

GCSSEPM NEWS



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The President's Column

LEGENDS. The word "legendary" can be used to describe people who become particularly well known or famous, and are honored for their achievements. There are "legends" in some sports (e.g., Arnold Palmer in golf, Gordie Howe in hockey), in music (e.g., John Coltrane in jazz, John Lennon in rock & roll), in movies (e.g., Jimmy Stewart, Elizabeth Taylor) and elsewhere (e.g. there are legends of aviation). Politicians, at least lately, seem too polarizing to have their "legendary status" agreed to by all.

There are living legends, people who are alive to see how their efforts have fundamentally changed, for the better, some field of endeavor.

Our field of sedimentary geology has some living legends, and I was fortunate enough to get together with three of them at the AAPG-SEPM annual convention this past April in Houston.

A special session of talks on clastic sedimentology had been

organized at the meeting to honor Gerard ("Gerry") Middleton and Roger Walker, both formerly professors at McMaster University in Hamilton, Ontario. I came to know both of them as a geology undergraduate there a few decades ago. At the time, both were among the best known sedimentologists in the world. A Monday evening social event at the convention was organized by Janok Bhattacharya (a former GCSSEPM President, currently at University of Houston) to reunite their academic offspring. Unfortunately Roger was not able to attend, but Gerry was beaming that evening.

In my undergraduate days, I knew that Gerry was known for his flume work on turbidites and for his efforts to bring physics to the study of sediment movement and bedform development. He co-authored (with Harvey Blatt and Raymond Murray) a textbook called "Origin of Sedimentary Rocks". My 1980 edition still stares at me every day from my book-

shelf. About 30 years after the first edition of that book, first published in 1972, and nearly 50 years after joining McMaster in 1955, Gerry was editor of the Encyclopedia of Sediments and Sedimentary Rocks (2003). Not bad for someone who's Ph.D. focused on paleontology! Among the awards bestowed upon him are the 1998 AAPG Distinguished Educator Award and SEPM's William H. Twenhofel Medal, the highest award given by that society. I will always remember him participating in a beer-chugging competition at a McMaster Geology Department social function about 30 years ago. I learned that at least some living legends knew how to have fun.

In my undergraduate days, Roger was also known for his work on turbidite systems (although generally outcrop based) and for his efforts to promote facies models as vehicles for characterizing and studying sedimentary rocks. He too was a recipient of the AAPG Distinguished Educator Award, but has also been a Francis J. Pettijohn Medalist (SEPM) and was awarded the Henry Clifton Sorby Medal by the International Association of Geologists.

Gerry and Roger taught me, my fellow McMaster grads, and the sedimentary geology community, much about sedimentary processes and sedimentary rocks. More importantly, they taught us how to think. To succeed, we need to do more than memorize a bunch of facts.

For at least two decades in the 1970s and 1980s, the Geology Department at McMaster

Highlights

The GCSSEPM News is published three times a year. Your comments and suggestions are welcome. Please contact Charlotte Jolley, GCSSEPM Secretary at charlotte.jolley@shell.com, or contact your local business representative. Visit the GCSSEPM Website at www.gcssepm.org for Section and Foundation news and information.

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was fertile ground for research and teaching in sedimentary geology, thanks to these two gentlemen and the students who congregated around them. The Monday evening social was a great opportunity for former students to reunite in their honor. Many of us have gone on to do well (or even exceptionally well!) in both Academia and the Petroleum Industry. We owe Gerry and Roger (both living legends) a huge debt of gratitude, one that we can never fully repay.

What we can do is try to help and inspire the next generation of sedimentary geology students

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Election of 2012 Section Officers

The GCSSEPM Executive Council are currently in the process of identifying candidates for the following Section office:

PRESIDENT ELECT

Nominations will shortly be posted on our website www.gcssepm.org.

Please look out for an email announcement and take the time to read the biographical sketches, and **vote online** for the candidate of your choice.

Election results will be announced in the Fall newsletter, as well as posted on our website.

**THE GCSSEPM WELCOMES
NEW MEMBERS**

William J Conroy
Geospectrum • Houston, TX

Thomas Pierle
Schlumberger • Houston, TX

The Director's Chair

One of our trustees, Jory Pacht, had a great thought: why not have SEPM send a notice out about the Ed Picou Fellowship program using their mailing list, and, he said, I'll bet we get 50 responses. He was wrong: it was more than 50. This year's response indicates a clear need to update our procedures drastically, and they will be changed for next year. Awardees will be notified by the end of May (I hope) and we will announce the results in the next news letter and on the web site.

