



**In this issue...**

What's New..... 1

Graduating & New Students..... 5

Recent & Upcoming Meetings..... 8

Recent & Upcoming Publications..... 12

Awards..... 15

Sponsors..... 16

<http://cbth.uh.edu/>

**Contacts:**

Dr. Paul Mann  
 pmann@uh.edu

Dr. Alejandro Escalona  
 alejandro.escalona@uis.no

Project E-mail:  
 cbthproject@gmail.com

Edited by: Jeff Storms  
 jeffstormswork@gmail.com

**Mailing Address:**  
 312 Science and Research Bldg. 1  
 Houston, TX 77204  
 (712) 893-1731



**What's New with the CBTH Project in Houston, Texas and Stavanger, Norway**

**CBTH Annual Sponsors Meeting 2021**

The CBTH 2021 Annual Sponsor Meeting was held virtually on Friday, October 8, 2021. Thanks to all 94 sponsor reps and colleagues who attended virtually! Continuing sponsors received this year's meeting presentations in October and will receive their year-end deliverables and updated login credentials in early 2022.



*CBTH students Bryan Moore, Daniella Easley, and Sean Romito present virtually at the 2021 Robert E. Sheriff Lecture*

**CBTH students win awards at the Robert E. Sheriff Lecture**

Congratulations to CBTH students Bryan Moore (1st Place Poster Presentation, MS and early PhD category), Daniella Easley (2nd Place Poster Presentation, Advanced PhD category), and Sean Romito (3rd Place Poster Presentation, Advanced PhD category), who received awards at the Houston Geological Society and University of Houston Robert E. Sheriff lecture series and student poster competition on November 1st. Click here to read more.

**Dr. Mann interviewed for Basin Dynamics Bulletin**

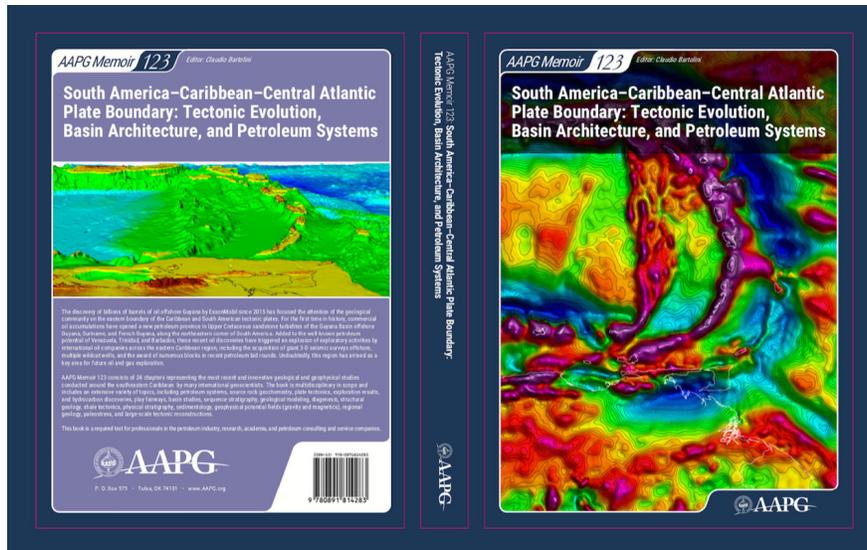
Dr. Paul Mann was recently interviewed by Dr. Jon Rotzien in the Basin Dynamics Bulletin. Click here to read part one of the interview, and click here to read part two.

**Dr. Alejandro Escalona named director of the National Center for Sustainable Energy Resources on the Norwegian Shelf at the University of Stavanger in Norway**

This eight-year project starting in the spring of 2022 will combine subsurface exploration of the Norwegian shelf and evaluate the potential of CO2 and H2 storage in shelfal reservoirs. Click here for more information.



