



Inside This Issue:  
Program News ... 1

Student Club News  
... 3

Photo Gallery ... 4

Contact us / Editors  
..... 1

### Program News

#### The Program Announces the new Earth Sciences Lab Manual



Jessica Garcia



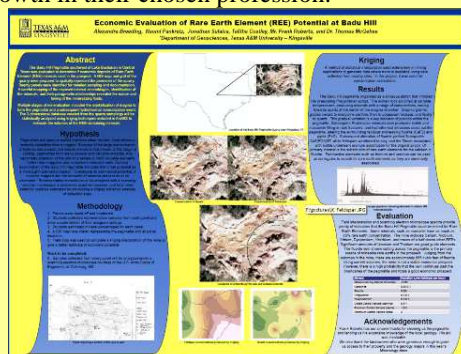
Dan Jackson

**Jessica Garcia and Mr. Dan Jackson** finished a production of the new lab manual. **Jessica Garcia** has been a lab instructor for our physical geology classes the past 2 years. During this time Ms. Garcia has evolved a series of 14 unique exercises that teaches students how to

connect the theory with scientific experiments. These experiments are far better than most promoted in published lab manuals. Dan Jackson has been working with Jessica this past year as an editor/advisor to prepare the manual for the Spring, 2012. All profits will be donated to the geosciences club for club activities.

#### Eight Majors Completed their Research Output at Pathways This Year

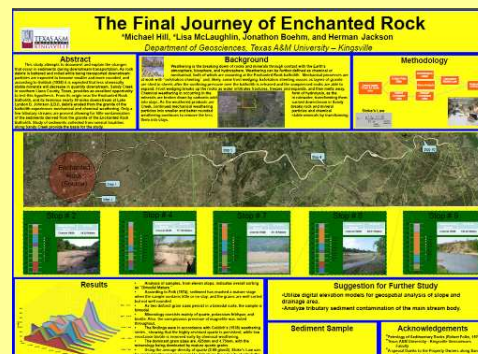
Eight Geosciences majors traveled to the 9<sup>th</sup> Annual TAMU System's Pathways Student Research Symposium held at Texas A&M University, College Station this year. Undergraduate student engagement in research projects provides our students with opportunities to gauge their interest and growth in their chosen profession.



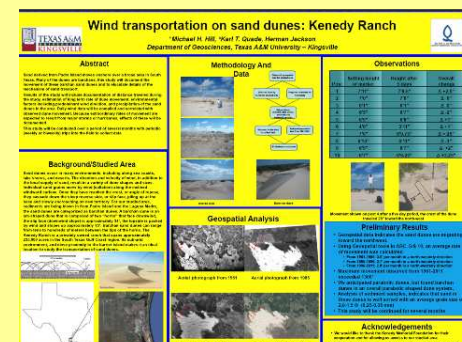
**Jonathan Sulaica and Naomi Pankrantz** presented an "Economic Evaluation of Rare Earth Element (REE) Potential at Badu Hill, Texas". **Talitha Costly** (Engineering), **Alexandra Breeding**, and students in the mineralogy class helped in the research.



**Jessica Garcia and Juan Cavazos** presented "Climate change expressed through the reduction/advancement of Amery and Ross Ice Shelves."



**Lisa McLaughlin and Michael Hill** presented "The Final Journey of Enchanted Rock". Lisa, Michael, and Jonathon Boehm (graduate summer, 2011) started the project last spring.



**Michael Hill and Karl Quade** presented "Wind transportation on sand dunes: Kenedy Ranch."

**Contact us:**  
Geosciences Program  
Texas A&M – Kingsville  
MSC 175, University Blvd  
Kingsville TX, 78363  
**Phone: 361-593-3110**  
**Fax: 361-593-2183**  
**URL:**  
[geosciences.tamuk.edu](http://geosciences.tamuk.edu)

**Editors:**  
**Dr. Thomas McGehee**  
([kftlm00@tamuk.edu](mailto:kftlm00@tamuk.edu))  
**Dr. Jaehyung Yu**  
([kfjy000@tamuk.edu](mailto:kfjy000@tamuk.edu))





## Congratulations to Lisa McLaughlin, Alexandra Breeding, and Jonathan Sulaica for Nomination to the Who's Who in American College Students



Lisa



Alexandra



Jonathan

Who's Who began in 1934 as a program to honor students who demonstrated consistent excellence at their Universities. TAMUK recognizes that college students are a major resource from which our nation draws our community's leadership and strength. Every Fall semester, 150 students are nominated by the Colleges/Department of TAMUK based on scholarship ability, participation and leadership in academic and extracurricular activities, citizenship and service to your college and/or the university, and potential for future achievement. Lisa, Alexandra, and Jonathan are among the highest achievers at Texas A&M University – Kingsville.