Those of you who are computer-oriented have probably noticed that AAPG and SEPM (among others) have their bulletins, special publications, etc, available on line for a subscription fee first for companies and universities and then for members. I am pleased to announce that we are in the process of doing the same thing; I think we are the first section to do so. Our Proceedings from 1999 to current will be the first group to go on line and it will be associated with the SEPM's publications. We hope to have this active by October, 2011 and actively market sometime this summer. The next goal will be to get 5 CDs of older publications on line. After that, we start scanning the rest of the Proceedings. Please note that the Special Publications, guide books, etc., will not be part of this series. Our first goal is to establish a library and corporate subscription service. Once established, we will establish a program for our members.

Editing of papers for this year's research conference (Seismic Attributes) is on its way and we are hoping for another successful (and well attended) conference. We may have an entertainment surprise Monday night, but that remains a secret for now. We are working on 2012 and, if the Mayans are wrong, 2013.

Once again, election for officers will be an online affair. When you receive e-mail notices about it, please do take the time to vote.

Dr. Norman C. Rosen
Executive Director
GCSSEPM Foundation

President's Column

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at McMaster. To this end, Janok (one of Roger's Ph.D. students) has played a significant role in fundraising efforts to establish two new funds (The Middleton/Walker Prize in Sedimentary Geology, and The Walker/Middleton Field Work Scholarships) in their honor at McMaster. Another former McMaster grad (Susan Cunningham, now Senior Vice President, Exploration for Noble Energy in Houston) was recently inspired to make a \$1 million donation to endow a chair in Sedimentary Geology at that university.

Hmmm, didn't I talk about "giving back" in the previous installment of this column?

On Tuesday evening, I was lucky enough to meet two other living legends at the SEPM President's Reception, and the pre-reception reception. As a society, we award the Doris Malkin Curtis Award to recognize geologists for their career contributions in the development of new concepts for understanding the geology of the Gulf of Mexico Basin and other basins globally (Ok, so I pinched that text from our website...). This year, we jointly honored three living legends, Peter Vail, Bob Mitchum and John Sangree, for their collaborative work in seismic and sequence stratigraphy. Unfortunately John was unable to attend, but Peter and Bob were joined by their spouses for the ceremony. Like Gerry Middleton the night before, Peter and Bob were beaming.

(Note: The award is usually presented at the GCAGS/GCSSEPM Annual Meeting, but our Section is not participating in this year's meeting in Veracruz – not part of the Section's "drainage basin".)

Paul Weimer (past GCSSEPM President and former GCSSEPM Foundation Trustee, currently President of something called the AAPG) prepared and read the citation. As President of this Section, I had the great honor of presenting the awards to Peter and Bob. The awards and honors that have previously been bestowed upon these gentlemen are too numerous to list.

Those of us who are interested in the history of geology can trace the seeds of sequence stratigraphy back at least to the start of the 20th century. That said, the sequence stratigraphy revolution truly began in 1977, when our three awardees (and colleagues from Exxon) co-authored a series of papers in AAPG Memoir 26 on seismic stratigraphy. Some of their ideas have been challenged, refuted or modified by subsequent research. Many more have stood the test of time, are taught to students, and are

used by Academic and Industry geoscientists around the world every day.

In his citation, Paul Weimer noted that our three Doris Malkin Curtis awardees first came together at Northwestern University under the tutelage of another legend, Larry Sloss. Their collaboration was later to continue at Exxon where they mentored a subsequent generation of leaders in sequence stratigraphy. They benefited from, and tilled, fertile intellectual fields.

A fundamental premise of Malcolm Gladwell's 2008 book "Outliers" is that an individual's family, culture, and friendships each play a role in that person's success. I can't and won't dig back into the family history or other sociological factors that might have helped the five gentlemen described in this column to become legends. But I know that they all helped to create, and then benefitted from, productive environments for research in sedimentary geology. There are many of us who have gone on to do well because of their efforts.

My friend John Lorenz (former AAPG President) wrote an article for the AAPG Bulletin in his days as Editor for that organization. He called it "Writing for the AAPG Bulletin: We're not literary giants, but we can try to be". In a similar vein, most of us are not, and will not become, legends in sedimentary geology. But through our efforts we can try to create fertile intellectual fields at our workplaces or in the societies that we belong to (including this one!). We can inspire our coworkers and protégés by pushing ourselves and them to work hard, challenge conventional wisdom, cross-pollinate with other disciplines, and commit to lifelong learning in our chosen discipline of sedimentary geology.

Who knows? We might inspire or otherwise help a new hire or a student to become a living legend some day.

Bruce S. Hart
President

LOST MEMBERS

We no longer have contact information for the following individuals. If you can provide information please contact Brandi Sellepack,
brandi.p.sellepack@conocophillips.com.