## What's New



Front and back cover for AAPG Memoir 123

### Upcoming CBTH Publications in AAPG Memoir 123 on the tectonics and petroleum geology of the southeastern Caribbean (Venezuela, Colombia, Trinidad, Guyana)

17 CBTH publications from researchers and students at the University of Houston and University of Stavanger will be appearing in the *AAPG Memoir 123*, which is scheduled to be released in 2022. This volume summarizes the results of 5 MS and 4 PhD students conducted over a period of a decade. Click here to view a full list of CBTH publications in this volume. A summary of this volume is available in the September issue of *Revista Maya de Geociencias*. According to AAPG officials, *AAPG Memoir 123* is currently being printed and bound and will be advertised in the January issue of *AAPG Explorer*.

### CBTH PhD candidate Nahid Hasan wins award at GeoGulf 2020

Congrats to CBTH PhD student Nahid Hasan, who received the 3rd Place Poster Gordon I. Atwater Award at GeoGulf 2020 held in Austin, Texas. Click here to read more.

### Dr. Mann and CBTH graduate Eleine Vence win Best Paper in Interpretation

Congratulations to CBTH MS graduate Eleine Vence and Paul Mann on receiving the 2020 award for Best Paper in Interpretation from the Society of Exploration Geophysicists! Eleine has been with Conoco since 2008 where she has worked in Colombia and the Gulf of Mexico as part of the Exploration Technical Services group. Paul Mann and former CBTH PhD student Kyle Reuber (now a geologist at ION) won the same Best Paper award in 2019 based on a paper from Kyle's PhD study. Click here to read more. The Vence article was also featured in the July issue of *Revista Maya de Geociencias*. Click here to read.



## What's New

### **CBTH graduates elected to HGS offices**

Congrats to all the newly elected members of the Houston Geological Society including former CBTH student Lucia Torrado (PhD, 2018) who was elected secretary and currently works as an exploration geologist with AGI Exploration.

### **CBTH graduate Patrick Loureiro elected President of EAS Alumni Association**

Congrats to CBTH graduate Patrick Loureiro (PhD, 2016; now with C&C Reservoirs) for his election as president of the UH Earth and Atmospheric Sciences Alumni Association.

### **CBTH students and alumni co-convene recent conferences**

Congrats to CBTH PhD candidate Sean Romito and CBTH alumni Bryan Ott and Lucia Torrado who volunteered as conveners at the EAGE-HGS virtual conference on Latin America in November. This September, Mohamed Abdelfatah and Kenneth Shipper served on the organizing committee of the HGS Student Expo.

### **2021 summer internships**

Congrats to CBTH students and graduates who completed 2021 summer internships:

- o Maddie Bishop, MS geology graduate (Arena Exploration, Houston)
- o Sean Romito, PhD geology graduate (ConocoPhillips, Houston)
- o Ben Miller, MS geophysics graduate (BP, Houston)

### **CBTH graduates starting full-time jobs**

Congratulations to the following CBTH graduates on their recent full-time job offers:

- o Maddie Bishop, MS graduate (Arena Exploration, Houston, began June 2021)
- o Mei Liu, PhD graduate (Sinopec, Beijing, began September 2021)
- o Sean Romito, PhD graduate (ConocoPhillips, Houston, beginning January 2021)
- o Matthew Storey, MS graduate (Arena Exploration, Houston, began June 2021)
- o Hualing Zhang, PhD graduate (PetroChina, Beijing, began September 2021)

### **2022 summer internships**

Congrats to CBTH students and graduates who have received 2022 summer internships:

- o James D. McConnell, MS candidate (Murphy Oil Corporation, Houston)
- o Ben Miller, MS graduate (Dec. 2021) (Murphy Oil Corporation, Houston)
- o Nahid Hasan, PhD candidate (BP, Houston)
- o Daniella Easley, PhD candidate (Hess, Houston)



## What's New

### UH IBA team places 2nd in Gulf Coast section

Congratulations to the UH IBA Team, who placed 2nd in the Gulf Coast section of this year's AAPG Imperial Barrel Award competition. Team members included: Bryan Moore (captain, currently MS student with CBTH) and Daniella Easley (currently PhD student with CBTH). Click [here](#) for more information.



