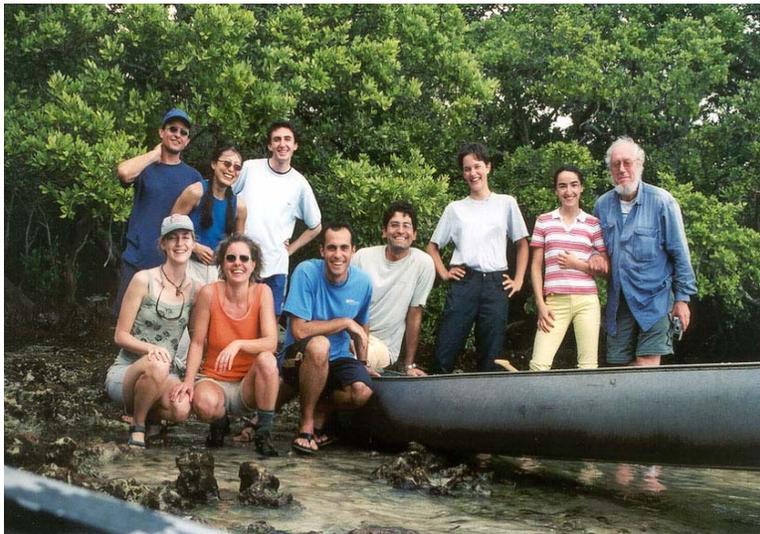


# MGG NEWS

## A Message from our Chairman

The Division is healthy and growing. In the last fiscal year MGG has been successful in securing over \$3 million of funding for research. This influx of small and large research grants has kept the faculty and students busy with fieldwork and data collection. In addition, two offices within the division administer and direct research: in the South Florida Caribbean Studies Unit, Carol Daniels facilitates research among member organizations and the JOIDES office is very busy with the double duty of administering and organizing research within the current Ocean Drilling Program, which ends October 2003, as well as helping with planning activities for the future integrated drilling program. This well-organized office has received a lot of praise from the ocean science community. Tim Dixon together with Hans Graber has spearheaded an initiative to create a Center for Southeastern Tropical Advanced Remote Sensing (CSTARS). This center requires antenna installations to receive data from satellites and build-



*MGG in the field (Standing — left to right: John Weber (visiting scientist), Sarah (John's fiancé), Alexandre (Delphine's friend), Delphine Icard (visiting scientist and honorary MGGite), Clemence Veauvy (honorary MGGite), and Chris Harrison. Sitting — left to right: Kelly Bergman, Guillermina Sagasti (Postdoc Associate), Brad Rosenheim, and Carlos Alvarez) on a canoe trip on a very windy day in March. The wind was so high that they were unable to get to their primary destination, Lignumvitae Key and Indian Key; therefore, they canoed around the northern part of Key Largo.*

ings to house computer facilities. The center is housed on the Richmond campus located in the vicinity of Metro Zoo, where the antennas will be installed in July. Tim and Hans are currently negotiating for rights to download data from several satellites. Two faculty members have been recruited to work with data from the center. Falk Amelung from the University of Hawaii will use the data to monitor volcanoes, and Gene Rankey from the University of Iowa will use the data to study coastal processes. Both will join MGG during the summer.

In regards to education and outreach the division continues to be very active. Jackie

Dixon and Larry Peterson are now part-time faculty in the undergraduate program and they help to make the program even more successful. Three programs combine outreach and education: Genny Healy, Peter Swart and Phil Kramer and others teach the Instar program, which is a summer course for Dade County science teachers; Robert Ginsburg organized a field seminar for students of the International Association of Sedimentologists to the carbonate environments of Florida and the Bahamas; and I, together with the Mitch Harris and Mike Grammer, run a field seminar to the northern Bahamas for the American Association of Petroleum Geologists.

These activities would not be possible without the qualified help in the division office and our lab technicians. Although it might sometimes be hectic in the division, we always find time for visitors and you are always welcome to stop by for a chat, a beer or a canoe trip.

