4 HUMANITIES DIVISION
5 English
6 Center for Intensive English Programs
7 History & Political Science
8 International Language & Global Studies
9 Music
10 Religion & Biblical Languages

11 STEM DIVISION
12 Biology
13 Chemistry & Biochemistry
14 Engineering
15 Mathematics
16 Physics
17 Sustainable Agriculture

18 SOCIAL SCIENCES DIVISION
19 Behavioral Sciences
20 Community & International Development
21 James White Library
22 Social Work
23 Undergraduate Leadership
24 Visual Art, Communication, & Design

25 AWARDS
26 Teaching Award
26 Research & Creative Scholarship Award
26 Service Awards
27 Research Mentor Awards

29 RESEARCH & CREATIVE ACTIVITY
30 Peer-Reviewed Publications
33 General Publications
34 Presentations
48 Performances, Exhibitions, Recordings & Film Production
50 Faculty Research Grants
51 Undergraduate Research Scholars
52 Graduate Research Grant Recipients
As we review the 2018-19 school year we find once again that the College of Arts and Sciences (CAS) is made up of a diverse and vibrant community dedicated to intellectual discovery, to making knowledge matter in the world, and to helping students reach their highest academic, and more importantly their highest spiritual, potential.

With a rigorous core of undergraduate courses across the arts and sciences, the CAS faculty encourage student inquiry and research while at the same time offering unique opportunities for international and pre-professional study. Liberal arts and sciences uniquely position students for success providing the most dynamic, engaging, and comprehensive knowledge by which to tackle today’s most pressing challenges. The CAS provides a great opportunity to pursue dreams for a better life, to understand one’s place in the Great Controversy, to discover new knowledge, and to make the world a better place. Programs in the CAS span much of what has captured the human imagination from uncovering the secrets of the natural world to understanding humanity and the societies we form. Our faculty and students throw themselves into these questions with passion and determination.

This is my final Year in Review and I am excited to see a brief picture of what has taken place during the 2018-19 school year. We had the privilege of receiving a presentation from a Nobel Laureate and having faculty invited to be the keynote speakers at prestigious conferences. New endeavors include the establishment of a new honors society (Chemistry), the International Center for Worship and Music (Music Department), the establishment of the Agriculture Education Center and the Center for Trauma Education and Care (Social Work). Our faculty continue to be active in research both on a personal level and on an involving of students level. Our faculty love their students and demonstrate this love through great advising and the provision of warm space where all feel welcome and at times fed.

The Almighty has richly blessed me in my position as the CAS dean for the past thirteen years. What has made the responsibility particularly enjoyable is the opportunity to work with excellent faculty and great department chairs. As of July 1, 2019, the CAS dean position has been placed in the very capable hands of Dr. Amy Rosenthal. She is a graduate of Pacific Union College (BS) and Indiana University (MA, PhD). Dr. Rosenthal is a historian specializing in Modern Britain and Colonial Africa. Prior to accepting her current role, Dr. Rosenthal served seven years as Vice President for Academic Administration at Southwestern Adventist University in Texas and, previously, eight years on the faculty of Pacific Union College in California.

Our motto for students has been, “Class is over, please stay”. Come join us in our faith-infused learning environment where we are committed to a faith seeking understanding. Browse our website (https://www.andrews.edu/cas/) for more information about our departments and programs of study.

Dr. Amy Rosenthal
English
Center for Intensive English Programs
History & Political Science
International Language & Global Studies
Music
Religion & Biblical Languages
Each school year has its own essence and distinctive highlights. At the same time, every school year falls into time-honored rhythms and traditions. The vignettes that follow offer three perspectives on a year in the life of the Department of English:

This year we celebrated two of the characteristics that have long distinguished the department and its faculty: loyal, enduring commitment and excellence in teaching. Bruce Closser has taught at Andrews University for 40 faithful years of quality teaching. One of his students sums up his career eloquently, “Dr. Closser is not only a good teacher, academic advisor, and work supervisor, he is an overall good person.” Scott Moncrieff marked his 30th year of dedicated and creative teaching at Andrews. One student commented, “He’s a tough teacher, but that guy really knows what he’s talking about.” Julia Kim, whose specialty lies in language teaching, was presented with the Daniel A. Augsburger Excellence in Teaching Award for the 2018-2019 school year. As a student in the graduate program testifies, “Dr. Kim cares deeply, and it shows to everyone who knows her. It is clear to those of us who call her teacher that she cares immensely about her students, about her teaching, about her field of study and research, about this university, and about her Savior.” These three faculty and their colleagues all embody the department’s devotion to good teaching and scholarship in literature, language, and writing.

–M. Jones Gray, Chair

What can an English department do for students beyond the classroom? Just provide a place to study, drink tea, or meet up with friends? How can we best serve our students beyond fostering academic excellence? These are questions I think about daily as I try to assist our professors in creating a holistic environment where our students can intellectually and physically be at home—a place where they can come together with others who find joy in the “music” of words.

Small things are often overlooked, but they help to create a feeling of warmth and welcome. It’s no surprise that students are often stressed and have to juggle many things in their lives. Helping with printing a paper, sharing a granola bar, or lending a listening ear to anything that is on a student’s mind, are all part of being there for our students in ways that assist and nurture.

In our constant quest to improve our students’ experience, five years ago we agreed that providing food at a day and time that the students could count on would be helpful, and our current “Elevenses” event was born. Every Thursday, at 11:00 a.m., we serve a light lunch to our majors, minors and grad students, and they often bring friends with them to sit down to eat and chat, or grab something on the run. Every May, when our soon to be graduates chatter happily about their futures, I know we will miss them, but feel blessed to have been a part of their Andrews English experience. I hope that they will always remember we cared and that they felt at home in their department.

–D. Dalton, Administrative Assistant

As a senior English major and long-time officer of Nu Sigma, Andrews’s chapter of the English Sigma Tau Delta honors society, I spent last year constantly thinking of outreach. I wanted to positively affect the lives of my fellow students on campus, of course, but I also wanted to think about how our department’s unique strengths could benefit our wider Adventist educational community. So when I heard that my parents’ English-speaking school in Hong Kong, Hong Kong Adventist Academy, had a beautiful new library and virtually no books to put in it, I knew my department could help. The English Department, with its love of literature and heart for education, stepped up—with help from Dr. Corredera as well as the other officers, we raised enough money to fill an entire box with classic, diverse children’s books, and I flew them out to Hong Kong last Christmas. Even better, our project supported two educational programs: because we ordered books through The Crayon Box’s Scholastic account and earned rewards for them, we gave their pre-k classroom the opportunity to purchase new books. That Christmas, I spent a day reading classics like Corduroy and Owl Moon, hand-picked by my professors and friends, to the first and second grade classrooms. Seeing the light in the kids’ eyes, I thought that maybe we had a few English majors in the making.


Website: https://www.andrews.edu/cas/english/ Facebook: https://www.facebook.com/AndrewsUniversityDepartmentOfEnglish/
The Center for Intensive English Programs (CIEP) serves Andrews students who need to demonstrate English-language proficiency and individuals from the community and beyond who come to Andrews to learn English. In addition to helping a diverse group of students meet their English-language goals this past academic year, CIEP also developed and maintained partnerships with departments and schools across campus, worked on research, and presented at conferences.

In total, more than sixty individual students from over twenty different countries studied in CIEP in the past year. Depending on their level of language proficiency when they arrived, some students studied in CIEP for one semester, while others continued progressing and building proficiency throughout the year. Many moved on to either undergraduate or graduate programs at Andrews. Some of the students came to us from the surrounding community, including several with ties to the Whirlpool Corporation.

CIEP once again collaborated with departments and schools across campus. On behalf of the School of Business, CIEP provided the Test of English as a Foreign Language (TOEFL) training to a cohort of fifty-four students from universities in China and Taiwan on the Andrews campus in July 2018. In October 2018, CIEP Director Christian Stuart visited Adventus University Cernica in Romania on behalf of the School of Distance Education and International Partnerships (SDEIP) to observe the language program there, clarify language requirements for Andrews University partnerships with this institution, and recommend customized solutions to language-requirement challenges. In March 2019, Christian Stuart traveled with Dr. Jerry Chi to China and Taiwan to oversee language testing for cohorts of students intending to study in the School of Business Administration. From this collaboration, over thirty students from China and Taiwan have enrolled in AU classes over the past several years.

Moreover, CIEP faculty presented at conferences and worked with other CAS faculty on scholarly projects. Christian Stuart presented a paper on his analysis of ESL writing textbooks at the Michigan Academy of Science, Arts, and Letters (MASAL) conference in March 2018 and will also present on this research at the overlapping International and National Conventions for Adventist Teachers of English in Lima, Peru in July 2019. In addition, he continued research with Dr. Ivan Davis that focuses on ways first-year college students transfer knowledge and skills they acquire in first-year writing classes to other college writing situations. They will present on this research at the Adventist English Association conference held on the campus of Southern University in June 2019.

Furthermore, for the entire Spring 2019 semester, Asta Sakala LaBianca was on leave from campus accompanying her husband, Oystein LaBianca, professor in the Department of Behavioral Sciences, who was privileged to be Frerichs Annual Professor at the Albright Institute of Archaeology in East Jerusalem. She served as co-host with him at regular social and community-building events for the other endowed fellows in residence during the semester and provided editorial assistance on presentations and upcoming publications. Visiting numerous archaeological and historical sites (including in Egypt and Florence, Italy), as well as daily interactions with the wealth of cultural diversity in Jerusalem itself, additionally contributed to the enriching experience she had during her leave.

Finally, a campus-wide discussion on restructuring of programs, departments, and schools took place during the 2018-2019 school year, and it was decided that CIEP will move from the College of Arts and Sciences to a newly-formed College of Education beginning in the 2019-2020 school year. This news is bittersweet, as CIEP has been part of CAS and the Department of English since the 1970s. We look forward to reinventing ourselves in this new role and serving the university in all matters related to English as a Second Language.
The Department of History & Political Science had a busy 2018-2019 academic year starting as soon as the spring semester ended; beginning with a month-long study tour and continuing with events throughout the summer and academic year. Our faculty participated in the NAD Teachers Convention while our students traveled to hear distinguished speakers, engaged in the 2018 state and federal mid-term electoral process, attended professional conferences, and established a pre-law honor society. Throughout the year, we held numerous student/faculty activities. This year, our department welcomed Andrews VP Michael Nixon, JD to our teaching staff. Professor Nixon taught pre-law classes as well as mentored students interested in pursuing law as a career. He joins professors Stephanie Carpenter, John Markovic, Marcella Myers, and Gary Wood as Department of History & Political Science faculty.

Some years our summer months are a time of rest and relaxation, but in May 2018, Dr. Stephanie Carpenter, along with Religion and English professors, led students on a Classics & Faith Study Tour that traveled to Greece, Turkey, and Tunisia. Dr. Carpenter taught two classes and several of our department students also joined the Tour. We look forward to the 2020 Life Origins & Processes, Civilizations & Faith Study Tour traveling to Egypt, Georgia & Armenia, and Turkey. Dr. Marcella Myers will be teaching with the 2020 Tour.

We started fall 2018 with a new dynamic program for our history and political science students. To prepare our students for the 21st century, we have redesigned both majors with a core group of courses and specialized upper-level courses. In the past few years, we see an increase in students interested in history and politics. Our commitment to a Liberal Arts education remain unchanged as we redesign our programs and courses. Our Social Studies program trains our next generation of teachers with those engaged in middle and secondary education.