*The 2021 UH IBA Team (from L to R): Rachel Ronquille, Michael Martinez, Nikola Bjelica, Bryan Moore, and Daniella Easley.*

### Outreach by CBTH students and alumni in EAS student organizations

#### o AAPG Wildcatters:

- Maddie Bishop (former Secretary, 2019-20)
- Daniella Easley (current Treasurer, 2021-22)
- Md Nahidul Hasan (former Treasurer, 2020-21)
- Jack Kenning (former President, 2018-19)
- Mei Liu (former Vice-President, 2019-20; former Professional Master's Rep, 2020-21)
- Bryan Moore (former liaison to UH Energy Coalition, 2020-21)
- Juan Pablo Ramos (current Vice-President, 2021-22)
- Sean Romito (former President, 2020-21)
- Hualing Zhang (former liaison to UH Energy Coalition , 2019-2020; former Webmaster, 2020-21)

#### o SEG Wavelets

- Benjamin Miller (former President, 2020-21)
- Jacob Miller (former Vice-President, 2019-20)
- Chesney Petkovsek (current Vice-President, 2021-22)
- Kenneth Shipper (former Treasurer, 2020-21)
- Matthew Storey (former President, 2019-20)

#### o Geosociety

- Bryan Moore (former Vice-President, 2019-20)
- Kenneth Shipper (former President, 2020-21)
- Marco Urdaneta (former President, 2020-21)



## Graduating Students at UH

**MADDIE BISHOP** completed her MS study in December 2021. She joined the CBTH project in Fall 2019 after completing her BS in General Geology in the Spring of 2019 at The University of Texas. She has a range of experience from developmental geology in the Gulf of Mexico during her UT undergrad studies to glaciology with the US National Park Service in Washington State. Her MS project involves seismic interpretation, stratigraphy, and petroleum system evaluation in the Sandino Forearc Basin, Nicaragua and Costa Rica. She completed two summer internships with Arena Energy in The Woodlands and now works there as a fulltime explorationist along with 2019 CBTH MS graduate Matthew Storey.



**MEI LIU** joined CBTH in August 2018 as a PhD student. She completed both her BS and MS degrees in geology at the University of Nebraska-Lincoln under the supervision of Dr. Irina Filina. Her PhD project was a study of crustal thickness mapping of the Gulf of Mexico in the tectonic context of Triassic and Jurassic phase 1 and 2 opening phases. She graduated in August 2021 and currently works as an exploration geologist for the Sinopec Exploration and Production Research Institute in Beijing.

**BENJAMIN MILLER** completed two BS degrees in Geology and Geophysics at the University of Houston in 2017 and worked in the Finance Department for the City of Bellaire, Texas. He joined the CBTH project as a research assistant in September 2019 where his research was a subsurface study of Saba Bank in the northeastern Caribbean Sea and the rifted-passive margin of Morocco. Ben will graduate in December 2020 and will be an intern with Murphy Oil in 2022.





## Graduating Students at UH

**SEAN ROMITO** is a PhD graduate with CBTH who completed his MS at Rice University in 2017. He worked on a seismic and well dataset from offshore Gabon, West Africa, and northern Brazil to better characterize the evolution and hydrocarbon prospectivity of these two conjugate margins. He has also completed a study of offshore basement terranes of the Caribbean plate and their hydrocarbon prospectivity that was published in a special volume of the Geological Society of London on the Gulf of Mexico and the Caribbean. He completed his summer internship with ConocoPhillips in August 2021 and completed his PhD at UH in December of 2021. He will begin working with ConocoPhillips in January 2022.



