

## **Center for Sedimentary Basin Studies 2000 Statistical Report**

### **Center Mission**

The purpose of the Center for Sedimentary Basin Studies (CSBS) is to provide a structure and program for interdisciplinary research and education in the sciences and engineering for the study of sedimentary basins. The CSBS focuses on basin analysis and modeling; petroleum system modeling; reservoir characterization, modeling and simulation studies; and the effective transfer of research findings and technology to the public and industry.

### **Center Objectives**

- Recognition nationally and internationally as a premier interdisciplinary research and education program in the study of sedimentary basins.
- Establishment of an integrated research team of scientists and engineers who are competitive in securing external funding nationally at the \$1 million level.
- Recruitment and education of graduate students nationally and internationally who are funded through CSBS.
- Establishment of an outreach program for the Eastern Gulf Region.

### **Accomplishments**

#### 1. **Recognition**

- Graduate student (William Parcell) received an award from GCAGS for outstanding research contributions.
- Researcher (Ernest Mancini) received an award from AAPG for outstanding research and education contributions.
- Researcher (Mancini) is invited to be a participant at an International Conference on Climate and Biota in the Early Paleogene.
- CSBS at UA is the lead university in establishing a University Consortium for Sedimentary Basin Studies in the Gulf of Mexico in cooperation with the USGS, LSU, U. Miss., and TAMU.
- CSBS is cooperating with 22 participating organizations, including other universities, federal and state agencies and industry.

#### 2. **Funding Support**

- CSBS awarded 2 new federal contracts totaling \$9,413,022 million.
- CSBS secured continuation of 2 contracts totaling \$585,173.
- CSBS secured continuation of 3 software grants with a total value of \$1.272 million.
- Annual external support for CSBS is at \$1.1 million.

#### 3. **Faculty and Student Support**

- CSBS has 13 participating faculty researchers in geology, geophysics, biology, petroleum engineering, chemical engineering, computer engineering, and civil engineering.
- CSBS is providing funding support for 3 research scientists, 9 Ph.D. students and 6 M.S. students.

#### 4. **Productivity**

- Researchers associated with CSBS have published 44 papers and abstracts, made 36 presentations and have been awarded 8 new or continuation research contracts/grants in 2000.

#### 5. **Outreach**

- CSBS is the recognized leader in the Eastern Gulf Region for oil and gas technology transfer and information dissemination, conducting 12 technology workshops in 2000, publishing a quarterly newsletter, maintaining a Web Site and answering information requests.

## Statistics

### 1. Participating Faculty (13)

- Geological Sciences/Geophysics
  - Ernest A. Mancini
  - Joe Benson
  - Carl Stock
  - Rick Groshong
  - Dennis Harry
  - Rick Major (U. Miss.)
  - Bruce Hart (McGill)
  - Wayne Ahr (TAMU)
- Chemical Engineering
  - Eric Carlson
- Civil Engineering
  - Charles Haynes
- Computer Engineering
  - Hannah Chen
- Petroleum Engineering
  - Tom Blasingame (TAMU)
- Biology
  - Lou Brown (MSU)

### 2. Participating Research Scientists (3)

Hsien-Cheng Chang  
 Mark Puckett  
 Brian Panetta

### 3. Participating Graduate Students (15)

- Geological Sciences
  - William Parcell (Ph.D.)
  - Marcello Badali (Ph.D.)
  - Guohai Jin (Ph.D.)
  - Christopher Crow (Ph.D.)
  - Heather Fowler (M.S.)
  - Juan Carlos Llinas (M.S.)
- Also students from U. Miss., MSU, TAMU
  - William Tedesco (Ph.D.)
  - Tiffany Hopkins (M.S.)
- Computer Engineering
  - Wen-Tai Yang (Ph.D.)
  - Haiyan Li (M.S.)
  - Min Zhang (M.S.)
  - Xiaoguang Deng (M.S.)
- Chemical Engineering
  - Vishal Vora (Ph.D.)
  - Jinquan Xu (Ph.D.)
- Mechanical Engineering
  - Ruban Mahfudh (Ph.D.)

