CREATIVE SCHOLARSHIP CLIPS 2022

OFFICE OF
RESEARCH & GRADUATE STUDIES
CENTRAL MICHIGAN UNIVERSITY

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MESSAGE FROM THE VICE PRESIDENT OF RESEARCH AND INNOVATION

What an amazing year it has been for Central Michigan University (CMU)! Looking back, 2022 saw the university reach new records in external grantsmanship ($26.3 m) and scholarly output with phenomenal impact touching lives around the world. For the first time, CMU earned a ranking in the QS World University Rankings, a clear reflection of the dedication and excellence shown forth by CMU faculty, staff, and students. The Office of Research and Graduate Studies (ORGS) has worked steadily with partners across campus to highlight the creative scholarship and research advancements of all at CMU. And the ORGS continues to engage in a wide array of activities across CMU, from new awards to recognize faculty excellence to special programming to enhance the graduate student experience. The Faculty Research Club was established to bring faculty together in innovative ways, a new clinical Institutional Review Board is being developed to optimize research compliance, safety training and chemical disposal are keeping the campus safe, and Cayuse SP has brought new proposal routing functionality. Graduate students are engaged in discovery and achievement and the campus is abuzz with excitement. In the year ahead, the ORGS has even more new ideas it plans to roll out in service to the campus community. Along the way, the ORGS will continually seek to be at the forefront of evolution, progressive programming, and service to all. On behalf of all staff within the ORGS' four units (Research Compliance, Sponsored Programs, Laboratory and Field Safety, and Graduate Studies), thank you for working with us to advance CMU boldly into the future.

The future is unwritten, and the best is yet to come.

David C. Weindorf, Ph.D., P.G.
Vice President for Research and Innovation

NEW HAPPENINGS IN ORGS

Faculty Club

From distant lands they came, pioneers of a new social construct that would bind the collective intellect of friends they had not yet known. The Faculty Research Club was born of a desire to know thy cross-campus neighbor in new and different ways. Familiar names, far-off faces, but who should rise to the occasion to vanquish the unknown? Four brave souls stepped forward to delight attendees at the intersection of dance, audio drama, media bias, ecology, even intimacy coaching. What ensued was the stuff of legend. Cheese, crackers, and wine in hand, silence turned to quiet murmurs, murmurs to conversation, and conversation to joyful laughter among newfound friends. Calls from the crowd grew – why only one Club meeting this term? The secret is out – conveners engage! As branches bound are stronger together, so too are the former campus strangers who now chart the future course of the academe as friends. Won't you join the fellowship?

Be on the lookout for the next Faculty Research Club!

OSP Workshops are back on this year!

With the ORGS, you've got it MADE!

Join your colleagues in the ORGS for professional development offerings MADE especially for you as a creative leader, educator, and researcher!

We strive to offer programs that are **M**eaningful, **A**ligned with your needs, **D**elivered conveniently, and always, **E**ntertainingly educational. Keep watch for new offerings in the coming months, and step outside your office for a bigger, brighter view of your scholarship at CMU!

We do Research. We do Creative. We do Real World.

The Office of Research and Graduate Studies in collaboration with CMU Alumnus, Christian Driessnak, at Christian Kurt Multimedia, has created a commercial to promote research at Central Michigan University. This commercial highlights faculty and students' research and creative endeavors across campus and across the world. You may view the video on our new TikTok page, cmich_orgs, **https://www.tiktok.com/t/ZTRV1aLCT/.**

NEW PEOPLE & NEW ROLES

Krista Welke, Coordinator, Financial Operations
Krista started with the ORGS on July 13, 2022.

Maria Ranger, Administrative Secretary
Maria started with the ORGS, Office of Sponsored Programs on October 17, 2022.

Jennifer Marrs, Coordinator/IACUC & IBC
Jennifer started in her new role in the Office of Research Compliance on October 17, 2022.

THE ORGS ACCOLADES

CMU Sets $26.3M Grant Funding Record
University bests previous high by more than $5M

Author: Logan Pellegrom

Central Michigan University reached a new milestone in grantsmanship during the 2021-22 fiscal year, earning $26.3 million in grants and contracts. The figure surpassed CMU's previous record of $20.8 million secured during 2010-11.

The record total is the result of 194 grants and contracts, the most earned since 2018-19. Of those, seven were more than $1 million, and 17 more valued at $250,000 or more.

"This is an important milestone in the evolution of CMU as a comprehensive national university where both teaching and research are valued and celebrated," said David Weindorf, Vice President for Research and Innovation at CMU.

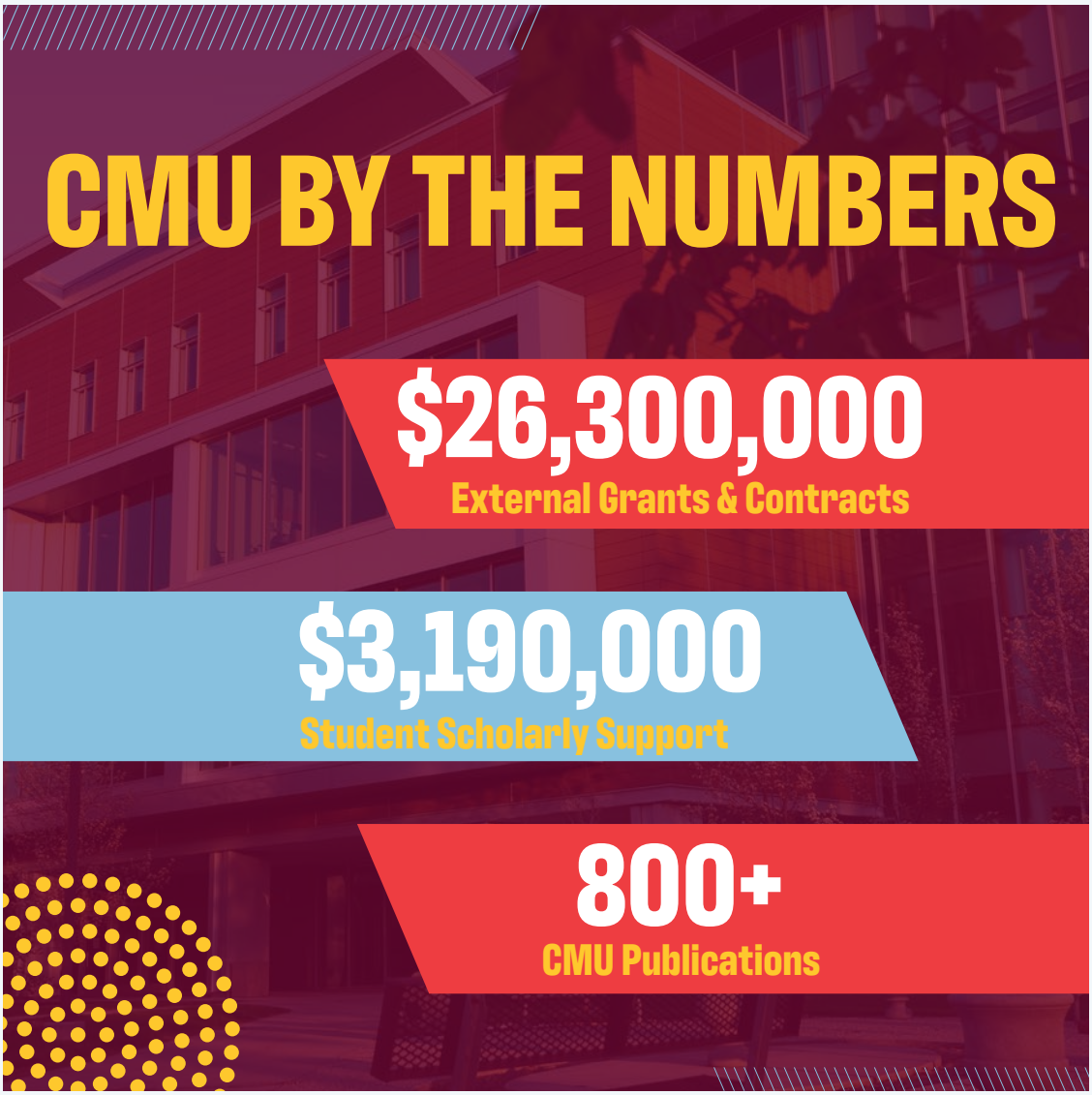
Weindorf credits hard work by faculty and staff, a focus on high-value grant opportunities, and new partnerships with other universities and institutions as several of the factors for the improved results.