Our department and students engaged in several events this past year. We hosted an alumni picnic at the 2018 Homecoming weekend and student activities included vespers, game and movie nights, Sabbath afternoon lectures, and travel to hear distinguished speakers and attend professional conferences. The department accompanied students to The Economic Club of Southwestern Michigan to hear Vice President of the United States Joe Biden and Meet the Press host Chuck Todd. Students also traveled to the University of Notre Dame to attend lectures by #MeToo movement founder Tarana Burke and Guillaume Lacroix, Consul General of France in Chicago (pictured here with French professor Dr. Sonia Badenas).

For the 2018-2019 year, our students developed two new initiatives. The History Club, its members from all three programs in the department, came together each Friday afternoon to record and plan its weekly podcast, “Don’t Quote Me, but . . .” The students covered current political and social topics in a fast-paced, and often humorous, dialogue. In January 2019, members of the History Club traveled with Stephanie Carpenter to the American Historical Association conference in Chicago. Students attended sessions dedicated to undergraduate and graduate students as well as those featuring podcasts and student engagement. Our Pre-Law Society, its members from the department and pre-law pre-professional students, attended several department events and met with law school admissions representatives here in Berrien Springs as well as in Chicago at the Law School Admissions Council Law School Forum and the University of Chicago Law School. In 2018, we established Andrews University Hall, an undergraduate chapter of Phi Delta Phi: International Legal Honor Society, and held our first initiation ceremony. Our Pre-Law Society (Phi Delta Phi) joins already established History (Phi Alpha Theta) and Political Science (Pi Sigma Alpha) honors societies. Each of these honor societies held meetings and events throughout the year, culminating in our annual honor society/department banquet.

Department faculty continue their research projects as well as teaching new courses and mentoring our students. Stephanie Carpenter continues to sponsor Phi Alpha Theta and the History Club, as well as the newly established Phi Delta Phi chapter; John Markovic continues his work on the Emerging Church/Emergence Christianity; Marcella Myers is teaching courses for the Community & International Development (CIDP); and Gary Wood continues as sponsor for Pi Sigma Alpha.

Website: https://www.andrews.edu/cas/history/
The Department of International Languages & Global Studies continues to support and promote the “Change the World” mission of Andrews University by providing students with several on-campus and off-campus opportunities to explore the world they will change. During the month of January 2019, the visit of the novelist and Notre Dame faculty Azareen Van Der Vliet Oloomi, who brought some remarkable multicultural life experiences and suggestions on how to use that to contribute to and influence our globalized world, was a spring semester highlight. Dr. Van Der Vliet Oloomi spoke about how learning languages and living in different cultures can make you not only a globalized citizen but also a sensitive person able to deal with cultural and ethnic diversity.

Another guest at Andrews was the French Consul of Chicago. Students from the ILGS department had the opportunity to interact with him and exchange experiences. Because of that interesting conversation, and after receiving information about the French program at Andrews University, the Consul offered internships to current students that are available in Chicago.

In off-campus activities, a group of 28 students decided to study abroad during the 2018-2019 school year in Austria, Argentina, Brazil, France, and Italy through the ACA program, which is open to any Andrews University student. They studied the language and the culture of those countries. Travelling was an important component of their experience and they could see the most emblematic sites on those respective countries. When asked about their study abroad time, they did not hesitate to say something about this life-changing experience. Christina Coston, a double major in Communication and Spanish, went to Spain and she said that the year abroad “not only helped me learn a new language but also helped me become familiar with the culture. Additionally, I made lifelong friendships and memories. I highly recommend studying abroad.” For Jasmine Logan, a double major in Psychology and Spanish, living in Spain for a year helped her realize an important difference in lifestyles. “I loved how laid back and chill Spain was, which is so different from the hectic lifestyle of so many Americans.”

Another worldview experience was a study tour. During the month of May 2019, a group of 41 students participated in a very intense study tour to explore the cultures of Spain, Italy, and Greece. They were completely immersed in cultural experience all day, every day. From the morning wake-up call (usually not in English) until the last activity of the day, they were exposed to a completely different environment: language, food, meal time, public transportation, internet speed, public signs, personal space, local currency differences, markets, stores, car sizes, motorcycles, historic sites, religious symbols, and even elevator and bed sizes at the hotels. Many of them summarized this study tour experiences when asked about what college experiences they will remember best. Moriah McDonald, an English major, said, “One of the things that I learned from the European culture tour was the importance of taking time to relax and enjoy life; the people there seemed happier and less stressed.” Torian Hill, a Psychology and Spanish major, added, “One lesson is that in most European cultures, time with family and socialization is very important. Sometimes, people would spend hours at a restaurant talking and eating only a snack.” Mia Hunter, a transfer student majoring in Spanish pre-medicine noticed the difference in pace between the European and the American cultures. “It (Europe) is not as fast paced as America. It’s more laid back and less stressful. Things still get done but people work just enough to be happy. They walk everywhere and there is no need for cars really! I enjoyed my time and highly recommend the tour!”

Finally, an example of “world changer” is the experience of Noel Harris, a double major in French and Sociology, who graduated from Andrews University and went to Europe to complete her master’s degree in Development Studies at the Graduate Institute of Geneva, Switzerland. Her story shows how relevant her experience learning a foreign language at Andrews University was. It allowed her to have access to unique opportunities reserved exclusively to bilingual students and professionals. “Finishing my masters in Development Studies at the Graduate Institute of Geneva was facilitated by my studies at the International Languages and Global Studies department at Andrews University. My first year at AU, I got the opportunity to study in Collonges, France. Learning a new language and meeting new people were integral in my academic development. Living near Geneva also familiarized me with the world of international organizations and the United Nations. Because I had learned French, which is an official UN language, it opened doors for different internships and jobs. When returning to AU, I got the chance to teach French classes and continue practicing the language. I also decided to pursue bachelor’s in International Development at AU. This combination of studies allowed me to enter one of the best schools for International Development.

Studying French at AU and spending a year abroad gave me the skills and competence to enter a bilingual school and to complete a year-long internship in a bilingual human rights NGO. Looking back, I now realize how important learning French was for me. It helped me become a part of different worlds, meet new people, and gain valuable skills. I just submitted my MA dissertation and I am looking forward towards new jobs and new opportunities. I know that the experiences and skills that I accumulated through my French studies will help me.”

Faculty members of the ILGS department were actively involved in teaching, research, presentations, publications, and service. Dr. Sonia Badenas received her rank promotion to Associated Professor of French with tenure. Dr. Pedro Navia was honored at the Andrews University Latino Association Graduation Ceremony by the Office of Diversity & Inclusion for his deep commitment and initiatives to support, guide, and encourage education among Latinos/Hispanics.

Website: https://www.andrews.edu/cas/inls/
The Department of Music is grateful to God for a successful and vibrant 2018-2019 school year.

One of the highlights of the year was the visit of world-renowned orchestra conductor and living legend Herbert Blomstedt. He led a series of events for the students of the Department of Music and the community. Maestro Blomstedt inspired and challenged music students to excel in their path to artistic excellence and in their commitment to seek the truth and change the world.

Our new appointed AU Symphony Orchestra conductor, Dr. Christopher Wild, is a recent graduate of Northwestern University’s Bienen School of Music, where he received a DMA in orchestral conducting. He has joined forces with the University Singers and Chorale performing Charles Gounod’s Gloria (featuring Professor Charles Reid as tenor soloist) and also with the hymn When You Come, arranged and conducted by Professor Stephen Zork. The Symphony Orchestra repertoire also included works performed by the six winners of the annual Young Artist Competition. This year’s winning students were Stephanie Guimaraes (Violin), Katharina Burghardt (Voice), Jade McClellan (Violin), Emily Jurek (Piano), Jeremy Myung (Violin), and Simon Brown (Violin).

University Singers, the University Chorale, and I Cantori had wide-ranging performance activities during the year, including five choral concerts in the Howard Performing Arts Center and collaborative performances with Andrews University Symphony Orchestra, Wind Symphony, Opera Gala and the Music & Worship Conference. Five graduate choral conducting students gave outstanding recitals, under the leadership and mentorship of Prof. Stephen Zork.

One of the highlights of the year was the release of the first promotional video of the Department of Music: “We Change the World One Note at a Time”. Music Faculty and students are forever grateful to Ruben Merino, director of Esperanza TV, and Goliath Productions, for capturing the essence of what we do at the Department of Music in a professional video.

In January, piano professor Dr. Chi Yong Yun was the Guest Artist Faculty at Taereung International Winter Music Festival in Seoul, Korea, where she participated performing in several concerts, teaching master classes, and serving as an adjudicator for the International Piano Competition. As a recitalist, Dr. Yun also performed with the Sunnyside Symphony Orchestra in Portland, Oregon, for their fundraising Gala concert. Dr. Yun is a guest Artist Faculty to Montecito International Music Festival in California, where she will perform in the Gala concert with violinist Cho-Liang Lin, among other notable artists.

Also in January 2019, the Andrews University International Center for Worship and Music (ICWM), a long-cherished dream for SDA musicians, theologians, leaders and educators around the world, was launched. The ICWM seeks explicitly to resource and educate musicians for work within the context of Adventist mission and ministry, and it will support the purposing of music practice in high school bands, as a significant contribution to the music education field. Dr. Graves is also an active Clarinetist. This year Claudio González (Viola), Byron Graves (Clarinet) and Peter Cooper (Piano), performed together for the Sunday Series at the Howard Performing Arts Center, and at Southern Adventist University, TN.

The AU Annual Music Festival was led by Dr. Byron Graves and Dr. Chi Yong Yun, and the focus was on keyboard and wind instruments. More than two hundred talented students traveled from several institutions in the US and Canada to band together with performances, workshops, masterclasses, and worship experiences at the Howard Performing Arts Center and Pioneer Memorial Church.

From the beginning of the school year, the Department of Music launched “Beyond Bars,” a music educational program that takes place in Westville Correctional Facility every Saturday afternoon. This program allows Faculty and students from the Department of Music to teach music theory, keyboard, guitar, violin, and singing lessons to incarcerated people. Dr. Karin Thompson, Dr. Claudio González, and Prof. Adriana Perera, along with several students from the Department of Music and other departments on campus, have witnessed the excitement, joy, and transformative experience that this innovative program brings to the inmates. Here at Andrews, we genuinely believe that we can change the world one note at a time!

Website: https://www.andrews.edu/cas/music/
“Don’t just choose a major… choose a mission!”

The 2018-2019 school year for the Department of Religion and Biblical Languages has focused on life mission. When university students are struggling through the process of choosing a major and a career path, we have sought to also highlight God’s call to mission, not just a major. Choosing a major requires guidance and reflection, and some students find themselves switching majors after a month or a semester or two because there are many important questions to consider.

But it is also important to look beyond the major and consider one’s purpose in life. In the Department of Religion, we believe that God has called each student to serve Him in some unique way. There are many paths of service for humankind so we encourage students to choose a major with a mission.

For students interested in “a life with a mission” the Department of Religion and Biblical Languages offers two main pathways: the theology major and the religion major.

The theology major prepares those who are planning to be pastors, campus or hospital chaplains, or Bible teachers. The theology major fully aligns with the new seminary M.Div. program.

The religion major is primarily a dual-degree focus. This major is ideal for those who will seek employment through another major (such as business, music, dentistry, medicine) and who desire to become spiritually and theologically equipped for ministry as part of the laity. This ability to combine the religion major with another major offers many possibilities. For example, religion and social work are a very desirable arrangement. A religion major may also be a good choice for a transfer student or a non-traditional student heading into ministry.

