state or institution?	or OTFA engages with health providers, industry and other business leaders,	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 30,227
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 246,757
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 266,819 \$ 543,803
	Total	\$ 543,803

### RDF, Annual Report - FY 2012 Univ. of Houston-Clear Lake

Title	Provost Main Research Development	
Description		
Purpose/Intent	Funds are used to provide additional suppresearchers in order to achieve goals and awards, both internal and external. Resea to, environmental science, chemistry, geoleducation.	objectives set forth in their research rch fields include, but are not limited
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 1,780
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 1,780

### RDF, Annual Report - FY 2012 Univ. of Houston-Clear Lake

Title	EIH Main Research Development	
Description	Environmental Research and Education Funds	
Purpose/Intent	Funds are used to provide seed funding in the field of environmental research and education support. Funds support research conducted by UH System faculty researchers and educators in the fields of environmental science, fisheries science, chemistry, geology, meteorology, biology and hydrology.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 13,260
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 10,289
	Staff Benefits	\$ 0
	Capital Expenditures	<b>\$</b> 0
	Total	\$ 23,549

#### RDF, Annual Report - FY 2012 Univ. of Houston-Downtown

Title	Research Development Fund-Office of Sponsored Programs	
Description	Support the University of Houston - Downtown's Office of Sponsored Research	
Purpose/Intent	or	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 52,124
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 52,124

### RDF, Annual Report - FY 2012 Univ. of Houston-Victoria

Title	Carried forward to FY13		
Description			
Purpose/Intent			
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 1,127	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 0	
	Total	\$ 1,127	

# RDF, Annual Report - FY 2012 University of North Texas

Title	Research Infrastructure  Improvement of existing and construction of new research infrastructure that supports and expands the research capacities of our faculty researchers.  Several areas have been supported such as the Center for Advanced Research and Technology (CART), Computational Epidemiology Research Laboratory (CERL), Nanofabrication Cleanroom, Next Generation 911 Services, and other labs.  Allows UNT faculty and students access to state-of-the art equipment in an environment conducive of cutting-edge research.	
Description		
Purpose/Intent		
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 52,068
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 101,585
	Total	\$ 153,653

Title	Sponsored Research Services office	
Description	Pays the salary and operating budget of the office.	
Purpose/Intent	The office of Sponsored Research Services (SRS) supports faculty and staff campus-wide by identifying external funding opportunities and assisting in the development of proposals in response to those opportunities. The office also assists with sponsored project administration and compliance requirements in support of research.	
What makes this project a good investment for the state or institution?	SRS assists the campus community in acquiring external research support. Last fiscal year saw a 64% increase in external award dollars over the previous year. Internal grant competitions for faculty, graduate students and undergraduate students is also administered from this office. The internal grant programs provide students in all fields of study exposure to the researc environment and facilitates faculty in acquiring preliminary data used in their external proposals.	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 185,670
	Operating Expenses	\$ 9,155
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 0
	Total	\$ 194,825

Title	National Council of University Research Administrators (NCURA) - Financial Research Administration (FRA)	
Description	Registration Fees to the NCURA - FRA annual conference  Allowed two research administrators to attend their first professional society research administration meeting.  Professional meetings provide the attendees with a plethora of information on funding agencies award administration as well as changes that are scheduled to be implemented. Exposure to the knowledge presented by senior research administrators and funding agency representatives has assisted the university in recognizing areas of administration that required attention to be compliant with federal guidelines. Without accurate and effective research administration institutions often find themselves in federal audit situations resulting in a high dollar impact and/or sanctions. Knowledge learned and contacts made assist West Texas A&M University in better research administration.	
Purpose/Intent		
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses Staff Benefits	\$ 0 \$ 0 \$ 970 \$ 0
	Capital Expenditures	\$ 0
	Total	\$ 970

Title	Research Equipment Purchase		
Description	Lab Vent Hoods and minor renovation to accommodate the installation		
Purpose/Intent	Removes toxic fumes from the laboratory to protect the personnel.		
What makes this project a good investment for the state or institution?			
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ 0	
	Operating Expenses	\$ 0	
	Staff Benefits	\$ 0	
	Capital Expenditures	\$ 130,595	
	Total	\$ 130,595	