**HUALING ZHANG** joined CBTH as a PhD candidate in fall 2018. She received her BS degree in geoscience from both University of Tulsa and China University of Petroleum (Beijing). She recently completed her Master's degree, which focused on deep-water petroleum system exploration in the Midland Basin, with researchers at the Bureau of Economic Geology of the University of Texas at Austin. Her CBTH-supported research involved the integration of regional gravity modeling, sequence stratigraphy, and basin analysis for understanding the tectonic and hydrocarbon evolution of the Permian Basin (west Texas) and the Sergipe-Alagoas rifted-passive margin (Brazil). She completed her PhD in August 2021 and currently works as a postdoctoral research associate at the Research Institute of Petroleum Exploration and Development (RIPED) of PetroChina in Beijing.



## New Students at UH

**MOHAMED ABDELFAH** is a PhD student who joined the CBTH Project in 2021. He completed both his BS and MS degrees in Egypt where his MS topic was the tectonostratigraphy of the Gulf of Suez. He is working on gravity modeling, basin analysis, subsurface structure and petroleum systems potential of the Red Sea basin.





## New Students at UH



**DANIELLA EASLEY** joined the CBTH Project in Fall 2021 as a third-year PhD student. She received a BS in Geology from Colorado State University in 2019 and a BS in Anthropology with a minor in Geology from Texas State University in 2014. Daniella spent her first two years at UH working on molecular organic geochemistry with the UH Center for Petroleum Geochemistry (UH-CPG). Her study for CBTH is entitled “Distinguishing petroleum source rock acme intervals across northern South America: Novel applications of Ultimate Expellable Potential (UEP) modeling and 4D petroleum system modeling from Venezuela to Suriname.”

**JAMES D. MCCONNELL** completed his BS degree in geology from the University of Colorado and his MS degree in petroleum exploration from the University of Houston. He joined the CBTH Project in fall 2021, where his PhD study will focus on the conjugate margins of Camamu-Almada in Brazil and the North Gabon basin in west Africa.



**JUAN PABLO RAMOS VARGAS** obtained his BS degree from the National University of Colombia and began his PhD study with CBTH in Fall 2021. His study focuses on the role of the Panama arc collision on the regional structure and hydrocarbon potential in Colombia, Panama, and western Venezuela based on a regional compilation and interpretation of seismic, bathymetric, and geophysical information.

**KENNETH SHIPPER** has worked with the CBTH Project as an undergrad research assistant from January 2021 to December 2021. He has worked on and presented gravity modeling of the Guyana margin and flexural effects related to the eastern subduction margin of the Caribbean Plate. He graduated from UH in May 2021 with a BS degree in geophysics with minors in geology and math. He will enter the PhD program at UH in January 2021 where he will continue his work on the Guyana margin and the subduction-related within the Caribbean Plate and of the Atlantic Plate beneath the Caribbean Plate.





## Recent Meetings

### **AAPG Caribbean Technical Symposium and E&P Summit, September 14-15, 2021 (virtual)**

- o Paul Mann and Travis Tillman - Distribution of hydrocarbons in island settings of the northeastern Caribbean: The importance of a thick overburden
- o Bryan Moore and Paul Mann - The unresolved origin of source rocks for hydrocarbons in the Barbados accretionary prism: squeezed from sources within prism or derived from organic-rich blocks scraped off the downgoing plate?
- o Kenneth Shipper and Paul Mann - 3D Gravity inversion to constrain the crustal structure of the Guyana-Suriname margin



### **IMAGE (SEG/AAPG) International Meeting for Applied Geoscience & Energy, September 26 - October 1, 2021 (virtual and in-person, Denver, CO)**

- o Maddie Bishop, Paul Mann, and Kurt Rudolph - Progressive, along-strike deformation of the Sandino-Tempisque-Terraba forearc basin of Nicaragua and Costa Rica and impact on its hydrocarbon prospectivity
- o Muhammad Nawaz Bugti and Paul Mann - Basin modeling to constrain the hydrocarbon potential of the Port Isabel foldbelt, northwestern US Gulf of Mexico
- o Sharon Cornelius - Contrasting overpressure environments for the western and central deepwater Gulf of Mexico
- o Md Nahidul Hasan, Paul Mann, and Mei Liu - Rifted, continental basement morphology of the Campeche salt basin and its controls on pods of source rock maturity, southern Gulf of Mexico
- o Md Nahidul Hasan, Paul Mann, and Benjamin Miller - Megaregional seismic mapping of the Moroccan rifted-passive margin of the Central Atlantic Ocean
- o Bryan Moore and Paul Mann - The unresolved origin of source rocks for hydrocarbons in the Barbados accretionary prism: squeezed from sources within prism or derived from organic-rich blocks scraped off the downgoing plate?