**Gregor Eberli, Chair**

## Student Defenses

**Xavier Janson (PhD)** Defended: March 15, 2002

Advisor: Gregor Eberli

Title: Architecture and Seismic Expression of Miocene Carbonate Barrier-Lagoon Systems (Ermenek Platform, Turkey and Zhujiang Platform South China Sea)

**Rene Price (PhD)** Defended: August 28, 2001

Advisor: Peter Swart

Title: Geochemical Determinations of Groundwater Flow in Everglades National Park

**Lisa Greer, (PhD)** Defended: July 27, 2001

Advisor: Peter Swart

Title: Seasonal to Centennial Holocene and Modern Climate Variability in the Dominican Republic

**Anthony Poiriez (MS)** Defended: Dec. 11, 2001

Advisor: Gregor Eberli

Title: Tectonostratigraphy of the Florida Straits and Northwestern Bahamian Archipelago

**Matthew Buonicotti (MS)** Defended: March 27, 2000

Advisor: Gregor Eberli

Title: The Sequence Stratigraphy of the Songwe Delta, a rift lake axial margin delta, Lake Malawi, East Africa

## MGG News



Enrique and Mariana looking like the proud parents

- ◆ Congratulations to **Enrique Cabral** and his wife, Mariana on the birth of their first baby, Catalina Framiñan-Cabral. Catalina was born at 8:54 PM, February 17 at South Miami Hospital, weighing 7 lbs. 15 oz.
- ◆ Congratulations to **Michael Finny** and his wife, Elizabeth on the birth of their son, Seth Finny. Seth was born at 2:59pm on May 6 in Mexico City.



Elizabeth and Seth Finny

- ◆ Congratulations to **Karin Bernet** and her husband Eric on the birth of their son Fabrice Ernesto. Fabrice was born weighing 8 lbs, 11 oz on March 25 in Switzerland.
- ◆ Congratulations to **Pam Reid** who was awarded Tenure.
- ◆ Congratulations to **Larry Peterson** who was promoted to the rank of professor.
- ◆ **Gregor Eberli** received the Medal of Merit from the Canadian Society of Petroleum Geologists. Presented annually, the award recognizes the best scholarly paper published for



The award winning team during field work in the Canadian Rockies. From left to right: Frans van Buchem (IFP), Eric Mountjoy (McGill), Gregor Eberli, Mike Whalen, Peter Homewood (SQU).

the year on a subject related to the petroleum geology of Canada. The award winning paper is entitled "Bypass Margins, Basin Restricted Wedges, and Platform-to-Basin Correlation, Upper Devonian, Canadian Rocky Mountains: Implications for Sequence Stratigraphy of Carbonate Platform Systems," and is published in 2000 in the Journal of Sedimentary Research. Authors on the paper are Michael T. Whalen, Gregor P., Eberli, Frans S. P. Van Buchem, and Eric Mountjoy, and Peter W. Home-

the project during his post-doctoral tenure at the Division of Marine Geology and Geophysics. Mike is now associate professor at the University of Alaska in Fairbanks. Peter Homewood has in the meantime taken a position as professor at the Sultan Quaboos University in Oman.

- ◆ Congratulations to adjunct faculty member **Bernhard Riegl** and his wife, Eileen on the birth of their first baby, Bernhard Riegl, Jr. Bernhard, Jr. was born on May 18 in



Bernhard Riegl, Jr.



Bernhard, Eileen, and Bernhard, Jr.

wood. The paper summarizes part of the results of a collaborative project between the University of Miami, McGill University, Institut Francais du Petrole (IFP) and Elf/Aquitaine that was funded by the French petroleum companies. Mike Whalen, who is first author on the paper, was working on

Dania, Florida.

- ◆ **Kyla Simons** was awarded Dean's Prize for best thesis. Her thesis title is: Volatiles in Basaltic Glasses from Easter-Salas y Gomez Seamount Chain: Implications for Geochemical Cycling of Volatile Elements.

- ◆ **Avis Miller** received a UM watch for 25 years of service at the University of Miami.
- ◆ The recent AAPG-SEPM meeting in Houston, Texas was well attended by current and former MGG students, faculty, and post-docs. To welcome all the MGG'ers to Houston, Mike and Sue Grammer hosted a Texas-style barbecue at their house Saturday evening. Being well fed for the meeting, a total of 38 papers by 29 different current and former MGG'ers were presented at the technical session from Monday March 4th through Wednesday March 6th. Of the 38 presentations, 12 were talks and 26 were posters. The list of authors include: **F. Anselmetti, G. Baechle, G. Bracco Gartner, M. Buoni-**

*gins.* Also honored by SEPM was MGG alum Mitch Harris with *SEPM Honorary Membership*. As part of his nomination, Robert Ginsburg wrote "Honorary Membership in SEPM for Mitch Harris recognizes his sustained production of seminal technical publications, his outstanding leadership and service to the Society and his contributions to education." The SEPM also bestowed its highest award, the William H. Twenhofel Medal on former MGG post-doc (1971-1974) **Noël James**. This award is recognition for excellence in sedimentary geology. The official citation of the award reads: "In recognition of pioneering studies and major advances in our understanding of how modern and ancient carbonate sediments are deposited and preserved,

of  
in-



During a recent visit, MGG alum Volker Vahrenkamp and the following MGG notables were captured during a lunch time visit to a local Cuban Eatery: Gregor Eberli, Volker Vahrenkamp, Flo Bonnaffe, Xavier Janson, Peter Homewood, Robert Ginsburg, and Peter Swart.