The Department of Religion also offers three minors: 1) Religion, 2) Biblical Languages and 3) Missions. The Religion and Biblical Languages minors provide rich biblical scholarship. The Missions minor provides a pathway to spread the Good News of Jesus Christ to our broken world.

The seven faculty of the Department of Religion continue to serve the mission of Andrews University and the Seventh-day Adventist church in multiple ways. Each faculty member carries a heavy load of classes, teaching religion and theology majors but also teaching hundreds of general education students. It is a distinct mission and privilege for our department to teach the religion courses for the campus.

Additionally, the religion department faculty serve in many other kinds of ministry. Dr. Ruben Munoz has been collaborating with Professor Davide Sciarabba and a team of international Hispanic theologians and pastors to develop an online Spanish Initiative in Undergraduate Theological Education. They have also taught classes and presented seminars for Hispanic pastors in the United States and Latin America. Professor Susan Zork combines significant teaching ministry with her devotional and pastoral care for students in class and in the One Place congregation. Along with presenting research papers at professional biblical studies conferences, Dr. Erhard Gallos has been invited to give Biblical presentations on various subjects in churches and on campuses throughout the Lake Union. As the new president of the international Adventist Theological Society, Dr. Rahel Wells continues a heavy schedule of teaching, research and publication. In addition to preaching in many locations, Dr. Rodney Palmer has sponsored the Andrews Ministerial Club and directed the Field School of Evangelism in May 2019. Dr. Glenn Russell continues to host the weekly Scriptural Pursuit media broadcast and directed the Honduras mission trip in December. In March 2019, Dr. Russell directed the mission trip to Beirut, Lebanon where his team of students and staff provided physical therapy for refugees, conducted two weeks of prayer, and assisted in the It Is Written evangelistic outreach. Whether it is giving Bible studies, providing pre-marriage counseling, mentoring students, providing pastoral counseling, ministering to congregations or presenting scholarly research papers, the faculty of the Department of Religion rejoice in the privilege of being part of God’s mission.

Website: https://www.andrews.edu/cas/religion/
Biology
Chemistry & Biochemistry
Engineering
Mathematics
Physics
Sustainable Agriculture
The Department of Biology has continued to thrive in both material and immaterial ways this school year. It has gained resources, provided accessible off-campus opportunities to students, and continued to minister to students by using a faith-based approach to science.

Specifically, in late 2018, the Department of Biology acquired a Keyence computer-driven fluorescent microscope that simplifies use by students. It provides publication-quality multi-color images which will enhance scholarship and teaching in areas that rely on microscopy such as microbiology, cell biology, and histology. Attached is an image taken by students in BIOL372 class where students study cells in detail. Peter Lyons, who teaches BIOL372, exclaimed “It was great to use this microscope with my students! Its ease of use really makes the microscope accessible and quick to use. It’s easy to find the cells with autofocus, easy to see them clearly with autoexposure, easy to make quality multicolor images. Everything is easy.”

The image shows MDCK (Madin-Darby canine kidney) cells stained with dyes that visualize the nucleus (blue) and microtubules (part of the cytoskeleton, colored green). Generous alumni funding made the purchase of this instrument possible. The acquisition of this microscope broadens the microscopy “suite” available to students. With the addition of this gift, along with the two departmental electron microscopes, the Department of Biology is positioned to offer microscopy training relevant to careers in biology.

Even as our on-campus facilities continue to grow, students often find academic enrichment through off-campus experiences: Paola Bayona participated in a summer undergraduate training program at Baylor College of Medicine doing genetics research relevant to the study of cancer. Her experience has opened the opportunity for her to pursue graduate studies at Baylor starting in the fall of 2019.

Adam Weir traveled to Mexico with Dr. Daniel Gonzalez-Socoloske where Weir did his Honors research on the feeding behavior of manatees. They spent one week studying West Indian manatees at the Dolphin Discovery facilities. The staff were very accommodating and allowed them to get in the water with the manatees to collect data. Overall, it was a fantastic trip both academically and personally. Adam comments that “Dr. Gonzalez is a great biologist and an even better Christian; it’s a research experience that an undergrad can’t get at most schools.”

As a Seventh-Day Adventist science department, the Department of Biology consistently works to incorporate faith into the curriculum. Benjamin Navia and David Mbungu have written an article published in the Journal of Christian Education. In this paper, Navia and Mbungu investigate student perceptions regarding the study of evolutionary concepts in their Foundations of Biology class here at Andrews. It is known that student interest in the subject is influenced by several factors, including prior exposure to the material, students’ belief system, and the instructors’ attitudes towards the subject. These factors also determine the ability of students to understand, discuss, and analyze evolutionary arguments. The results of this study showed that students are interested in the material, think it is important to study, and value discussing these issues in a supportive Christian environment. The authors discuss the implications of this for strengthening the faith and intellectual growth of students.

Overall, it has been another spiritually and academically stimulating school year for the Department of Biology.
Chemistry National Honor Society

The Department of Chemistry & Biochemistry became the first Seventh-day Adventist higher education institution to establish a chapter of Gamma Sigma Epsilon. We are proud of our fourteen outstanding chemistry and biochemistry students for the work they did to both organize and be selected as charter members of this honor society chapter under the guidance of sponsor Dr. Lisa Ahlberg. The purpose of the honor society is to recognize academic excellence and undergraduate research scholarship in chemistry.

Nobel Laureate

The Department of Chemistry & Biochemistry hosted the first lecture by a Nobel Prize winner at Andrews University. Sir J. Fraser Stoddart, who shared the Nobel Prize in Chemistry in 2016 for the design and synthesis of molecular machines, took the general public audience on a journey from steam engines to molecular machines. In 1991, Stoddart established the importance of the mechanical bond. Since then he and his students have created a diverse array of mechanically interlocked molecules including molecular switches, elevators, pumps and drug delivery systems. The central driving motivations of his life’s work, are teaching and mentoring more than 450 students from over 43 different countries and his insatiable search for beauty, evidenced by his lifelong fascination with stereochemistry and topology and his fondness of poetry.

JN Andrews Medallion

In August 2018, Dr. Desmond Murray received the most prestigious award that the University gives to faculty and staff, the JN Andrews Medallion. Dr. David Nowack remarked, “Dr. Murray’s number of contributions and length of service to our department are without peer. His enthusiasm and energy for his area of chemical education and organic chemistry research has inspired scores of young people to rethink their assumptions of what science and chemistry really are.”

Andrea Luxton, Andrews University president, introduced Sir Stoddart, saying, “The university is delighted to welcome a guest of such renown. Sir Fraser Stoddart is an exemplary educator, researcher and innovator, as evidenced by his illustrious career and, most notably, the honor of receiving the 2016 Nobel Prize.”

Website: https://www.andrews.edu/cas/chemistry/
Andrews Students Win Stryker Engineering Challenge

The Michigan Colleges Alliance (MCA) team won the 2019 Stryker Engineering Challenge on Friday, March 22. The MCA team consisted of Jeremy Barrett and Devin Garcia from Andrews University, Denise Roorda from Calvin College and Joshua Cormier from University of Detroit Mercy. The MCA team competed against teams from University of Michigan, Michigan State University, Michigan Technological University, Western Michigan University, University of Notre Dame and Purdue University.

The University Recruiting department at Stryker Medical in Kalamazoo held the 9th annual Stryker Engineering Challenge from March 21–22, 2019. Teams of four sophomore engineering students competed against each other for an opportunity to receive a $1,000 scholarship and an interview for a Stryker internship position for summer 2020. MCA has been invited to send a team to the competition since 2015.

The challenge began around 7 p.m. on Thursday, and all work ended at 1:45 p.m. on Friday. The competition portion of the challenge started at 2:30 p.m. The main part of the challenge was to design a remotely-controlled vehicle from a supplied build kit. This vehicle was used in a 30-minute competition where all teams worked simultaneously to pick up Lego people, then in an obstacle course race where two to three teams raced at a time to see who could complete the course the fastest. Each team was required to use three different drivers during the race.

In addition to the competition, the teams could collect points on technical challenges before the competition and on homework that was collected around noon on Friday.

The MCA team was second overall after the homework and technical challenges, trailing Michigan State by 13 points. During the pick-up competition, MCA took the lead and was 24 points ahead of Michigan Tech before the obstacle race. Western won the race followed by Michigan Tech and MCA, resulting in MCA winning the challenge overall by a single point over Michigan Tech.

Gunnar Lovhoiden, MCA team sponsor and professor of engineering at Andrews University, supported Andrews students at the competition. He says, “The MCA team worked really well together and maximized their performance by making good design decisions.”

Hyun Kwon, chair of the Andrews University Department of Engineering, adds, “I am so proud of our students. They have proven the ability to successfully compete at such a high level and against much larger schools.”

Website: https://www.andrews.edu/cas/engineering/
On December 1, 2018, students in the Andrews University Department of Mathematics competed for the second time in the William Lowell Putnam Mathematical Competition—the preeminent mathematics competition for undergraduate students in the United States and Canada. In order to compete, students individually take a six-hour exam comprised of legendarily difficult proof-based problems. The Andrews University team scored in the 49th percentile, competing against the best mathematical talent from the nation’s top universities.

The 2018 Andrews team consisted of Devin Garcia (physics and math, sophomore), Mykhaylo Malakhov (junior, math), and Adrian Negrea (sophomore, computer science). Also participating in the competition were Lucinda Ford (2019 BS in math), Yaser Monterrey (math, junior), and Yosia Nurhan (math, sophomore). Our top scorer, Mykhaylo, placed in the top third of test takers. We are incredibly proud of all of our students!

After a period of collaboration, the Department of Mathematics and the newly formed Department of Computing rolled out a dual major in Data Science open to students beginning Fall 2019. The B.S. in Data Science provides students with a background in computer science, mathematics, statistics, and a chosen domain area such as Behavioral Sciences, Biology, Finance, Marketing, Physics, or Public Health. As the students garner skills for acquiring, managing, visualizing, mining, and modeling data, they will have the tools and techniques for working with Big Data and using machine learning for making predictions. Andrews will be one of less than 100 institutions nationwide that offer this major even though the demand for data scientists currently exceeds supply. The curriculum is composed of a core set of classes in data science, computer programming, mathematics, and statistics as well as domain-specific courses and cognates.

During the 2018-19 School Year Award Ceremony, the Student Association presented mathematics professor Dr. Shandelle Henson with the Teacher of the Year award. This award goes to a teacher whom students have highly recommended as an excellent teacher and mentor. One of the members of her Seabird Ecology Team, math major Yosia Nurhan states, “Dr. Henson gave me an opportunity to do research the summer after my freshman year even though I had no previous experience in research. She held high standards yet patiently helped me to attain a higher level of professionalism. She is very understanding and willing to work with inexperienced students like me.” Other students comment on how clear she makes the material that she presents in her classes.

To facilitate students’ ability to assimilate the material and be able to share it with others, Mathematics professor Dr. Anthony Bosman has started a YouTube channel. Called Math at Andrews, the channel has almost 10,000 views, with over 1,200 views on Dr. Bosman’s first Knot Theory lecture. All of the MATH 485: Special Topics—Knots class lectures are available there as are the videos that students made for their MATH 355 course (discrete math). Students from around the world have watched the videos, and the Andrews University mathematics students who created the videos enjoy looking at the comments their videos have garnered. To make the videography easier, Dr. Bosman has purchased a camera, green screen, and various other pieces of equipment with funds from a teaching innovation grant from the Center for Teaching and Learning Excellence.