Didier Arboulie
Kazuyoshi Hasegawa
Duncan W. McMaster
Paul Owens
Garth E. Syhlonyk

News from the Business, Corporate & Student Representatives

ALABAMA AREA NEWS

Dr. David T. King Jr., Auburn University

UNIVERSITY OF ALABAMA

Geological Sciences is searching for three new faculty members. See information at <http://www.as.ua.edu/geo/job-openings/>. According to the UA departmental web page, there are some new graduate opportunities too.

Dr. Paul Aharon and the SPELEO-TEAM GROUP are seeking PhD applicants interested to pursue research on an NSF-funded study of caves and stalagmites from the island of Niue in the South Pacific.

From Dr. Samantha Hansen: "I am seeking graduate students to work on a variety of seismology and tectonic-related projects. Please contact me at shansen@geo.ua.edu if you are interested and/or would like more details."

From Dr. Alberto Pérez-Huerta: "I have several Ph.D. and M.Sc. projects for potential graduate students in Biomineralization and Paleoecology. Please contact me at aphuerta@as.ua.edu if you are interested."

From Dr Yuehan Lu: "I am seeking M.S. or Ph.D. students to work on a variety of projects in biogeochemistry and organic geochemistry. Please contact me at yuehan.lu@ua.edu if you are interested."

I should note that an area very near the University of Alabama was devastated by the F4 tornado of April 27. It is my understanding that the buildings where the Geological Sciences department and the Geological Survey were not damaged, but that some faculty, survey personnel, and graduate students may have experienced personal losses in the storm.

From those of us at GCSSEPM, our hearts and prayers go out to the families at University of Alabama who lost loved ones and homes as a result of the F4 tornado.

2011 Doris Malkin Curtis Medal Award Recipients

In 2006, the Gulf Coast Section SEPM established the Doris Malkin Curtis Medal, which recognizes geologists for their career contributions in the development of new concepts for understanding the geology of the Gulf of Mexico and other sedimentary basins. The award is named in honor of Doris Malkin Curtis, one of the pioneers in studying the paleontology and stratigraphy of Gulf Coast Geology. Dr. Curtis worked in the Gulf Basin for more than 50 years and served the geologic profession admirably in many ways.

An important aspect of the stated goal of this award is to recognize the important contributions of groups or individuals who worked as teams in unraveling the geology of the Gulf basin. This year's award is given to Peter Vail, Bob Mitchum, and John Sangree, for their pioneering collaborative research in seismic and later sequence stratigraphy. Working individually or in teams since graduate school, these three helped develop the core concepts for modern stratigraphic thought. They have maintained partnership and friendship in their consultant years "after Exxon."

The many accomplishments of these three distinguished gentlemen have already been widely recognized by various geological societies when they awarded them their highest honors. Citations detailing their many achievements are abundant in the literature. Instead, the GCSSEPM wishes to emphasize their contributions as a group, specifically how working together for five decades enhanced the full fruition and widespread impact of their ideas.

Their association began in graduate school at Northwestern University in the early 1950's, where they were students absorbing the new ideas of Larry Sloss on continent-wide unconformities and cratonic sequences and the progressive ideas of Bill Krumbein and Ed Dapples on facies relationships, mapping techniques and regional geology.

After graduate school, they worked together for many years at the Carter, Jersey, and Exxon Research Centers in a variety of capacities. They kept abreast of each other's research and worked to have their evolving concepts applied and integrated throughout the company. These concepts are now taught routinely in undergraduate and graduate courses: sequence boundaries, chronostratigraphic significance of seismic reflections, seismic facies, and sequence stratigraphy. Their innovative collaboration ultimately led to one of the most influential books ever published on stratigraphy, AAPG Memoir 26. The geology of the Gulf of Mexico basin clearly influenced their work. Several of their key publications included Gulf basin examples such as onshore Texas, and seismic stratigraphy of the West Florida slope.

Between 1986 and 1988, all three retired from Exxon, and they began working together in teaching short courses for numerous companies and groups, and consulting around the globe. As consultants, they developed long-term working relationships with many people as mentors and teachers. This mentoring and teaching was really the essential aspect in getting sequence stratigraphic concepts fully accepted and integrated throughout the geoscience community. In addition, after their "retirement" from Exxon, they collectively wrote several significant papers based on Gulf of Mexico examples that developed the concepts for the integration of biostratigraphy and sequence stratigraphy.

Their joint mission to disseminate concepts and applications of sequence stratigraphy went far beyond the call-for-duty. For their pioneering concepts in the broad field of stratigraphic analyses and outstanding teaching and mentoring, the GCSSEPM recognizes Pete, Bob, and John with the Doris Curtis Medal.