- ◆ **conti, C. Crescini, P. Crevello, J. Dravis, A. Droxler, G. Eberli, G. Ellis, M. Esteban, E. Gischler, M. Grammer, M. Harris, M. Incze, N. James, X. Janson, B. Katz, J. Kenter, J. Massaferrero, D. McNeill, K. Miskell-Gerhardt, M. Perlmutter, W. Schlager, C. Scholz, T. Smith, P. Swart, V. Vahrenkamp, and H. Wanless.**
- ◆ MGG was also well represented at the AAPG and SEPM award ceremonies. MGG alum Barry Katz won AAPG's Robert H. Dott Sr. Memorial Award for the best special publication during 2000 for his editorial work on *Petroleum Systems of South Atlantic Mar-*

*spirational teaching and guidance, and of unstinting service to the earth science community." Bob Ginsburg and Noel James co-founded the CSL on Fisher Island in the early 1970s.*

- ◆ Congratulations to **Brad Rosenheim** and **Carlos Alvarez** for being given the MGG student of the year award in 2001 and 2002. The MGG student of the year award is a new award given annually to MGG students who make a difference in the division.
- ◆ **Chris Harrison** was elected President-elect of the Geomagnetism and Paleomagnetism

section and member of the Council of the American Geophysical Union. His term of office starts on 1 July 2002 and last for two years. He will then become President of the GP section for two more years.

- ◆ Congratulations to **Mike Grammer** who reports he will soon be moving from Chevron-Texaco to the Western Michigan University. Mike has also been named an AAPG distinguished lecturer for 2002-2003.
- ◆ In honor of **Harold Wanless**, a party was thrown on February 14 to celebrate his 60th



Hal in the Field

birthday.

- ◆ Congratulations to **Guido Bracco Gartner** (MGG post-doc) who claimed boasting rights, this year, as the top finisher for Team UM with an 18 minute, 46 second finish time at the 18th Annual Corporate Run (5 km). The event shaped nothing but a streak of victories for the 412 Hurricanes, who made up the 5th largest team of 514 overall participating organizations. MGG participants were: **Christopher Harrison, Chris Moses, Edmundo Norabuena, Pam Reid, and Amel Saied.**
- ◆ **Henny Groschel Becker** recruited **Amel Saied, Greta Swart, and Atty Tantivit** (RSMAS) to be a member of the *Alien* team in the 2nd Key Biscayne Relay for Life fundraiser for the American Cancer Society held in April. The 16 member team raised over \$14,000 for cancer research and education, the third highest amount of 34 teams. They also took home the 1st place trophy for best tent decoration and the 2nd place trophy for team spirit. **Congratulations Aliens!!!**

## International Sedimentology Workshop on Florida/Bahamas Quaternary

Robert Ginsburg led a Field Workshop on the Quaternary Carbonates of South Florida and North Andros Island, Bahamas October 7-17. Fifteen participants, graduate students and faculty, from eight different countries of Europe and South America participated. The International Association of Sedimentologists, the Ocean Research and Education Foundation of Coral Gables (a non-profit organization established by Robert Ginsburg) and the School's Division of Marine Geology and Geophysics sponsored the Workshop. For the participants whose research and teaching is about carbonate rocks, this was their first opportunity to experience active environments of carbonate formation and accumulation and their Pleistocene counterparts. Many readers of this Newsletter can probably remember their own first experience in active environments. Bob reported that it was a thrill to be able to introduce them to the lime muds of Florida

Bay, the reefs and reef mounds of the Florida Reef Tract and to lead them in visiting environments and outcrops on North Andros; tidal flats, ooid sand shoals, eolianites, and fossil reefs. Their enthusiastic responses, questions during the Workshop and letters received afterwards made the considerable effort of organizing and leading a ten-day trip worth while.