## Lisa McLaughlin Receives EPA Fellowship



Lisa McLaughlin is one of 40 undergraduate students selected nationally to receive the EPA Greater Research Opportunities Fellowships for 2011-2013. For each year of eligibility Lisa will receive support for her junior and senior years of undergraduate study and for an internship at an EPA facility during the summer of their junior year. The fellowship provides up to \$19,700 per academic year of support and \$9,500 of support for a three-month summer internship. With this support Lisa will complete degrees in Geology and Environmental Engineering by 2013. We are all happy she received this award.

## Thirty Geosciences Majors Evaluated the REE potential at Badu Hill



On October 13-15, Rank Roberts, Thomas McGehee, Scott Hughes, Dan Jackson, John Buckley, and thirty geosciences majors conducted a field evaluation of the Rare Earth Element (REE) potential of Badu Hill. Four Honors College Students took part in the planning, organization and implementation of the field exercise. Our Program now has a full collection of Badu Hill minerals, sketches and photographic panorama of the workings (2011), a GIS (Geographic Information System) of site, geologic evaluation of the mineralization, and a statistical study of the site. Training in this type of work will provide employment for some of these majors in their future. The owner of the mine has offered the site as a mineralogy class training exercise for our undergraduate Program. This Capability started with the CCRAA-Title V grant, the PPOHA Grant funding, the Quality Enhancement Program and friends like Frank Roberts.

## Thirty-Five Majors Mapped an Angular Unconformity on the Southwest Flank of the Llano Uplift



On October 26-28, thirty-five majors supported by 5 geosciences professors (Dan Jackson, Jaehyung Yu, Thomas McGehee, Haibin Su, and John Buckley) mapped portions of adjacent Quadrangles (Hammett's Crossing and Pedernales) to study the geology of the area above the Balcones Canyon lands preserve. The students used Brunton Compasses to measure structural phenomena and GPS to locate data collection sites. Traditional field-notes and field mapping was supported with ArcGIS geospatial data logging. The major goals of this fieldtrip centered on our courses in Structural Geology, Geomorphology, and Introduction to GIS. Student demonstrated their ability to walk out formation contacts, use a Brunton Compass to measure the attitude of formation bedding, accurately record field data, and prepare geologic maps.

## GSRL Workshop Announcements



Dr. Hughes

The new multi-disciplinary GeoSpatial Research Laboratory (GSRL) has opened its doors to research projects covering all disciplines, including many in engineering, agriculture, biology, anthropology, social sciences, and humanities, as well as the geosciences. Managed by Director Scott Hughes with help from other Geosciences faculty and a Graduate Teaching Assistant, the GSRL was officially granted space in Kleberg Hall Rm 121 in spring 2011. The Laboratory is set up for workshops, training, and Geospatial applications for faculty and students conducting research in all areas of GeoSpatial Analysis. The lab currently has 16 computer stations – six new computers and ten older units- to seat up to fifteen individuals plus an instructor. All stations are equipped with Internet connections, ESRI ArcGIS and MS Office software.

*to be continued to next page ...*



**... continued from previous page**

Plans are to add Remote Sensing software (ENVI/IDL) and Adobe Suite capabilities to most or all stations. Although full implementation of the facility is still in progress, the GSRL is already engaged in two important pilot projects: "Development of a New Texas Literary Map on a GIS Platform" (with Dr. Cathy Downs and students, Dept. of Language and Literature), and "Mapping Kingsville Historical Registry Sites" (with Dr. Shannon Baker and students, Dept. of History, Political Science, and Philosophy). These projects are intended to develop extended interest in multi-disciplinary applications of GIS that will lead to future funding for the GSRL and benefits to TAMUK and the community.

---

**Student Club News****President's Report: Geosciences Club Activities**

This has been a great semester for the Geosciences Club here at Texas A&M University – Kingsville. Membership in the club has increased since last year, mostly due to all the new bright and inquiring minds that have transferred to our program from all over the state. Our club roster has swelled to over forty people, and will likely be even greater next semester as more and more people recognize the many benefits of the Geology & Geosciences program at TAMUK.