This year the Department of Mathematics invested in a promotional video that we have uploaded to our Facebook page as well as to our AU Department of Mathematics home Web page. The video has garnered positive comments as it presents our department to prospective students in a unique way.

Overall, this year has been filled with student and professorial successes, and technological advances in order to make our program more accessible to future and current students.
In the Department of Physics during the schoolyear 2018-2019, some bywords that embody the fulfillment of those promises include Biomedical Physics, APS and PhysCon, Moku:Lab, STEMboost, and Series.

**Biomedical Physics** is a new 34-credit potential career path for Andrews students that will launch in Fall 2019. It is an innovative preparation for medicine, medical physics, and biomedical engineering. It empowers problem-solving and research in biology and medicine with physics tools and analysis used in Health Physics, Medical Imaging, Radiation Therapy, Biotechnology, Molecular Biophysics, and Nanotechnology. It is a rigorous introduction that will prepare students for direct employment or graduate studies.

Nationally, there are only six undergraduate Biomedical Physics programs, and none of them are SDA institutions. There is a huge demand for medical physics and its extraordinarily high starting salary levels. There is a need of around 300 new medical physicists per year while only 60 or so are being produced each year, so the market is strong. This is a four-year program, but a five-year dual BS/MST program in the works in collaboration with Radiological Technology University in South Bend, Indiana.

**APS and PhysCon** travel was funded by a new source this year. The John and Mildred Medic Wuchenich Foundation gave grants to four STEM departments for student development. The physics grant subsidized two first-year and two senior physics students to travel to the American Physical Society (APS) meeting 13-16 April 2019 in Denver, Colorado with the theme “Quarks to the Cosmos” (Q2C). It will also fund up to four students to go to the Quadrennial Physics Congress (PhysCon) 14-16 November 2019 in Providence, Rhode Island with the theme “Making Waves and Breaking Boundaries”.

Hosted by Sigma Pi Sigma, the national Physics Honor Society, PhysCon anticipates 1500 participants in the largest known gathering of physics undergraduate students in the US.

Student reactions at the APS meeting in April and four years ago at the last PhysCon repeatedly centered about the fact that these experiences are “life-changing”. Physics students and alumni, faculty and mentors, national lab physicists and luminaries together broach frontier physics, interactive professional development and networking, and rub shoulders at social events and events that support diversity in physics.

**Moku:Lab** refers to the new concept equipment in our Advanced Lab. In 2014, Danielle Wuchenich (BS Physics 2008) teamed up with experimental physics and engineering colleagues to establish a startup called Liquid Instruments in San Diego and Canberra, Australia, that would design and produce a 12-in-1 piece of precision test and measurement equipment combining reconfigurable hardware and advanced digital signal processing using familiar iPAD displays. This project was motivated by the volume and weight constraints of outer space ventures like the Laser Interferometer Space Antenna (LISA) which is essentially a space-based version of the Laser Interferometer Gravitational-Wave Observatory (LIGO).

Danielle had worked as a LIGO research assistant at the Australian National University for Tiffany Summerscales and later completed her doctoral work there focusing on laser interferometry techniques for satellite metrology. She worked on missions for the NASA Jet Propulsion Lab (JPL) in Pasadena, California, the Albert Einstein Institute in Hanover, Germany, and later at Lockheed Martin’s Advanced Technology Center in Palo Alto as Senior Research Scientist for interferometric imaging and laser communications.

This past January, as Chief Strategy Officer and co-founder of Liquid Instruments, she came for a whirlwind visit to present an eigentalk (ie. Physics Colloquium Talk) “From Research to Startups—What I did after Andrews with my Physics and Math Majors”. Afterwards, she demonstrated the Moku:Lab and offered two units to us that she had brought in her totebag for us to try out. Meanwhile, that very week her business had raised over 8 million dollars in a Series A funding round to accelerate product development as it grows in the US, Europe, and Asia. The following week our students and faculty ran the 12 Moku:Lab modes: Lock-in Amplifier, Arbitrary Waveform Generator, PID Controller, Bode Analyzer, Laser, Lock Box, Phasemeter, Oscilloscope, Spectrum Analyzer, Digital Filter Box, Waveform Generator, Data Logger, and FIR Filter builder. They worked beautifully and were put in service immediately. Advanced Lab students resonated to the simplicity, small footprint, versatility, and user friendliness of the Moku:Lab. It was a game changer for us all. We shared this technology with our colleagues in engineering.

**STEMboost** is a course concept designed, developed, and rolled out this summer to boost the quality of STEM education by enhancing the continuing education of K-12 educators. It provides first-person experiences that will translate into participants’ respective classrooms and labs. It is a five-week program of online preparation leading up to a five-day sequence of onsite laboratory experiences in Physics, Mathematics, Chemistry, Biology, and Engineering for three graduate academic credits. The physics was led by Professor Mickey Kutzner assisted by former physics minor Dillon Zimmerman (BS Chemistry, Mathematics Studies, 2017) for the hands-on physics lab component. STEMboost is supported by the Lake Union Conference and the NAD and launched onsite in June and July with a cohort of six educators from Arizona, Michigan, New Mexico, New York, Ontario, and British Columbia.

**SPEAKER SERIES** alludes to the new endowment established this year to fund the Robert and Lillis Kingman Speaker Series on Science and Society, with the purpose of scientific outreach to both campus and area communities in Michigan. Annually, visiting speakers from all STEM disciplines will be chosen in consultation with the STEM Department Chairs on the basis of their world class scientific contributions and their ability to communicate their relevance to laypersons and insiders alike. The first speaker, launching this series, will be David Reitze, executive director of the Laser Interferometer Gravitational-Wave Observatory (LIGO) at the California Institute of Technology (CalTech). Reitze is scheduled to present a public lecture at the Howard on Wednesday evening of 23 October 2019, having met earlier in the day with students, faculty, and other interested parties.

**Website:** [https://www.andrews.edu/cas/physics/](https://www.andrews.edu/cas/physics/)
Several exciting developments have happened in our Department this past year.

First, we have changed our name from the Department of Agriculture to the Department of Sustainable Agriculture. We have been benchmarking, taking market surveys, and discussing an update to our name for several years. Our name needed to reflect better who we are and what we do, so this year we made the change. It will appear in the 2019-2020 Bulletin.

Second, the most recent model for an Agriculture Education Center has been approved. It will re-purpose the facilities of the former dairy which ceased operations in December 2018. The prices of milk dropped to an unsustainably low level and the dairy was losing too much money, so the AU Board of Trustees voted to close it in June 2018. This had an impact on many areas of the University but our department felt it directly since we used the dairy for labs, research, teaching, and internships every semester. A number of models of what would replace it were proposed in order to maintain the quality education our students received, and then take it to the next level. We are now moving forward the approved model which will have a wide variety of domestic livestock, poultry, food, and ornamental plants. Our students will have an immersive experience with animals and plants. They are very excited about the prospects! Our website has more details about it: www.andrews.edu/agriculture.

In student news:
Our student club, the Flora & Fauna Club, had an active year with several vespers, service projects (cleaning barns, socializing dogs/cats at Animal Control), a movie night, and a guest speaker, an alumnus of our department and currently in veterinary school, who shared about how to get into vet school and what is it like once you’re in.

Livestock Health & Disease class was taught in spring 2019 and is always a popular class. Jolene Birney, DVM gives the Animal Science students much good information in class and then takes them to area farms for hands-on labs (our students will not need to leave campus for these experiences starting fall 2019 since the Agriculture Education Center will provide the animals for this.) They conducted health checkups on a variety of domestic species including chickens, cattle, sheep, llamas, mini-pigs and goats.

Several of our International Agriculture Development students completed their international internships this past year. Nolan Salazar interned at a kibbutz in Israel and learned about date production. He also did an internship in Nepal to improve the length of the growing season in Patiswara. Naelijwa Manongi did her internship with Korfovouni SeedPro in Tanzania. This company grows most of the cyclamens found in florist shops around the world. Heidi Harris spent spring and summer semesters 2019 at the New Start Children’s Home in Harare, Zimbabwe. This is an orphanage for children who have lost their parents to HIV/AIDS and have no one else to care for them. Heidi developed a business plan for a farm at New Start to improve the children’s nutrition, and is now putting it into practice.

On the domestic front, our faculty and Environmental Landscape Design students have developed the landscape designs for the Andreasen Center for Wellness on campus as well as Camelot Place condominiums and JKB Contemporary Art Museum, Niles, MI.

We are looking forward to what the 2019-2020 school year will bring. The future is very promising!

Website: https://www.andrews.edu/cas/agriculture/
Behavioral Sciences

Community & International Development

James White Library

Social Work

Undergraduate Leadership

Visual Art, Communication, & Design
This year the Department of Behavioral Sciences had the unique opportunity to have faculty members involved in major events and projects that impact the world stage and the Seventh-day Adventist World Church. First, Dr. Øystein LaBianca was one of two invited keynote speakers for the opening session of the 14th International Conference on History and Archeology of Jordan that was held on January 21st in Palazzo Vecchio, Sala Cinquecento. This year also witnessed the historic celebration of 50 years of research at the Mabada Plains Project (MPP) in Jordan. The MPP is considered the longest ongoing archaeological project that includes three sites: Tell Hisban, Tell Jalul and Tell Umayri. Dr. LaBianca is one of the co-directors and founding fathers of the project. Third, Dr. Duane McBride and Dr. Karl Bailey completed the important and enormous task of leading a microanalysis of a global church member survey that was presented and received favorably at the General Conference Fall Council and was published in the March 2019 issue of Focus Magazine. Finally, Dr. McBride continues to serve as President of the Adventist Human-Subject Researchers Association and was reappointed to the Advisory Committee of the Monitoring the Future Study at the University of Michigan, as well as reappointed Chair of the NIH grant review committee on Moving the Field Forward Conducting Secondary Data Analysis of Meta Health Data Banks.

The department has also been blessed in regards to faculty awards. Two of our faculty were publically recognized for their contributions to Andrews University. Dr. Melissa Ponce-Rhodas received the undergraduate Research Mentor Award and the Bruce E. Lee Service Award for the Social Sciences Division. Dr. Harvey Burnett received the Siegfried H. Horn Award for Excellence in Research & Creative Scholarship.

Research activity among our faculty this year continues to be strong. This has included co-publishing with our undergraduate and graduate students in peer-reviewed scholarly journals. The Behavioral Sciences Department continues to provide a strong research contribution to the College of Arts Sciences.

This year we are also proud of our student researchers:

- Talisa Gonzalez (Psychology Pre-Professional Honors Senior) was the lead author in publishing her research entitled, "an Examination of Resilience, Compassion Fatigue, Burnout, and Compassion Satisfaction between Men and Women," in the North American Journal of Psychology. Her co-authors and research mentors were Dr. Herbert Helm and Dr. Burnett.
- We sent 24 students with Drs. Bailey, Burnett, Helm, and Ponce-Rhodas to the annual Midwestern Psychological Association conference in Chicago in early May. There were 10 poster presentations and one talk by nine undergraduate students and a talk by one faculty member.
- This year’s Michigan Academy of Science, Arts & Letters (MASAL) was held at Alama College. We had 2 faculty members chair a discipline section. We also had two faculty members, three undergraduate, and five graduate students present their research, while 2 undergraduate students presented poster presentations.
- Four students presented posters at the 3rd Southwest Michigan Psychology Undergraduate Research Conference on March 15. Two of our students received awards for their poster presentations: Brittany Bird received first place while Talisa Gonzalez received third place.