List of participants:



*Dr. Ginsburg in costume at the party thrown the last evening. (Picture was taken from the Bahamas slide show presentation provided by: Kinga Hips, Sarolta Pálfalvi, Akos Török, Janos Haas, Zoltán Lanos.*

Andrea Ceriani (Pavia, Italy), Giovanna della Porta (Amsterdam, The Netherlands), Marcin Górka (Warsaw, Poland), Michal Gruszczynski (Warsaw, Poland), Janos Haas (Budapest, Hungary), Kinga Hips (Budapest, Hungary), Adrijan Kosir (Cardiff, U.K.), Zoltán Lantos (Budapest, Hungary), Jane Nobrè Lopes (Minas Gerais, Brazil), Zolt R. Nagy (Missouri, U.S.A.), Sarolta Pálfalvi (Budapest, Hungary), Guillermina Sagasti (La Plata, Argentina), Hairuo Qing (Regina, Canada), Akos Török (Budapest, Hungary).

**Robert Ginsburg**

## South Florida Caribbean Cooperative Studies Unit Takes Off

The South Florida Caribbean Cooperative Studies Unit (SFC-CESU) headed by **Dr. Peter Swart** has been in business for about 12 months now and has attracted over \$2 million in funds from the National Park Service, USGS, and the Bureau of Land Management. The funds have been dispersed amongst the nine partners who are members of the SFC-CESU. The SFC-CESU is a mechanism with which scientists within the NPS, USGS, or BLM can interact with scientists in the partner organizations and universities and provide funding for the research. **Carol Daniels**, an employee of the NPS, is now within the Division and takes care of interactions between the SFC-CESU and the partners. The SCF-CESU network is also growing and has recently added Florida Atlantic University (FAU) as a partner. The SCF-CESU web page is located at <http://mgg.rsmas.miami.edu/sfcesu/index.htm>.

“...life is only as interesting as you choose to make it.”

## Randy Parkinson Reveals All

It has been over one year since I resigned my position as an Associate Professor of Geological Oceanography at the Florida Institute of Technology. I left the University after 13 years of service to assume the position of Coastal Geologist and Director of the Coastal Geology & Sediments Laboratory at Coastal Tech, Inc. Most of my work over the last year has centered around coastal construction projects; i.e. beach nourishment, environmental impact assessment, and offshore sand surveys. However, I have also been active in advising the State on matters related to the protection of marine turtle nesting beach habitat and the formulation of beach fill guidelines.

Graduate students in marine geology and geophysics take note: opportunities abound in this field, which has been dominated over the past two decades by coastal engineers and biologists. The geologist brings a fresh perspective and obvious qualifications. State and Federal agencies, as well as private consulting firms, have recognized this and are expanding their staff to incorporate competent persons with any degree (i.e. BS, MS, Ph.D.) in geology. I recently hired a graduate student to fill a full-time lab technician position.

In addition to the obvious salary benefit, employment with Coastal Tech has allowed me to

spend more time with my family. No longer must I spend 60 to 80 hours a week struggling to keep my head above water. To be sure, I clock more than 40 hours each week, but the workload and deliverables are clearly defined. Don't get me wrong, there are aspects of the University life that I miss, including my role as a mentor, teaching, and basic research.

In the next year, I intend to continue expanding the number of projects awarded to Coastal Tech as a direct consequence of our unparalleled geotechnical capabilities. New work continues to arrive as word of our firm's distinct technical capabilities and knowledge of coastal sedimentology and stratigraphy spreads throughout the coastal consulting community.

In short, I do not regret leaving the University and academic life. The world of consulting can be equally challenging if one simply puts their mind to it. As always, life is only as interesting as you choose to make it. It may take some time, however, before I'll be able to wear the corduroy jacket that carried me through myriad GSA, SEPM, and AGU conferences!

**Randy Parkinson**

## Olympics 2002

Genny Healy and I had the great opportunity to be part of the winter Olympics, hosted and organized by Salt Lake City. Utah, known by MGGers as a great geology spot, turned out to be a perfect site for an event as big as the Olympics.

Our exciting experience started a couple of months before the games began, as we received the notification that we would be a part of SLOC (Salt Lake Organizing Committee) which meant we were from then on "Slockers" also nicknamed by some as slackers.

When we asked what our title and duties were, we were told "Event Specialists"—we are still wondering how they came up with such a title. We actually were accreditation magnetometers (mag) and "bag" specialists. Thrilled as new slockers could be and with the blessing of our supervisors, coworkers and fellow MGGers, we embarked to Salt Lake the week before the big opening ceremonies.