This year has also been inception of our local chapter of the American Associate of Petroleum Geology, and the Geosciences Club has been proud to stand by and support the AAPG Club in its first semester. Together we have cooperated in two very successful fundraisers: Frito Pie Fiesta, and the annual Fall Carnival, during which we experienced record sales. Club members Michael Parker, Jonathan Sulaica, and Talitha Costley did an excellent job of promoting the Geosciences Club at Fall Carnival with the creation of the Rock Monster – a six foot tall golem who eats rocks and spits out candy, much to the delight of the many children present at the Carnival. The proceeds from our Frito Pie Fiesta were such that we were able to send some of our members to the Meeting of the Monitors convention in Houston, which was sponsored by the Texas Stream Team, an organization that specializes in water monitoring training, technology, and applications. Many of our members have already become the local rivers for over a year.

Our club members have also enjoyed two field trips to the central Texas area, where they were able to study pegmatite deposits, practice their mapping skills, and generally have a fun and insightful time in the field. Club members have also enjoyed a field trip to Houston to see the fantastic gem and mineral exhibit at the Houston Museum of Natural Science, followed up by a trip to the Houston Gem and Mineral Societies annual Gem, Jewelry, Mineral and Fossil Show in Humble, Texas.

The Geosciences club has also had a fun time continuing the tradition of movie night, as this semester we have been watching excellent History Channel program "How the Earth was Made". In addition to insightful programming, movie night attendees enjoy complimentary popcorn and sodas, and several professors offer extra credit for attending as well. Movie Night is held every other Thursday at 6:30 pm in Hill 119, and is entirely free to attend. It really has been a great semester for the Geosciences Club, I for on know that next semester will be even better!

*Michael Parker, President of Geosciences Club*

---

**President's Report: AAPG Student Chapter Activities**

The Texas A&M University – Kingsville Student Chapter of American Association of Petroleum Geologist (AAPG) became official as of this Fall 2012 semester. Our officers include Lauren Rosson (Secretary), Naomi Pankrats (Treasurer), Stephannie Resendez (Vice President) and Lisa McLaughlin (President). The main focus of the TAMUK AAPG Student Chapter is to prepare our membership for a professional career in Geology. We aim to supplement our scholastic experiences with both local and AAPG sponsored guest speakers, attending professional and educational conferences and utilizing the AAPG opportunities for short courses and field seminars.

This semester has been a process of "getting our feet wet" in building our membership, setting goals and becoming officially recognized by the AAPG and TAMUK. We have already obtained 28 members in our Student Chapter. So far we have already participated in school sanctioned activities such as the Javelina Leadership Conference, Fall Carnival and fundraising for the Bastrop Fire Victims. We are currently working to benefit the community with volunteer water quality and bacteria monitoring and beach clean-ups, and are seeking opportunities to work with the local youth in training and recruiting future geologists. Additionally, we are pleased to have had a great turnout for a presentation by Mr. Dennis Moore, of Baker Hughes (Picture), on the Eagle Ford Shale; and we are now looking forward to wrapping up our semester with a presentation on December 6<sup>th</sup>, by Mr. Randy Bissell, formally of Exxon Mibil and currently a Geologist at Heading ton, on the Geology of Barbados.

We are very excited to announce plans for our First Annual TAMUK AAPG Fishing Tournament! To be held (tentatively) April 7<sup>th</sup> at the Port Aransas City Marian Pavillion, we are organizing this event to foster camaraderie between our local professionals and our membership of prospective geologist. Proceeds of the tournament will be dedicated to funsing our organization's goals of traveling to professional conferences and furthering our educational opportunities. We are actively beginning the process of seeking sponsorship, and are hoping to build an enduring tradition for our future alumni. Be on the lookout for future details!

Our officers would like to extend our thanks to our faculty advisors, Dr. Thomas McGehee and Mr. Dan Jackson for their continuing support and guidance; to the Corpus Christi Geological Society and to the AAPG for being a source of professional development; and to our members for their ongoing participation. A special thanks to CoreLab and the Gisler Brothers for sponsoring our members at the annual CCGS Bar-B-Q Kickoff; and to Mr. Dennis Moore and Mr. Randy Bissel for taking the time out of their busy lives to visit our campus and speak to our students.

*Lisa McLaughlin, President of TAMUK AAPG Student Chapter*





**Photo Gallery (Geosciences Field Trips to Central Texas)**