The College of Medicine and the College of Science and Engineering led the university in funds raised, but faculty from many academic disciplines also brought in strong awards, said Weindorf. Some notable grants received during the year include:

- Semi-Synthetic, Magneto-Photonic Circuit for Non-Invasive Control
  - The grant funds the study in which researchers propose to develop a new genetic tool based on synthetic biology by harnessing the power of electromagnetism and biophotonics to control gene expression within cells remotely, on-demand, and with the utmost temporal and spatial resolution. Those tools are crucial for basic research, drug development, and developing the next generation of synthetic biology-based therapeutics.
  - Funded by the National Institutes of Health and the US Department of Health and Human Services
  - Research led by Ute Hochgeschwender, College of Medicine
- FLO-SIC: Efficient Density Functional Calculations Without Self-Interaction
  - This grant is a combined effort from five universities led by CMU, that aims to develop the theory and improve state-of-the-art computational software for the prediction of atomic-scale matter.
  - Funded by the US Department of Energy
  - Research led by Koblar Jackson and Juan Peralta, College of Science and Engineering
- DeafBlind Central: Michigan's Training and Resource Project Year 4
  - The project provides training, consultation, information, and referrals, and engages in systems change activities all designed to improve the lives of children and young adults who are deafblind.
  - Funded by the US Department of Education
  - Project led by Timothy Hartshorne and Beth Kennedy, College of Liberal Arts and Social Sciences
- Early Childhood Collaborative with EightCap, Inc. 2022
  - The grant provides quality preschool to 3- and 4-year-old children at no cost to families who qualify by being low-income.
  - Funded by EightCap, Inc. and the US Department of Health and Human Services
  - Research led by Margaret Desormes, College of Education and Human Services

- Albertine Cinematheque French Film Grant
  - The grant funds the inclusion of six French films during the five-day Central Michigan International Film Festival
  - Funded by FACE Foundation
  - Work is led by Patricia Williamson, College of Arts and Media
- CMU-TRIO Upward Bound Northwest Detroit 2021-22
  - Since 1999, the Upward Bound grant has served over 1,000 students providing college accessing programming for first-generation college students in the City of Detroit. The project has a 96% high school graduation rate with students going on to pursue two- and four-year college degrees.
  - Funded by the US Department of Education
  - Research led by Primavera Jimenez, TRIO Detroit Pre-College Programs

Many of the grants received included funding for graduate assistantships and student technicians, providing opportunities for hands-on learning with leading experts.



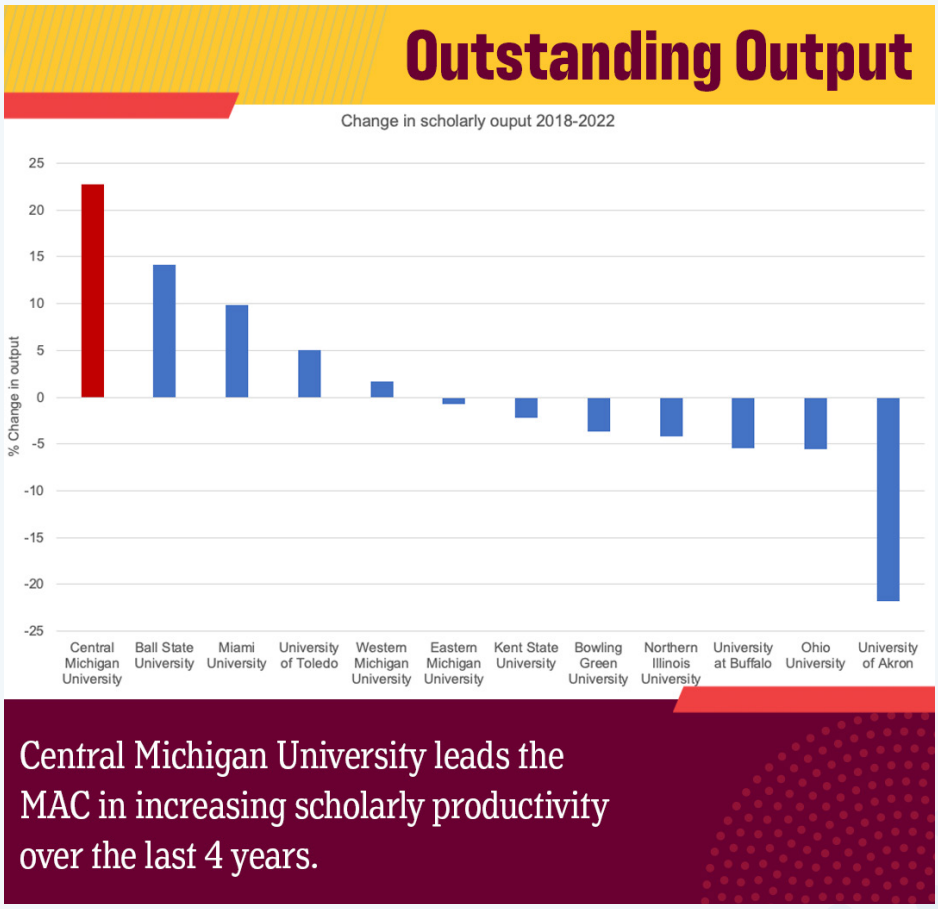
CMU RANKED FOR FIRST TIME IN QS WORLD UNIVERSITY RANKINGS

Author: Kara Owens

For the first time, CMU has been ranked by the Quacquarelli Symonds (QS) World University Rankings. This achievement is a major step forward for the prominence of CMU on the international stage. David Weindorf, CMU's Vice President for Research and Innovation, said "the ranking will bring us more national/international visibility, feed into recruiting the best students and faculty, and distinguish us as truly one of the best universities in the world."

Some of the factors included in the ranking include academic peer review, faculty/student ratio, citations per faculty, employer reputation, international student ratio, and international staff ratio. The QS World University Rankings is considered one of three major international university ranking systems, inclusive of the Times Higher Education and Academic Ranking of World Universities systems.

Coming off a record-setting year in grantsmanship, CMU also boasts the strongest percentage change in scholarly output (+26.2%) over the past five years of any school in the Mid-American Conference. Weindorf said, "the momentum of CMU's creative scholarship/research enterprise is palpable and a direct reflection of the hard work and dedication of its exceptional faculty, staff, and students."



2022 SCHOLARLY OUTPUT

335 days into the current calendar year, we have 765 outputs the second year of record-making numbers of scholarly output. Field weighted citation impact (FWCI) of said scholarly output currently sits at 1.48 – excellent positivity.

» FACULTY RECOGNITION

Faculty President's Award

The President's Award for Outstanding Research and Creative Activity recognizes the achievements of current Associate or Full Professors. This award can only be received once in a professor's career and is one of the most prestigious awards CMU offers.

2021-2022 Award Recipients

Authors: Hailey Nelson & Elli Heron

Dr. Will Anderson, Broadcast & Cinematic Arts

Dr. Will Anderson, a Broadcast and Cinematic Arts professor, has received the Central Michigan University 2022 President's Award for Outstanding Research and Creative Activity. "It represents recognition and adjudication of a lifetime of work," said Dr. Anderson, who had studied audio dramas and electronic promotion for about 25 years.

Throughout his career, Dr. Anderson has strived to find new uses and distribution tactics for audio dramas. Now able to go beyond writing scripts, he has opportunities to produce audio dramas in their entirety and find new uses for this form of media. In the past, Dr. Anderson has used audio dramas to document history, tell children's stories, and worked with students to tell the history of Beaver Island. He has also produced *School Spirits*, an audio drama that uses QR codes in some of CMU's most famous buildings to allow listeners to access the audio drama on their phones, and *66 Trips to Lansing*, a comedic audio drama that was featured on multiple broadcast stations across the United States and Canada.

Dr. Anderson attributes much of his success to the collaborative nature of audio dramas, stating that the President's award is "more representative of everyone who has helped me along." Audio dramas have given Dr. Anderson the opportunity to work with a variety of students and faculty, including CMU President Davies. Dr. Anderson also appreciates the accessible nature of audio dramas, which unlike other forms of mass media, have a relatively low production cost and few limitations to get started in the field.

Over the past year, Dr. Anderson has worked on a book about two things he loves, writing and guitar, which he hopes to promote on a book tour in the summer of 2023. Dr. Anderson also hopes to continue working to find new uses and distribution avenues for audio dramas.

Dr. Thomas Gehring, Biology

Dr. Thomas Gehring, a professor in the biology department, received the Central Michigan University 2022 President's Award. "It's the highest honor CMU bestows to researchers here on campus," said Dr. Gehring.

Dr. Gehring is a wildlife and conservation biologist whose research focuses on human-wildlife conflicts and finding ways to resolve these issues in a peaceful manner. One of his major areas of study is the interaction between gray wolves and livestock, with the goal of finding nonlethal ways to protect livestock from gray wolves. Some methods they tested consisted of shock collars, livestock guard dogs, and fladry, which is the hanging of flags on a rope around the perimeter of the pasture to create a visual barrier that wolves won't cross. Working with the guard dogs was Dr. Gehring's favorite approach. "The guard dogs led to areas of biology, sociology, and economics that I had never thought about," said Dr. Gehring, "Allowing farmers to be more content in life because they're not stressed about wolves was so rewarding."

Beyond more than 10 years of research on gray wolves, Dr. Gehring has also done research on the Great Lakes and coastal wetland conservation. Going onto year 12 of coastal wetland research, Dr. Gehring focuses on frogs, toads, birds, and muskrats, working with graduate and undergraduate students to look at coastal changes and what could be causing them.

Dr. Gehring credits the people he's worked with as his biggest accomplishment. "Working with undergraduate and graduate students and helping mentor them, seeing them do awesome stuff in their professional and personal lives. That's bigger than anything," said Dr. Gehring.

Going forward, Dr. Gehring plans to continue his coastal wetland research, looking into long-term patterns and changes in wildlife and water levels. He hopes that this research will help to inform policy and provide better insight into the environment around the Great Lakes. Dr. Gehring will also become more involved with gray wolf issues again and plans to begin experimentation with livestock guard dogs again on a much bigger and international scale.

» FACULTY PROVOST AWARD

2021-2022 Award Recipients

Dr. Michael Conway, College of Medicine

Dr. Michael J. Conway, a faculty member in the College of Medicine, received the 2022 Provost's Award.

Dr. Conway helped develop the early curriculum of CMU's College of Medicine and provides students with cutting-edge research experiences in his laboratory.

