



PALM BEACH ATLANTIC UNIVERSITY
ENLIGHTENING MINDS:
RESEARCH REVIEW 2012 - 2013



Beyond the classroom: providing real-world research experience



Students say that what makes Palm Beach Atlantic University special is “our professors.”

Current students as well as alumni enthusiastically describe how PBA professors stimulate and energize learning in the classroom. They tell of the professors’ selfless sharing of time and Christ-like encouragement in advising, mentoring and counseling outside of the classroom. Students share how their professors integrate their research and professional work in the classroom and extend invitations for students to participate. It is not uncommon for students and professors to co-author articles and presentations at professional meetings.

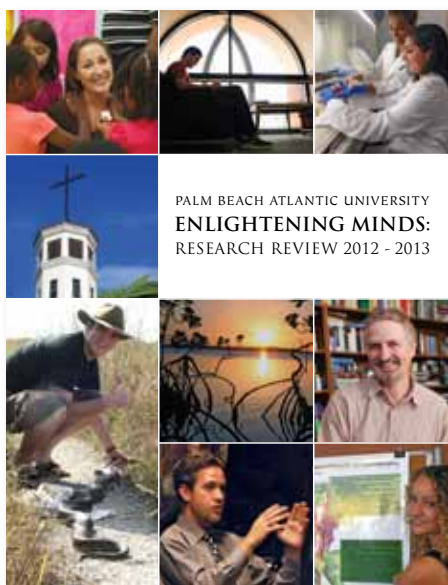
Since 1999, PBA has provided increased support for faculty and student research by granting sabbatical study leaves for 28 faculty members, course load reductions for research for 16 faculty members, and

funding for quality initiative research grants to 104 faculty members and for 100 student projects.

This publication highlights the research and professional work of many of our PBA teacher-scholars in the 2012-2013 academic year. From books, articles and professional presentations to creative partnerships via the PBA Centers of Excellence, medical missions and catalyzing STEM projects in local schools, you will see that PBA professors are truly impacting the lives of our students and their professions by the quantity and quality of their work beyond the classroom.

Joseph A. Kloba

Joseph A. Kloba, Ed.D.
Provost and Chief Academic Officer



On the cover, row one, l-r: pharmacy student Sarah Reeg, class of 2015, on a medical mission trip in Belle Glade, FL; Logan Thomas '12 in PBA's Warren Library; and Dr. Marielle Aleman and Maira Gaffar '12 collaborating on cancer research; **row two:** PBA's DeSantis Family Chapel; **row three, l-r:** author Josh Holbrook '09; mangroves in the Florida Keys at sunset; and Professor and Pledger Family Chair of Philosophy and Ethics Dr. Paul Copan; and **row four, l-r:** junior Justin Cox participates in a “Civic Dialogue” after a presidential debate; and junior Olivia Anderson with award-winning poster, “The Vine of History: Applying a New Testament Metaphor to Historiography.”

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Samantha Loutzenhiser, left, and Katherine Harvey take a soil sample on Torry Island in Lake Okeechobee, FL.

Photo by Dr. Peggy G. VanArman

Pond apple at the core of environmental and cancer research

Henry David Thoreau, in his work *Wild Apples*, wrote “It is remarkable how closely the history of the apple tree is connected with that of man.”

Is it possible Thoreau had a vision about the pond apple research currently under way at Palm Beach Atlantic University?

Two faculty members – Professor of Biology Dr. Peggy G. VanArman and Assistant Professor of Chemistry Dr. Mireille Aleman – along with five of their students hope the studies they are conducting bring Thoreau’s words to life: that pond apples hold the key to information beneficial to Everglades restoration and breast cancer treatment.

Dr. VanArman’s interest in pond apples blossomed from her longtime involvement in planting trees and removing exotic plants in the Everglades. Along the way, she and her

students began planting on Torry Island in Lake Okeechobee, FL.

“I started researching the island in 2011 and the importance of the domes of pond apple trees that grow there, how they anchor the soil but uptake the nutrients that flow into the Everglades. I also noted that the apples’ medicinal values were known in China, Australia and other countries,” she said.

That same year, Dr. VanArman decided to make Torry Island a service learning project as part of her environmental science class, and applied for and received a PBA Quality Initiative (QI) grant. She hired a guide named “Boots” to operate an air boat to conduct the field research that she had in mind, and chose three biology students who were juniors, and were also awarded QI grants, to join the research team. She then collaborated with Dr. Aleman to ensure that seed collection met the parameters of her cancer research.

Along with Dr. VanArman, who gathered green pond apple leaves, Katherine Harvey gathered soil, Samantha Loutzenhiser collected groundwater surrounding the trees, and Luke Young collected senescent (dying) pond apple leaves on three field visits to Torry Island in 2012. The samples were sent to labs to test for nutrients such as nitrogen, carbon and phosphorous, which are sometimes responsible for pollution in the greater Everglades.

“Ultimately, we are studying whether the pond apple trees are removing these nutrients from the surrounding environment and preventing them from flowing to the Everglades downstream,” Dr. VanArman explained. She said they will present the results of their initial findings in March at the Florida Academy of Sciences conference at Barry University.

Continued from Page 3.

The team's work also included collecting seeds from the apples to be tested by Dr. Aleman and two senior biology students – Taj Anderson and Ashley Dolberry – who obtained a QI grant last spring for their research. Anderson is working on the chemistry side, which involves extracting compounds out of the seeds, while Dolberry is learning how to culture and treat cells and prepare experiments in vitro.

“Our goal is to see if extracts from the seeds have the potential to cure breast cancer. We are testing two breast cell lines and one normal cell line combined with various concentrations of extracts to determine whether the extracts kill the cancer cells, as well as the minimum dosages we can use,” Dr. Aleman said.

According to Dr. Aleman, this is just the beginning. She anticipates this research will take at least a year or two and hopes it will open the door to other studies involving breast cancer treatment. Dr. VanArman, too, already anticipates a continuation of the

“A trend in research today is to do modeling on a computer while you sit in a room... where you don't have to get wet, cold and dirty. I would like my students to take away that research can be a fun and incredible experience that will help them no matter what they do. It helps foster in them teamwork, leadership and common sense. And from an academic standpoint, it gives them an experience they can't get anywhere else.”

*Dr. Peggy G. VanArman
PBA Professor of Biology*

environmental research, planning for additional soil, leaf, water and seed collections at the Arthur R. Marshall Loxahatchee National Wildlife Refuge in Boynton Beach, FL, which she hypothesizes is a less nutrient-enriched area.

While these professors hope to write the next chapters in the history of the pond apple tree through research, their mission is to also enhance the education of their students.

“Research is extremely important at a small university like ours. Most undergraduates are not going to receive the level of training that our students are getting from such projects. It's huge to get this competitive edge, whether students are going on to graduate school or entering the job market,” Dr. Aleman said.

According to Dr. VanArman, hands-on research is also great training for life. “A trend in research today is to do modeling on a computer while you sit in a room...where you don't have to get wet, cold and dirty,” she said. “I would like my students to take away that research can be a fun and incredible experience that will help them no matter what they do. It helps foster in them teamwork, leadership and common sense. And from an academic standpoint, it gives them an experience they can't get anywhere else.”



Photo by Dr. Peggy G. VanArman

Freshman Kyle Holly collects pond apple leaf samples for nutrient analysis.



Taj Anderson analyzes the chemical makeup of extracts of pond apple seeds.

Pond apple research team braves elements to conduct field studies

Neither whipping winds, knee-high flooding, tall, thick flag plants nor gigantic banana spiders could keep the Palm Beach Atlantic pond apple research team from its mission. On their journey to, from and on Torry Island, faculty/student researchers braved the elements through determination and sheer grit at times to conduct the field studies they hope will eventually help restore the Everglades and/or treat breast cancer.

Led by Professor of Biology Peggy G. VanArman, students Katherine Harvey, Luke Young and Samantha Loutzenhiser gathered the soil, leaves and water currently being examined in off-campus labs, while seniors Taj Anderson and Ashley Dolberry are working in an on-campus lab studying the chemical makeup of extracts of the seeds also collected by their fellow students, and the effects the extracts may have on breast cancer cells.



Pond apple. Picture taken by Christopher Hind at Royal Palm, Everglades National Park.



Katherine Harvey, a senior biology major graduating in May, gathered soil samples on Torry Island for nutrient analysis at Florida International University.

"It was awesome but there were more challenges in the field than I anticipated. It was difficult to collect soil in flooded areas when

we went in February. Then in June we had to be careful because of alligators. Plus we had to use machetes to cut through the thick flag plants so the airboat could move through. The heat was really bad too," she said. "This has been a great experience I would recommend to all students. It is very valuable being in the field, working closely with a professor in my major and seeing the opportunities available to field biologists."