Our department was very excited about the academic achievements of several of our seniors who graduated this year and were accepted into graduate programs. Brittany Byrd (Psychology – Pre-Professional) and Talisa Gonzalez (Psychology – Pre-Professional) were accepted to the Forensic Psychology graduate program at Marymount University; and Joseph Mayor (Psychology – Behavioral Neuroscience) was accepted to Loma Linda Medical School.

Website: https://www.andrews.edu/cas/behavioral/
Madagascar Study Tour: Exceeding All Expectations

When I decided to join the graduate program of Community and International Development there were several things I expected. I, of course, expected to learn about the theory of community development and increase in knowledge necessary for me to work in what I believe to be a necessary yet ever-changing field. I expected to meet students from around the world, with various levels of experience, and with differing skill sets than myself. I expected to gain greater clarity about where I fit in this field and hopefully some direction about what I'd like to do with this degree. I expected to write a lot of papers, spend hundreds of hours reading, and develop my research skills. As I am winding down my program, I can say that the Community and International Development program has met all of these expectations. But when I signed up for the Madagascar Study Tour, I had no idea what to expect. After overcoming the initial worries about the cost of the trip, and how it would impact my budget and the course of my program, I made my deposit and began to prepare for a little under a month in Madagascar. I registered for the two courses that trip covers, Poverty Analysis & Reduction Strategies and Humanitarian & Development Practice. I packed my bags, did my pre-work, and departed with 6 other classmates on May 13, 2019 for Antananarivo, Madagascar. Each day of the tour focused on one of the UN’s 17 Sustainable Development Goals. Each of our visits connected not only with the goal, but with our broader examination of poverty and development practice. For example, one of our visits included a visit to a local community outside of the capital that is a large producer of eggs. We were given a tour of the village by the mayor who is also a medical doctor in the community and had the opportunity to learn more about local politics, education, and economy through agriculture. We saw first-hand with this visit and the others we had, the complexities of communities and local development contexts, the factors that lead to poverty, theories of poverty and solutions used by local practitioners to address poverty at various levels.

This trip was one in which theory and praxis were perfectly blended to create a comprehensive learning experience. In addition to the learning experience, being in Madagascar reminded me why I joined this program in the first place. My desire to be an advocate for equity in our society, to do the slow, system-transforming work of creating communities that enable all individuals to be empowered and live a quality life, was reaffirmed while in Madagascar. I carry the stories with me of the men, women and children I encountered. I carry with me the experiences of walking through the crowded streets of Tana, hiking barefoot and crossing a river to a rural village outside of Tamatave, holding the hand of a child with whom I could share little words but the comfort of walking hand-in-hand, and meeting one of the government’s highest officials. I carry with me the sounds, sights, tastes, and smells of the city and the country. Of all the expectations I had when I started the CIDP program and of all the expectations I did not have when signing up for the study tour, I can say without doubt that the Madagascar Study Tour is an experience that students need. It’s more than just six credits, it’s more than an opportunity to travel, it’s an opportunity to learn and grow that will exceed all expectations.

Note: I kept track of all my experiences in Madagascar via my social media. These photos and stories were compiled and shared in a photojournalism article through Spectrum Magazine. Learn more about my experience on the study tour here: https://spectrummagazine.org/arts-essays/2019/beauty-behind-us-stories-madagascar

Website: https://www.andrews.edu/cas/behavioral/cidp/
New Staff. During the 2018-19 school year, we added three new employees to the staffing, namely: Margaret Adeogun, Head of Patron Services & Marketing; Zorislav Plantak, Systems Librarian; Kevin Reiner, Resource Sharing Manager; and Vicki Wiley, Office Manager.

Retirements. The Dean of Libraries, Lawrence W. Onsager, retired after 18 years of service to Andrews University. Others who retired included Steve Sowder, Systems Librarian; Mildred McGrath, Patron Services Manager; and Wanda Cantrell, Office Manager.

Projects. When walking through the stacks of the James White Library, there are many areas where the shelves are full to bursting. There is little room to add new titles. To solve this problem, the James White Library contracted with OCLC to provide an analysis of the collection using a program named GreenGlass. This program allows us to identify titles that:

- have been sitting on the shelves for 20 or more years and which have never been checked out, but which are readily available in other libraries where we can get them through interlibrary loan. These titles are candidates for possible removal.
- are available full text online in HathiTrust. We retain access to the content so we can remove the physical copy on the shelves.
- are not found in other libraries. These will be secured in a Rare Book room.

Service Improvement. In order to promote library user experience, the library made the following enhancements to our service models: we installed libCal, a space management software to enable our patrons to make space reservations from anywhere and at any time. Our new digital signage has enabled the library to promote its services and communicate with patrons more easily. Through the digital signage, we have been able to relate campus news and events to our patrons as well, making the library a clearinghouse for campus news. The SenSource people counting software gives insights into the library's traffic patterns and peak times for improved daily operations and service restructuring.


Special Events. At the Library Council of May 15, 2019, the Dean of Libraries and members of the Council participated in the unveiling of the portrait of Hyatt Moore's The Last Supper with Twelve Tribes. The painting commemorates the inclusion of all peoples under God.

Website: https://www.andrews.edu/library/
Social Work's 2018-19 has been both eventful and productive. Our first piece of good news is that the Andrews University Board voted to upgrade our status to School of Social Work! We are excited by this new phase in our history, which (almost!) coincides with the 25th anniversary of the beginning of our Masters in Social Work (MSW) program in 1995.

Our Bachelors in Social Work (BSW) and MSW programs continue to thrive, with around 100 students in both programs. We continue to produce graduates who are successful in the field of social work. Our latest five-year alumni survey shows that, of those who responded, 100% of those who attempted their state board exam passed that test. In addition, 100% of those who had looked for a social work job had found one.

We worked hard to obtain re-accreditation for our BSW and MSW Programs. Under the leadership of Curt VanderWaal, the incredibly large self-study documents had key sections written by Alina Baltazar (MSW Program Director), Desi Davis (BSW Program Director), John Gavin (BSW Washington Adventist University), Krista Cooper (Assessment Coordinator) and Twyla Smith (Director of Field Education). Shannon Trecartin provided invaluable support and writing in the assessment and diversity chapters and Ingrid Slikkers added critical documentation support. The self-study submission was followed by a smooth site visit by the Council on Social Work Education (CSWE) in April. We fully anticipate receiving an 8-year re-accreditation when CSWE reviews our site visit findings in the fall.

We are also pleased to announce that we have created a Center for Trauma Education & Care, coordinated by Ingrid Slikkers. We have received start-up funding from a private donor and look forward to integrating trauma education throughout our curriculum in the coming year. We will also feature trauma education as a new focus area for MSW students starting this Fall Semester. Over the past year we provided trauma education to the Navaho Nation Reservation in Chinle, AZ as well as offered family-centered trauma education/care to Latino families in North Carolina. This summer, faculty and students are traveling to refugee camps in Ethiopia and Cambodia to provide similar services. Within these trips, our team delivers introductory trauma education to individuals while providing intentional, research-based ideas with sensory-related tools to encourage healing. Workshops and individual consultation are provided to trauma survivors but also community leaders, teachers, pastors and first responders who will then continue to use and teach these skills to others (training the trainers).

Faculty had a banner year for scholarship, so much so that we can only list the highlights, which include six peer-reviewed articles or book chapters and thirty-seven peer-reviewed conference presentations. Our findings were published and presented with the help of twelve students, faculty from six departments across the university, as well as faculty from six outside universities or professional organizations. In addition, Curt VanderWaal and Alina Baltazar organized the Adventist Human Services Research Association conference held at Andrews University last summer, which resulted in a co-edited book. In addition, faculty conducted peer-reviews for three scholarly journals and brought in almost $20,000 in external research funds.

In other news, Margaret Howell and Desi Davis worked to obtain full state certification in School Social Work, Alina Baltazar led in establishing a new MSW/Master of Business Administration Dual Degree, and Twyla Smith and Desi Davis worked with John Gavin at Washington Adventist University to strengthen their BSW program and field education components in preparation for re-accreditation. Finally, we welcomed a new office manager, Nathaly Ortega, whose cheerful and efficient approach to students and faculty has helped us to manage our busy and sometimes-chaotic lives.

Website: https://www.andrews.edu/cas/socialwork/
The 2018-2019 year was a time of transition for the Undergraduate Leadership (Ulead) program. The program joined the Social Sciences division of the College of Arts & Sciences; as a result Ulead has become more involved in the work of the Andrews University Unified Outcomes curriculum overview. Kari Prouty, new Ulead director, co-lead a discussion to clarify the shared curriculum and measurements used to determine outcomes for all AU students, focusing on Transferable Life skills (skills which are considered by employers to be the most important in determining the likely success of employment candidates) including resilience and reflective learning.

Thanks to the support of alumni backers, Ulead was able to send two instructors for further certification in both Coaching and Strengths Training. This training will enrich Ulead and the Andrews University campus as a whole (both instructors are also deans for Meter Hall and have daily interactions with and oversight of most of the male undergraduate population).

Thanks to a new corporate supporter, UltraCamp, (owned by Daniel Ashley and Jason Payne both AU alumni) Ulead held mock interviews at UltraCamp’s headquarters in Niles, Michigan. Seniors were treated to a wide variety of possible interview styles and environments in order to prepare them for their upcoming graduation and introduction to the work world.

This year Ulead also provided support and mentorship to world changing students:

A hundred pieces of Laffy Taffy started a conversation in the Fundamentals of Leadership class that ended with students helping local students and community members experiencing food insecurity. The end of the semester means students purchasing things in the Gazebo to use up remaining cafeteria account funds. The Laffy Taffy belonged to freshman student Nehemiah Sitler. He thoughtfully shared his candy with other classmates and this started a conversation. The class wished for another way to use remaining funds and brainstormed some of the ways this could be done. Nehemiah stepped up and carried through what this discussion began. He created the opportunity for Andrews Students to donate leftover cafeteria funds to God’s Abundant Pantry (a food bank ministry organized by Pioneer Memorial Church). In less than two days several thousand dollars were donated by 131 Andrews Undergraduate students.

Gwendoline Albright, a Senior Architecture student, enabled a collaborative design for a bright socially active indoor/outdoor public space in the center of campus that would encourage students, faculty, and staff to go outside regardless of the season; providing them with a destination that is experientially connected to the landscape. The goal was to design a space that would run all year long accommodating at least 30 people in a cozy and enjoyable environment that would also help prevent seasonal affective disorder in the Andrews University community. Gwen conducted a charrette (an architecture design event) of both students and professors who created several designs which, if built, would meet the needs of current and future Andrews Students. These designs have already been shared with Andrews Administrators.

Evenny "Ev" Milliner’s project was a response an emergency. Chaplain Michael Polite’s son Jesher, was born prematurely and was in a neo-natal intensive care unit. Her inspiration was a blog post by Chaplain Polite describing the imaginary world he experienced with his son Jesher. Ev created the “Starship Jesher” T-shirt design using Polite’s images of the incubator as a spaceship and little Jesher wearing an epic pair of sunglasses. As Ev states, “The t-shirt is a declaration of love and support for a family that deserves more than love and support can give.”