Title	Utilities necessary for research equipment		
Description	Installation of utilities (gas, air and water) for lab vent hoods		
Purpose/Intent	Required for the installation of laboratory vent hoods		
What makes this project a good investment for the state or institution?	Allows the lab vent hoods to be installed thus supporting research in multiple disciplines and allowing researchers to expand the type of research project undertaken.		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0	
	Salaries/Wages for Existing FTEs	\$ O	
	Operating Expenses	\$ O	
	Staff Benefits	\$ O	
	Capital Expenditures	\$ 4,555	
	Total	\$ 4,555	

Title	Research Equipment Purchase		
Description	Research Art wash basin assembly		
Purpose/Intent	Similar to lab vent hood for creative arts p remove toxic fumes that may be present in projects		
What makes this project a good investment for	Research art projects using products producing toxic fumes would not be able to be done at the institution. Having the ability to protect the personnel working on the projects allows West Texas A&M University to include non traditional research on our campus.		
the state or institution?	on the projects allows West Texas A&M U		9
the state or institution? Financial	on the projects allows West Texas A&M U		9
	on the projects allows West Texas A&M Uresearch on our campus.	niversity to include r	<b>U</b>
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	on the projects allows West Texas A&M Uresearch on our campus.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	s 0 \$ 0 \$ 0 \$ 0	<b>U</b>

Title	Research Laboratory Safety	
Description	Tot salety purposes key swipes are necessary on labs using caustic chemicals	
Purpose/Intent		
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ 0
	Staff Benefits	\$ 0
	Capital Expenditures	\$ 5,680
	Total	\$ 5,680

Title	Commercial Core Lab		
Description	Purchase of furnishings,		
Purpose/Intent	Establish office facilities for the Director of the newly established Commercial Core Lab.		cial
What makes this project a good investment for the state or institution?	The Commercial Core Lab was established to conduct analysis for both industry and academia in the area of Feed/Forage testing, Lab Olfactometry and the analysis of various compounds by GC/MS in air and other media. This provides our researchers with the testing capabilities in house and provides industry in Texas and the surrounding states with access to state of the art facilities.		
	provides our researchers with the testing of industry in Texas and the surrounding state	apabilities in house and provide	es
Financial	provides our researchers with the testing of industry in Texas and the surrounding state	apabilities in house and provide	es
Financial	provides our researchers with the testing of industry in Texas and the surrounding state facilities.	apabilities in house and provide es with access to state of the ar	es
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Financial	provides our researchers with the testing of industry in Texas and the surrounding state facilities.  Salaries/Wages for New or Reassigned FTEs Salaries/Wages for Existing FTEs Operating Expenses	apabilities in house and provide es with access to state of the are \$0 \$0 \$4,165	es

Title	Disseminating research results	
Description	Purchase of West Texas A&M University logo uniform for TV presentation.	
Purpose/Intent	The program is dedicated to talking about the wildlife that lives in the Texas Panhandle. The data of which comes directly from the investigator's research.  This provides the opportunity to talk about the investigator's research and to bring public awareness to the wildlife in the local Texas area. It has a secondary benefit of promoting West Texas A&M University as a research institution thus attracting students from the local viewing area that are interested in pursuing research themselves.	
What makes this project a good investment for the state or institution?		
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Salaries/Wages for Existing FTEs  Operating Expenses	\$ 0 \$ 118
	5	· ·
	Operating Expenses	\$ 118

Title	Carryover FY12	
Description	Research Development Fund	
Purpose/Intent	Projects in process as of 8/31/12 were not expended but were encumbered to be spent.	
What makes this project a good investment for the state or institution?	The Research Development Fund benefited the university by assisting facult in requesting grant application dollars in fiscal yr 10	
Financial	Salaries/Wages for New or Reassigned FTEs	\$ 0
	Salaries/Wages for Existing FTEs	\$ 0
	Operating Expenses	\$ O
	Staff Benefits	\$ O
	Capital Expenditures	\$ 281,030
	Total	\$ 281,030