Taj Anderson, a senior biology major with a pre-health concentration who will graduate in May, is analyzing the makeup of the pond apple seed and breaking it into segments to determine the possible effect on cancer cells.

"Classroom learning is much easier than working in a lab setting. You have to bring your understanding

from class, register how the material relates to your experiment and then turn it into practical use. You have to understand the information for a test but when you come to the lab things change and situations arise, requiring you to respond in the correct way," he said. "This experience has been very enriching and I am glad to have it. I wouldn't trade it."



Samantha Loutzenhiser, who will graduate in May with a bachelor's degree in biology, was responsible for collecting the bottles of groundwater for nutrient analysis by FIU and the South Florida Water Management District.

"It's great to be in the field. This is an extremely valuable learning

experience that will look great on my resume. Going out and actually doing the research has reinforced what I've learned in the classroom and made it more comprehensible," she said. "I like being outside but the morning in February we went out was horrible. It was 42 degrees and we were going 60 miles per hour on an airboat. It was so cold and the island was flooded so when we got off the boat we were freezing and in water up to our knees. It was an adventure!"



Ashley Dolberry is a senior biology major with a pre-health concentration who is going on to dental school after she graduates in May. Her responsibility is to determine whether extracts – and in what portions – from pond apple seeds have an effect on breast cancer cells. Do the extracts stop cancer cell growth, completely kill the cancer cells or have no effect?

"I've learned how to conduct a proper research project... to take care of and treat cells and do everything that matters within that realm. When you are in a classroom lab, everything is set up for you. This experiment is my own and I now see all of the hard work that goes into that. I've been very blessed to be able to do this and know that I enjoy research," she said.



Pharmacy faculty and students with children they cared for while on a medical mission trip in the Amazon.

New center of excellence focuses on sharing expertise with others about medical missions

Seven years after sponsoring its first medical mission in Ecuador, Palm Beach Atlantic University's Gregory School of Pharmacy established the Gregory Center for Medical Missions, a center of excellence for sharing its expertise in organizing and conducting medical missions across the globe.

"We want to encourage other schools to give their students the opportunity to make a difference by helping those in need of medical care," said Dr. Mary Ferrill, dean of pharmacy. "Because we have conducted more than 25 medical mission trips in 11 countries, we can give other pharmacy schools the tools so they don't have to reinvent the wheel, and they may be more likely to want to start a mission program if they don't have to start from scratch."

Dean Ferrill, who has personally been involved in the mission program for the last six years, has led trips to Belle Glade, FL, Costa Rica and Taiwan. Other faculty members, alumni and many PBA students also have answered the Lord's commandment to "Go into all the world and preach the Gospel."

"The School of Pharmacy uses Jesus Christ as a role model for medical missions," Dean Ferrill said. "We enter a country, treat those in need, and then we earn the right to be heard and preach the Gospel."

Elias Chahine, assistant professor of pharmacy practice, is one of those faculty members. He came to PBA in 2007 and immediately became involved in the medical mission program. He has traveled to Zambia, the Dominican

Republic and Brazil, experiences he drew on to write several articles and present on how to set up a medical mission program.

"I want other schools to be able to look at our program and replicate it," Dr. Chahine said. "I have received a lot of positive feedback, and other pharmacy schools have contacted me to try to do something similar."

"I want other schools to be able to look at our program and replicate it."

*Dr. Elias Chahine
Assistant Professor of Pharmacy Practice*

Tapping into the Gregory School of Pharmacy's expertise, Campbell University and Mercer University,

for example, have sent students on PBA mission trips. These students have worked alongside PBA students in activities ranging from counseling patients and filling medications to performing blood pressure screenings and helping in triage.

PBA pharmacy student Samantha Axtell said she appreciated the knowledge she acquired during a medical mission trip to Costa Rica. "The trip not only helped grow my spiritual life, but also my professional life. Being able to have the amount of hands-on experience in such a small amount of time was fantastic. As we all know, practice makes perfect, and being able to practice things over and over allowed me to grow in those areas."

Beyond the on-the-job training mission trips provide, one student in particular summed up the intangible lessons he learned.

"My experience was very enlightening and truthful at the same time," said student Jose Penaloza, who traveled to Costa Rica the summer after finishing his first year in the pharmacy program. "It was enlightening because I was able to see the immediate change that I was making since the people were very thankful and kept telling us to come more often. Truthful because I also saw how blessed I am to have the everyday necessities that I take for granted."

"The School of Pharmacy uses Jesus Christ as a role model for medical missions. We enter a country, treat those in need, and then we earn the right to be heard and preach the gospel!"

*Dr. Mary Ferrill
Dean of Pharmacy*

Two other pharmacy students, Julie Brown and Manasseh Heeralall, echoed their classmates' sentiments and expressed their desire to continue doing mission work after graduating.

"As Christians, we are commanded to go into the world and teach the gospel, to make disciples, and to minister to the poor. Those words should define us. That is what we should be doing on a daily basis, whether at home or abroad," said Heeralall, who participated in a medical mission trip to Belle Glade in 2012. "This is who we are – we are Christians."

"I would highly recommend that if anyone has mission on their heart that they strongly consider serving abroad," said Brown who served last summer in Guatemala. "God has put it in your head for a reason, and following His call is an act of obedience. You never know how He will use you, and what lives you will impact."



Pharmacy students and faculty set up a health clinic during a medical mission trip in Costa Rica.



*Assistant Professor of Pharmacy
Dr. Mariette Sourial on a medical
mission trip in Guatemala.*

Pharmacy faculty documents medical mission trips

Dr. Dana Brown and Dean Mary Ferrill. "Planning a Pharmacy-Led Medical Mission Trip, Part 1: Focus on Medication Acquisition." *Annals of Pharmacotherapy*. 46.5 (2012): 751-759.

---. "Planning a Pharmacy-Led Medical Mission Trip, Part 3: Development and Implementation of a Medical Missions Elective Rotation." *Annals of Pharmacotherapy*. 46 (2012): 1111-1114.

Dr. Dana Brown and Dr. Christine K. Yocum. "Planning a Pharmacy-Led Medical Mission Trip, Part 2: Servant Leadership and Team Dynamics." *Annals of Pharmacotherapy*. 46.6 (2012): 895-900.

Dr. Dana Brown, Dr. Jamie Fairclough, and Dean Mary Ferrill. "Planning a Pharmacy-Led Medical Mission Trip, Part 4: An Exploratory Study of Student Experiences." *Annals of Pharmacotherapy*. 46 (2012): 1250-1255.

Dr. Elias Chahine and Dr. Adwoa Nornoo. "Pharmacist Involvement in Medical Missions: Planning, Execution, and Assessment." *American Journal of Health-System Pharmacy*. 69 (2012): 636-643.

Dr. Elias Chahine. "Engaging Pharmacists and Student Pharmacists in Medical Missions." 2012 American College of Clinical Pharmacy Annual Meeting. Hollywood, FL. Oct. 22, 2012.

Bookshelf



Dean E. Randolph Richards and Brandon J. O'Brien. *Misreading Scripture with Western Eyes: Removing Cultural Blinders to Better Understand the Bible*. Downers Grove, IL: InterVarsity Press, 2012.

The book sheds light on the ways in which Western readers often misunderstand the cultural dynamics of the Bible. The authors identify nine key areas where modern Westerners have

significantly different assumptions about what might be going on in a text. Drawing on their own cross-cultural experience in global mission, the authors show how better self-awareness and understanding of cultural differences in language, time and social mores allow us to see the Bible in fresh and unexpected ways.

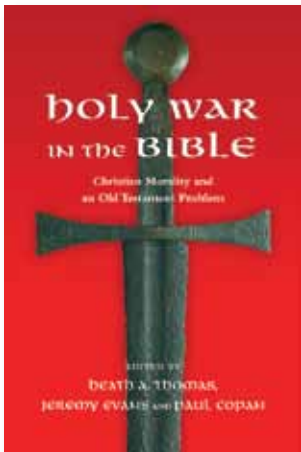


Dr. Paul Copan and William Lane Craig. *Come Let Us Reason: New Essays in Christian Apologetics*. Nashville, TN: B&H Academic, 2012.

Come Let Us Reason is the third book in a series on modern Christian apologetics that began with the popular *Passionate Conviction* and *Contending with Christianity's Critics*. The 19 essays here raise classical philosophical questions in fresh ways, address contemporary

challenges for the church, and will deepen the thinking of the next generation of apologists.