Functionally, this project consisted of establishing relationships and rapport with the family, designing the t-shirts, and creating a way for Andrews University and the broader church community to support the family. Ev built a social media presence so that supporters and donors could help on multiple platforms (Etsy, Kickstarter, emails, hand selling, and even church bulletins). Ev has stated that this structure and the things that she learned through the project will be used to help others in the future.

Kia Williams started an outreach program for the AU women’s basketball team. Her plan connected the team with the outreach coordinator at the YMCA. Kia and her teammates ran basketball clinics for elementary school students at the Benton Harbor/St. Joseph YMCA. It was important to Kia that this let the local kids know that the team members cared about them. Kia explains, “[W]e hope to help these children see the underlying values learned in the game of basketball and how they can be applied in their lives in practical ways.” The project was popular with both the team and the students. Kia’s structure has been implemented by the Andrews University Lady Cardinals basketball team and the team plans to continue working with the community in this manner in the future.

Ulead shines through the students we prepare for the work of Servant Leadership. Whether minors, certificates, or a la carte classes, we are changing the world, one student at a time.

Website: https://www.andrews.edu/cas/ulead/
This year, the Department of Visual Art, Communication & Design welcomed a new faculty member and artist-in-residence from Europe to build on the growth and recent accolades in the film program. The highly talented Austrian Sebastian Woeber is a Director of Photography and a graduate of the prestigious Film Academy Vienna. He is the founder of Cinema5D.com, one of the leading websites exploring film technology and equipment. His unique insights and technical prowess have strengthened the film program this year, and the students have responded positively to his high standards.

The Communication programs consistently highlight the opportunities available to the students for professional development. In October 2018, seven graduate students, two undergraduate students, and two faculty members attended the Society of Adventist Communicators Conference (SAC) held at the North American Division headquarters in Maryland. One of our faculty members, Heather Day, received the prestigious Young Professional Award. Chelsya Waworuntu, an MA Communication graduate student, emphasized the networking opportunities: “The doors that were opened through SAC reminded me exactly why I wanted to pursue Communications in the first place.”

According to Heather Day, our editor and also Associate Professor of Communication, this year the magazine set out to tell honest stories reflective of young adult culture and to do it well enough that people noticed nationally: “Our students worked hard to put together a quality product. This fall we were recognized by the Associated Collegiate Press, a national organization that sets the standards for collegiate publications. Envision won a Pacemaker, which is considered the Pulitzer Prize of collegiate journalism.”

For Envision’s latest issue we were able to bring to campus Wandile Mthiyane, a recent Andrews graduate who was recognized by Tedx as one of the top 100 millennial world changers. He spoke to students about the importance of serving in the spaces of your life where you were not served. Last month, Wandile became an Obama Fellow.

His faith and work of building homes with dignity through Unbuntu Design in South Africa inspires young adults in our church to believe that their service can be their legacy. His story became Envision’s cover story and we are honored to share it.

In March 2019, three of our graduate students presented their research at the MASAL conference held at Alma College. It was a great opportunity for our students to engage with other scholars within the Michigan academy. Several of the students in attendance are already working on their research and production projects in anticipation of next year’s events.

Website: https://www.andrews.edu/cas/vacd/
Teaching Award

Research & Creative Scholarship Award

Service Awards

Research Mentor Awards
2019 DANIEL A. AUGSBURGER AWARD FOR EXCELLENCE IN TEACHING

Julia Kim (English)

Julia Kim’s teaching embodies the philosophy of teaching to which Andrews University aspires and is characterized by excellence, inquiry and compassion. She teaches a wide range of classes: first-year college writing, English to speakers of other languages, a graduate seminar on Global English—varieties of English spoken around the world, to name just a few. In the classroom Julia skillfully combines academic rigor with teaching strategies that spark her students’ interest. She brings cutting-edge research and information to her presentations and also engages students with her innovative use of technology, encouraging student participation and peer interaction both in and out of the formal classroom setting.

Julia is an inquisitive, energetic learner herself and never shrinks from tackling new knowledge. A colleague observes, “It’s too hard are words that Julia surely has never uttered in any language when facing professional challenges.” As a very active research faculty, Julia infuses her own scholarly endeavors with this spirit of inquiry and models good research practices for her students. Julia generously shares her scholarly expertise, mentoring her students to present papers at academic conferences and collaborating with colleagues.

Julia is also very sensitive to the diversity she encounters among her students, and she is skilled at recognizing and responding to cultural differences. Her care and concern for her students reaches to the bedside of a student undergoing surgery in Ann Arbor, to a young woman struggling to finish the final requirements for her degree long distance, to families facing food insecurity. One of her students says, “Dr. Kim cares deeply, and it shows to everyone who knows her. It is clear to those of us who call her teacher that she cares immensely about her students, about her teaching, about her field of study and research, about this university, and about her Savior. Her attention to detail, her fairness, her calm, her openness, and her encouragement have impacted us, and we are enriched by her.”

to our community. He holds a Master of Divinity and a PhD in psychology.

He has an outstanding record of integrating faith, teaching, service and research in his career. His students and colleagues consider him an outstanding teacher, advisor and mentor. Harvey has a global reputation for his commitment to service in many roles from local conflict resolution and work with police departments to international disaster recovery.

He also has established a strong scholarly record of accomplishment and, perhaps more importantly, he has continued to develop a strong departmental scholarly productive culture in the Department of Behavioral Sciences. His faculty and students lead the College of Arts & Sciences in scholarly productivity. His research mentoring of students has helped produce outstanding scholarly work that has resulted in a high number of student presentations at regional and national conferences and student co-authored publications. His example has been inspirational to his colleagues.

2019 BRUCE E. LEE AWARD FOR EXCELLENCE IN SERVICE

Gunnar Lovhoiden (Engineering)

Gunnar Lovhoiden received the 2019 Bruce E. Lee Excellence in Service Award for his outstanding community service. He was a core team leader a church plant in 1998 for an experimental church of small groups launched by NADEL, the Calvary Road Community Church, an SDA Church in Niles, MI. He is Ministry Leader for the Monthly Mobile Food Pantry, which recently served 140 families in a single event. Gunnar was responsible, along with his small group, to adopt a neighborhood in Niles, which is now a strong center for outreach to kids and teens. Every month he leads out in delivering food door to door to residents from local farmers and purchased from the warehouse at Feeding America. Gunnar’s favorite role is behind the scenes. He sets-up the church at least twice a month. At the church’s annual Easter Egg Hunt and other events for the community, Gunnar will be the first to arrive to make sure all equipment and tables, etc. are set up. In addition, Gunnar works with the children’s ministry along with his wife, Linda, teaching 10-13 year old youth at least twice a month. He is frequently involved in doing projects, which use his skills in construction, mechanics, and cutting firewood to serve people who do not have the means to fix or provide for themselves. A direct quote from Gunnar is “I don’t think God wanted us to serve for what it would do for them but what it would do for us.” His pastor, Mark Youngberg, notes, “I personally think that Gunnar takes seriously the call to love your neighbor as yourself in the way Jesus meant it. He loves interacting and conversing with those he serves and knows them by name as well as their stories. His greatest joy is to serve the “least of these.”

2019 SIEGFRIED H. HORN AWARD FOR EXCELLENCE IN RESEARCH & CREATIVE SCHOLARSHIP

Harvey Burnett (Behavioral Sciences)

Harvey Burnett is an outstanding example of the best of what Andrews’s faculty can be. Harvey comes from an interdisciplinary background that has played a major role in his professional development and contributions.
Adriana Perera
(Music)
Adriana Perera’s strong dedication to both the local and extended community is remarkable. Since she came to Andrews University to teach in the Music Department, she has demonstrated passion for service and for participating in activities beyond her teaching responsibilities. For example, Adriana has developed a ministry to teach music to inmates of local prisons. She has organized a group of students, from the music department and others, to go with her and support this ministry. The time and effort involved in keeping this initiative running is impressive. For weeks and months, both students and inmates have been able to work together, share their love for music, and see how their lives have positively changed because of this experience.

In addition, Adriana has designed and supported several initiatives on campus to encourage college and high school students to take part in music groups. Her service to the SDA Church is equally valuable. As a strong supporter of the integration of worship and music, she has travelled to several countries to make presentations and guide pastors and congregations as they look for venues to achieve such a much-needed integration. In conclusion, Adriana is involved in helping and providing service in all levels: university, local community, the state of Michigan, the United States, and the whole world. Finally, her strong collaboration with AULA (Andrews University Latino Association) has been so important for Hispanic students who see in Adriana a true role model. A Latina who overcame difficulties to achieve her goals and became not only a college professor, a department chair, and an international speaker but also a person devoted to serve and help everyone who is in need.

Melissa Ponce-Rodas
(Behavioral Sciences)
Melissa Ponce-Rodas has led out in two crucial service areas at Andrews University. She organized an Andrews University response to Hurricane Maria that hit Puerto Rico in 2017. She led a team of emergency and trauma responders that included faculty from the Behavioral Sciences and Social Work Department as well as from the School of Education. This team was able to provide needed resources and training that facilitated recovery. In addition, Melissa has been an active part of the End It Now campaign, which calls for an end to interpersonal violence. She has played a major role in working with the Hispanic community on domestic violence issues.

Benjamin Navia
(Biology)
“When I found out that Dr. Navia was going to be my research mentor, I was excited because he is a widely respected professor known not only for his scholastic abilities but also more uniquely for his genuine care and interest in his students’ learning. My experience working on his research team has only confirmed this. Those of us on the cricket team have been able to witness Dr. Navia’s other good qualities such as his tireless work ethic as well as his ability to form meaningful relationships with his students.

“No matter how busy he is, Dr. Navia has always made himself available to help us. In the cricket lab, we all know that we can ask Dr. Navia any question (no matter how small it is or how many questions we have already asked that day) and he will kindly explain the answer until he is confident that we are effectively able to navigate the issue.

“Dr. Navia goes way above and beyond what is asked of him as a research mentor. It is not unusual to see him spend hours tinkering with cricket machinery to help a student with their problem; a feat that many would see as not their responsibility. On top of the time that Dr. Navia spends every week giving guidance, he has spent countless hours helping me and the other students in the lab compile data and put together posters and presentations to make sure that we are properly prepared. Dr. Navia has also given me extremely valuable advice at a time when I needed it the most. I know that I am one of many students (inside and outside of the lab) that Dr. Navia has influenced in a similar way.

“I originally started working in Dr. Navia’s lab in order to gain research experience and motor dexterity to prepare me for medical school. While this did happen, under his guidance I also gained a love for research and formed a great group of colleagues who I now call friends.”

“I have had the honor of having Dr. Navia as my undergraduate research mentor over the past two years, and it has been an incredible privilege. Together, we investigate the relationship between behavioral and neuronal responses in a cricket model via painstaking cycles of trial-and-error. To clarify, the project that I am working on is not an easy one; however, throughout the entire process, Dr. Navia has helped mentor, guide, and motivate me. There were many times where I felt defeated and dejected, but he has always had words of encouragement. ‘You’re building character,’ is one of his favorites. He also consistently pushes me to test my own intellectual limits, and teaches me when I err.