Dr. Conway's research is focused on emerging infectious diseases such as mosquito-borne viruses and coronaviruses. His research on virus-vector-host interactions, which focuses on the relationship between the virus and the organisms (vectors) that carry it, revealed novel strategies to interfere with mosquito-borne virus transmission. These studies serve as a precursor to the development of "transmission-blocking" vaccines, which target the vector rather than the virus itself.

With the emergence of the coronavirus in 2019, Dr. Conway's laboratory shifted its focus. After receiving a $1.7 million dollar grant from the Michigan Department of Health and Human Services (MDHHS), the Conway Laboratory and co-investigators developed a SARS-CoV-2 wastewater monitoring program. In tandem with a network of laboratories across the State of Michigan, the team screened wastewater for the coronavirus. This data is then sent to MDHHS and used to inform public health decisions.

Dr. Conway's next project involves collaborating with a regional biotechnology company to develop a technique to rapidly extract microbial DNA and RNA. Whether it's researching mosquito physiology, COVID-19, or developing new biological techniques, Dr. Conway continues to make important contributions to research and public health and is an example of the great work that is performed at CMU. Dr. Conway expresses his gratitude for the 2022 Provost's Award, sharing, "[it] gives me confidence and motivation to continue all of my hard work at CMU...."

Dr. Trevor Diehl, Broadcast and Cinematic Arts

Dr. Trevor Diehl, a professor in the School of Broadcast and Cinematic Arts, received the 2022 Provost's Award.

Dr. Diehl's research explores how social media has altered the role of journalism in a democratic society. In particular, he is interested in citizen engagement with the news, political participation, and emerging professional practices as they relate to new communication technologies. These interests stem from an overarching concern for the quality of news and public information in today's complicated, networked media environment. Other topics that interest Dr. Diehl include audience fragmentation, global populism, and public opinion about science issues.

Dr. Diehl's most recent project focuses on how people curate their daily information flows, and how those choices impact attention to ideological and partisan media. Along with his co-author at the University of Alabama, Matthew Barnidge, he is developing novel ways to measure attention to the news. For example, a current working paper employs both network analysis and survey data to map people's news preferences onto overlapping 'audience niches'. This approach will allow future studies to better understand the influence of audience-level characteristics on one's news selections. This is important, he argues, because much of what we see online today is based not only on our own interests but also on the interests of others in the audience. That is, the algorithms that filter content are making decisions for us based on the preferences of others in the audience, but we really know very little about how audience characteristics might influence attention to partisan media.

As a teacher, Dr. Diehl is motivated by the belief that students learn best when they pursue their interests, learn from each other, and focus on creating quality content. He hopes that after taking his classes, which focus on media history, multimedia storytelling, and graduate research methods, students are more informed as citizens, and better prepared for jobs in the industry.

Dr. Diehl has worked with an international group of scholars to publish dozens of articles in the fields of political communication and journalism studies. Dr. Diehl expresses his gratitude for the 2022 Provost's Award, sharing, "I am very happy to be recognized by my colleagues in the College of Arts and Media and I feel fortunate to have been able to continue to pursue my research agenda here at CMU."

2022 Excellence in Teaching Awards

Created by CMU in 1985, the Excellence in Teaching Awards recognize outstanding teaching efforts by faculty. Awardees are selected from faculty members nominated and supported by their peers and students, who then undergo a rigorous selection process by the Excellence in Teaching Awards Committee.

Dr. John Andraka, Physical Therapy

John Andraka is an assistant professor of Physical Therapy in the Hebert H. and Grace A. Dow College of Health Professions. Andraka designs his classroom activities in an extremely intentional way to convey the subject matter and elicit a productive learning experience for students. He is highly praised and loved by students for providing clear and high expectations for his courses. His biggest asset is his ability to inspire students and encourage them to be curious and ask questions that help their understanding. He builds a sense of community within the classroom by including interactive and collaborative activities within his lessons providing a chance to practice professional collaboration with peers.

Dr. Allison Arnekrans, Counseling and Special Education

Allison Arnekrans is an associate professor of Counseling and Special Education in the College of Education and Human Services. Her colleagues describe her as warm, enthusiastic and humble. She engages students with respect and integrity and works to include various learning activities in her teaching. Students know they can discuss any concerns or questions they may have with her and frequently seek her out both in her role as a faculty member and as the advisor for the department's registered student organization, Mu Kappa Chapter of Chi Sigma Iota. Arnekrans adapts to the unique needs and personalities of each group of students she teaches, all while remaining transparent in her expectations and thorough in her instructional design.

Dr. Stephen Juris, Biology

Stephen Juris is an associate professor in Biology, Chemistry and Biochemistry within the College of Science and Engineering, teaching at multiple levels. Juris is committed to helping students learn, think and work independently and in teams. His classes are designed to engage students and build their confidence and community. Students say he teaches a difficult subject in a way that is understandable and gives them the tools to study the content on their own time outside of class. Students also say that he is one of the most upbeat and approachable professors at CMU.

Dr. Keeley Stanley-Bohn, Theatre and Dance

Keeley Stanley-Bohn is a professor of Theatre in the Department of Theatre and Dance in the College of Arts and Media. At the heart of Stanley-Bohn's teaching is the building of a strong rapport with students. She believes that to set students up for success in their chosen field, they need to understand how valuable they are regardless of status, grades and titles. In her own words, Stanley-Bohn affirms that, "providing guidance from the beginning sets them up for success, and I always honor my word to them."

Dr. Leslie Wallace, Health Sciences

Leslie Wallace is a fixed-term faculty member in the Exercise Science Division, School of Health Sciences in the Herbert H. and Grace A. Dow College of Health Professions. As an educator, she describes herself as a cheerleader and coach encouraging students to become better versions of themselves in and out of the classroom. Colleagues note Wallace uses personal and real-life examples and case studies to illustrate applications and capture students' interest, helping students visualize and conceptualize processes. This gives students ownership in the course and fosters a sense of community in the classroom.

2022 Student Choice Excellence in Teaching Award

The Student Choice Award allows students to recognize a faculty member for creative excellence in overall instructional effectiveness.

Dr. Daniel Ballou, Physical Education and Sport

Daniel Ballou is an assistant professor of Physical Education and Sport within the Herbert H. and Grace A. Dow College of Health Professions. Ballou has taught facility management, statistics, economics, and finance courses at multiple course levels. Students say he has made math and finance accessible, leaving them wanting more experience. He engages students in discussion, allowing them to develop their own deeper understanding of the material. Ballou's lessons are designed in a student-friendly manner that gives real-world experience and prepares students for the future.

2022 Faculty Distinguished Service Awards

Created by the provost in 2002, the award recognizes faculty members with a record of sustained and distinguished service at CMU. Nominations are reviewed by members of the Instructional Development Advisory Council, a subcommittee of CMU's Academic Senate.

Dr. Susan Grettenberger, Sociology, Anthropology & Social Work

Susan Grettenberger joined CMU in 2002 as the field director and has been the program director of CMU's accredited social work program since 2006. Grettenberger is a licensed clinical social worker, with her practice experience including direct services and administration, in the areas of child welfare, domestic violence, substance abuse, and HIV/AIDS, primarily in Latino communities in Michigan and Chicago.

Dr. Bradley Swanson, Biology

Bradley Swanson joined CMU in 2001 and works in the field of conservation genetics. During his time at CMU, he has served as the director of Environmental Studies for four years, as the chairperson of the Academic Senate for three years and is currently the director of the Office of Graduate Studies. In addition, he served as the major advisor for 40 Master's students and mentored 56 undergraduate student researchers at CMU.

2022 Lorrie Ryan Memorial Excellence in Teaching Award

Lorrie Ryan was a faculty member in human environmental studies and an awardee of the 2002 Excellence in Teaching Award. This award, established in 2006, is given in her memory each year to a faculty member who inspires students by building a sense of community within the learning environment and demonstrating a profound mentorship and respect for others.

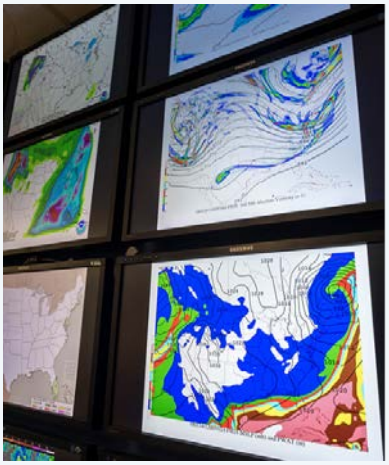
Dr. Jeffrey Weinstock, English Language and Literature

Jeffrey Weinstock is a professor of English Language and Literature in the College of Liberal Arts and Social Sciences. Students appreciate how Weinstock creates a sense of shared ownership of the learning experience providing them with new ideas and opportunities for exploring life and literature. Described by his students as an instructor with high expectations, he also offers students the support they need to succeed. His enthusiasm and attention to detail are shown in his assignment design and classroom rapport. One student noted, "He really cares about us as people, and this makes us more engaged with his teaching and the rest of the course."

Professor Receives Award to Study Wind and Hail Storms

John Allen, Ph.D., received an award from the Disaster Resilience Program to research wind and hail storms in a warming climate

Author: Hadlee Rinn



John Allen, Ph.D., a professor in the Department of Earth and Atmospheric Sciences, received an award from the Disaster Resilience Program to fund his project, Quantifying the Risk and Impact of Wind and Hail Storms in a Warming Climate. The Disaster Resilience Program is a joint fund through the National Institute of Standards and Technology and the National Science Foundation.