### 4. Participating Organizations (22)

- Universities
  - Louisiana State University
  - Texas A&M University
  - University of Mississippi
  - Mississippi State University
  - McGill University
- Federal Agencies
  - U.S. Department of Energy
  - U.S. Minerals Management Service
  - U.S. Geological Survey
- State Agencies
  - Alabama Geological Survey
  - Mississippi Office of Geology
  - New Mexico Bureau of Mines
- Industry
  - Petroleum Technology Transfer Council
  - Mobil Oil
  - Chevron Oil
  - Smackco Operating
  - Pruet Production
  - Paramount Petroleum
  - Strago Petroleum
  - Wayne Stafford & Associates
  - Platte River
  - Landmark
  - Seismic Micro-Technology

## 5. **Publications** (44)

- Badali, M., Carbonate sequence stratigraphy and paleoenvironments of the Washita Group (Albian/Cenomanian) Main Pass Field area, northeastern Gulf of Mexico, AAPG/EAGE Program and Abstracts Volume, p. 12, 2000.
- Badali, M., Sequence stratigraphy of Lower Cretaceous carbonate strata in the northeastern Gulf of Mexico, Geo. Soc. America Abs. with Programs (Ann. Mtg.), v. 32, no. 7, p. A-176, 2000.
- Bearden, B.L., The Mobile area salt basin: early evolution of salt structures and attendant hydrocarbon trends in offshore Alabama, 2000 Am. Assoc. Petroleum Geologists Annual Meeting Abstract Volume, CD, 2000.
- Bearden, B.L., Mancini, E.A., and Puckett, T.M., Salt anticline play in the Mississippi Interior Salt Basin, Gulf Coast Association of Geological Societies Trans. 50:261-268, 2000.
- Bearden, B.L., Mancini, E.A., Puckett, T.M., and Panetta, B.J., Petroleum plays in the Mississippi Interior Salt Basin, Am. Assoc. Petroleum Geologists Bulletin, v. 84, p. 1671, 2000.
- Bell, G.L., and Crow, C.J., Heterogeneity of the Capitan reef and its importance to reservoir development, AAPG/EAGE Program and Abstracts Volume, p. 14, 2000.
- Cantrell, D., Microfacies analysis of upper Brassfield Formation strata (Lower Silurian): from thin sections to depositional environments, Geo. Soc. America Abs. with Programs (Ann. Mtg.), v. 32, no. 7, p. A-178, 2000.
- Chang, H.-C., Chen, H.-C., and Kopaska-Merkel, D.C., Comparison of permeability prediction using back-propagation and hybrid neural networks, AAPG/EAGE Program and Abstracts Volume, p. 15-16, 2000.
- Chang, H.-C., Chen, H.-C., and Kopaska-Merkel, D.C., Determination of carbonate permeability category using hybrid neural network and fuzzy inference systems, AAPG/EAGE Program and Abstracts Volume, p. 17-18, 2000.
- Crow, C.J., and Bell, G.L., Allostratigraphy and contrasting constructional styles of the middle and Upper Capitan reefs: a progress report, Geo. Soc. America Abs. with Programs (Ann. Mtg.), v. 32, no. 7, p. A-177, 2000.
- Crow, C.J., and Brande, S., Paleontological and lithological variability in the Upper Capitan Limestone, southeastern New Mexico: significance to petroleum exploration, AAPG/EAGE Program and Abstracts Volume, p. 19, 2000.