Dr. Copan wrote an essay in the book, "Does the Old Testament Endorse Slavery?"

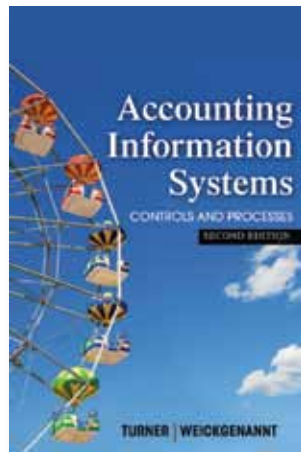


Dr. Paul Copan, Jeremy Evans and Heath Thomas. *Holy War in the Bible: Christian Morality and an Old Testament Problem*. Downers Grove, IL: InterVarsity Press, 2013.

The challenge of a seemingly genocidal God who commands ruthless warfare has bewildered Bible readers for generations. The theme of divine war is not limited to the Old Testament historical books, however.

It is also prevalent in the prophets and wisdom literature as well. Still it doesn't stop. The New Testament book of Revelation, too, is full of such imagery.

These controversial yet theologically vital issues call for thorough interpretation, especially given a long history of misinterpretation and misappropriation of these texts. This book does more, however. A range of expert contributors engage in a multidisciplinary approach that considers the issue from a variety of perspectives: biblical, ethical, philosophical and theological.

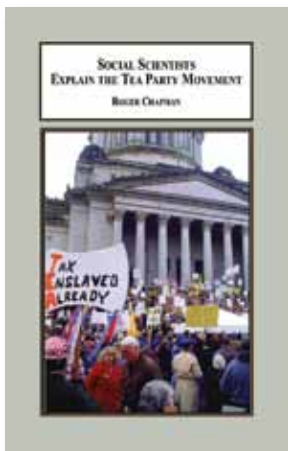


Dr. Leslie Turner and Andrea Weickgenannt. *Accounting Information Systems: Controls and Processes, Second Edition*. Hoboken, NJ: John Wiley & Sons, Inc., 2013.

This textbook is used in Accounting Information Systems courses within the accounting major. CPA exam educational requirements include accounting information systems and therefore,

nearly every undergraduate accounting degree requires this course. A total of 44 universities in the U.S. adopted the first edition of this text, and the second edition was just published. There are also international adoptions of the text, such as in Australia.

The second edition includes many updates, but the chief update is in the area of cloud computing in accounting. Cloud computing also affects the nature of the audit and the second edition includes these factors. The text also includes many real-world vignettes and many of those were updated in the second edition.



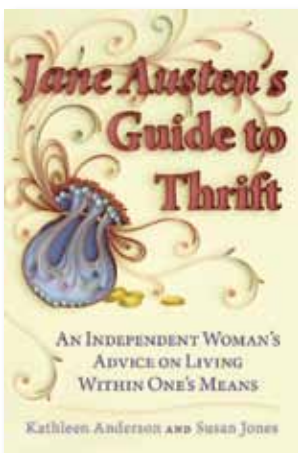
Dr. Roger Chapman. *Social Scientists Explain the Tea Party Movement: With a Selection of Primary Documents.* Lewiston, NY: Edwin Mellon Press, 2012. Online.

“The complexity of the Tea Party gives rise to a great many different analytical approaches. The variety of subtopics is numerous. This collection of essays, supplemented by a documents section, provides a beginning point of reference for future

academic studies of this very interesting development in American politics.” Forward. Dr. John Calhoun, Palm Beach Atlantic University.

The assembled essays focus on historiography (critiquing the Tea Party’s use/misuse of history as it self-identifies with the nation’s founders and constitutional originalism) and religion (considering, for instance, civil religion). In addition, the volume addresses the Tea Party with respect to media bias, race, the natural environment, and collective bargaining. The 10 contributors include academics and independent scholars.

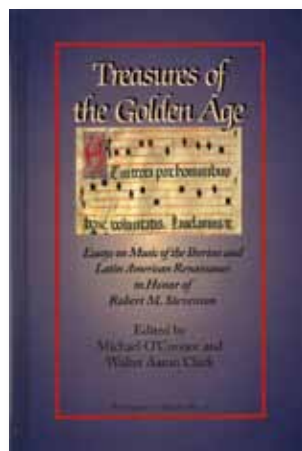
Dr. Chapman wrote two chapters in the book: “Not Exactly an American Cup of Tea: The Foreign Context of the Nativist Movement Known as the Tea Party,” and “Sarah Palin’s Nature: The Tea Party and Environmentalism.”



Dr. Kathleen Anderson and Dr. Susan Jones. *Jane Austen’s Guide to Thrift: An Independent Woman’s Advice on Living Within One’s Means.* New York, Berkley Publishing Group. 2013.

Jane Austen knew well that wealth and grandeur had little to do with happiness, and that fashionable new dresses and reticules were simply not the path to fulfillment, especially if one accrues debt in

the process. It’s as true today as it was then. Using the timeless example of Austen’s heroines, *Jane Austen’s Guide to Thrift* shows how to live a life of elegant economy and joyful generosity on any budget.

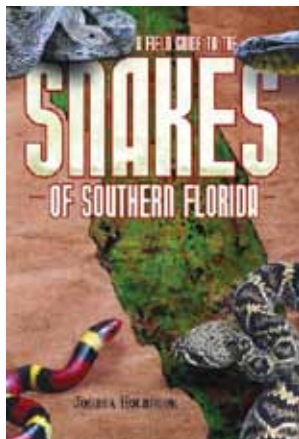


Dr. Michael O’Connor and Walter Aaron Clark. *Treasures of the Golden Age: Essays in Honor of Robert M. Stevenson.* Hillsdale, NY: Pendragon Press, 2012.

Treasures of the Golden Age is a collection of new scholarship by some of the most recognized scholars in Hispanic and Portuguese early-modern music studies. Each essay was written in honor of and appreciation for the pioneering work

of Robert M. Stevenson in the area of Iberian and Latin American Renaissance music. Stevenson’s constant advocacy for this music and his formidable work are clearly evident in the topics and rigor of the essays presented in the book.

In addition to editing, Dr. O’Connor wrote a chapter, “The Polyphonic Marian Antiphon in Renaissance Spain.”



Joshua David Holbrook '09. *A Field Guide to the Snakes of Southern Florida.* Rodeo, NM: ECO Herpetological Publishing and Distribution, 2012.

This guide for reptile and amphibian enthusiasts, amateur naturalists, professional biologists, and visitors to southern Florida’s diverse natural areas contains descriptions of each native snake species as well as all known

established exotic species. It contains a fool-proof key to identifying all of Florida’s native snakes and has tips on finding snakes in Florida.

Joshua collected the photos and wrote the text as an undergraduate at PBA for his biology senior research course. He had a student Quality Initiative Research Grant to support the effort, which allowed him to pursue and observe many snakes in the wild in Florida, and photograph them in their native habitats. He is currently a graduate student pursuing a master’s degree in environmental science, researching aquatic reptile and amphibian ecology.

Quantum Grant brings science to life for middle schoolers

Launching pumpkins and making clouds in a bottle may not sound like typical activities for 11-, 12- and 13-year-olds, but at Conniston Middle School in West Palm Beach, FL, that's exactly what students are experiencing in their science classes. Because of a three-year, \$175,000 grant awarded to Palm Beach Atlantic University from Quantum Foundation, laboratory modules such as these are being introduced to illustrate the everyday applications of science to young people.

A team of PBA faculty from various disciplines is working with science teachers at nearby Conniston in an innovative and collaborative project designed to ultimately stimulate students' interest and success in Science, Technology, Engineering and Math (STEM) through fun, hands-on, unconventional activities. The project is expected to reach all 1,100 students at the school by the end of the third year.

"We're excited about what we believe will be a true shift in paradigm in the way middle-school students think about science as our program unfolds," said the project director, PBA Assistant Professor of Chemistry Dr. Mireille Aleman. "We hope to change attitudes and foster a newfound love of the subject... and show students they can be very successful in the field of science."

Dr. Aleman is working with other PBA faculty who include Dr. Chelly Templeton, associate professor of education; Jim Swick, assistant professor of mathematics; Dr. Fred Browning, associate professor of physics; Dr. Jim Craft, associate professor of art; and Dr. Marsha Guntharp, associate professor of mathematics.

Dr. Aleman explained that the grant is helping the University develop and implement the Center for Integrative Science Learning, which will oversee the five-tier project, encompassing:

1) Hands-on laboratory modules. PBA professors, Dr. Linda Sedlacek (earth sciences), Dr. Sanaz Dovell

(chemistry) and Dr. Browning (physics), already have contributed to and written modules that are being introduced in Conniston classrooms as pilot labs. Once evaluated, the modules will be used school-wide.