According to Allen, agriculture and infrastructure are vulnerable during windstorms and hailstorms. The storms represent a hazard to electricity distribution and production networks, like wind turbines. This can lead to "localized cascading outages of water supply, automotive fuel, and heating/cooling systems." Every year for the past decade has had at least 10 billion dollars of losses due to storms.

Allen's project will focus on determining the when and where of hail and wind extremes, as well as the long-term impacts of climate change on the storms.

The goal of his project is to develop improved building and infrastructure design practices, codes, and standards by combining his findings with climate change information.

Caring in the Classroom

Krystyna Nowak-Fabrykowski, Ph.D., was recognized at the 18th Annual Book Recognition for her book on the ways caring practices influence children

Author: Hadlee Rinn

Krystyna Nowak-Fabrykowski, Ph.D., a professor in the Teacher Education and Professional Development Department was recognized at the 18th Annual Book Recognition Event for her book, *Different Perspectives on Caring: Making Caring a Metacognitive Activity* (with Reflections on the Impact of COVID-19 Pandemic). The book contains many perspectives on caring teachers such as characteristics of caring teachers and children's view of them, developing caring children, and other reflections on teaching.

After teaching for many years and reflecting on her own experiences, Nowak-Fabrykowski realized that first-year teachers play an integral role in setting students up for success.

Nowak-Fabrykowski stresses the complicated relationship between caring in teaching and the student/teacher/school environment. She also read Nell Nodding's book, *Happiness, and Schooling*, and reflected on her question: why are some schools not happy places? Nowak also states, "The pandemic made the situation even worse."

Nowak-Fabrykowski first started this book in 2011, however, the pandemic created a necessity to revisit the subject with new research findings. A positive effect of the pandemic was people becoming more caring, understanding,

compassionate, and empathetic. Nowak says, "Teachers were called heroes, the same as nurses, firefighters, doctors, and all front- line workers. During this time, teachers tried to help children get connected with the world."

Prior to the pandemic, Nowak-Fabrykowski did a research project, *Heroes and Superheroes for Boys and Girls: Same or Different*, with 43 children from the ages of three to five. From this study, only two children considered family members to be heroes. The rest of the children thought real people could not be heroes.

Nowak-Fabrykowski hopes the pandemic was able to change children's perspective on how caring people can be heroes. As for her book, she hopes it will help teachers "reflect on the theory and research on caring as well as their caring practices and plans for developing caring in their students [...] and re-examine who they are, who they would like to be and find the necessary resources to achieve their goals."

MAC Honors School of Music Faculty Member

John Nichol awarded for inspiring music students

Author: Aaron Mills

Central Michigan University School of Music faculty member John Nichol has been named a recipient of the Mid-American Conference (MAC) Outstanding Faculty Award for Student Success. The award recognizes one faculty member from each of the 12 MAC institutions for their outstanding effort in supporting and developing students both inside and outside of the classroom.

"I strive to promote student-driven success," Nichol said. "I'm the kind of educator who puts my students first, collaborating to help them identify and diligently pursue their personal and professional goals. Inspiration comes from a clear roadmap. We have a lot of fun together in navigating this process."

Nichol is professor of saxophone at Central Michigan University, as well as a nationally recognized performer, having performed by invitation at nine World Saxophone Congresses. He also has performed at numerous international jazz festivals, in addition to touring with the Jimmy Dorsey Orchestra, the Harry James Orchestra, and the Nelson Riddle Orchestra.

Beyond an impressive résumé, Nichol views his greatest accomplishments as his students, many of whom have achieved success in national and international competitions and gone on to pursue lifelong careers as successful performers and music educators.

"It's an incredible responsibility to nurture a passion for art music," Nichol said. "Given the right conditions, it is like a hook that comes out and grabs you. Once exposed to the highest forms of art music, students want to explore it further and recreate it on their own. I find that giving my students a platform to achieve excellence is the 'ace in the hole' when teaching them – here is what we can achieve together, now let's get to work and go do it."

CMU Professor Honored for Teaching Excellence

Carl Lee among MASU's 2022 Distinguished Professors of the Year

Author: Kylie Schmus

Carl Lee, founding chair and faculty member in the Central Michigan University Department of Statistics, Actuarial and Data Sciences, has been recognized by the Michigan Association of State Universities (MASU) as a recipient of the 2022 Michigan Distinguished Professor of the Year award. The award recognizes the contributions and dedication of faculty from Michigan's 15 public universities to the education of undergraduate students. Lee is one of three 2022 recipients.

In the award announcement, MASU recognized Lee's significant impact on undergraduate student learning through hands-on learning activities, applied research, experimental learning, and innovation.

Lee implements what he calls the P.A.C.E. model of teaching, which emphasizes projects, hands-on activities, cooperative learning, and exercises. Lee says his motivation lies in conducting research to investigate how students best learn quantitative concepts.

"As a professor, you must find ways to get students interested and motivated," Lee said. "One way I have been successful is by finding activities that really associate with their daily lives and piques their interest." Lee is known for designing the undergraduate statistics and actuarial science program at CMU, in addition to creating an interdisciplinary program on campus in data science. This involved coordinating a new degree and major with faculty from four colleges and nine academic departments, said Lee. He also stated data science has a variety of different applications. "We want students with different levels of experience to have a chance to learn the basics of data science," Lee said. "Using data evidence for decision-making is very important in the business industry as well as our daily living, so we think students in all areas should have the opportunity to do that."

Lee said he believes education provides students with hope. "As a professor, seeing students come into class with disadvantages or high levels of talent they aren't aware of, you want to encourage them to aim higher," he said. "I strongly believe that education, regardless of level, is to provide students with hope and help them see the light at the end of the tunnel."

Of the award, Lee said he is simply grateful to be recognized. "There are many outstanding faculty deserving this recognition at CMU." Lee said. "I am fortunate and honored to represent our outstanding faculty to receive this award."

» BY THE COLLEGE

COLLEGE OF THE ARTS AND MEDIA

Animation Professors and Students Create a Short Film From a Gospel Poem

Author: Hadlee Rinn

Stephan Leeper, Animation professor, is working with undergraduate students Chelsea Dunham, Stephanie Shaw, and Demi Huertas-Romero to produce an animated short film reimagining a black gospel poem. *The Creation Poem* by James Weldon Johnson explores the first chapters of Genesis as a "powerful Black Gospel sermon [which] captures both the majestic power on display at the inception of the universe and a Creator's poignant desire for intimacy that ultimately leads to the creation of humankind."

In May of 2021, Leeper was awarded a Faculty Research and Creative Endeavors: Research Grant from CMU to support the animated film dubbed, *The Creation Film*. Thus far, Leeper and his team have created concept images, story panels of key moments, and a teaser trailer which can all be found on their website.

The students involved in the project have specific roles assigned to them. Dunham is responsible for environment design and animation, with an interest in storyboarding, layout, and concept design. Shaw is behind character design and animation, with a passion for cartoons and bringing characters to life. Huertas-Romero is the Colorist and Concept Artist on the project because of her interest in character creation, concept design, and color scripting.

Leeper hopes that the film will encourage respect for humanity beyond racial, cultural, religious, or political identity.

Beyond *The Creation Film*, Leeper, Dunham, Shaw, and Huertas-Romero were involved in creating and producing the 2021 Hell's Half Mile (HHM) Film Festival Bumper titled, *Rising from the Ashes*. The bumper is played at the opening of the festival and at the beginning of every screening at the festival. Leeper says, "these last few weeks of break and leading into September, myself and a handful of animation students will be producing the 2022 HHM Film Festival Bumper. Last year was our first time out and we got a tremendous response, so we decided to come back for more." The 2022 Bumper will be inspired by the classic 80s movie, *Sixteen Candles* because it is HHM's 16th anniversary.

Monitoring Mental Health

Communication professor Kirsten Weber, Ph.D., works with student Kayla Norton on researching how a sense of community impacts the mental health of lesbians

Author: Ellie Heron

Kirsten Weber, Ph.D., a professor in the Communication Department, is working with Honors undergraduate student Kayla Norton to determine how different forms of community building impact the mental health of lesbian women. There has been a decline in the number of lesbian-specific

face-to-face spaces, leading to an increase of socialization online. This shift from in-person to online community building changes the way that lesbians interact.

According to the Lesbian Bar Project, there are only 21 lesbian bars as of 2021, a shift from the hundreds that were previously recognized in the late 1980's. This lack of lesbian-specific safe spaces has led to an increase of socialization via dating apps and social media. This shift takes away the potential for physically safe spaces, in-person interactions, and intergenerational dialogue.

Weber and Norton are researching how this shift impacts the mental health of lesbian women. They plan on interviewing women nationally regarding their sense of community and their mental health. All participants will be over the age of 18, but Weber and Norton are specifically aiming to document an intergenerational perspective, as they anticipate that older women may have more experience with face-to-face spaces, whereas younger women will have more experience with social media interactions.

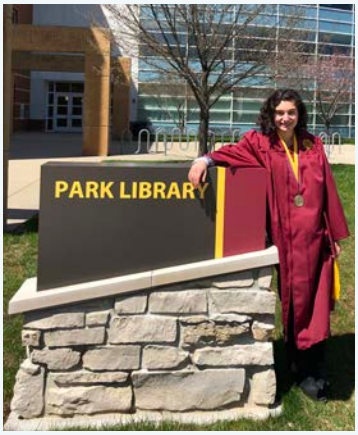
Weber and Norton expect that increased face-to-face interactions will "offer opportunities for more depth of intimacy," something that they believe will be associated with improved mental health. They also predict that online spaces will offer support for those who don't have access to in-person spaces. Weber and Norton hope that their findings will be helpful in improving the mental health of lesbian women going forward.