- Fowler, H.E., Characterization of the Smackover reservoir: Chatom Field, Washington County, Alabama, 2000 Am. Assoc. Petroleum Geologists Annual Meeting Abstract Volume, CD, 2000.
- Fowler, H.E., and Benson, D.J., Characterization of the Smackover reservoir: Chatom Field, Washington County, Alabama, AAPG/EAGE Program and Abstracts Volume, p. 27, 2000.
- Mancini, E.A., Basin analysis of the Mississippi Interior Salt Basin and petroleum system modeling of the Jurassic Smackover Formation, eastern Gulf Coastal Plain, DOE Oil Technology Program and Contractor Abstracts Volume, p. DCS-15, 2000.
- Mancini, E.A., Improved oil recovery from Upper Jurassic Smackover carbonates (Class II Reservoir) through the application of advanced technologies at Womack Hill Oil Field, Choctaw and Clarke Counties, Alabama, Eastern Gulf Coastal Plain (Class Revisits), DOE Oil Technology Program and Contractor Abstracts Volume, p. DEMO-06, 2000.
- Mancini, E.A., Oxfordian Smackover carbonate hydrocarbon exploration strategies for the northeastern Gulf of Mexico area, carbonate reservoir characterization and modeling for enhanced hydrocarbon discovery and recovery, Program and Abstracts Volume, AAPG/EAGE International Research Conference, p. 43, 2000.
- Mancini, E.A., Sequence stratigraphy and chronostratigraphy of Eastern Gulf Coastal Plain Eocene-Oligocene strata, Am. Assoc. Petroleum Geologists Bulletin, v. 84, p. 1684, 2000.
- Mancini, E.A., Sequence stratigraphy and chronostratigraphy of Upper Eocene and Lower Oligocene strata, eastern Gulf Coastal Plain, Gulf Coast Association of Geological Societies Trans. 50:379-388, 2000.
- Mancini, E.A., Variability in components of the Upper Jurassic Smackover petroleum system, northeastern Gulf of Mexico, Am. Assoc. Petroleum Geologists Bulletin, 2000 Am. Assoc. Petroleum Geologists Annual Meeting Abstract Volume, p. A92, 2000.
- Mancini, E.A., Benson, D.J., and Hart, B.S., Integrated geoscientific study of Upper Jurassic Smackover reef and carbonate shoal reservoirs associated with a paleotopographic basement structure: Appleton Field, South Alabama, carbonate reservoir characterization and modeling for enhanced hydrocarbon discovery and recovery, Program and Abstracts Volume, AAPG/EAGE International Research Conference, p. 44, 2000.
- Mancini, E.A., Benson, D.J., Hart, B.S., Balch, R.S., Parcell, W.C., and Panetta, B.J., Appleton Field case study (Eastern Gulf Coastal Plain): field development model for Upper Jurassic microbial reef reservoirs associated with paleotopographic basement structures, Am. Assoc. Petroleum Geologists Bull. 84:1699-1717, 2000.
- Mancini, E.A., and Panetta, B.J., 3-D geologic visualization modeling: Upper Jurassic carbonate shoal lithofacies, North Choctaw Ridge Oil Field, southwest Alabama, Geol. Soc. America Abs. with Programs (Ann. Mtg.), v. 32, no. 2, p. A-59, 2000.