Varsha Dabiesingh, Conniston science teacher and department instructional leader, expressed that the labs are a critical step in changing student attitudes. "Our students have a perception that science has no use in their lives. We hope to increase their enthusiasm because of cool labs. With PBA faculty we are brainstorming these innovative ideas that will also help us meet state benchmarks."

2) After-school programs. For example, through Conniston's Stewards for the Environment Club, PBA Associate Professor of Biology Tom Chesnes, an expert in sea grasses and estuaries, is taking students on field trips to Snook Island to learn about the restoration project in Lake Worth Lagoon.

3) Continuing education and training for teachers through a summer institute. Two three-day sessions will be held to train and collect feedback from Conniston teachers on the new lab modules.

4) Community events for parents. By drawing parents in for events such as FCAT Family Night, Dr. Aleman believes parents will learn more about how to support their children at home.

5) Fun school assemblies. One featured a flying pumpkin project and another a post-FCAT bash themed "The Mother of All Games Shows."

While Dr. Aleman believes this multi-faceted approach that reaches from school to home is critical, Dabiesingh also emphasizes the success of the program will be a direct result of how well students relate to it. "Our kids need to see the real-world applications. Science is not mundane. Students need to feel it with their hands and get an understanding of how it plays a role in their everyday lives," she said. "That's what we are trying to accomplish here."

All components of the program will be evaluated by Quantum and PBA to determine their effect on student attitudes about science and test scores. When the project is complete, curriculum and best practices will be shared with the School District of Palm Beach County.

"Quantum Foundation's grant to PBA touches on all the areas of our science education plan – it engages students, it enlivens the curriculum and it gives new tools to teachers," said Quantum Foundation President Kerry Diaz. "A program like this brings science to life for middle-school students; it's at the forefront of where our community is going to reach these young minds."



Conniston students use a giant slingshot and pumpkins to test scientific and mathematical theories.

Grants support faculty and student research

The University's Office of Institutional Research and Effectiveness has awarded \$47,000 in Quality Initiative (QI) Grants in 2012-2013.

2012 QI Grants

- **Dr. Mireille Aleman**, Assistant Professor, School of Arts and Sciences with **Josh Gradwhol**, junior, biology major. *Integrative Approach to Science Learning: from STEM to STEAM.*
- **Chelsea Bugg**, senior, biology major; and **Maira Gaffar**, senior, biology major. *Effects of Cardamom oil on p53 levels in MCF-7 and MDA-MB-231 Breast Cancer Cell Lines in vitro.*
- **Dr. Roger Chapman**, Associate Professor, School of Arts and Sciences. *American Isolationism and Anticommunism: Selling the Marshall Plan to the Midwest and West.*
- **Dr. Tom Chesnes**, Associate Professor, School of Arts and Sciences. *Benthic Secondary Productivity of Seagrass Communities in Lake Worth Cove, Lake Worth Lagoon, Palm Beach County, FL.*
- **Dr. David Compton**, Professor, School of Education and Behavioral Studies. *Effects of adolescent exposure of Mitragnine from Mitragnya speciosa Korth on Cognitive Function in Adult Rats.*
- **Dr. Jamie Fairclough**, Assistant Professor, Gregory School of Pharmacy with **Janelle Ludwig**, pharmacy major. *Moderators and Predictors of Stress and Depressive Symptomatology among Student Pharmacists: A Second-phase, Multi-Methodological Approach.*
- **Dr. Jonathan Grenz**, Associate Professor, School of Ministry. *Factors Influencing Regular Attending in Student Ministry Activities.*
- **Professor Tyler Hamilton**, Assistant Professor, School of Education and Behavioral Studies. *Cardiac Emergencies in Sports Medicine.*
- **Dr. Craig Hanson**, Associate Professor, School of Arts and Sciences. *Rationality and Future Discounting.*
- **Dr. Lee Prescott**, Associate Professor, School of Arts and Sciences. *"If I Should Forget Thee, O Jerusalem": Going to the Source—Israel.*
- **Dr. Olga Rybalkina** Assistant Professor, School of Education and Behavioral Studies, and **Dr. Andrea Dyben**, Assistant Professor, Orlando Campus. *Experiential Learning Abroad as a Part of Graduate Counselor Education.*
- **Dr. Peggy VanArman**, Professor, School of Arts and Sciences with **Katherine Harvey**, junior, biology major; **Samantha Loutzenhiser**, junior, biology major; and **Luke Young**, junior, biology major. *Torry Island Study: Nutrients in Leaves, Soil, and Water of Annona Glabra Swamps in Relation to Everglades Restoration.*
- **Dr. Steve Zombory**, Associate Professor, School of Education and Behavioral Studies. *Environmental Engagement and the Contours of Wisdom.*

2012-2013 QI Grants

- **Dr. Mireille Aleman**, Assistant Professor, School of Arts and Sciences, with **Ashley Dolberry**, senior biology major, *Cytotoxicity of Annona Glabra (Pond Apple) Crude Extracts on Breast Cancer Cells.*
- **Dr. Sanaz Dovell**, Assistant Professor, School of Arts and Sciences, with **Taj Anderson**, junior biology major, *Isolation and Purification of Anticancer Components of Crude Extracts From Annona Glabra (Pond Apple) Seeds.*
- **Dr. Keysha Bryant**, Assistant Professor, Gregory School of Pharmacy, and **Dr. Carmela Nanton**, Professor, MacArthur School of Leadership, *Are We Measuring Up? Needs Assessment of Leadership in Pharmacy.*
- **Dr. Yuh Jia (Mike) Chen**, Professor, Rinker School of Business, *The Relationships Among Students' Christian Values, Money Attitudes, and Unethical Behavior: Do the Cultural Factors Matter?*
- **Dr. Ashley Johnson**, Assistant Professor, Gregory School of Pharmacy, *Identifying Medication Discrepancies in an Indigent Ambulatory Care Clinic.*
- **Dr. James Mitroka**, Associate Professor, Gregory School of Pharmacy, *CYP1A2 Genotype and Phenotype Analysis in a Cohort of Pharmacy Students.*
- **Diane Kimball Parker**, Orlando graduate student, mental health counseling, *Parent-Adolescent Relationship Therapy: "Returning the Hearts of the Fathers to Their Children."*

2013 QI Grants

- **Dr. Wesley Borucki**, Assistant Professor, School of Arts and Sciences, *Ronald Reagan: The Counterrevolution's Leading Man.*
- **Peter Bowen**, junior history major, *The Fountain of Youth: Myth and the Founding of Spanish Florida.*
- **Jessica Carmean**, Orlando graduate student, *Fostering Attachment through Sandtray Therapy: Helping Adoptees Find Hope.*
- **Dr. Elias Chahine**, Assistant Professor, Gregory School of Pharmacy, *Evaluating an Elective Learning Experience in Pharmacy-Led Medical Missions for Pharmacy Residents.*
- **Dr. Roger Chapman**, Associate Professor, School of Arts and Sciences, *Nuclear Weapons and Our Globalizing Century: A Multidisciplinary Challenge for the Christian Academy.*
- **Dr. Tom Chesnes**, Associate Professor, School of Arts and Sciences, *Effectiveness of Aquatic Traps on the Collection of the Semi-Aquatic Mangrove Saltmarsh Snake, Nerodia Clarkia Compressicauda with Hannah Boss*, junior biology major.