## Recent Meetings

### **IMAGE (SEG/AAPG) International Meeting for Applied Geoscience & Energy, September 26 - October 1, 2021 (virtual and in-person, Denver, CO) (continued)**

- o Andrew Pepper, Muhammad Nawaz Bugti, Lara Heister, John O'Leary, Jean-Marie Laigle, Elizabeth Roller, Jack Stalnaker, Paul Mann, and Robert Pascoe - Outcrop to basin center thermal evolution of the US Gulf of Mexico Basin
- o Sean Romito, Paul Mann, and Dale Bird - Cretaceous-Cenozoic structural and magmatic evolution of the Camamu-Almada rifted-passive margin, northeastern Brazil
- o Hualing Zhang, Paul Mann, and Dale Bird - Integration of basin analysis and gravity modeling for the Sergipe-Alagoas rifted-passive margin, northeastern Brazil



### **GeoGulf 2021, October 27-29, 2021 (in-person, Austin, TX)**

- o Muhammad Nawaz Bugti - Regional basin modeling and hydrocarbon maturation of the Port Isabel passive margin foldbelt, northwestern Gulf of Mexico
- o Sharon Cornelius and Peter Emmet - Overpressure sources in the western and central deepwater Gulf of Mexico
- o Md Nahidul Hasan and Paul Mann - Regional thermal maturity modeling along the Campeche salt basin, southern Gulf of Mexico
- o Paul Mann - Progress and problems in our current understanding of the Mesozoic opening history of the Gulf of Mexico basin
- o Paul Mann - The predictive value of basin modeling in the Caribbean and Gulf of Mexico area: One confirmed giant cluster and two remaining possibilities
- o Chesney Petkovsek and Paul Mann - Precambrian basement is an important control on subsidence, heat flow and maturation in the Delaware basin



## Recent Meetings

### HGS Robert E. Sheriff Lecture, November 1, 2021 (virtual)

- o Mohamed Abdelfatah - Can the Red Sea become a 5 billion barrel superbasin?
- o Muhammad Nawaz Bugti - Source rocks thermal stress study in Port Isabel passive margin foldbelt, northwestern Gulf of Mexico
- o Daniella Easley - Distinguishing petroleum source rock acmes across northern South America: Application to evaluate the potential of the Albian to Maastrichtian Guyana Basin
- o Md Nahidul Hasan - Thermal maturity modeling along the Campeche Salt Basin, southern Gulf of Mexico
- o Bryan Moore - The unresolved origin of source rocks for hydrocarbons in the Barbados accretionary prism: Squeezed from sources within prism or derived from organic-rich blocks scraped off the downgoing plate?
- o Juan Pablo Ramos Vargas - Assessing the effects of the Panama arc collision on basement configuration, clastic wedge formation and hydrocarbon distribution in northwestern South America
- o Sean Romito - AI-assisted structural interpretation of complex faulting and salt on the shelf and slope of the Camamu basin northeastern Brazil
- o Kenneth Shipper - Flexural modeling of the subducting Atlantic plate – Bahamas to Trinidad