- Mancini, E.A., and Parcell, W.C., Upper Jurassic sequence stratigraphic framework for the northeastern Gulf of Mexico and western Europe, *Geol. Soc. America Abs. with Programs (Ann. Mtg.)*, v. 32, no. 7, p. A-176, 2000.
- Mancini, E.A., and Puckett, T.M., Integrated lithostratigraphic and biostratigraphic approach to sequence stratigraphic analysis: Lower Cretaceous section, Mississippi Interior Salt Basin, *Am. Assoc. Petroleum Geologists Bulletin*, 2000 *Am. Assoc. Petroleum Geologists Annual Meeting Abstract Volume*, p. A92, 2000.
- Mancini, E.A., and Puckett, T.M., Paleoenvironmental and stratigraphic changes in Paleocene and lower Eocene strata, Eastern Gulf Coastal Plain, USA, in *GFF, Geological Society of Sweden, Early Paleogene Warm Climates and Biosphere Dynamics International Meeting Proceedings 122:99-100*, 2000.
- Mancini, E.A., and Puckett, T.M., Sequence stratigraphy of Lower Cretaceous strata, eastern Gulf Coastal Plain, USA, *31<sup>st</sup> International Geological Congress Abstract Volume*, 2000.
- Mancini, E.A., and Puckett, T.M., Sequence stratigraphy and petroleum potential of Lower Cretaceous strata, Mississippi Interior Salt Basin, *Am. Assoc. Petroleum Geologists Bulletin*, v. 84, p. 1684, 2000.
- Mancini, E.A., and Puckett, T.M., Sequence stratigraphy and petroleum potential of Lower Cretaceous strata, Mississippi Interior Salt Basin, *Gulf Coast Association of Geological Societies Trans.* 50:351-360, 2000.
- Mancini, E.A., Puckett, T.M., and Parcell, W.C. (eds.), *AAPG/EAGE International Research Conference, Program and Abstracts Volume, Carbonate Reservoir Characterization and Modeling for Enhanced Hydrocarbon Discovery and Recovery*, 68 p., 2000.
- Mancini, E.A., Puckett, T.M., and Parcell, W.C., Integrated biostratigraphic and sequence stratigraphic framework: key to sedimentary basin modeling, *31<sup>st</sup> International Geological Congress Abstract Volume*, CD, 2000.
- Panetta, B.J., Case Study of an oil field in the regional peripheral fault trend play: North Choctaw Ridge, Alabama, *AAPG/EAGE Program and Abstracts Volume*, p. 48, 2000.
- Parcell, W.C., 2000, 3D computer simulation of carbonate depositional facies distribution and productivity rates using continuous set theory to mimic geologists' reasoning: *American Association of Petroleum Geologists Bulletin*, v. 84, p. 1688, 2000.
- Parcell, W.C., 2000, 3D computer simulation of carbonate depositional facies distribution and productivity rates using continuous set theory to mimic geologists' reasoning: *Gulf Coast Association of Geological Societies Transactions* 50, p. 439-450, 2000.
- Parcell, W.C., Classification of microbial growth forms and fabric in the Smackover Formation, southwest Alabama and implications for reservoir quality, *AAPG/EAGE Program and Abstracts Volume*, p. 49, 2000.
- Parcell, W.C., 2000, Distribution and controls on carbonate reservoir quality in the Mississippian Mission Canyon Formation, Carter Creek Field, Uinta County, Wyoming: *American Association of Petroleum Geologists Annual Meeting Abstracts with Programs*, p. 111, 2000.
- Parcell, W.C., 2000, Documenting early highstand development of microbial bioherms in the Upper Jurassic Oxfordian Smackover Formation with a 3D fuzzy logic stratigraphic simulator: *Geological Society of America Annual Meeting Abstracts with Programs*, p. A-176, 2000.
- Petty, A.J., Post, P.J., and Parcell, W.C., Field distribution and petroleum systems of the Andrew Formation (Albian) and James Limestone (Aptian), Mobile, Main Pass, and Viosca Knoll areas, northeastern Gulf of Mexico, 2000 *Am. Assoc. Petroleum Geologists Annual Meeting Abstract Volume*, CD, 2000.
- Puckett, T.M., Lower Cretaceous carbonate petroleum systems in the Mississippi Interior Salt Basin, *AAPG/EAGE Program and Abstracts Volume*, p. 56, 2000.
- Puckett, T.M., and Mancini, E.A., Calcareous microfossil biostratigraphy of marine tongues of the Mooreville Chalk in northern Mississippi and eastern Alabama, *Geol. Soc. America Abs. with Programs (Ann. Mtg.)*, v. 32, no. 7, A-177, 2000.
- Puckett, T.M., and Mancini, E.A., Microfossil characteristics of systems tracts in the Upper Cretaceous deposits of Mississippi and Alabama, *Am. Assoc. Petroleum Geologists Bulletin*, v. 84, p. 1688-1689, 2000.
- Puckett, T.M., and Mancini, E.A., Microfossil characteristics of systems tracts in the Upper Cretaceous deposits of Mississippi and Alabama, *Gulf Coast Association of Geological Societies Trans.* 50:389-398, 2000.
- Puckett, T.M., Mancini, E.A., and Parcell, W.C., Source rocks, maturation, and seals in carbonate systems of the Mississippi Interior Salt Basin, 2000 *Am. Assoc. Petroleum Geologists Annual Meeting Abstract Volume*, CD, 2000.
- Siripitayananon, P., Chen, H.-C., and Hart, B.S., Learning the relationship between seismic attributes and lithofacies by back-propagation neural network, *AAPG/EAGE Program and Abstracts Volume*, p. 57, 2000.
- Wang, L., Siripitayananon, P., Chen, H.-C., and Hart, B.S., Increased seismic resolution by universal kriging approach, *AAPG/EAGE Program and Abstracts Volume*, p. 66, 2000.