COLLEGE OF BUSINESS

Administration Biologics, Biosimilars, and Budgets, Oh My!

Economics Professor Jason E. Taylor, along with 2022 graduate, Nicole Polemitis, wrote a paper discussing the impact biosimilars had on biologic prices

Author: Hadlee Rinn



Jason E. Taylor, Professor of Economics, is working on a paper with 2022 graduate, Nicole Polemitis. The project came to fruition when Polemitis was writing a paper for Taylor's class. Taylor says, "[The] paper was amongst the most outstanding work I have seen from an undergraduate economics student in my 19 years at CMU." This inspired Taylor to ask Polemitis whether she would consider allowing him to join the paper as a co-author whereby he would add to the paper and attempt to steer it over the finish line toward scholarly publication.

The paper, "*Has the Recent Surge in Biosimilar Competition Impacted Biologic Prices*?", explores the economic relationship between biologics and their "generic" counterparts known as biosimilars. Biologics, such as vaccines, gene therapy, and recombinant therapeutic proteins, are commonly used to treat autoimmune diseases and cancer. Today they are among the fastest growing and most expensive products in the pharmaceutical industry.

While biosimilars could bring substantial cost savings to patients, prior to the Food and Drug Administration (FDA) establishing the 2018 Biosimilar Action Plan to speed along the approval process, very few biosimilars had been approved. The plan has succeeded as theFDA has now approved 35 biosimilars associated with 12 biologic competitors. Taylor and Polemitis's paper "explore whether the recent increase in the number of 'generic' biosimilars has had any effect on the price of biologics and the number of times the biologics have been prescribed."

The results of their research suggest that biosimilar competition has decreased biologic prices. Specifically, Taylor and Polemitis found that "every additional biosimilar is associated with a 1.5 to 2.1 percent reduction in the annual growth rate of the price of biologic that it may substitute for."

Since graduating, Polemitis is currently working as a Registered Behavior Technician for kids with intellectual and developmental disabilities in Colorado and is planning to apply to medical school to become a developmental or neurodevelopmental pediatrician.

Millennial Money Mania

John Gawryk, an administrator and lecturer in Finance, co-authored a book focusing on Millennials' spending habits' effect on the economy

Author: Hadlee Rinn

John Gawryk was highlighted in the 18th Annual Book Recognition Event for the book he co- authored, *Vanishing Assets of the Young Professional: Where it is Going and What it Means for the Economy*. Gawryk is an administrator in finance for facilities management and a lecturer in the Department of Finance and Law. His book focuses on solutions and repercussions of the spending habits of Millennials regarding loans, health insurance, and declining wages compared to previous generations.

Gawryk became interested in this subject years ago when the Millennial generation became the largest generation to date, outnumbering the Baby Boomers. He was interested to know what impact this generation would have on the economy, specifically because Millennials' outlook on their future and career is vastly different compared to the two previous generations, Baby Boomers and Generation X.

Millennials do not have the resources to consume goods and services at the same rate as previous generations. They are also delaying larger purchases, such as buying a home andpushing back the age at which they decide to get married and start a family, which plays another large role in the consumption of goods and services.

In the 1970's, the U.S. transitioned from being a manufacturing-based economy to a consumption-based economy. Gawryk explains, "With the Baby Boomers retiring, their consumption ability will contract. So, the thought was that the Millennial generation will make up for the decrease in consumption. [However] if Millennials do not have the recourse to consume this isn't going to happen." This would lead to a recession or depression in the U.S. economy.

Gawryk hopes that the main takeaway from his book is to help readers understand why the Millennial generation is not consuming like the generations before them. *Vanishing Assets of the Young Professional: Where it is Going and What it Means for the Economy* is available for purchase at Barnes & Noble, Amazon, Walmart, and other outlets. The book is also available in seven languages.

COLLEGE OF EDUCATION AND HUMAN SERVICES

Testing Racial Equity Measure in Afterschool Learning

Gina McGovern, Ph.D., from the department of Human Development and Family Studies, is studying the implementation of racial equity-based teaching practices outside of the classroom

Author: Ellie Heron

Gina McGovern, Ph.D., a professor in the department of Human Development and Family Studies, spent the summer of 2022 working with undergraduate senior Anyah Lewis to study the racial equity-based teaching practices afterschool educators are implementing in their social-emotional learning programming with youth.

Through eight focus groups with afterschool educators, McGovern and Lewis investigated how the recently developed Racial Equity-Oriented Social-Emotional Learning (REQSEL) measure can be adapted for out-of-school settings. The REQSEL measure, developed with Deborah Rivas-Drake, Ph.D., and colleagues at the University of Michigan, was designed to "assess the extent to which practitioners advance racial equity through their social-emotional learning practices." This measure builds on findings from the School and Community Pathways to Engagement project, and has four components: 1) awareness of diverse ethnic/racial identities and experiences, 2) acknowledging and addressing racial injustice, 3) acknowledging and addressing xenophobia, and 4) supporting students' agency, voice, and power.

Professor McGovern's study also investigated how these practices align with trauma- informed approaches to social-emotional learning and the barriers that prevent afterschool educators from implementing racial equity-based social-emotional learning practices. McGovern and Lewis are currently analyzing their results for publication.

Lights, Camera, Education

Scott L. Roberts, Ph.D., co-edits a book of lesson plans to address world history through connecting the past and Hollywood films

Author: Hadlee Rinn

Scott L. Roberts, Ph.D., a professor in the Department of Teacher Education and Professional Development at CMU, co-edited a book of lesson plans for grades 6-12 which address nine eras of world history. The book, *Hollywood or History? An Inquiry-Based Strategy for Using Film to Teach World History*, was honored at CMU's 18th Annual Book Recognition Event. The book is part of the *Hollywood or History?* series for Information Age Publishing that Roberts co-edits.

Roberts notes that world history courses play a role in most K-12 classrooms and curriculum in the United States, even though U.S. history tends to dominate conversation. According to Roberts, the challenges of covering world history in the classroom are ever-present. "The curricular terrain to choose from is immense and forever expanding, dealing with the development of numerous civilizations," explains Roberts.

With these struggles in mind, the *Hollywood or History?* world history volume was born. Roberts, who created the *Hollywood or History?* strategy when he was a classroom teacher, says the main objective is helping teachers use film effectively in "classroom utility and teacher practice." Roberts notes that the authors who contributed lesson plans for the book, "believe[s] that students' connection to film, along with the teachers' ability to use film in an effective manner, will help alleviate some of the challenges of teaching world history."

For example, one of the lessons within the book focuses on investigating the technological advancements of early humans using a clip from the film, *2001: A Space Odyssey*. The opening scene of the film is known for "its portrayal

of the Paleolithic Era and the advent of tool usage and human evolution." Using the movie, as well as primary and secondary sources, students are prompted to answer the following questions:

- What were some of the technologies of early human societies?
- What characteristics and traits must a species display in order to be considered human?
- How do historians and anthropologists learn about time periods with limited evidence and sources?
- How do historical films shape our understanding of historical figures and events?

The reviews of the book series have been positive. Due to the success of the strategy, there are currently five books published in the *Hollywood or History?* series, with several more set for release over the next few years. Roberts' next edited book in the series will be about the effective use of cartoons in the K-12 social studies classroom. More information about the *Hollywood or History?* series can be found on the Information Age website.

COLLEGE OF HEALTH PROFESSIONS

Hearing Hindrance

Author: Hailey Nelson

Dr. Stacey Lim, a professor in the Department of Communication Sciences & Disorders, researches the 1973 Michigan PBB (polybrominated biphenyls) contamination event and its effects on victims' hearing and balance. PBBs are man-made chemicals that were formerly added to a variety of plastic products to make them less flammable. In 1973, the Michigan Chemical Company accidentally substituted PBB for magnesium oxide (a cattle feed supplement) and shipped it to dairy cattle feed mills across Michigan. By the time the contamination was noticed in 1974, PBB had already entered the food chain through contaminated livestock, exposing millions of people.

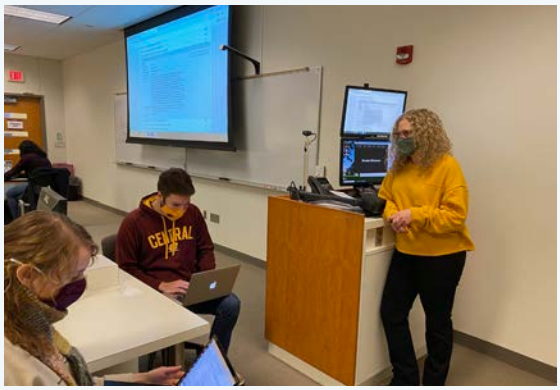
Prior research found that individuals exposed to PBB had long-lasting health issues such as nausea and abdominal pain. Individuals exposed to PBB have also had increased rates of breast cancer, digestive system cancers, lymphoma, as well as other health issues such as infertility, thyroid dysfunction, miscarriages, etc. In some cases, these health issues are also present in the children and grandchildren of those exposed. While much research has been done concerning the broader health implications of PBB exposure, much less is known of its effect on hearing and balance.

To see if there is a connection between PBB exposure and hearing or balance-related issues, Dr. Lim is developing a survey to share with those affected by the 1973 incident. From there, she and her students will conduct various tests to detect any patterns in hearing loss, balance issues, or other auditory disorders. If possible, Dr. Lim also plans on testing the children and grandchildren of those affected. She expects the testing will reveal higher rates of auditory issues in the individuals exposed to PBB compared to the general population.