Upon arrival to the airport everything seemed very quiet. Only the banners and the signs were evidence that we were in the right place. Linda, a Salt Lake City resident provided us free lodging at her home the whole duration of the games. Without her, we wouldn't have been able to stay as all of the hotels in the area were booked and SLOC didn't offer housing to the employees or the volunteers, nor did the ACOG (Atlanta Committee for the Olympic Games).

The very next day, we picked up our accreditations and our "infamous" uniforms (greener than green), and began a series of required training. We learned about the hierarchies, how to communicate over the radio, how to use Magnetometers (mags), how to screen people with a wand (our favorite thing), and how to search bags (our less favorite thing to do). In summary, we realized that our duties were going to be security related: checking accreditations at check points, roving the venue, and helping the host volunteers "in crowd control." For both Genny and I, these tasks were very unfamiliar. We were assigned to "work" at the Utah Olympic Park (UOP). UOP is one of the best venues, it was located 5 minutes from Park City (considered

Utah's sin city) and 15 minutes from Salt Lake.

When we visited UOP the week before the games, everything seemed unorganized and the infrastructure unfinished. We were wondering how they were going to manage to be ready on time. But we were told that the UOP would be "sanitized" a couple of days before the opening ceremonies. Sanitizing meant that the National Guard and the Secret Services would "comb" the venue inch-by-inch with the help of dogs ... to make the venue completely safe. After sanitizing, the venue was "sealed," which meant all accesses to the venue would be through magnetometer and with accreditation

checks. Post UOP sanitizing day was very impressive. We couldn't believe our eyes. Everything became so organized and "sooooo" under control. WE WERE READY for the games!

Both Genny and I were on the same shift from 12:30PM till 9:00PM. We worked everyday, except for the 2 days SLOC offered us to take off. On our off days we attended a concert, a medal ceremony, and the closing ceremony—tickets were provided by SLOC. SLOC also gave us tickets to attend the rehearsal of the opening ceremonies, but unfortunately we had to work. By coincidence, at the medal ceremonies, the Tunisian (my hometown) Olympic representative was awarding some medals. Of course, the medals were the product of the Utah mines and were designed by a local artist. The bars in Salt Lake City were closed by 2:00AM. Though it was the norm for them, we thought for sure the hours would be extended due to the Olympics, but they were not. Even so, we enjoyed the night life, guided by our good friend,

Jeff Graves, who was in charge of the ski jump forerunners and was Katie Couric's (NBC *Today Show*) ski jump coach.

The layout of the UOP venue was so widespread that exercise was inevitable. The access to the venue was either from the top of the mountain, which was only for athletes and coaches or the bottom of the mountain for spectators, staff, media and Olympic family members; therefore, Genny and I climbed the mountain quite regularly—depending on our assignment for the day. (We were so grateful that the weather was cooperative, except for two days when it was just down right cold.) Mid mountain was the heart of the whole venue where you would find the venue management building including the doping test center, the media building where the press could set up for interviews, and the media compound where the international TV stations got their desired footages for their respective channels. Also, it was at mid mountain where the high jumpers landed and caught the lift to the top.

Our daily positions as event specialists varied. Some were more exciting than others. Of course, the top of the mountain, mid mountain and roving along the track were the most prized positions and we tried to get our sector coordinators to rotate us as

often as possible. The other fellow event specialists were a mixture of "Salt Lakers" and representatives of the four corners of the US. They were an interesting bunch.

The Swiss were strong in the 90 and 120 meter ski jump events. It was the first time in the history of the Swiss team to win the ski jump. Simon, the winner of the 90 meter,

was nick named Harry Potter (he never thought the price of fame was to give interviews till he dropped). Other sports in the venue were the luge, the skeleton, and the bobsled. All were spectacular. We couldn't help noticing the Jamaican Bobsled team, the Virgin Islands, US and the Netherlands team because of their outfits, but especially the Netherlands because their uniforms were bright orange. At my request, the Netherlands team paused to take a picture for all of the MGG Netherlands fellows. **Amel Saied**



Genny, Andreas (Swiss team) and Amel after some historical jumps.



### Students

**Art Gleason** (PhD) is focusing on two areas of research: (1) To improve the quality of coastal benthic habitat maps created with acoustic and optical data, and (2) to develop more efficient tools for collecting and analyzing ecologic data in coral reef environments.