## 7. **Presentations** (36)

- Badali, M., Carbonate Sequence Stratigraphy and Paleoenvironments of the Washita Group (Albian/Cenomanian) Main Pass Field Area, Northeastern Gulf of Mexico, AAPG/EAGE International Research Conference, 2000.
- Badali, M., Sequence Stratigraphy of Lower Cretaceous Carbonate Strata in the Northeastern Gulf of Mexico, Geological Society of America Annual Meeting, 2000.
- Cantrell, D., Microfacies Analysis of Upper Brassfield Formation Strata (Lower Silurian): From Thin Sections to Depositional Environments, Geological Society of America Annual Meeting, 2000.
- Chang, H.-C., Comparison of Permeability Prediction using Back-Propagation and Hybrid Neural Networks, AAPG/EAGE International Research Conference, 2000.
- Chang, H.-C., Determination of Carbonate Permeability Category using Hybrid Neural Network and Fuzzy Inference Systems, AAPG/EAGE International Research Conference, 2000.
- Crow, C.J., Allostratigraphy and Contrasting Constructional Styles of the Middle and Upper Capital Reefs: A Progress Report, Geological Society of America Annual Meeting, 2000.
- Crow, C.J., Paleontological and Lithological Variability in the Upper Capitan Limestone, Southeastern New Mexico: Significance to Petroleum Exploration, AAPG/EAGE International Research Conference, 2000.
- Fowler, H.E., Characterization of the Smackover Reservoir: Chatom Field, Washington County, Alabama, AAPG/EAGE International Research Conference, 2000.
- Fowler, H.E., Characterization of the Smackover Reservoir: Chatom Field, Washington County, Alabama, American Association of Petroleum Geologists Annual Meeting, 2000.
- Mancini, E.A., Basin Analysis of the Mississippi Interior Salt Basin and Petroleum System Modeling of the Jurassic Smackover Formation, Eastern Gulf Coastal Plain, DOE Oil Technology Program Review Meeting, 2000.
- Mancini, E.A., Improved Oil Recovery from Upper Jurassic Smackover Carbonates (Class II Reservoir) through the Application of Advanced Technologies at Womack Hill Oil Field, Choctaw and Clarke Counties, Alabama, Eastern Gulf Coastal Plain, DOE Oil Technology Program Review Meeting, 2000.
- Mancini, E.A., Oxfordian Smackover Carbonate Hydrocarbon Exploration Strategies for the Northeastern Gulf of Mexico Area, AAPG/EAGE International Research Conference, 2000.
- Mancini, E.A., Integrated Geoscientific Study of Upper Jurassic Smackover Reef and Carbonate Shoal Reservoirs Associated with a Paleotopographic Basement Structure: Appleton Field, South Alabama, AAPG/EAGE International Research Conference, 2000.
- Mancini, E.A., Hydrocarbon Migration Modeling in the Mississippi Interior Salt Basin, Eastern Gulf Region, Petroleum Technology Transfer Council Workshop, 2000.
- Mancini, E.A., Underdeveloped Plays and Reservoirs in the Mississippi Interior Salt Basin, Eastern Gulf Region, Petroleum Technology Transfer Council Workshop, 2000.
- Mancini, E.A., 3-D Geologic Visualization Modeling: Upper Jurassic Carbonate Shoal Lithofacies, North Choctaw Ridge Oil Field, Southwest, Alabama, Southeastern Geological Society of America Annual Meeting, 2000.
- Mancini, E.A., Integrated Lithostratigraphic and Biostratigraphic Approach to Sequence Stratigraphic Analysis: Lower Cretaceous Section, American Association of Petroleum Geologists Annual Meeting, 2000.
- Mancini, E.A., Integrated Biostratigraphic and Sequence Stratigraphic Framework: Key to Sedimentary Basin Modeling, International Geological Congress, 2000.
- Mancini, E.A., Sequence Stratigraphy and Petroleum Potential of Lower Cretaceous Strata, Mississippi Interior Salt Basin, Gulf Coast Association of Geological Societies Annual Meeting, 2000.
- Mancini, E.A., Upper Jurassic Sequence Stratigraphic Framework for the Northeastern Gulf of Mexico and Western Europe, Geological Society of America Annual Meeting, 2000.
- Mancini, E.A., The Mobile Area Salt Basin: Early Evolution of Salt Structures and Attendant Hydrocarbon Trends in Offshore Alabama, American Association of Petroleum Geologists Annual Meeting, 2000.
- Mancini, E.A., Sequence Stratigraphy of Lower Cretaceous Strata, Eastern Gulf Coastal Plain, USA, International Geological Congress, 2000.
- Panetta, B.J., Case Study of an Oil Field in the Regional Peripheral Fault Trend Play: North Choctaw Ridge, Alabama, AAPG/EAGE International Research Conference, 2000.
- Parcell, W.C., Classification of Microbial Growth Forms and Fabric in the Smackover Formation, Southwest Alabama and Implications for Reservoir Quality, AAPG/EAGE International Research Conference, 2000.
- Parcell, W.C., Documenting Early Highstand Development of Microbial Bioherms in the Upper Oxfordian Smackover Formation with a 3D Fuzzy Logic Stratigraphic Simulator, Geological Society of America Annual Meeting, 2000.