- **Dr. David Compton**, Professor, School of Education and Behavioral Studies, *An Examination of the Effects of Agmatine on Neurological and Behavioral Function In Middle-Age and Senescent Sprague-Dawley Rats.*
- **Dr. Vic Copan**, Associate Professor, School of Ministry, *Research and Writing a Spiritual Formation Textbook.*
- **Dr. Matt DellaVecchia**, Assistant Professor, Gregory School of Pharmacy, *Assessing the Impact of a Pharmacy Student-led Class Project on Undergraduate Students in a Medicinal Chemistry Course with Aylssa Claudio*, pharmacy student.
- **Dr. Kathleen Klein**, Associate Professor, School of Music and Fine Arts, *State of the Arts in the 21st Century: A Snapshot of Dance Communities in the Northeast, the Southeast, the Midwest, the Northwest and the Southwest regions.*
- **Dr. Ann Langlois**, Associate Professor, Rinker School of Business, *Progress of Female Empowerment through Self Help Groups in Chennai, India with Toma Sakurai*, junior international business major.
- **Dr. Adwoa Nornoo**, Associate Professor, Gregory School of Pharmacy, *Cytotoxicity of Paclitaxel and Vinorelbine Microemulsions when Combined with Nutraceuticals in a Cancer Cell Line.*
- **Stephen Rineer**, junior biology major, *Molecular Analysis of Pond Apple's Anti-Cancer Effects on Breast Cancer Cell Lines.*
- **Dr. Marile Santamarina**, Assistant Professor, Gregory School of Pharmacy, *Developing Empathy and Comprehensive Patient Care amongst Health Care Professionals.*
- **Chris Schiel**, pharmacy student, *Student Pharmacists' Knowledge and Perceptions of Managed Care Pharmacy.*
- **Dr. Linda Sedlacek**, Assistant Professor, School of Arts and Sciences, *Children Eat their Parents? Documenting the Conditions Leading to Crustacean Young Eating their Parents.*
- **Dr. Mariette Sourial**, Assistant Professor, Gregory School of Pharmacy, *Improving High-Risk Patients' Medication Experience Across the Continuum of Care through Interprofessional Education in a Rural Community.*
- **Dr. Sandra Szegedi**, Assistant Professor, School of Arts and Sciences, *Dimerization Dilemma: Does RsrI DNA Methyltransferase Bind and Methylate DNA as a Dimeric or Monomeric Enzyme?*
- **Dr. Peggy VanArman**, Professor, School of Arts and Sciences, *Nutrients (C, N, P) in leaves of pond apple (Annona glabra) and surrounding soil, and water in a cypress-pond apple swamp in the Arthur R. Marshall Loxahatchee National Wildlife Refuge, (LNWR), Boynton Beach, FL, with Keegan Baldock*, sophomore medicinal and biological major; **Isabelle George**, sophomore biology major; and **Kyle Holly**, freshman biology major.

Publications and Presentations 2012 - 2013

Books

Dr. Stephanie Bennett. *Within the Walls: A 21st Century Tale of Love and Technology.* Leland, NC: Wild Flower Press, 2012.

Dr. Paul Copan. *Will the Real Jesus Please Stand Up?* translated into Portuguese: *O Jesus Dos Evangelhos Mito Ou Realidade?* Sao Paolo, Brazil: Vida Nova, 2012.

Dr. Paul Copan and Chad Meister. *The Routledge Companion to Philosophy of Religion, Second Edition.* London: Routledge, 2012.

Dr. Linda Ellington. *Wetlee and Friend.* Charleston, SC: CreateSpace Inc., 2012.

Dr. Nicholas Palmieri. *Strength Transformation for Marriage.* Jacksonville, FL: CreateSpace Inc., 2012.

Chapters in Books

Dr. Terriel Byrd and Dr. Olga Rybalkina. "Biblical Multiculturalism: Moving Forward in Deed and in Truth." *The Christian College Phenomenon: Inside America's Fastest Growing Institutions of Higher Learning.* Eds. Samuel Joeckel and Thomas Chesnes. Abilene, TX: Abilene Christian University Press, 2012. 221-231.

Dr. Paul Copan. "A Protestant Perspective on Human Dignity." *Human Dignity in Bioethics: From Worldviews to the Public Square.* Eds. Stephen C. Dilley and Nathan J. Palant. London: Routledge, 2013. 67-85.

---. "Bioethics." *The Routledge Companion to Theism.* Eds. Charles Taliaferro, et al. London: Routledge, 2013. 515-527.

---. "Ethics Needs God." *Debating Christian Theism.* Eds. J.P. Moreland, et al. Oxford: Oxford University Press, 2013.

---. "Evil and Primeval Sin: How Evil Emerged in a Very Good Creation," and "Evil and Original Sin." *God and Evil: The Case for God in a World Filled with Pain.* Eds. Chad V. Meister and Jamie Dew. Downers Grove, IL: InterVarsity Press, 2013. 109-123, and 124-137.

---. "Grounding Human Rights: Naturalism's Failure and Biblical Theism's Success." *Legitimizing Human Rights.* Ed. Agnus Menuge. Burlington, VT: Ashgate, 2013.

---. "Why the World Is Not Religiously Ambiguous: A Critique of Religious Pluralism." *Can Only One Religion Be True?* Ed. Robert Stewart. Minneapolis, MN: Fortress Press, 2013. 139-162.

---. "The Naturalists Are Declaring the Glory of God: Discovering Natural Theology in the Unlikeliest Places." *Philosophy and the Christian Worldview: Analysis, Assessment and Development.* Eds. David Werther and Mark D. Linville. New York: Continuum, 2012. 50-70.

---. and Matthew Flannagan. "Does the Bible Condone Genocide?" *In Defense of the Bible.* Ed. Steven Cowan. Nashville, TN: B&H Academic, 2013.

Dr. Linda Ellington. "Chapter 8: Development and Sustainability for Learning Societies." *Handbook of Research on Technologies for Improving the 21st Century Workforce: Tools for Lifelong Learning.* Ed. Victor Wang. Hershey, PA: IGI Global Publishing, 2012. 110-121.

Dr. Seena Haines. "Chapter 104: Ambulatory Care Pharmacy Practice." *Remington: The Science and Practice of Pharmacy, 22nd Edition.* Ed. Pharmaceutical Press. Philadelphia, PA: University of Sciences in Philadelphia, 2013. 2523-2539.

Dr. Phil Henry. "The Power of Christ in Transforming Unwanted Homosexual Behavior and Attractions." *When God Steps In.* Downers Grove, IL: InterVarsity Press, 2013.

Dr. Wes Jamison. "Animal Rights and Sports." *The Berkshire Encyclopedia of World Sport, Third Edition.* Eds. David Levinson and Gertrud Pfister. Great Barrington, MA: Berkshire Publishing Group, 2013.

Dr. Michael O'Connor. "Juan de Esquivel's 'Ave Maris Stella' (a4): Observations on the Spanish Polyphonic Hymn Repertory." *Pure Gold: Essays in Honor of Bruno Turner.* Eds. Tess Knighton and Bernadette Nelson. Kassel: Reichenberger Editions, 2011. 153-166.

---. "An Immaculate Deception?: Emulation and Religious Politics in Juan de Esquivel's *Ave Maria Domini mei mater*." "Hands-On" *Musicology: Essays in Honor of Jeffery Kite-Powell.* Ed. Allen Scott. Ann Arbor, MI: Steglein, 2012. 137-145.

Dr. Francisco Plaza. "Mesianismo Político y Democracia Procedimental: Nuevos Enemigos de la Libertad en América Latina." *Caminos de la Libertad.* Ed. Sergio Sarmiento. Mexico: Fomento Cultural Grupo Salinas, 2012. 306-325.

---. "Prologue." *La Democracia del Siglo XXI y el Final de los Estados.* Asdrubal Aguiar. Mexico: Observatorio Iberoamericano de la Democracia, 2012. 11-17.

Dean E. Randolph Richards. "Pauline Prescripts and Greco-Roman Epistolary Convention." *Christian Origins and Greco-Roman Culture: Social and Literary Contexts for the New Testament.* Eds. Stanley Porter and Andrew Pitts. The New Testament in its Hellenistic Context Series, 1. Leiden: Brill, 2012. 497-514.

Journal Articles, Poems and Other Original Works

Dr. Kathleen Anderson and Christina Ibanez Unkel '08. " '...let him succeed at last, Fanny': Edmund Bertram as Henry Crawford's Double in Jane Austen's *Mansfield Park*." *Sensibilities: the Journal of the Jane Austen Society of Australia.* (June 2013)

---. "From Powerlifter to Powerless: How Physical Debility Strengthened my Reliance on God." *Christianity Today.* 56.5 (May 2012): 32-35.

Dr. Joshua Avery. "Falstaff's Conscience and Protestant Thought in Shakespeare's Second *Henriad*." *Renascence.* 65.2 (2013): 79-90.

Dr. Cora Barnhart and Gerald Dwyer. "Returns to Investors in Stocks in New Industries." *Economic Inquiry.* 50.4 (Oct. 2012): 1031-1049.

Dr. Stephanie Bennett. "Encountering Ellul." *International Jacques Ellul Society. The Ellul Forum.* 50 (Nov. 2012): 4.

Professor Denise Breitkreuz and Christopher M. Safficii. "Coaching: It's All About Communication." *Florida Alliance For Health, Physical Education, Dance & Sport.* 50.1 (Spring 2012): 20-21.

Dr. Christine Brooks and **Professor Lynn Erickson.** "What is the Solution for Clinical Nurse Educators and the Electronic Medical Record?" *Teaching and Learning in Nursing.* 7.4 (Oct. 2012): 129-132.