Advisor: **Pamela Reid**

**Zachary Atlas** (Ph.D) is working on the variation in volatile phases (H<sub>2</sub>O, CO<sub>2</sub>) and geochemistry of

arc magmas through the study of melt inclusions in phenocrysts. He is focusing his research on large strato volcanoes in the Trans Mexican Volcanic Belt (e.g., V. Colima, V. Popocatepetl, etc.) and he has plans to include other volcanoes along the Middle America Trench.

Advisor: **Jacqueline E. Dixon**

**Gina Schmalzle** (Ph.D.) plans to work on a project involving volcanic research using an FTIR and an UAV.

Advisor: **Tim Dixon**

### Research Staff

**Carol Daniels** is operating the SFC CESU office in MGG. She is supported by the National Park Service and has a Ph.D. from the University of Maryland.

**Guillermina Sagasti** is a postdoctoral research associate from Argentina working with **Gregor Eberli** and CSL.

## Welcome to New Members of MGG

## A STUDENT'S ENCOUNTERS ON AN AFRICAN TRIP

I have immensely enjoyed working in Africa over the last three years. With such warm and vibrant people, it has always been a pleasure to be there. With that said, I have decided to concentrate on a few of the funnier moments of my most recent trip. I am no Ernest Hemingway, but let's crash on.

As the plane touched down at the Entebbe airport, I was preparing myself for what was going to be a hectic four weeks. Passing the shot-up aircraft from the abortive hijacking of the "Raid on Entebbe" fame (plans to make it into a pub had not come to fruition), it was time to hail a taxicab. After debating the cost of the taxi ride at 1:00am, with a little cursing from both sides in Lugandan, I was able to pass myself off as a local and the price dropped by a factor of ten. It was great to be back.

This trip was to access the engineering, logistical, political and security requirements for a seismic survey of Lakes Albert and Edward on the Uganda Congo border. My first day there, I left my hotel at dawn. I made a quick stop at the Petroleum Exploration and Petrol Development offices (the Ugandan Government ministry we were working with), in order to pick up my driver and two government officials. We were on our way to Fort Portal, south of Lake Albert, and the trip would take an estimated four hours. Translation: an

easy eight. We needed to start at dawn, as one should not travel at night due to the banditry and the fact that Ugandans do not use headlights because the headlights run by battery which is charged by the engine, and by not using the lights we save petrol. To which my answer is "I'm paying, lights on!"

We arrived in Fort Portal on election night, and there was not a room to be had. We managed to find a run-down hotel in the downtown area. The reason for the bars on the windows became self evident as the machine-gun fire continued throughout the night. It turns out, all high-jinks were due to the election celebrations and the four pipe bombs found by the police, the next day, were for the fireworks display. After Fort Portal, our destination was the Seimliki Valley, on the

shore of Lake Albert. This trip went as expected, but after meeting with the Resident District Controller for the region, we were running late, very late. It was dark by the time we left (but the headlights were on). The two Ugandan officials traveling with me were trying not to make me nervous, however, their whispering, "Oh \*\*\*\*" every time we came upon someone was a tad unsettling. Once back in Fort Portal and in the hotel bar, I was informed that it was the



*Grilled, broiled, or rare rat. Goes well with beer and plenty of hot peppers (so I'm told, ed).*

unexpected pull-out of the sixteen-hundred Ugandan Army troops (a couple of days prior) that were stationed in the area for the protection of the land-seismic team that had led to the increased tension. The beer tasted rather good that night.

The next stop consisted of staying out in the bush for the next couple of weeks. Moving into the bush was something I always looked forward to and this time was no exception even though I would have to eat rat, again. The funny thing about rat, it tastes just like rat! Called hedgehog, by the locals, it had no spines but it did have a long pink tail and pointed nose. Call it what you want, but it still looks and tastes like rat!

One of the wonders of Africa is that life goes on despite the conflicts, the insurrections, etc. On taking a police launch up the Eastern side of Albert, the amount of trade across the lake is quite extraordinary. Especially considering that

in order to row across the lake it takes around 8-10 hours at some places. I am convinced that although the dollar may be the most widely used currency in the world, Coca-Cola is the most traveled commodity!

Having worked my way around Lake Albert and having met with every local politician and military individual of note, it was time to move south to Lake Edward. There was plenty of chicken in this area of Uganda, but somehow

their chicken dishes always tasted like rat. I guess that's why it was always stewed. There was also an abundance of ox-tail soup. I have yet to see an ox in Uganda.