- Parcell, W.C., Distribution and Controls on Carbonate Reservoir Quality in the Mississippian Mission Canyon Formation, Carter Creek Field, Uninta County, Wyoming, American Association of Petroleum Geologists Annual Meeting, 2000.
- Parcell, W.C., 3D Computer Simulation of Carbonate Depositional Facies Distribution and Productivity Rates Using Continuous Set Theory to Mimic Geologists' Reasoning, Gulf Coast Association of Geological Societies Annual Meeting, 2000.
- Puckett, T.M., Calcareous Microfossil Biostratigraphy of Marine Tongues of the Mooreville Chalk in Northern Mississippi and Eastern Alabama: implications for Late Cretaceous Cyclicity, Geological Society of America Annual Meeting, 2000.
- Puckett, T.M., Lower Cretaceous Carbonate Petroleum Systems in the Mississippi Interior Salt Basin, AAPG/EAGE International Research Conference, 2000.
- Puckett, T.M., Source Rocks, Maturation, and Seals in Carbonate Systems of the Mississippi Interior Salt Basin, American Association of Petroleum Geologists Annual Meeting, 2000.
- Puckett, T.M., Salt Anticline Play in the Mississippi Interior Salt Basin, Gulf Coast Association of Geological Societies Annual Meeting, 2000.
- Puckett, T.M., Microfossil Characteristics of Systems Tracts in the Upper Cretaceous Deposits of Mississippi and Alabama, Gulf Coast Association of Geological Societies Annual Meeting, 2000.
- Puckett, T.M., Framework of the Mississippi Interior Salt Basin, Eastern Gulf Region, Petroleum Technology Transfer Council Workshop, 2000.
- Puckett, T.M., Petroleum Geology of Selected Fields in the Mississippi Interior Salt Basin, Eastern Gulf Region, Petroleum Technology Transfer Council Workshop, 2000.
- Siripitayanon, P., Learning the Relationship between Seismic Attributes and Lithofacies by Back-Propagation Neural Network, AAPG/EAGE International Research Conference, 2000.
- Wang, L., Increased Seismic Resolution by Universal Kriging Approach, AAPG/EAGE International Research Conference, 2000.