Dr. Roger Chapman. "The Lion, the Witch and the Cold War: Political Meanings in the Religious Writings of C.S. Lewis." *Journal of Religion and Popular Culture.* 24.1 (Spring 2012): 1-14.

---. "Review of *Prescription for Heterosexuality: Sexual Citizenship in the Cold War Era*, by Carolyn Herbst Lewis." *The Historian.* 74.1 (2012): 116-117.

---. "Review of *Bolivia's Radical Tradition: Permanent Revolution in the Andes*, by S. Sándor John." *Labor History.* 53.4 (2012): 583-584.

Dr. David Compton, Melissa Selinger, and Peter Otero. "Modification of Serial Pattern Learning by Designer Tryptamine Exposure during Adolescence: Comparison with Damage to the Dorsal Hippocampus or Prefrontal Cortex." *International Journal of Psychology and Behavioral Sciences.* 2.6 (2012): 263-273.

Dr. Elias Chahine and Dr. Steven Mayberry. "Update on the Treatment and Prevention of Community-acquired Pneumonia in Children." *U.S. Pharmacist.* 37 (2012): HS-12-HS-15.

L.R. Karaoui, R. El-Lababidi R, **Dr. Elias Chahine.** "Oritavancin: An Investigational Lipoglycopeptide Antibiotic." *American Journal of Health-System Pharmacy.* 70 (2013): 23-33.

Dr. Elias Chahine, A.N. Johnson, and M.S. Mayberry. "Update on the Treatment and Prevention of MRSA Infections." *U.S. Pharmacist.* 37.8 (2012): 61-70.

Dr. Elias Chahine, Dr. Mariette Sourial, and J. Scales. "Role of the Pharmacist in the Management of Adults with Pulmonary Tuberculosis." *U.S. Pharmacist.* 37.7 (2012): HS 2-6.

Dr. Paul Copan. "If God's Creation Was 'Very Good,' How Could Evil Arise?" *Enrichment Journal*. (Winter 2013): 24-28.

---. "Richard Dawkins, Naturalism, and God's Goodness." *Dialogue* (UK). 39 (Nov. 2012): 33-37.

Professor Tim Eichner. Logo for First Baptist Church of Wellington. 2012. Digital file.

---. Logo for Impact FC, a proposed soccer outreach ministry at Christ Fellowship Church. 2012. Digital file.

Dr. Linda Ellington. "Select Learning Organizations?" *International Journal of Adult Vocational Education and Technology* (IJAVET). 3.2 (April-June 2012): 1-9.

D. L. Matthews, J. Y. Miller, M. J. Simon and **Dr. Gary Goss.** "Observations of Plume Moths on North Andros Island, Bahamas, and Notes on New Records and Species Previously Recorded from the Bahamas (Lepidoptera: Pterophoridae)." *Insecta Mundi*. 2012. 0236: 1-12.

Dr. Seena Haines. "Establishing a Measurement Framework for Multiple Chronic Conditions." National Quality Forum (NQF). Online.

Dr. Seena Haines and J. Van Amburgh. "Think for Yourself, Talk To Others: Use of Discussion Protocols." American Association of Colleges of Pharmacy/Self-Care Therapeutics-Non Prescription Medicine Newsletter. 3.1 (May 2012): 2-3.

A.J. Flynn, **Dr. Seena Haines.** "Pharmacists Requirement for Continuity of the Clinical Narrative Continuity in the Electronic Medical Record." *American Journal of Health-System Pharmacy*. 69. (2012): 1027-1029.

Dr. Seena Haines, J. Van Amburgh, P. Stamm, C. Johnson, J. Buxton. "Entry-Level Competencies Needed for Ambulatory Care Practices." *ASHP Guidelines: Minimum Standard for Pharmaceutical Services in Ambulatory Care*. American Society of Health-System Pharmacists. Online.

Dr. Amy Henneman and **Dr. Krisy-Ann Thornby.** "Concomitant Use of Calcium-Channel Blockers and Macrolide Antibiotics: A Potential Increase in the Risk of Clinically Significant Hypotension." *American Journal of Health-System Pharmacy*. 69 (2012): 1038-1043.

Professor David Jacobs and the PBA Brass Quintet. *We Proclaim*. Grace Immanuel Bible Church. Ekklesia Music, Dec. 16, 2011. CD.

Dr. Art Johnson. "Underappreciated Value of Informal Leaders in Organizational Change Initiatives." *Journal of Organizational Leadership, Change, and Talent Development*. Best Practices Institute. West Palm Beach, FL. June 2012.

Dr. Ann Langlois and **Dr. Ed Langlois.** "Marketing a United States Multinational Brand in the United Arab Emirates." *Journal of Marketing Development and Competitiveness*. 6.5 (2012): 115-122.

Dr. Velma Lee. "Toward Learning and Knowledge Creation: Operationalising the Social Learning Cycle." *Journal of General Management*. 37.4 (2012): 29-53.

Dr. Michael O'Connor and D. Hedwig. *The Coates Brass Band: Quickstep: Brass Band Music of the American Civil War, featuring the Music of Thomas Coates*. (program notes by Michael O'Connor). MSR Classics, 2012. CD.

Dr. Mara Poulakos, Dr. Yasmin Grace, C. Coakley. "Probable Linezolid-Induced Thrombocytopenia in a Patient with Vancomycin-Resistant Enterococci." *Journal of Pharmacy Practice*. (2012): Online.

Dean E. Randolph Richards. "A Critical Evaluation of Bruce Longenecker's *Remember the Poor: Paul, Poverty, and the Greco-Roman World*." *Journal of the Evangelical Theological Society*. (2012): 430-433.

Professor Alex Wainer. "Creating a Conservative Counterculture: Harder Than It Sounds." *breakpoint.org*. (2013): Online.

---. "Life, the Universe and a Texas Everyfamily: Terrence Malick's *The Tree of Life*." *breakpoint.org*. (2012): Online.

Dr. Raymond E. Waldner. "Redfish Hot Spots." Fish Facts, *Sport Fishing*. Mar. 2013: 20.

---. "Great Grouper Migrations." *Sport Fishing Magazine*. Feb. 2013: Online.

---. "Bloodhounds of the Skies." Fish Facts, *Sport Fishing*. Feb. 2013: 20.

---. "A mini Mae West in the Surf." Fish Facts, *Sport Fishing*. Nov.-Dec. 2012: 25.

---. "Bizarre Bahamas Catch," and "Florida's Tiny Africans." Fish Facts, *Sport Fishing*. Oct. 2012: 18 and 21.

---. "No-blarney: It's an Irish Pompano." Fish Facts, *Sport Fishing*. Aug. 2012: 20.

Professor Marlene Woodward Cooper. *Toccata*. Commissioned by The International Certificate of Piano Artists, Palm Beach Atlantic International Piano Festival. Feb. 2012. Frontwave New Music Festival. Palm Beach Atlantic University. Mar. 2012.

Presentations

Dr. Kathleen Anderson. "Jane Austen. Need We Say More?" Palm Beach Branch of the English-Speaking Union. Palm Beach, FL. Mar. 26, 2013.

Dr. Karelynne Ayayo. "Magical Expectations and the Two-Stage Healing of Mark 8." Evangelical Theological Society Annual Meeting. Milwaukee, WI. Nov. 15, 2012.

Dean Steven Baker. "Henry Jessey's Scripture Almanac: Calendaring the 'restitution of all things' in Revolutionary England." Interdisciplinary Research Conference. Palm Beach Atlantic University. West Palm Beach, FL. Mar. 21, 2012.

Dr. Stephanie Bennett. "Human Presence and the Problem of Communication: Seeking an Ethics of Dialogue in the Virtual Church." [RCA Panel] *Against Media Oppression: Jacques Ellul on Subversive Presence and Transformative Action*. Media Ecology Association. National Communication Association. Orlando, FL. Nov. 15, 2012.

---. "Voices Crying Out in the Wilderness: Ellul's Dialogic Morality in the Simple Church Movement to the Tech-Savvy Worshipers of Cyberspace." National Communication Association. Wheaton, IL. July 9, 2012.

---. "The Presence of the Kingdom Online: Exploring the Virtual Church in Light of Jacques Ellul's Techno-Religious Discourse." Jacques Ellul Centenary Conference. Wheaton College. Wheaton, IL. July 9, 2012.

---. "Recovering the Voice of God in a Hyper-Mediated Environment: From Desert Spirituality to the Tech-Savvy Worshipers of Cyberspace." Media Ecology Association Convention. Manhattan College. New York. June 9, 2012.

Dr. John Calhoun. "The American Electoral System and the Elections of 2012." Center for the Study of American Elections, Department of Political Science, University of Havana. Havana, Cuba. June, 2012.