Dr. Lim first became interested in studying PBB after working with a patient who believed their hearing loss was a result of PBB exposure. After this experience, she reached out to Dr. Brittany Fremion from the Department of History to learn more about the topic. To their knowledge, no prior testing had been done on PBBs impact on hearing. Motivated by this, Dr. Lim joined Dr. Fremion in working on a research project with Emory University. While the project is still in its beginning stage, Dr. Lim hopes to use her expertise to provide insight into the impact PBB exposure has on hearing.

Communication Collaboration

Author: Hailey Nelson



Dr. Natalie Douglas, a professor in the Department of Communication Sciences and Disorders, co-developed a coaching program aimed at improving communication in a nursing home setting. By teaching healthcare professionals the necessary skills to efficiently communicate with each other, they will be able to better implement strategies aimed at improving the communication of residents with dementia. Nursing homes are complicated environments with high demands for workers. It can be difficult to form the relationships needed among staff and residents to support care. Dr. Douglas co-developed a six-week coaching program that relies on relationship building and person-centered care to best support the communication of residents with dementia.

Interprofessional collaboration and implementation science are at the forefront of Dr. Douglas' program. Implementation science aims to bring programs that may have success in a controlled setting into the real world through clinical practice in settings such as nursing homes. During the program, a speech-language pathologist (SLP) and a certified nursing assistant (CNA) were paired together in a nursing home facility and tasked with supporting the communication of a resident with dementia. Co-design was vital to the program's success. Instead of giving the CNA a list of communication strategies to implement, the SLP created the list with input from the CNA, acknowledging their expertise and knowledge. The SLP was also encouraged to develop a personal relationship with the CNA, increasing the chances of the strategies actually being implemented to support the resident's communication.

Following the installation of the program, CNAs showed increased positive communication toward the resident including smiling, using the resident's name, and approaching them from the front. The implementation of the program also led to a reduction in negative communication behaviors associated with dementia (yelling, spitting, hitting, etc.). As a result of the program's success, Dr. Douglas was awarded a Researcher-Practitioner Collaboration grant by the American Speech-Language-Hearing Foundation to expand the project across six nursing homes. In doing so, she hopes to continue improving the communication outcomes and quality of life for individuals with communication disorders.

COLLEGE OF LIBERAL ARTS AND SOCIAL SCIENCES

CMU Showcases Games and Learning at GenCon 2022

The CMU Center for Learning through Games and Simulations promoted their games and CMU at GenCon 2022

Author: Ellie Heron

The CMU Center for Learning through Games and Simulations (CLGS) was a community partner of GenCon 2022, the largest gaming convention in North America. Founded in 1967, GenCon has tens of thousands of attendees annually, with over 50,000 people in attendance this year. As community partners, the CLGS was able to have a table set up at the convention to promote CMU and all that the CLGS has to offer, including the Central Michigan University Press, online classes, and the Game Design Thinking minor offered at CMU.

The Central Michigan University Press is the only peer-reviewed tabletop gaming press, meaning that all the games that it prints are held to rigorous academic standards, including a double-blind peer review. The Press released its first game, *Monumental Consequence*, last year, and will be crowdfunding its next game, *Rising Waters*, beginning at the end of August. Additionally, the CLGS was able to playtest

a third new game, *Five Hundred Year Old Vampire*, demonstrate the *Hydrologic Cycle Game*, created by CMU professor Wendy Robertson, Ph.D., and run a session of *Monumental Consequence* for attendees to play.

The CLGS also worked with GenCon to introduce online classes for an Applied Game Design Certificate. These classes are taught by board game industry experts supported by CMU and will be online and synchronous, allowing students to directly interact with these experts. The official launch of these classes was at GenCon on August 5th, and a full slate of classes will be presented in the 2022-2023 academic year.

A poem by Professor Jeffrey Bean

Snow Prayer

Let sky's soft crush come in sleep.
Let squirrels huddle, clouds shine. Please
a white-fresh fire. Please a kid's feast, her mouth
stuffed with ice-ash, enlivened. May stoplights
flame across miles. May salt splash, trucks
grumble. Let gray moths tremble,
dogs wallow and shove. Please smooth a field's
face. Let shovel, let curse, let birds
hunch over wires and pines. Bring a lustrous
season of bones. Let the old men
take down their parchment and pens. Let mummy cloth
grip what is gone. Please a museum
of smoke, a hall of rooftops. Make me and the trees
forget what we have lost, put on
our silver clothes in stillness, our skin shining,
our rushing done. Let the ground be the sun.

"Snow Prayer" originally appeared in *Colorado Review*.

COLLEGE OF SCIENCE AND ENGINEERING

Magnetic Molecules

Physics professor, Juan Peralta, along with undergraduate student Alex Koke, is developing computer software to better understand molecular magnets

Author: Hadlee Rinn

Juan Peralta, Ph.D., a professor in the Physics Department, is developing computer software that simulates the quantum behavior of special molecules with an undergraduate student, Alex Koke. This project is funded by a grant from the Department of Energy during the summer.

Peralta and Koke's research focuses on "building and improving computational capability to predict the properties of molecular complexes." These complexes are also referred to as molecular magnets and are the smallest known materials to have magnetic properties.

Because of this, there are many potential technological applications, and understanding the properties of these molecules is integral to the development of future technology.

Koke is working on building a computational scheme, using existing software and developing his own, to find the quantum energy levels of these molecular magnets. This is among one of the problems when researching molecular complexes because they are so small. "One of the remarkable characteristics of this problem is that its dimension scales exponentially with the number of magnetic atoms. For example, for a simple complex containing 28 iron atoms, the number of solutions is the same as the number of stars in the universe" says Peralta.

Koke is testing methods that can find the most important solutions, which is like finding a needle in a haystack but using physics, mathematics, and computer software.

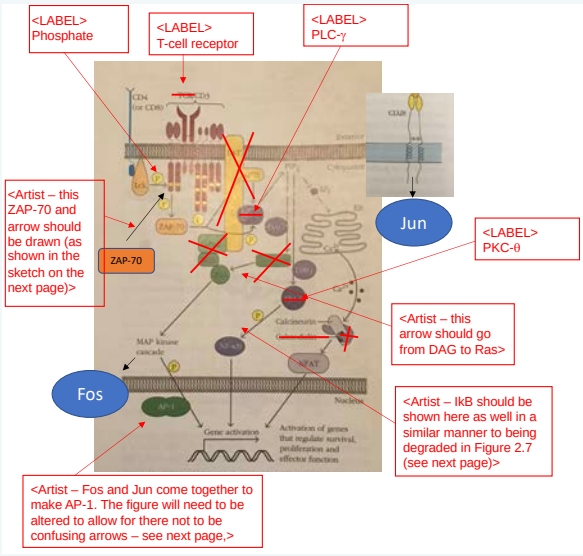
Impressive Immunology

Biology professor Stephen Juris, Ph.D. has published *Immunology*, an introductory text on the study of the immune system

Author: Ellie Heron

Stephen Juris, Ph.D., a professor in the Department of Biology, has recently published a textbook entitled *Immunology*, designed to be an introductory text to the study of the immune system and its functions. The book is published by Oxford University Press and has been a work in progress for over seven years. The goal of the textbook is to make sure students understand both the specific content and the big picture and to teach the most up- to-date information available.

Immunology is designed to keep students engaged, featuring learning objectives and illustrations intended to help readers "connect the dots." Juris claims his largest success with the book was being able to use his "teacher voice" to make the content more easily understandable. This helped ensure that the textbook wasn't just an encyclopedia of the field, as immunology is a rapidly expanding area of study.



Juris claims the opportunity to write this book was a matter of "stars aligning," as the question of writing a textbook was raised immediately before he began his first sabbatical. He completed his sample chapters and proposal during that time and was able to sign his contract for the book in 2014. "It was very exciting to work on the book, as I was able to use my love of teaching the course in publishing the book," says Juris. His work consisted not only of writing the book, but of making sure the information was accurate and current and creating his vision for the images that would be featured in the book, called "scrap art."

The textbook is available through a variety of online vendors, such as Oxford University Press and RedShelf. The print copy is $149.95 through the publisher, and a virtual copy is available through RedShelf to rent for 180 days for $60.

» STUDENT RECOGNITION

Undergraduate President's Award 2021-2022 Recipients

Molly Damitio

Molly Damitio is a junior majoring in Music: Instrumental Performance in the College of the Arts and Media. Molly's recent creative work includes awards and performances at the national and state levels, as well as at the university level. Molly was one of fifteen national winners of the National Flute Choir Collegiate Competition and was selected to perform at the national convention in Dallas with nationally prominent composer Nicole Chamberlain. Molly has been selected to perform in a larger collegiate flute group at the 50th anniversary of the National Flute Association Convention in Chicago (the largest flute association in the world with over 5,000 members from 50 countries). As the result of an annual juried young artist competition, Molly was selected as one of three finalists, and then won Second Prize (the only undergraduate in the first three places), in the 2021 Southeast Michigan Flute Association Ervin Monroe Young Artist Competition, thus earning her a live performance at the Southeast Michigan Fall Flute Festival in Farmington Hills and a masterclass with Sarah Frisof, flute professor at the University of Maryland. As a member of a flute duo, Molly was also selected to perform on the opening night of the Southeast Michigan Flute Association's virtual showcase concert. Additionally, Molly was one of three students to perform on a Midland Center for the Arts ticketed virtual event, a streamed masterclass with national flutist Amy Porter.