#### 8. **Grants Awarded** (8)

- Mancini, Ernest A., Basin Analysis of the Mississippi Interior Salt Basin and Petroleum System Modeling of the Jurassic Smackover Formation, Eastern Gulf Coastal Plain, U.S. Department of Energy, \$1,400,000, 1996–2001.
- Mancini, Ernest A., Jurassic-Cretaceous Hydrocarbon Play Characterization and Jurassic Petroleum System Modeling, Eastern Gulf of Mexico, Minerals Management Service and Industry, \$450,000, 1997-2002.
- Mancini, Ernest A. and Parcell, William C., BasinMod Software-Platte River Academic Software Loan Agreement, Platte River Associates, \$84, 500, 1998-2001.
- Mancini, Ernest A. and Bearden, Bennett L., University Grant Software Partnership Program, Landmark Graphics Cooperation, \$1,138,910, 1998-2001.
- Mancini, Ernest A. and Bearden, Bennett L., Seismic Micro-Technology Software Loan Agreement, Seismic Micro-Technology, \$38,000, 1999-2001.
- Mancini, Ernest A., Information and Technology Transfer, Eastern Gulf Region, Petroleum Technology Transfer Council and U.S. Department of Energy, \$1,254,000, 1999-2004.
- Mancini, Ernest A., Integrated Geologic-Engineering Model for Reef and Carbonate Shoal Reservoirs Associated with Paleohighs: Upper Jurassic Smackover Formation, Northeastern Gulf of Mexico, U.S. Department of Energy, \$1,296,022, 2000-2004.
- Mancini, Ernest A., Improved Oil Recovery from Upper Jurassic Smackover Carbonates through the Application of Advanced Technologies at Womack Hill Field, Choctaw and Clarke Counties, Alabama, Eastern Gulf Coastal Plain (Class II Reservoir), U.S. Department of Energy, \$8,117,000, 2000-2006.

#### **Outreach**

##### 1. **Technology Workshops** (12)

<u>Type of Workshop</u>	<u>No. of Attendees</u>
Horizontal Drilling	92
3-D Data Loading	27
3-D Seismic Interpretation	27
Seal Rocks	34

Petra Software	10
Unitization	35
Salt Tectonics	37
Property Evaluation	35
Carbonate Reservoirs	65
Coalbed Methane	31
Underdeveloped Reservoirs	49
Geophysical Logging	<u>70</u>
	512

2. **Newsletter**—circulation of 700 quarterly.
3. **Web Site**—average 2,704 users per month
4. **Information Requests**—average 56 requests per month.

#### **Awards**

1. William Parcell received First Place for Excellence of Presentation Award from GCAGS.
2. Ernest A. Mancini received Distinguished Educator Award from AAPG.

#### **Other Activities**

1. CSBS at UA is the lead university in the establishment of a University Consortium for Sedimentary Basin Studies for the Gulf of Mexico in cooperation with the USGS, LSU, U. Miss. and TAMU.
2. Director is Organizer of International AAPG Hedberg Research Conference on Sequence Stratigraphy and Allostratigraphy.
3. Director is an Invited Participant to International Conference on Climate and Biota of the Early Paleogene.
4. Director served as Chair of North American Commission of Stratigraphic Nomenclature.
5. Director served as Chair of Mineral and Energy Resource Section, Board on Natural Resources, National Association of State Universities and Land-Grant Colleges.
6. Director served as Organizer of AAPG-EAGE International Research Conference on Carbonate Reservoir Characterization and Modeling for Enhanced Hydrocarbon Discovery and Recovery.
7. Director served as Organizer of GSA Topical Session on Carbonate Allostratigraphy and Sequence Stratigraphy.
8. Director served as Organizer of AAPG Technical Session on Controls on Trap, Reservoir and Charge in Carbonate Systems.
9. Director was Invited Speaker to the 2000 DOE Oil Technology Program Review Meeting.