“Finally, Dr. Navia has inspired me through his genuine investment in learning about his students and mentees, and the way that he respects,
Melissa Ponce-Rodas
(Behavioral Sciences)

"Dr. Melissa Ponce-Rodas…
What can I say? No student's research experience is complete until given the chance to cross paths with a professional of her caliber. She embodies the whole person concept as described by God's Servant in her inspired work Acts of the Apostles, p. 318: ‘No matter how high the profession, he whose heart is not filled with love for God and his fellow men is not a true disciple of Christ.’ During my time with Dr. Ponce-Rodas, I have seen first-hand her devotion for her mentees—myself included—as well as her profession. On the relational aspect of working with her, I am touched to see how we were—as I am positive her current mentees still are—her most important asset, our wellbeing her number-one concern. While mentored by Dr. Ponce-Rodas, there was never a time when she assigned me a task in which she did not take the time to assess my current life situation, and, if needed, lend a helping hand or a much needed and appreciated word of advice, whether career or non-career related. Having Dr. Ponce-Rodas as my research mentor was nothing short of a blessing as sharing our values enhanced our work and our connection. Workwise, she offered us a safe environment and set the ideal tone for any mentee, new or seasoned, to grow professionally and spiritually, especially while handling such a sensitive and taboo subject as it is the existence of domestic abuse in the SDA Church. The knowledge and practice I acquired while working with her will always be unparalleled. Only with her did I have the opportunity to exercise in the real world what I learned in the classroom. Only with her did I find out that such a field as Community Psychology exists and how rewarding and innovative it is! If not for her, I would have never imagined I was up to the challenge of presenting my own posters at different research events, during which my work was also noticed and complimented by other professors. No other professor or advisor I had during my run through AU, kept me in mind for any professional development opportunity like she did, whether a workshop or a conference; not once did she leave me outside of her agenda. Every research related meeting with her was stimulating, thus inviting me as her mentee to ask more questions. She welcomed any useful input and insights I offered related to the subject, while also clearing away confusion. Dr. Ponce-Rodas has undoubtedly been, and will always be, pivotal in my personal, career, and professional development. No other educator and community servant will bring credit upon AU by touching the lives of her mentees and students as Dr. Melissa Ponce-Rodas ever will. Any educational institution needs to be aware of the honor it constitutes to have this eminence within its ranks."

"I am so glad I got to work with Dr. Navia in doing this research. Through collecting and analyzing my data, I learned to think in more three-dimensional ways that required honest self-evaluation and much thinking outside the box. I learned how to communicate my research content to an interdisciplinary audience in a way that will speak relevance and ‘light-bulb moments’ to them. I got to have many fun, learning experiences by attending conferences where I got to present my research. Through these conferences, I was able to experience the bigger ocean of academics that reminded me once again that there is a lot more to see, learn, and challenge myself with. I am thankful for all the work Dr. Navia is doing of which helped me to get to where I am today! Thank you very much, Dr. Navia!"

"I have worked with Dr. Navia as my research mentor for the past couple of years. He is an amazing research mentor. In lab, it is very easy to become frustrated and discouraged when working with crickets, but in Dr. Navia’s lab that is not what happens. He drops words of encouragement and wisdom throughout the lab work day that make it easier for all of us to power through each experiment. Dr. Navia also does a great job at building up the lab’s morale as a team. We have get-togethers and research meetings that help us to catch up with the other projects being conducted and to build deeper friendships with one another. I have definitely enjoyed working with Dr. Navia, and he is a worthy recipient of the Undergraduate Research Mentor Award."

cares for, and seeks to understand and accommodate each of our backgrounds. I believe this is something which everyone at Andrews University should seek to emulate. He has taught me more than I could possibly imagine knowing about crickets, and he has truly been an inspirational figure to me during my time here. I believe that he is undeniably qualified and deserving of the 2019 Undergraduate Research Mentor Award.”
Peer-Reviewed Publications
General Publications
Presentations
Performances
Exhibitions, Recordings & Film Production
Faculty Research Grants
Undergraduate Research Scholars
Graduate Research Grant Recipients
**Behavioral Sciences**


**Chemistry & Biochemistry**


**Engineering**


P. A. Damiano, P. A. Delamere, B. Stauffer, C.-S. Ng, and Jay R. Johnson. Kinetic simulations of electron


Jay R. Johnson, Simon Wing, and Enrico Camporeale. Transfer entropy and cumulant-based cost as measures of nonlinear causal relationships in space plasma: Applications to *Dst* *Annales Geophysicae* 36(4), 945-952, 2018.


**English**


**History & Political Science**


**International Languages & Global Studies**


**James White Library**


**Mathematics**


J. M. Cushing and Shandelle M. Henson. Periodic matrix models for seasonal dynamics of structured populations with applica-


Physics


Tiffany Z. Summerscales with M. Soares-Santos et. al. (LIGO Scientific and Virgo Collaborations). First measurement of the Hubble Constant from a dark standard siren using the dark energy survey galaxies and the LIGO/Virgo binary-black-hole...

**Religion & Biblical Languages**


**Social Work**


Krista Cooper. Research advocacy: Afro-Caribbean immigrant women living with HIV. *Journal of Social work and Christiani
ty 46(1), 41-48, 2019.


**2018-19 GENERAL PUBLICATIONS**

**Bold italics** = graduate student co-author, 
**italics** = undergraduate student co-author

**Agriculture**


**Behavioral Sciences**


Rachelle E. Pichot, Harvey J. Burnett, and Karl G. D. Bailey. Empowering frontline trauma responders: Keys to resili


**Engineering**


**English**


**James White Library**


**Music**


**Religion & Biblical Languages**


**Social Work**


**Visual Art, Communication & Design**


2018-19 PRESENTATIONS

**Bold italics** = graduate student co-author, 
**italics** = undergraduate student co-author

**Agriculture**


**Behavioral Sciences**


Melissa Ponce-Rodas, Mary Insalaco, and Alisha Schneider. “Nine days, 20 volunteers, over 1,000 people reached: How we translated psychological research into practice.” Adventist Human-Subject Researchers Association Annual Conference. Andrews University, Berrien Springs, MI. May 16-19, 2018.


Biology


Daniel Gonzalez-Socoloske, Ezea Penjaitan, Miriam Marmontel, and Daryl P. Domning. “Florida manatees have less functional teeth and higher levels of mesowear than other manatee populations.” XXXVI Reunion Internacional para el Estudio de los Mamíferos Marinos. Villahermosa, Tabasco, Mexico. May 27-31, 2018.


Daniel Gonzalez-Socoloske, Camila Carvalho De Carbalho, and Miriam Marmontel. “Caracterización de las imágenes de sonar de escaneo lateral producidas por el delfín del Amazonas (Inia geoffrensis) para reducir la posible confusión durante los estudios de los manatíes Amazónicos (Trichechus inunguis) [Characterization of side scan-sonar images produced by Amazonian River dolphins (Inia geoffrensis) to reduce potential confusion during surveys of Amazonian manatees (Trichechus inunguis)].” XII Congreso de la Sociedad Latinoamericana de Especialistas en Mamíferos Acuáticos - RT 18. Lima, Peru. November 5-8, 2018.


Cassie Kim and Benjamin A. Navia. “The effect of octopamine on phonotaxis in unexposed female (Acheta domestica).” Michi-


**R. Christian McDonald (with Peter J. Lyons).** “Searching for the function of Ecm14, a pseudopeptidase, using a synthetic lethal assay.” Experimental Biology/ASBMB Annual Meeting. Orlando, FL. April 7-9, 2019.


**Ezra Panjaatian, Daniel Gonzalez-Socoloske, and Miri Marmontel.** “Florida manatees have less functional teeth and higher levels of mesowear than other manatee populations.” Michigan Academy of Science, Arts, and Letters Annual Conference. Central Michigan University, Mt. Pleasant, MI. March 9, 2018.


**Nina Woodard, Daniel Gonzalez-Socoloske, Miriam Marmontel, Daryl Domning, and Camila Carvalho de Carvalho.** “Similar mouth different result: Variation in manatee tooth wear and number between populations.” Michigan Academy of Science, Arts, and Letters Annual Conference. Alma College, Alma, MI. March 1, 2019.

**Chemistry & Biochemistry**


Engineering


RESEARCH & CREATIVE ACTIVITY

PRESENTATIONS


English


History & Political Science


International Languages & Global Studies


James White Library


Mathematics


RESEARCH & CREATIVE ACTIVITY

PRESENTATIONS


Yun Myung Oh. “Rectifying submanifolds in pseudo-Euclidean spaces and rectifying curves in Minkowski space E^4.” Fall Central Sectional Meeting, American Mathematical Society. University of Michigan, Ann Arbor, MI. October 20-21, 2018


Brandi Seawood, Adriana Luna, and Shandelle M. Henson. “Egg cannibalism in gulls: If the first–laid egg in a nest has been cannibalized, is the second–laid egg likely to be cannibalized?” Zoology Section, Michigan Academy of Science, Arts, and Letters Annual Conference. Alma College, Alma, MI. March 1, 2019.


Lynelle Weldon. “If I could only teach one concept,” “If I could only teach one skill.” Math Teachers Professional Learning Community. Lake Union Conference, Berrien Springs, MI. October 30, 2018.


Music


Charles Reid. Masterclasses with undergraduate voice students and Die Meistersinger (male chorus). Southern Adventist University, Collegedale, TN. October 25, 2018.

Charles Reid. Masterclass with undergraduate voice students. La Sierra University, Riverside, CA. March 19, 2019.


Carla Trynchuk. Faculty, Young Artist Seminar. Rocky Ridge Music Center, Estes Park, CO. June 19-July 15, 2018.

Carla Trynchuk. Violin Masterclass. Walla Walla University, College Place, WA. March 18, 2019.


**Physics**


**Religion & Biblical Languages**


PRESENTATIONS


Social Work


Skip Bell, Will James, Carmelo Mercado, Todd Stout, Ingrid Slikkers, and Bryan Mann. Panel, Urban Ministry and Mission Congress. Andrews University, Berrien Springs, MI. September 6-8, 2018.


Visual Art, Communication & Design


2018-19 PERFORMANCES, EXHIBITIONS, RECORDINGS & FILM PRODUCTION

Behavioral Sciences


Chemistry & Biochemistry


History & Political Science

James White Library

Music
Andrew Campbell (piano), Katherine McLin (violin), Carla Trynchuk (violin), David Rose (viola), and Si-Yan Li (cello). Chamber Performance, “Piano Quintet in F minor, op. 34.” Brahms. Rocky Ridge Music Center, Estes Park, CO. June 24, 2018.

Byron Graves. Director, Wind Symphony Tour Concerts. Battle Creek Academy, Battle Creek, MI; Lansing SDA Church, Lansing, MI; Holland SDA Church, Holland, MI. March 9-10, 2018.


David Shea (clarinet), Carla Trynchuk (violin), Erik Peterson (violin), David Rose (viola), and Si-Yan Li (cello). Chamber Performance. “Clarinet Quintet in A Major,” Mozart. Rocky Ridge Music Center, Estes Park, CO. July 1, 2018.


Mark Walters (baritone), Christina Pier (soprano), Nicole Heaston (soprano), Aaron Sorensen (bass), Charles Reid (tenor), Sydney Anderson (soprano), Evan Boyer (bass), Jay Oetman (bass), Josh Danks (bass), Mozart: Don Giovanni. Kalamazoo Symphony Orchestra, KSO-023-A, 2018.


Chi Yong Yun. Recitalist. TLI Arts Center, Seoul, South Korea. March 2018.


Chi Yong Yun. Second Sunday Series. Howard Performing Arts Center, Berrien Springs, MI. April 2018.


**RESEARCH & CREATIVE ACTIVITY**

**PERFORMANCES, EXHIBITIONS, RECORDINGS & FILM PRODUCTION / FACULTY RESEARCH GRANTS**

---


**Stephen Zork.** Clinician, Northern Ohio Adventist Academy Choir Festival. Sheffield Lake, OH. October 11-13, 2018.

**Stephen Zork.** Conductor, Andrews University Singers Concert Tour. Indiana Academy, Cicero, IN (November 9, 2018) and Glendale Seventh-day Adventist Church, Indianapolis, IN (November 10, 2018).