Dr. Elias Chahine. "*Clostridium difficile* Infection: From Diagnosis to Evolving Treatments." FL-ASCP Senior Care 2013 Conference and Exhibition. Tampa, FL. April 14, 2013.

---. "Bugs and Drugs Refresher." Broward County Pharmacy Association. Davie, FL. Feb. 12, 2013.

---. "Numb Toes and Other Woes," and "The Pharmacist's Role in Managing Acute and Chronic Pain." Florida Pharmacy Association Pain Management Conference. Miramar Beach, FL. Jan. 26, 2013.

---. "Infectious Diseases at Sea. Part 1: Practice Guidelines for Implementing Antimicrobial Stewardship Programs," "Infectious Diseases at Sea. Part 2: The Pharmacist's Role in Managing MRSA Infections," "Infectious Diseases at Sea. Part 3: *Clostridium difficile* Infection: A Primer for Pharmacists and Technicians," and "Infectious Diseases at Sea. Part 4: Pharmacy-Based Immunization Delivery: Focus on Influenza, Pneumococcal, and Shingles." Southeast Society of Health-System Pharmacists CE at Sea. Nassau, The Bahamas. Jan. 19-20, 2013.

---. "Sexually Transmitted Diseases: A Primer for Pharmacists and Technicians," and "The Pharmacist's Role in Managing *Clostridium difficile* Infection." Florida Pharmacy Association Infectious Disease Conference. Orlando, FL. Oct. 20, 2012.

---. "Pharmacy-based Immunization Delivery: Focus on Influenza, Pneumococcal, and Shingles." Palm Beach County Pharmacy Association. West Palm Beach, FL. Sept. 19, 2012.

---. "The Pharmacist's Role in Managing Acute and Chronic Pain." Florida Pharmacy Association Pain Management Conference. Dania Beach, FL. Sept. 9, 2012.

J. Rey, S. Gelot, S. Kelley, and **Dr. Elias Chahine**. "Know Pain, Know Gain: Pharmacy Patient Pain Counseling Competition." Florida Pharmacy Association Pain Management Conference. Dania Beach, FL. Sept. 8, 2012.

Dr. Elias Chahine and **Dr. Marile Santamarina**. "APhA Pharmacy-based Immunization Delivery: A National Certificate Program." AmerisourceBergens Corporation. Lantana, FL. Aug. 25, 2012.

Dr. Roger Chapman. "Read This Book and Become a Member of Delta Force or the SEALs: Warrior Memoirs and the Vicarious Pleasure of Hunting Osama Bin Laden." Annual National Conference of the Popular Culture Association/American Culture Association. Washington, D.C. Mar. 29, 2013.

Dr. Tom Chesnes. "Under the Boardwalk: Submerged Biodiversity of the Lake Worth Cove Estuary." Palm Beach Pack and Paddle Club Lecture Series. West Palm Beach, FL. Jan. 14, 2013.

Timothy Gauthier, Jennifer Steinberg, Antonia Zapantis, Laura Smith, Elizabeth Shepherd, **Dr. Angela Clauson**. "Advanced Pharmacy Practice Student Participation Within Antimicrobial Stewardship Activities." AACP Annual Meeting. Orlando, FL. July 15-18, 2012. Poster.

Dr. Paul Copan. "God and Morality." Samford University Convocation. Birmingham, AL. April 18, 2013.

---. "Neo-Atheism and Old Testament Ethics" and "Neo-Marcionism and Old Testament Ethics." Evangelical Theological Society Southwest Regional Meeting. Dallas, TX. Mar. 1-2, 2013.

---. "Faith and Science" and "Genesis and Science." Defend the Faith Conference. New Orleans Baptist Seminary. New Orleans, LA. Jan. 11-12, 2013.

---. "An Acts to Grind with Contemporary Culture: Apologetics, Worldviews, and the Relevance of Paul's Mars Hill Speech." Evangelical Philosophical Society Annual Meeting. Milwaukee, WI. Nov. 16, 2012.

---. "Truth, Freedom, and Social Constructions: Why Truth-seeking Ought To Guide Scientific Research." NARTH Annual Conference. Orlando, FL. Nov. 2, 2012.

---. "Truth and Tolerance." Apologetics Conference. Columbia, CT. Oct. 27, 2012.

---. "Is God a Moral Monster?" Credo House. Edmond, OK. Oct. 5, 2012.

Dr. Victor Copan. "Approaches to Mentoring." Overflow Mentoring Network. Palm Beach Atlantic University. West Palm Beach, FL. Jan. 22, 2013.

---. "Creational Allusions in Romans 8:18-27 and their Interpretive Significance for Understanding Verses 28-39." Evangelical Theological Society. Milwaukee, WI. Nov. 18, 2012.

---. "In God We Trust: Glaube und Politik in den USA" ("Faith and Politics in the USA."). Evangeliumsundfunk, Austria. Vienna, Austria. June 25, 2012. Interview.

Dr. Tom Dodson. "Career Development: A Unifying Bridge Opportunity for NCDA, ACES, ASCA." National Career Development Association (NCDA) Global Conference. Atlanta, GA. June 2012.

Dr. Tom Dodson, K. Glavin, J. Goodman, and T. Lara. "Career Development Training and Practice: Current, Future and Projections." National Career Development Association (NCDA) Global Conference. Atlanta, GA. June 2012.

Dean Craig Domeck. "Emotional Intelligence and Effective Teaching." Christian Adult Higher Education Association Annual Conference. Nashville, TN. Aug. 1, 2012.

Professor Carl Donner. "Making Developmental English Work for Adult Students." CAHEA Conference. Nashville, TN. Aug. 2, 2012.

Dr. Judith Drumm. "The Student's Experience of Learning Caring." 33rd International Association for Human Caring Conference. Philadelphia, PA. June 2, 2012.

Dr. Andrea Dyben. "Assessing the Current Response to the Psychosocial Needs of Adolescents with CF." North American Cystic Fibrosis Conference. Orlando, FL. Oct. 11, 2012.

Dr. Jenifer Elmore. "Emancipation Through Ritual, Then Reality: The Reversal of the Curse of Ham in *Huckleberry Finn*." Southern American Studies Association Annual Conference. Charleston, SC. Feb. 1, 2013.

Professor Diane Esposito. "The Relationship Between Risk Factors and Stress Response in Women after Elective Abortion." American Psychiatric Nurses Association 26th Annual Conference. Pittsburg, PA. Nov. 9, 2012. Poster.

Dr. Marsha Guntharp. "Use Nspire to Create a Video Using Mathematical Equations." Teachers Teaching with Technology Annual International Conference. Philadelphia, PA. Mar. 9, 2013.

---. "A New Twist on the Box Problem." Florida Council of Teachers of Mathematics Annual Conference. Orlando, FL. Oct. 19, 2012.

Dr. Marsha Guntharp and **Dr. Fred Browning**. "Parabolas in the Real World ... New Looks at Old Problems." Teachers Teaching with Technology Annual International Conference. Philadelphia, PA. Mar. 8, 2013.

Dr. Seena Haines. "Active Learning Three-day Workshop: Course Planning, Active Learning, and Assessment Methods." Princess Nora University. Riyadh, Saudi Arabia. Mar. 2013.

---. "CYP1A2 Genotype and Phenotype Analysis in a Cohort of Pharmacy Students as a Model for Teaching Pharmacogenomics." American Society of Health-System Pharmacy. Las Vegas, NV. Dec. 5, 2012. Poster.

---. "Impact of a Standardized Medication Reconciliation Form and a Bring-Your-Medicines Campaign on Medication Discrepancies in an Indigent Ambulatory Care Setting." American Society of Health-System Pharmacy. Las Vegas, NV. Dec. 5, 2012. Poster.

---. "Developing Ambulatory Care Clinical Services: Financial Incentives and Service Value." American Society of Health-System Pharmacy. Las Vegas, NV. Dec. 2, 2012.

---. "Service, Credentials, and Consulting Opportunities for Clinician-Educators." Non-Prescription Medicine Academy. Cincinnati, OH. Sept. 29, 2012.

---. "Discussion Protocols and Effective Questioning Strategies to Promote Critical Thinking." American Association of Colleges of Pharmacy Annual Meeting. Orlando, FL. July 15, 2012.

---. "Diabetes Workshop Speaker." Malaysian Pharmaceutical Society 7th Annual Pharmaceutical Conference. Johor Bahru, Malaysia. June 2012.

Dr. Phil Henry and Dr. Elizabeth Stuller. "Managing Addiction with Neuro-Endo-Immunology." Neuroscience Inc. Palm Beach Gardens, FL. June 30, 2012.