Emily Lauzon

Emily Lauzon is a senior majoring in Neuroscience. Emily's work is ground-breaking as she is the first to demonstrate that progesterone clearly enhances cognitive abilities in mice that carry the transgene for Alzheimer's disease, and that serum progesterone levels are higher in these mice. Emily put in well over 500 hours of behavioral assessments on this project and another 200+ hours completing the histochemical and biochemical analyses. During this time, Emily learned the critical techniques and protocols of how to administer the progesterone, test the mice, perform the histological (immunohistochemistry) and biochemical (Luminex, Western blots) analyses, and analyze the data (including the use of unbiased stereology). Emily's presentation of her findings at the Michigan Chapter of the Society for Neuroscience earned her top honors for undergraduate neuroscience research in the state. Emily cares about those suffering from neurological diseases, as exemplified by her volunteer work helping children at the Isabella County Restoration House, caring for patients at a nursing home, and serving as a certified nurse aid during the pandemic.

Shashwat Maharjan

Shashwat Maharjan is a senior majoring in Mechanical Engineering in the College of Science and Engineering. Shashwat has successfully collaborated with two postdocs, a Master's student, a prominent research scientist at Exxon Mobil Research Lab, and a faculty member at South Dakota State University during his time at CMU. These collaborations have resulted in Shashwat being the first author on two submitted research papers and second author on a third paper, in top-tier journals. Shashwat also presented his work at the 2021 International Mechanical Engineering Congress and Exposition, where he received third place from the National Science Foundation for best student research poster presentation. Shashwat hopes to continue his winning streak when he will be competing (with MS and PhD students) for the best student paper at the Engineering Mechanics Institute Conference. Shashwat also received a $4,000 summer scholars grant to support his research efforts. An additional strength of Shashwat is his ability to translate the complexities of his research to the general public, as he has recorded three tutorial videos on machine learning to solve inverse problems and is currently creating layperson YouTube presentations explaining his research.

Kennedy Scott

Kennedy Scott is a senior majoring in Public Health Education in the Herbert H. and Grace A. Dow College of Health Professions. Kennedy's research focused on COVID-19 vaccine perceptions and political affiliation on college campuses. The results of Kennedy's research will help inform colleges nationwide on the concerns of the student body regarding vaccination efforts. In a time where vaccine hesitancy is a threat to public health in the United States, Kennedy's project illuminated political motivations and hesitancies among college students, which has been explored very little in other studies. She was able to formulate a hypothesis to study the relationship between COVID vaccine perceptions among students and their political affiliation. Her work ethic and style has led to her being included on an outside research project with a community collaborator in public health, where she will help to determine COVID deaths in Michigan counties by political affiliation. This information will be submitted for publication to help inform local health departments as they mitigate COVID spread amidst a politically charged environment. Kennedy is currently in the process of submitting her research to the Society for Public Health Education's (SOPHE) journal, *Health Promotion Practice*.

Anna Wetzel

Anna Wetzel is a senior majoring in Special Education in the College of Education and Human Services. Anna's research focused on teaching students with severe disabilities in an online environment. Her research required her to perform a thorough literature review on instructional and educational considerations when providing online learning for students with disabilities. Anna created a survey that was sent to educators and administrators to determine the most effective instructional practices and challenges when teaching online. Anna's work described instructional practices that are effective for use when teaching students with severe disabilities in online delivery formats, critiqued the unique challenges that arise when working with students with severe disabilities via online delivery formats, and identified and articulated instructional practices and strategies to address these challenges. Anna's research has been accepted for two presentations at the Michigan Council for Exceptional Children's Conference, as well as presentation at the National Council for Exceptional Children Conference & Expo.

Meagan Williams

Meagan Williams is a senior majoring in Human Resources in the College of Business Administration. Meagan's research focused on the impact of COVID-19 on human resource professionals, particularly on women. Megan designed a 58-question survey related to challenges of maintaining work-life balance, mental health, and creating appropriate workplaces while maintaining a functioning human resources office. Meagan found that women experienced a greater degree of work-life balance issues than men, and more women than men considered stepping away from their HR career, or actually did step away from their career. The reasons for these differences were additional job duties, development of new policies, job burnout, and lack of "down time." Megan will continue her work in human resources as she starts a master's program in Human Resources and Labor Relations in the nationally ranked program at Michigan State University.

Edwin Williamson

Edwin Williamson is a senior double majoring in English and Anthropology in the College of Liberal Arts and Social Sciences, minoring in Art History. Edwin advanced himself and CMU into the national spotlight last year by being named the winner of the Academy of American Poets *Aliki Perroti and Seth Frank Most Promising Young Poet Award* for his poem entitled "Life As We Know It." *The Aliki Perroti and Seth Frank Most Promising Young Poet Award* is the most prestigious award available to undergraduate students in the United States, featuring entrants from more than 200 participating writing programs from across the country, including Harvard, Yale and other prominent universities. In addition to being featured on the Academy of American Poets website, Edwin's poem was also featured in *American Poets* Magazine, a journal the Academy website calls "one of the most widely distributed poetry magazines featuring a panorama of poems, essays, and more by American poets." He was also the winner of last year's Academy of American Poets Eric Torgersen Award at CMU and has served as an Editor of *Central Review* and *Arthropod Literary Journal*. Edwin has also recently published a poem in Issue 42 of *The Blue Route*, a nationally prominent literary journal for undergraduate students. Edwin is currently in pursuit of the Accelerated Master of the Arts Program in Creative Writing at CMU.

Student Provost's Award 2021-2022 Recipients

Rosemary Guzman

Rosemary Guzman is a senior majoring in Dance Studies in the College of the Arts and Media. Rosemary has engaged in dance activities on campus through interdisciplinary partnerships that have helped CMU students in their educational endeavors. In 2019, Rosemary performed in a dance that demonstrates the process of cellular division to students taking introductory biology classes in order to increase understanding and academic success. Since 2020, Rosemary has worked with a team of her peers and faculty members to collaborate with opera students and faculty at Columbus State University in Columbus, GA to create a film that represents the anatomical functions of the human vocal folds. This film will be used for national educational endeavors combining the science of human anatomy with the performing arts to create an interdisciplinary learning experience. Rosemary's passion for working with students extends to younger ones as well; she worked with a group of her peers to create a Saturday dance class for young children (ages 3-7) through a community partnership with Art Reach of Mid-Michigan. Rosemary also was one of three students selected to have her choreography fully produced as part of the University Theatre Dance Company Mainstage Concert. Her success with this production led to her selection as a performer in the 2022 University Theatre Dance Company Concert and the 2022 University Theatre dance studio production of *The Book of Womanhood*. In addition, she has performed in three student choreography showcases and created a dance film while at CMU.

Joseph Monetta

Joseph Monetta is a senior majoring in History in the College of Liberal Arts and Social Sciences. Joe's interdisciplinary research is at the confluence of history, cultural resource management, legal studies, and museum studies, requiring a mastery of theory and method in multiple fields as he proposes to close a gap in protecting underwater shipwrecks nationwide. Joe's research focused on language in the federal Abandoned Shipwreck Act (1987) that allowed underwater cultural resources to be looted for personal gain rather than preserved for public trust. The law stipulated that shipwrecks must be "embedded," in order to be protected, leaving shipwrecks that settled atop hard rock bottoms or are incompletely covered by sediment, unprotected. Given the finite and irreplaceable nature of shipwrecks as moments frozen in time, Joe's research identified two practical methods of removing the loophole: 1) nominating all shipwrecks to the National Register of Historic Places to obtain blanket protection; 2) finding language to substitute for "embedded" by amending existing federal law. He identified "adjoined to," which is defined as "touching or contiguous, as distinguished from lying near to or adjacent; to be in contact with; to abut upon" as a viable substitute to embedded. Joe presented his research at the Underwater Cultural Resources Public Access and Research Conference, which generated spirited discussion among managers, scholars, and recreationalists, and a conclusion that while nominating all shipwrecks to the National Register was not plausible, changing the language in the law was achievable. His approach was published in the conference proceedings and Joe is currently leading two dozen students in complementary research on state and territorial law which will support his attempt to develop legislative sponsorship in Congress for changing the federal statutes.

Chloe Pestrue

Chloe Pestrue is a senior majoring in Biology: Biomedical, Cellular, and Molecular. While at CMU, Chloe worked on two main research projects using the roundworm *Caenorhabditis elegans* (*C. elegans*). In one project, her experiments shed light on how stress differentially affects the condensation of RNA-binding protein into granules, and elucidated distinct properties of RNA-binding proteins that provide insight into their function in eggs and effects on fertility. In a second project, Chloe identified distinct subunits of the CCT chaperonin as regulators of RNA-binding protein condensation. Her results are the first to implicate CCT as an inhibitor of condensation in eggs. Gaining a better understanding of the regulation of this process will help us ultimately determine the molecular function of condensation in eggs. Chloe is a co-author on a paper submitted to *Genes*, *Genomes*, *Genetics*, and is working on a second publication as well. She has presented her work at a regional conference on *C. elegans*, and an international meeting focusing on *C. elegans*. Chloe was named a Goldwater Scholar in Spring 2021, one of only four CMU students ever to earn this honor. The Goldwater Scholarship Program is one of the most prestigious national scholarships and seeks to identify students who show exceptional promise of becoming the next generation of research leaders. Chloe was accepted into a top-ranked Genetics and Genomics program to begin working on her Ph.D.