---

**Religion & Biblical Languages**


---

**Visual Arts, Communication & Design**


---

**New Faculty Research Grants**

Lisa Ahlberg (Chemistry), High Pressure Liquid Chromatography (HPLC) Method Development for Analysis of Amino Acids.

Sonia Badenas (International Languages), The Use of Short Stories in Intermediate French Textbooks in the USA.

Alina Baltazar (Social Work), Qualitative Assessment of Christian College Students’ Perceptions of Motivations and Influences for Health Risk Behaviors.

Anthony Bosman (Mathematics), Families of Links Related by Band Surgery.

Daniel Gonzalez (Biology), Phase II of Amazonian Manatee Detection with Side-scan Sonar and Initial Survey of Antillean Manatees in the Villa Clara Province of Cuba.

Tom Goodwin (Biology), Variation in Diet by Season, Age, and Gender in Thirteen-lined Ground Squirrels (Ictidomys tridecemlineatus).

Julia Kim and Beverly Matiko (English), Power, Ideology, and Linguistic Choices in the Discourse on Women’s Ordination: A Study of Three Roman Catholic Documents.

Marianne Kordas (Library), The Blythe Owen Project, Facets I & II: Creating a Critical Edition of the Sonata for Violin and Piano and Completing Transcriptions of the Owen Correspondence in CAR Collection 186.

Kathy Koudele, Tim Newkirk, and Melissa Poua (Agriculture, Medical & Laboratory Sciences), The Correlation between the Milk Somatic Cell Count and the Differential Leukocyte Count in the Blood of Cows that have a Positive Milk ELISA Test for Antibodies to the Bovine Leukosis Virus.

Peter Lyons (Biophysics), Investigating the Function of Pseudopeptidases.

Marlene Murray (Biology), The Effects of Omega-3 Fatty Acids on Expression of the ISYNA1 and IMPA Genes in Human Brain Cells.

Joel Raveloharimisy (Behavioral Sciences), Formalizing the Informal: Analysis of the Formalization of Informal Institutions in Madagascar.

Christian Stuart and Ivan Davis (English), Teaching for Transfer in the First Year: Writing About Writing at Andrews University.

---

**Faculty Research Grant Renewals**

Greg Constantine (Visual Art, Communication & Design), Creation and Exhibition of “Poetic Licenses” and the Creation and Publishing of two Graphic Novels.


Ryan Hayes (Chemistry) and Brian Wong (Biology), Mutagenicity Assessment of Burned Plant Amino Acids and Antimugenic/Anti-carcinogenic Effects of Chinese Medicinal Herbs.
Jay Johnson (Engineering), Neural Basis for Auditory Scene Analysis.
Hyun Kwon (Engineering), Affordable Detection of Cancer Biomarkers Using the ECL Sensor.
Oystein LaBianca (Behavioral Sciences), Animation of the Cultural Landscape of Hisban and Vicinity in the Longue Duree.
Kenneth Logan (Music), Musical Composition Fostering and Efficiency Project.
Getaahun Merga (Chemistry), Synthesis and Characterization of Conjugated Gold and Silver Nanoparticles.
Benjamin Navia (Biology), Control of Female Cricket (Acheta domesticus) Phonotaxis by Call Selective Neuronal Processing and Molecular Regulation.
Boon-Chai Ng (Engineering), Exploration of the Use of DEAP as a Large Strain Gauge.
David Sedlacek (Discipleship) and Alina Baltazar (Behavioral Sciences), Male Spouses and Female Pastors: Stressors and Coping Strategies.
Denise Smith (Biology) and Desmond Murray (Chemistry), Antitumor Properties of Novel Organic Compounds in Glioblastoma Multiforme.
Tiffany Summerscales (Physics), Estimating the Parameters of Gravitational Waves Using BayesWave.
Shannon Trecartin (Social Work) and Petr Činčala (Church Ministry), Analysis of the 2017 World Church Survey: Exploration of Church Health and Disability within Five Divisions.
Rob Zdor (Biology), Exploring Mustard Seed Meal Effects on the Extended Growth of Velvetleaf Plants under Controlled Field-like Conditions.

2018–19 EXTERNAL RESEARCH SCHOLARS

Federal Grants


Church Grants
Alina Baltazar, Qualitative Assessment of Christian College Students’ Perceptions of Motivations and Influences for Health Risk Behaviors. General Conference of Seventh-day Adventists (2018-2019).
David Sedlacek and Alina M. Baltazar, Male Spouses and Female Pastors: Stressors and Coping Strategies, General Conference of Seventh-day Adventists (2017-2019).

Other Grants & Foundations

2018–19 UNDERGRADUATE RESEARCH SCHOLARS

Jeremy Barrett (Hyun Kwon, Engineering), Development of a Dopamine Sensor. Summer 2018, Fall 2018
Brittney Byrd (Harvey Burnett, Behavioral Sciences), The Effects of Suggestive Wording on Eyewitnesses. Fall 2018, Spring 2019
Amanda Cho (Tom Goodwin, Biology), Comparing Surface Appearance and Microstructure of Tooth Enamel and Dentin Formed During and Outside of Hibernation, Using Scanning Electron Microscopy. Spring 2019
Kieun Chung (Ryan Hayes, Chemistry), Method Optimization to Isolate Potentially-Carcinogenic, Arginine-Based Heterocyclic Amines. Summer 2018
Claire Covrig (Lisa Ahlberg, Chemistry), Rapid and Versatile One-Flask Synthesis of Dendrimer Cores. Summer 2018
Diamond De Guzman (Joel Raveloharimisy, Behavioral Sciences), Formalizing the Informal: Analysis of the Formalization of Informal Institutions in Madagascar. Fall 2018, Spring 2019


Lucinda Ford (Joon Kang, Mathematics), Positive Solutions to a General Predator-Prey System with Combined Self-Limitation and Competition. Spring 2019

Trevor Furst (Duane McBride, Behavioral Sciences), Sexual Orientation and Mental Health. Fall 2018, Spring 2019

Devin Garcia (Yun Myung Oh, Mathematics), A curve satisfying $\kappa = 1/s$ with constant curvature $\kappa$. Fall 2018, Spring 2019

Talisa Gonzalez (Harvey Burnett, Behavioral Sciences), The Effects of Adverse Childhood Experiences on Parenting Practices. Fall 2018, Spring 2019


MariAlexa Holman (Melissa Ponce-Rodas, Behavioral Sciences), Racial Identity, religiosity and spiritualty as correlates of campus climate and diversity narratives. Summer 2018

Ryutaro Jacobson (Ryan Hayes, Chemistry), Synthesis and Analysis of Red Perylenediimide Core PAMAM Dendrimers. Summer 2018

Christopher Jenkins (Oystein LaBianca, Behavioral Sciences), Animation of the Cultural Landscape of Tall Hisban in Jordan. Summer 2018

Juliane Johnson (Daniel Gonzalez, Biology), Subspecies differences in body shape and size in West Indian manatees. Fall 2018

Lisa Johnston (Lynelle Weldon, Mathematics), Identifying Common and Persistent Student Misconceptions by Analyzing Student Work on Remedial Mathematics Examinations. Summer 2018

Adair Kibble (Sonia Badenas, International Languages), Gender Roles and Hierarchy in The Beauty and the Beast as adapted by Jean Cocteau and Christophe Gans. Spring 2019

Ye Lim Kim (Karl Bailey, Behavioral Sciences), Investigating the Link Between Eye Movements and Related Speech Under Working Memory Load. Fall 2018, Spring 2019

Abigail Lopez (Kristen Witzel, Behavioral Sciences), Prevalence and Success of Crowdfunding Campaigns for Victims of School Shootings. Spring 2019

Anthony Miller (David Nowack, Chemistry), Understanding the Mechanism of the Intrinsic Fluorescence of PAMAM Dendrimers. Fall 2018, Spring 2019

Yosia Nurhan (Shandelle Henson, Mathematics), A Discrete-time Mathematical Model of Seabird Behavior. Summer 2018

Delight Pazvakawambwa (Denise Smith, Biology), Synthesis and Anti-Cancer Properties of Benzothiazole Chalcone in Glioblastoma U87 MG Cells. Spring 2019

Ingrid Radulescu (Monique Pittman, English), The Romanian Bard: Translating Shakespeare for a Post-Communist Nation. Spring 2019

Kate Reitz (Kari Friestad, Visual Art, Communication & Design), An Artistic Response to God's Word. Summer 2018

Paul Roschman (Oystein LaBianca, Behavioral Sciences), Animation of the Cultural Landscape of Hisban and Vicinity in the Longue Duree. Fall 2018

Skyler Schell (Ryan Hayes, Chemistry), Burning Method Optimization to Form and Capture Potentially-Carcinogenic, Arginine-Based Heterocyclic Amines. Spring 2019

Michaela Souza (Desmond Murray, Chemistry), Synthesis and Activity of Novel Dendrimer Binding Transfectors. Summer 2018

Nathaniel Srikureja (Ryan Hayes, Chemistry), Prep-HPLC Method Optimization to Isolate Potentially Carcinogenic, Arginine-Based Heterocyclic Amines. Fall 2018, Spring 2019

Adam Weir (Daniel Gonzalez, Biology), Effects of body size, food type, and ontogeny on chewing cycle duration in West Indian manatees (Trichechus manatus) & Modeling morphometrics of West Indian manatees (Trichechus manatus) to estimate body mass. Summer 2018, Spring 2019

Mikelle Wile (Shannon Trecartin, Social Work), Seventh-day Adventist Persons with Disabilities and Their Experiences with Involvement in Church Life and Ministry. Spring 2019

Nicolai Williams (Melissa Ponce-Rodas, Behavioral Sciences), Awareness of Mental Health Services. Fall 2018, Spring 2019

Nina Woodard (Daniel Gonzalez, Biology), Mesowear in the Florida Manatee. Fall 2018, Spring 2019

Taemin Yoon (Desmond Murray, Chemistry), Green Organic Synthesis Mediated by Plant & Non-Plant P婚s. Summer 2018, Fall 2018

2018-19 GRADUATE RESEARCH GRANT RECIPIENTS
Studies by the Association of American Colleges & Universities show that liberal arts graduates possess a wide variety of **SKILLS VALUED BY EMPLOYERS.**

"It is in Apple’s DNA that technology alone is not enough—it’s technology married with liberal arts, married with the humanities, that yields us the results that make our hearts sing."

Steve Jobs

Long-term career success. The liberal arts prepare students to be life-long learners who can thrive in a changing economic environment and experience a **11**

The average number of times a person changes jobs in their lifetime.

Ultimately, those with a liberal arts background match or surpass the earnings of their peers.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional and Preprofessional</td>
<td>$31,183</td>
<td>$64,149</td>
<td>I. <strong>Critical Thinking</strong></td>
</tr>
<tr>
<td>Humanities and Social Sciences</td>
<td>$26,271</td>
<td>$66,185</td>
<td>II. <strong>Intercultural Competence</strong></td>
</tr>
<tr>
<td>Physical Sciences, Natural Sciences, and Mathematics</td>
<td>$25,986</td>
<td>$86,550</td>
<td>III. <strong>Written &amp; Oral Communication</strong></td>
</tr>
</tbody>
</table>

$86,550