Dr. Art Johnson. "Best Practices in Elearning to Enhance Participation." South Florida Chapter of American Society for Training and Development (ASTD). Spring 2012.

Dr. Susan Jones. "The Power of Freeloading: Enjoying Other People's Money in Jane Austen's Works." Jane Austen Society of North America Annual General Meeting. New York. Oct. 6, 2012.

Provost Joseph A. Kloba. "Lessons Learned from Mistakes -What Doesn't Kill You Can Make You Stronger." The Council of Independent Colleges, Institute for Chief Academic Officers and Chief Financial Officers. San Antonio, TX. Nov. 5, 2012.

Dean Jim Laub. "Creating a Bridge from Servant Leadership Research to Practice." The Servant Leader Roundtable. Regent University. May, 2012.

Dr. Velma Lee and A. Lo. "A Preliminary Sustainability Model: From Policy to Practice." Competitive Paper. International Journal of Arts and Sciences, Third Harvard Conference. Boston, MA. May 30, 2012.

Dean J. Duane Meeks. "Cutting Time and Saving \$\$\$ in Editing." National Religious Broadcasters Annual Convention. Nashville, TN. Feb. 20, 2012.

Professor Marilyn Mims. "Technical Efficiency in Breath Management and Support for Singing." Classical Singer Convention (master classes for High School Division and Young Artist Division). Chicago, IL. May 26-27, 2012.

Dr. Michael O'Connor. "Mariology and the Motet in the Early Seventeenth Century: The Marian Motet Cycle of Juan de Esquivel." 2011 Medieval & Renaissance Music Conference. Institut d'Estudis Catalans (IEC) and the Consejo Superior de Investigaciones Científicas (CSIC) [Spanish National Research Council] at the Institut d'Estudis Catalans. Barcelona, Spain. July 5-8, 2011, and Music and Liturgical Reform, 1611-Present: A Conference in Honor of the Death of San Juan de Ribera. University of Valencia, Estudi General. Valencia, Spain. June 29-July 2, 2011.

Dr. Ken Phillips. "The Rhythmic Body: Internalizing Rhythm Learning." Florida Association of Christian Colleges and Schools State Convention. Orlando, FL. Oct. 18, 2012.

Assistant Dean Thomas Robertson and Dean Mary Ferrill. "Staffing and Salaries of Pharmacy Admissions and Student Services Personnel among U.S. Pharmacy Schools." American Association of Colleges of Pharmacy Annual Meeting. Orlando, FL. July 16, 2012.

Dr. Beate Rodewald. "Utopian Dreams and Real Places: Varieties of Community Building in the Last 100 Years." 37th Annual Conference of the Society for Utopian Studies. Toronto, Canada. Oct. 4, 2012.

Dr. Olga Rybalkina and Dr. Andrea Dyben. "Experiential Learning Abroad as Part of Graduate and Continuing Counselor Education." American Counseling Association. Cincinnati, OH. Mar. 22, 2013.

Professor Pamela Sigafosse. "Four Generations in My Classroom: What Do I Do Now?" CAHEA - Christian Adult Higher Education Association. Nashville, TN. Aug. 2, 2012.

Dr. David Smith and Dr. Velma Lee. "Taking Stage Presentation from Good to Great." International Association of Chinese Management Research Annual Conference. Hong Kong SAR, The People's Republic of China. June 20, 2012.

Dr. Peggy VanArman. "Torry Island Study (Belle Glade, FL): Nutrients in Leaves, Soil, and Water of Pond Apple (*Annona glabra*) Swamps in Relation to Everglades Restoration." Palm Beach Atlantic University 2012 Quality Initiative Session. Nov. 13, 2012. Poster; Florida Academy of Sciences, Barry University, Miami, FL. Mar. 8, 2013; and Interdisciplinary Research Conference at Palm Beach Atlantic University, Mar. 19, 2013.

Dr. Henry Virkler. "Understanding and Responding to Depressed Suicidal Clients and Church Members." South Florida Association for Christian Counselors. Palm Beach Atlantic University. June 23, 2012.

PBA-at-a-Glance

Palm Beach Atlantic University is a comprehensive, interdenominational Christian university founded in 1968.

Enrollment: 3,579

Traditional Undergraduate/Day Students: 1,917

Non-traditional Undergraduate/Evening Students: 435

Graduate Students: 520

Professional/Pharmacy Students: 308

Dual-enrolled: 399

Academic Programs:

- 48 undergraduate majors
- Evening undergraduate degree programs in ministry (West Palm Beach and Orlando campuses, and online), organizational management (West Palm Beach, Wellington and Orlando campuses, and online), and psychology (West Palm Beach and Orlando campuses)
- Graduate and professional degree programs in business administration, counseling psychology (tracks for addictions, marriage and family counseling, mental health counseling, and school guidance counseling), divinity, leadership and pharmacy (Counseling and leadership are offered in the West Palm Beach and Orlando campuses.)

Degrees Offered: A.A., B.A., BGS, B.S., B.Mus., BSN, M.S., M.A., M.Div., M.B.A., Pharm.D., Pharm.D./M.B.A.

Faculty:

- 165 full-time faculty
- Undergraduate student-faculty ratio: 13 to 1
- 81 % of full-time teaching faculty hold the highest degree in their field

Activities: Member of the National Collegiate Athletic Association (NCAA) Division II, National Christian College Athletic Association (NCCAA)

Alumni: 13,000 +




Economic Impact: \$313.4 million local economic impact

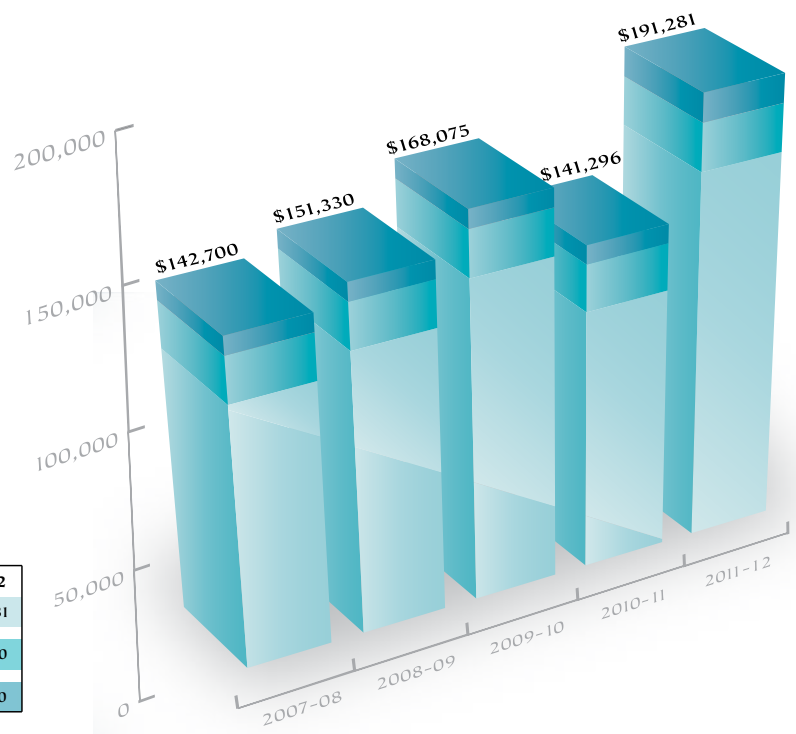
Accreditation Statement as of June 1, 2012: Palm Beach Atlantic University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS) to award associate's, bachelor's and master's degrees, and a doctor of pharmacy degree. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call 404-679-4501 for questions about the accreditation of Palm Beach Atlantic University. Persons wishing to review documents related to the accreditation of Palm Beach Atlantic University should contact the Office of Accreditation and Assessment at 561-803-2053.

Funding for faculty and student research steadily climbing

While fundraising efforts for 2012-2013 are still under way, Palm Beach Atlantic University increased its budgetary support for faculty and student research under the Quality Initiative (QI) program from \$32,000 in 2011-2012 to \$47,000 in 2012-2013. See list of QI grants on page II.

The gifts and grants category supporting faculty and student research are from individuals, corporations and foundations. The PBA Board of Trustees' policy is that the University does not seek or accept government funds from federal, state or local sources with the single exception of direct financial aid to students.

	2007-08	2008-09	2009-10	2010-11	2011-12
 Gifts & Grants	\$114,700	\$123,330	\$140,075	\$113,296	\$159,281
 Faculty QI Grants	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
 Student QI Grants	\$8,000	\$8,000	\$8,000	\$8,000	\$12,000



For more information:

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