Well, my thought was Lake Edward

should be a piece of cake (though cake in Uganda is that it tastes like...). Anyway, I had worked in the Lake Edward area before and knew it was not going to be a problem. Although I was able to finish the work without any trouble, one incident does come to mind. Three hundred Mai Mai (a Congolese tribe) had acquired AK47s and were moving swiftly eastwards, marauding on the way. On receiving intelligence that they were about 5 km away, and generally killing all in their way, I decided to move to the southern part of the lake – just north of Goma. Imagine my surprise when on arrival at Kisoro, the volcano Nyiaragongo erupted. The massive destruction that occurred resulted in five hundred thousand displaced refugees, of which the majority were moving north into Uganda. Faced with the choice of half a million desperate Congolese to the south, three hundred rampaging Mai Mai to the north and water to the west, needless to say I headed east!

Finally, we're back in Entebbe and the beer tastes better than ever. I look forward to my return.

**Nick Peters**

**"Moving into the bush was something I always looked forward to and this time was no exception even though I would have to eat rat, again."**



*Roadside fast food, not a Burger King franchise*

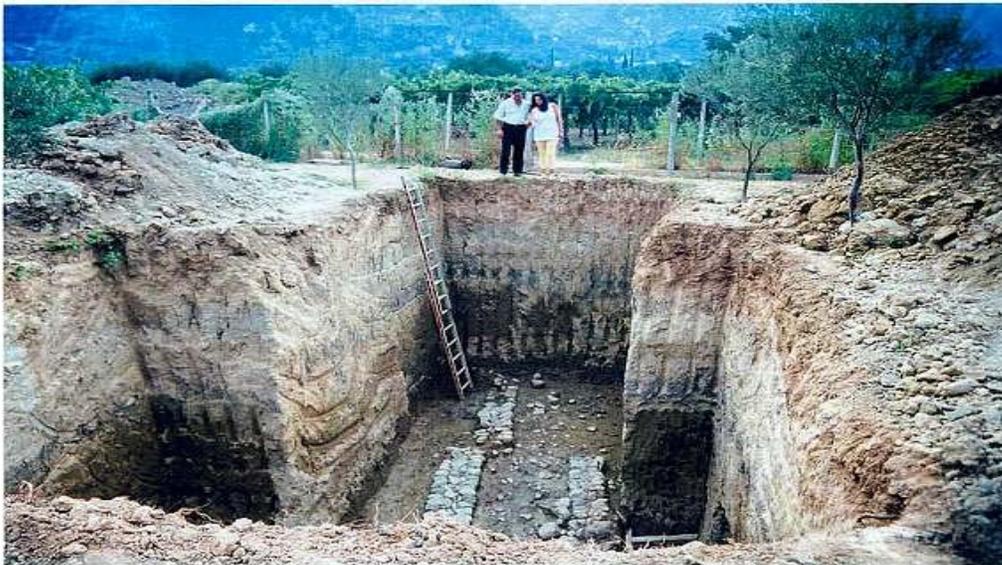
# Carlos on the BBC “Helike - The Real Atlantis?”

On January 10, 2002 MGG student Carlos Andrés Alvarez Zarkian appeared in the BBC documentary series Horizon: “*Helike - The Real Atlantis?*” as a research associate for the Helike Project, an international research team lead by Greek Archaeologist Dr. Dora Katsonopoulou and AMNH geophysicist Dr. Steven Soter whose aim is to discover the lost Greek city of Helike. The search takes place on the Helike delta in the south-western coast of the Corinthian Gulf 150 km west of Athens. The area, one of

the most active seismic regions in Europe, holds a mystery that has captivated archaeologists for decades, for according to old Greek and Roman texts there was once a great ancient Greek city called Helike, the principal city of ancient Achaia. Ancient texts tell that on a winter night in 373 BC, Helike was destroyed by a massive earthquake and tidal wave. The entire city and all its inhabitants perished beneath the sea and its destruction is considered as one of the most appalling tragedies of Classical Greece. Ironically, Helike was a worship center of Poseidon, god of earthquakes and the sea. So great was the tragedy, that experts think it inspired one of the greatest of all myths. Just a few, short years after the disaster, the Greek writer Plato created the story of Atlantis, the legendary city swept beneath the waves. For great many years, archaeologists have searched for the city for they say that if it is as well preserved as everyone hopes, Helike could be a time capsule from the golden age of Greece. But there had been

just no sign of it, and despite numerous expeditions trawling the waters off the coast of Greece and vast amounts of money and technology in-

deposition of alluvial sediments, local subsidence, and the tectonic uplift of the northern Peloponnese.