Gulf Coast Section – Society of Economic Paleontologists and Mineralogists

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Attributes: New Views on Seismic Imaging. Their Use in Exploration and Production

31st Annual GCSSEPM Foundation Bob F. Perkins Research Conference

DECEMBER 4-7, 2011 • HOUSTON, TX

The aim of the 31st Bob F. Perkins Research Conference is to establish the value and limitations of both modern seismic attributes and their interpretation workflows in improving our understanding of the earth's subsurface as illuminated by modern 3D seismic reflection data. Geoscientists apply attributes in two ways. The first application is to use attributes to illuminate subtle features that allow us to reconstruct the depositional, tectonic deformation, and diagenetic history of the imaged earth volume. From these images we use principals of seismic geomorphology, structural geology, and fluid flow to infer lithology, the presence of fractures, or diagenetic alteration to enhance or destroy porosity. The second application is more quantitative, where densely-sample attributes sensitive to reservoir thickness, porosity, and fluid product are correlated to sparse well logs and/or production data to provide predictions of the well or production property on a dense grid. Multi-attribute analysis tools range from simple animation, through more sophisticated multi-attribute visualization and cluster analysis, to geostatistics.

The 1996 GCSSEPM Research addressed how seismic attributes such as AVO can aid geologists in predicting lithology and fluid product. Since that time, spectral decomposition, coherence, volumetric curvature, and elastic impedance inversion, as well as the 3D visualization, neural network, and geostatistical tools to analyze them have become available to almost all seismic interpreters. Papers have been solicited to span multiple scales – from basin analysis to reservoir characterization, and diverse lithologies – carbonates, clastics, intrusive and extrusive igneous rocks in the sedimentary section as well as fractured basement.

The *Call for Papers* has been answered with over thirty significant papers from industry and academia that will address these questions. A current listing of papers is available on our web site. All papers will be presented orally as well as poster format available for browsing throughout the meeting. All authors will be writing complete articles or expanded abstracts, which will be published in **CD or DVD format** in the same successful manner as the GCSSEPM has done since 1999. This means full color illustrations, longer articles, and, perhaps, some oversized illustrations.

The most current information and registration forms for the conference are always available on our web site at www.gcssepm.org. We will try and maintain an accurate listing of papers and authors. As we did last year, the final program will be on-line and available for downloading before the conference starts. In addition, we will have on-line registration available!

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SECOND CALL FOR PAPERS AND POSTER PRESENTATIONS

New Understanding of the Petroleum Systems of Continental Margins of the World

32nd Annual GCSSEPM Foundation Bob F. Perkins Research Conference

DECEMBER 2-5, 2012 • HOUSTON, TX

During the past decade, numerous discoveries have been made in many deep-water basins globally, as well as ongoing significant development of previous discoveries. With many new companies operating in deepwater globally, our goal is to assemble an outstanding, innovative technical program that summarizes the recent successes globally, and a CD-ROM with the conference proceedings.

We are soliciting papers that document some or all aspects of the petroleum systems of deep-water margins with major production and/or discoveries (source rocks, seals, generation, migration, reservoirs, and traps). We are interested in papers that address these specific elements in a field, discovery, emerging play or regional setting of a basin.

The conference will address current areas of active exploration/development, and emerging deep-water basins. Current deepwater basins of interest include northern Gulf of Mexico (including the emerging Paleogene and Mesozoic plays), Brazil (Santos, Campos, Sergipe-Alagoas, Espirito-Santo), West Africa (Angola, Congo, Gabon Equatorial Guinea, Nigeria, Ghana, Sierra Leone, Mauritania, Morocco), eastern Mediterranean (Nile Delta, Levantine basin), west of Shetland Islands, Norway (recent discoveries), Indian subcontinent (Krishna Godavari), circum-Borneo (Baram Delta, northwest Borneo basin, Kutei/Makassar), northwest Shelf of Australia, Sakhalin Islands.

Emerging deep-water basins of the world: east Africa (Madagascar, Mozambique, Tanzania, Kenya, Somalia), additional West Africa basins, Arctic basins (east- and west-Greenland, North Siberian Shelf, Beaufort Sea), southern Gulf of Mexico, north Africa (Algeria, Libya), eastern Canada (Scotian, Jeanne D'Arc), northern south America (Colombia, Venezuela, Guyana, Suriname), Caribbean (Trinidad/Tobago), additional Brazilian basins, Argentina, Western India, Black Sea, New Zealand basins.

Authors interested in presenting a paper at the conference should submit by e-mail a preliminary title and 250-word abstract to Norman C. Rosen or one of the technical co-conveners.

DEADLINES

Preliminary Title and Abstract	October 1st 2011	First Manuscript	December 15, 2011
Tentative Program Announced	November 15, 2011	Final Illustrated Manuscript	June, 1, 2012

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