### Third EAGE-HGS Conference on Latin America, November 9-10, 2021 (virtual)

- o Andres Felipe Cedeño - Oil and source rock geochemistry of the Guyana Basin
- o Sharon Cornelius - Geological sources of CO<sub>2</sub> in Santos, Campos and Espírito Santo basins
- o Daniella Easley - Distinguishing petroleum source rock acmes across northern South America: Application to evaluate the potential of the Albian to Maastrichtian Guyana Basin
- o Md Nahidul Hasan - Regional source rock maturity modeling along the Campeche Salt Basin, southern Gulf of Mexico
- o Paul Mann and Maddie Bishop - Cretaceous-Cenozoic tectonostratigraphic evolution and hydrocarbon prospectivity of the Sandino Forearc Basin, offshore Nicaragua
- o Juan Pablo Ramos Vargas - Regional effects of Miocene-Recent Panama Arc collision; Influence on maturation and distribution of HCs in NW South America and S. Central America
- o Kenneth Shipper - 3D gravity inversion supports the Guyana-Suriname rifted passage margin of Jurassic age: But where is its conjugate?
- o Hualing Zhang - Tectonostratigraphic evolution and thermal maturity modeling of the Sergipe-Alagoas rifted-passive margin, northeastern Brazil



## Recent Meetings

### **AGU Fall Meeting 2021, December 13-17, 2021 (virtual and in-person, New Orleans, LA)**

- o Muhammad Nawaz Bugti and Paul Mann - Opening of the closed Gulf of Mexico by a first phase of Late Triassic-Middle Jurassic continental rifting followed by arcuate, Late Jurassic oceanic spreading
- o Paul Mann - How subsurface industry data can address tectonic problems in different tectonic settings
- o Juan Pablo Ramos Vargas and Paul Mann - Regional effects of Miocene-to-Recent Panama arc collision from subducting plate geometry, basement thermochronology and clastic wedge deposition
- o Kenneth Shipper and Paul Mann - Comparison of the flexural effects of subducted oceanic plates beneath the highly-arcuate Lesser Antilles and South Sandwich subduction systems
- o Lei Sun and Paul Mann - Strike-slip fault geometry and strain partitioning in the North America-Caribbean plate boundary zone in northern Hispaniola (Dominican Republic and Haiti)
- o Lei Sun, Paul Mann, and Eric Fielding - Comparison of tectonic setting, focal mechanisms, after-shocks, and coseismic displacement patterns of the 2010 and 2021 Haiti earthquakes

## Upcoming Meetings

Please visit our website for more information about these events as they become available, including lists of accepted CBTH presentations and registration links.

**AAPG Annual Convention & Exhibition 2022, April 10-13, 2022 (virtual and in-person, Houston, TX)**

**AAPG International Conference and Exhibition, April 19-22, 2022 (virtual and in-person, Cartagena, Colombia)**

**AAPG Southwest Section Annual Convention, May 8-11, 2022 (in person, Midland, TX)**

**7th Conference of the Geological Society of Trinidad & Tobago, July 10-13, 2022 (in-person, Port-of-Spain, Trinidad & Tobago)**



## Recent Theses and Dissertations

- Bishop, L.M., 2021, Cretaceous-Cenozoic tectonostratigraphic evolution and hydrocarbon prospectivity of the Sandino forearc basin, offshore Nicaragua, MS thesis, University of Houston, 126 p.
- Liu, M., 2021, Mesozoic rift evolution and crustal structure of the Gulf of Mexico Basin from integration of multiple geological and geophysical datasets, PhD dissertation, University of Houston, 219 p.
- Miller, B., 2021, Tectonic evolution of the Cenozoic Lesser Antilles volcanic arc and the Mesozoic rifted-passive margin of northern Morocco using geologic, seismic reflection, and gravity data; MS thesis, University of Houston, 147 p.
- Romito, S., 2021, Crustal structure, tectonostratigraphy, and hydrocarbon potential of the terranes underlying the Caribbean Plate and the Camamu-Almada rifted-passive margin of northeastern Brazil, PhD dissertation, 288 p.
- Zhang, H., 2021, Gravity modeling, seismic stratigraphy, and thermal maturity modeling of hydrocarbons of the Permian Foreland Basin, USA and the Sergipe-Alagoas rifted-passive margin, Brazil, PhD dissertation, University of Houston, 213 p.