Archaeological trench H22 yielded abundant pottery fragments and revealed the ruins of Archaic walls between 2.95 and 3.35 m depth. The sediments covering these walls contained microfossil indicators from marine and freshwater environments.

vested in the searches no one could find anything except for two small coins, unearthed over a 100

center for advanced microscopy at the Univ. of Miami, Carlos has found these clues in the form of tiny aquatic microfossils, namely ostracods and foraminifera that inhabited marine, brackish and freshwater environments along the Greek coast. Ostracods and foraminifera are especially important in paleoenvironmental reconstructions because they can be used to properly differentiate ancient fresh, brackish or marine water deposits. A considerable number of ecological studies of living ostracods and foraminifera have shown that their distribution is primarily controlled by water chemistry (i.e., salinity, ionic composition), temperature, substrate and availability of food. Therefore, when fossil specimens of a particular species or related taxa are found in sedimentary deposits, one can make the assumption that those sediments were deposited in ecological conditions similar to the conditions present in today's environments. For this reason, these microfossils are being used as ecological indicators not only to reconstruct the paleoenvironmental conditions of the Helike delta over the last few thousand years, but also to recognize earthquake and tsunami deposits.

In the search for Helike, numerous exploratory bore-hole and trench sediment samples have been sent to RSMAS. Carlos' tasks are to unearth important clues about the cultural and paleoenvironmental history of the Helike Delta, particularly evidence that marine sediments once covered the newly excavated ruins on the Helike delta plain. With the help of his old binocular microscope and the much more advanced



Participants of the 3rd Intl. Conference on Helike at the History Museum in Aigion, Greece. Carlos Alvarez is in the front row and has on a green shirt.

years ago. Not until now, when the scientific team lead by Dora and Steven may have finally found Helike. Although ancient sources reported the site of ancient Helike as submerged in the Corinthian Gulf, modern sonar surveys showed no evidence of a city on or under the seafloor in the area. This suggested that the ruins of Helike now lie buried on land, under the broad coastal plain due to the seaward movement of the shoreline caused by

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## ODP, IODP, JOIDES

The JOIDES Office is kept busy these days with three important tasks. One is to make sure that the transition from the Ocean Drilling Program (the current drilling program) to the Integrated Ocean Drilling Program, scheduled to start in October 2003, is as smooth as possible. Many drilling proposals originally submitted to the JOIDES Office but not scheduled for drilling during ODP have been passed on to the interim Planning Committee of IODP. Included in this is the proposal to drill on Lomonosov Ridge in the Arctic Ocean, which has been highly ranked by JOIDES but could not be drilled because of logistic reasons. The second task is to make sure that ODP does exciting science until the end of the last leg. This was achieved by the JOIDES Science Committee, chaired by **Keir Becker**, which scheduled the last year of drilling at its August 2001 meeting. The third task is to ensure that there is a lasting legacy of all ODP achievements. This

legacy will consist of several aspects, such as cores, data bases, logging tools and technology, and engineering developments, and also scientific results. Part of the scientific results legacy (a special volume entitled Achievements and Opportunities of Scientific Ocean Drilling) can be found in the June issue of the JOIDES Journal (v. 28, no.1) or on the JOIDES web site (<http://joides.rsmas.miami.edu/legacy/>). One of the editors for this volume was faculty member **Larry Peterson** and a chapter was written by MGG PhD **Andy Fisher**. Both the JOIDES Science Committee and Executive Committee (chaired by **Chris Harrison**) have taken steps to ensure that the legacy of ODP is preserved. Much of the work of the office is carried out by **Elsbeth Urquhart** (international liaison) and **Aleksandra Janik** (science coordinator), the JOIDES Journal is edited by **Henny Groschel-Becker** and our web site is maintained by Rupert Minnett.

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### Needed: Geotopic Speakers!!

**Are you coming to Miami? Why not come to visit MGG and give a Geotopics Seminar? If you are planning to come and wish to give a talk, contact Avis Miller.**

The MGG Newsletter is produced by the Division of Marine Geology and Geophysics; Editor: **Peter K. Swart**. Copies of this newsletter and previous newsletters are available on the MGG Web Site at <http://mgg.rsmas.miami.edu/news/index.html>. Contributions to future newsletters can be sent by e-mail or by regular mail to Avis Miller at the Division Office.