Where Education Meets Athletics

The ORGS would like to recognize the seventeen graduate student athletes from six different athletic programs that have committed to advancing their education by working towards their master's degrees while participating in Chippewa Athletics. These seventeen student athletes are working on their master's degrees in three different Administration programs, Exercise Science, and Biochemistry. These athletes demonstrate the importance of education by obtaining an average graduate GPA of 3.42. Congratulations on your hard work and dedication to your future pursuits.

» FALL 2021 PHOTO CONTEST – INTERNATIONAL DIMENSIONALITY

All CMU students, faculty, and staff were welcome to participate in the annual photo contest. This year's theme was International Dimensionality.

As the pandemic underscored the simple comforts of home, it awakened in all of us a painful loss of our sense of community. As our world began to "re-open" to a new normal, the ORGS asked to see photographs of International Dimensionality - from the aspects of life that unite us all, to the culture, scholarship, experiences and struggles that make each corner of our global community uniquely memorable.

The fall 2022 Photo Contest will showcase those who have submitted photos demonstrating Data as Art.


Nate Moelling - CMU Student
Peripatetic
"A midnight sunset in Reykjavik, Iceland paints a metaphor for the pandemic-induced loneliness that has made many into silhouettes, wondering and wandering into the beatification of connecting with self."


Carl Lee
Joy & Harmony
"No matter how noisy or how difficult life is, there are always pieces of joy and harmony inside."
РЕГИСТРАЦИЯ
МЕД. КНИЖКИ
СПРАВКИ
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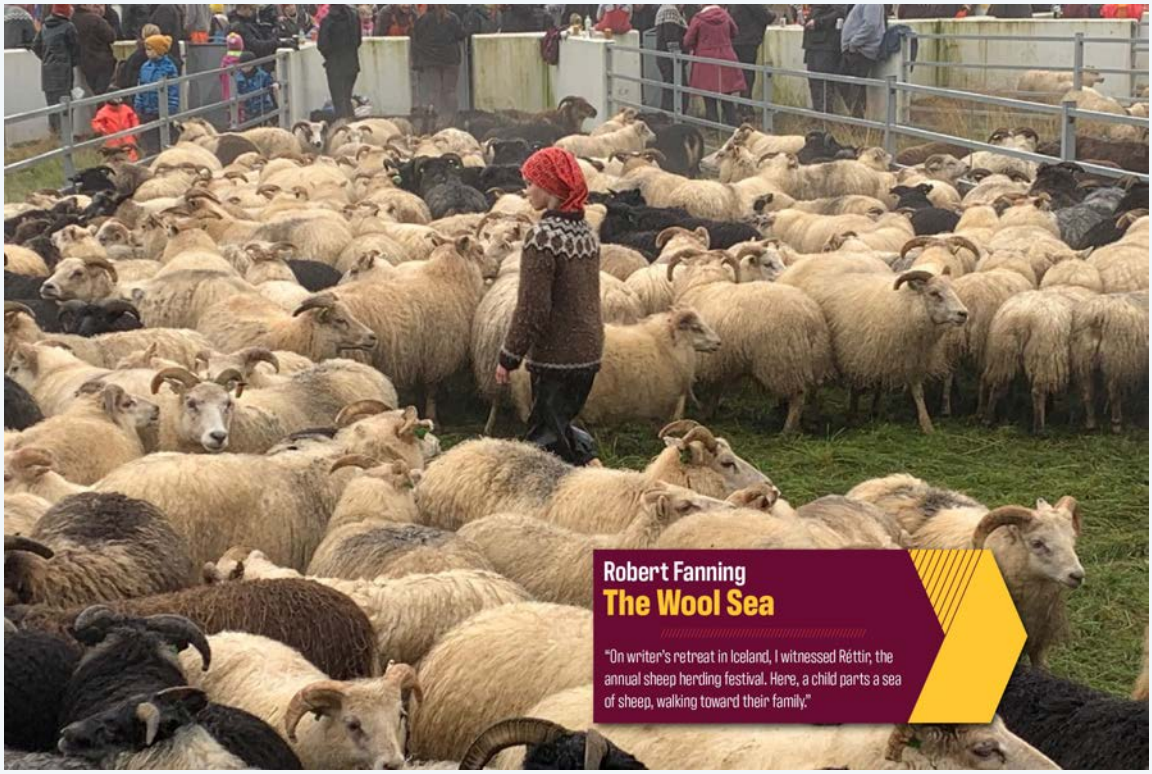


Robert Fanning
The Wool Sea

"On writer's retreat in Iceland, I witnessed Réttir, the annual sheep herding festival. Here, a child parts a sea of sheep, walking toward their family."

Deric Learman
Gerlache Strait

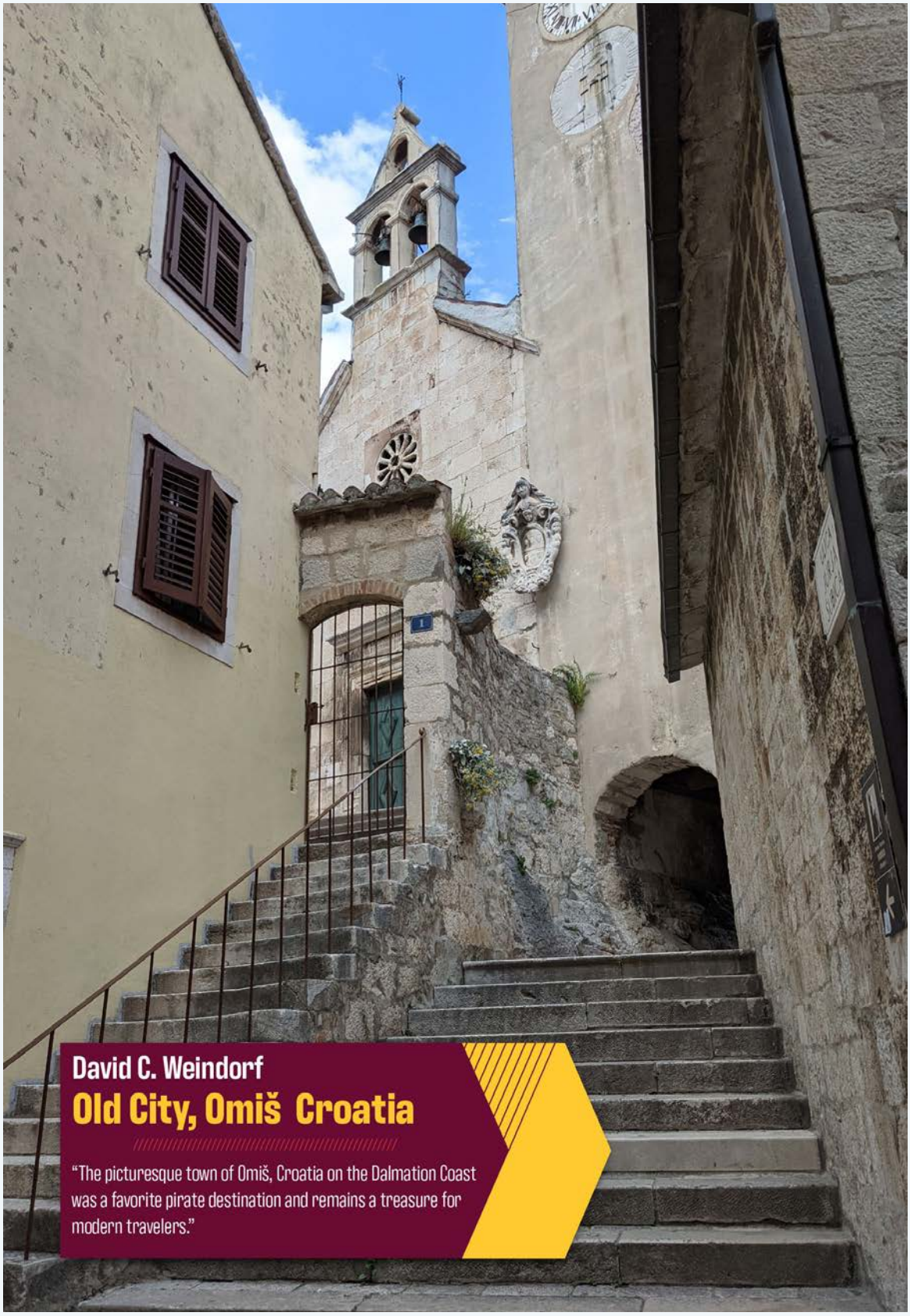
"Snowy veils of blue and white cover the coastal mountains of the Western Antarctic Peninsula."


Layla Blahnik-Thoune - CMU Student
Overlooking Golfo Paradiso
"In Italy, I hiked through Ruta, a hamlet of Camogli which overlooked *Gulf Paradise*, a stretch of land encompassing the riviera east of Genova to Camogli and Portofino."


David C. Weindorf
Victoria Falls, Zimbabwe
"The stark clash of water and rock in Victoria Falls, Zimbabwe"


Addelyn Wachter - CMU Student
In Fellowship Together
"Five youth gather at a tree in their school courtyard near Naigobya, Uganda during the summer of 2018. They were so inclusive with other children and welcomed us into their community."


David C. Weindorf
Woman Drying Beans
"A woman drying beans in the hot sun of Akola, India; she was a remarkable image of perseverance."



David C. Weindorf

Old City, Omiš Croatia

"The picturesque town of Omiš, Croatia on the Dalmation Coast was a favorite pirate destination and remains a treasure for modern travelers."


David C. Weindorf
Foz do Iguaçu, Brazil
"A rainbow hanging in the mist of Foz do Iguaçu, Brazil."

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