## Recent and Upcoming Publications

- Alvarez, T., Mann, P., Vargas, C.A., and Wood, L.J., 2021, Gravity, seismic reflection and tomographic constraints on the subduction to strike-slip transition; southeastern Caribbean Plate boundary zone, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Alvarez, T., Mann, P., and Wood, L.J., 2021, Tectonics and evolution of sedimentary basins along the arcuate southeastern margin of the Caribbean plate, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Blanco, J.M. and Mann, P., 2021, Subsurface geology of La Vela Basin, offshore Venezuela: Examples of basement and carbonate-hosted, liquid and gas hydrocarbon reservoirs, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Castillo, K., and Mann, P., 2021, Structure, stratigraphy and petroleum potential of the easternmost part of the Eastern Venezuelan foreland basin: in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.



## Recent and Upcoming Publications

- Cedeno, A., Ahmed, M., Escalona, A., and Abrahamson, P., 2021, Tectonostratigraphic evolution of the western Barbados accretionary prism and the eastern Tobago forearc basin: Implications for petroleum systems: in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Cedeno, A., Ohm, S., and Escalona, A., 2021, Barbados petroleum and its role in understanding distribution of Cretaceous source rocks in the southeastern Caribbean margin: Insights from an organic geochemistry study, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Cedeno, A., Ohm, S., Escalona, A., Narain, E., and Jager, J., 2021, Source rocks in the Guyana-Suriname basin: Insights from geochemical investigations of 15 heavy oils from onshore Suriname, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Cornelius, S. and Emmet, P., 2021, Difference in overpressure environments for the Western and Central Deepwater Gulf of Mexico, *AAPG Bulletin*, in press.
- Cornelius, S. and Emmet, P., 2021, Relationship between geothermal and geopressure gradients in the deepwater Gulf of Mexico: Garden Banks, Green Canyon, Keathley Canyon and Walker Ridge, *Interpretation*, in press.
- Escalona, A., Norton, I., Lawver, L., and Gahagan, L., 2021, Quantitative plate tectonic reconstructions of the Caribbean region from Jurassic to present, Eastern Caribbean-NE South American Boundary: in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Escalona, A., Watson, L., and Ahmad, M., 2021, Late Cretaceous-Pliocene paleogeography of the circum-Caribbean region based on quantitative plate reconstruction and georeferenced databases, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Figueira, B., and Escalona, A., 2021, Overview of the petroleum system of the Gulf of Paria, Eastern Venezuela Basin, Trinidad-Venezuela - implications from plate to province scale, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Galhom, T., Mann, P., and Rudolph, K., 2021, Jurassic-Recent structure, stratigraphy, and basin modeling of the rifted-passive margin of the Tarfaya-Dakhla basin of southern Morocco, *Marine and Petroleum Geology*, in review.



## Recent and Upcoming Publications

- Gomez, S., Mann, P., Alvarez, T., and Krueger, A., 2021, Tectonostratigraphic evolution of the Barbados accretionary prism and surrounding sedimentary basins within the southeastern Caribbean- north-eastern South America arcuate, strike-slip to subduction transition zone, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Hasan, M.N. and Mann, P., 2021, Structural styles and evolution of the Campeche salt basin, southern Gulf of Mexico, *Marine and Petroleum Geology*, v. 133, n. 105313. doi:10.1016/j.marpetgeo.2021.105313
- Hippolyte, J.C., Mann, P., and Weber, J.C., 2021, Neogene paleostress and structural evolution of Trinidad: Strain partitioning, rotation, and strike-slip reactivation of a colliding, accretionary wedge, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Kenning, J., and Mann, P., 2021, Cenozoic structural deformation between the Lamprea fold-belt and Salina del Bravo salt province by interacting salt and shale detachments, western Gulf of Mexico, *Journal of Structural Geology*, v. 153: <https://doi.org/10.1016/j.jsg.2021.104458>
- Leslie, S., 2021, Distribution and Character of Bottom Simulating Reflections in the Western Caribbean Offshore Guajira Peninsula, Colombia, in J. Mienert, C. Berndt, A. Tréhu, A. Camerlenghi, and C.-S. Liu (eds.), *World Atlas of Submarine Gas Hydrates in Continental Margins*, in press, doi: 10.1007/978-3-030-81186-0.
- Punnette, S. and Mann, P., 2021, Subsurface structure of the Hinge Line fault zone and its control on the distribution of gas fields of the North Coast Marine Area (NCMA) of offshore, northern Trinidad, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Punnette, S., Wood, L., and Mann, P., 2021, Late Quaternary sedimentary evolution of the North Coast Marine Area (NCMA) of northern, offshore Trinidad, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Rodriguez, L., Mann, P., and Hall, S., 2021, Crustal structure and geologic history of the Espino rift, Venezuela, based on integration of potential fields, seismic reflection, and well data, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Sun, L. and Mann, P., 2021, Along-strike rapid structural and geomorphic transition from transpression to strike-slip to transtension related to active microplate rotation, Papua New Guinea, *Frontiers in Earth Science*, 13 May 2021. doi:10.3389/feart.2021.652352



## Recent and Upcoming Publications

- Watson, L. and Escalona, A., 2021, Creating spatial-based paleogeography from plate reconstructions: a methodology, in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.
- Zhang, H., Mann, P., Bird, D., and Rudolph, K., 2021, Integration of regional gravity modeling, subsidence analysis, and source rock maturity data to understand the tectonic and hydrocarbon evolution of the Permian Basin, west Texas, *Interpretation*, v. 9, n. 1, 1-F-Y1. doi: 10.1190/INT-2020-0065.1
- Zimmerman, U., Dieset, J., Watson, L., and Lapen, T., 2021, Sedimentological constraints and provenance of Eocene and Miocene successions from Barbados, Eastern Caribbean-NE South American Boundary: in C. Bartolini (ed.), *South America-Caribbean-Central Atlantic Boundary: Tectonic Evolution, Basin Architecture and Petroleum Systems*, AAPG Memoir 123, in press.

## Awards (2021)

- o Bryan Moore, MS candidate, 1st Place Poster Presentation, MS and early PhD category, Houston Geological Society and University of Houston Robert E. Sheriff lecture series and student poster competition
- o Daniella Easley, PhD candidate, 2nd Place Poster Presentation, Advanced PhD category, Houston Geological Society and University of Houston Robert E. Sheriff lecture series and student poster competition
- o Sean Romito, PhD candidate, 3rd Place Poster Presentation, Advanced PhD category, Houston Geological Society and University of Houston Robert E. Sheriff lecture series and student poster competition
- o Daniella Gutierrez Easley, PhD student, Honorable Mention, Research Presentation, Annual HGS Geoscience Student Expo, Houston
- o Elaine Vence, MS Graduate, and Paul Mann, Best Paper award for the journal *Interpretation* in 2020
- o Nahid Hasan, PhD candidate, Carolyn Farb Natural Sciences and Mathematics Alumni Association Scholarship (2021-2022)
- o Kenneth Shipper, Undergrad, 1st Place Presentation (Undergraduate), UH EAS Student Research Day 2021
- o Benjamin Miller, MS candidate, 3rd Place Presentation (MS & 1st Year PhD), UH EAS Student Research Day 2021
- o Hualing Zhang, PhD candidate, 3rd Place Presentation (PhD), UH EAS Student Research Day 2021
- o 2nd Place, Imperial Barrel Award Program (IBA) of the American Association of Petroleum Geologists (AAPG) Gulf Coast Competition.



## Thanks to our sponsors!

As we continue with Phase VI of the CBTH project, we would like to thank our active and inactive company sponsors for their support in providing data, software, funding, and knowledge to further student research in geology and geophysics. Your support has provided many opportunities for CBTH students to pursue research projects in the region and your efforts are truly appreciated.

### Active Sponsors for Phase VI, Year 2



### Previous Sponsors (2005 - 2021)



### Data Sharing



### Technical Support

