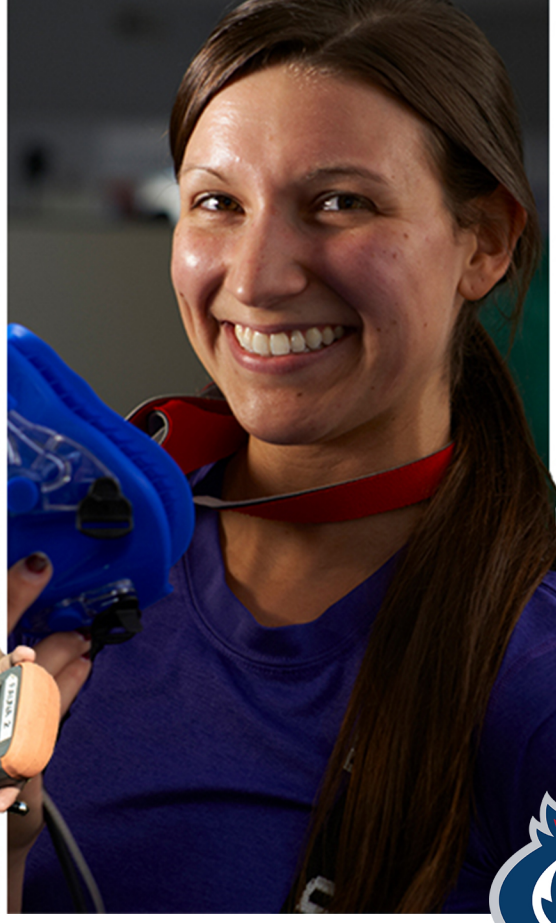

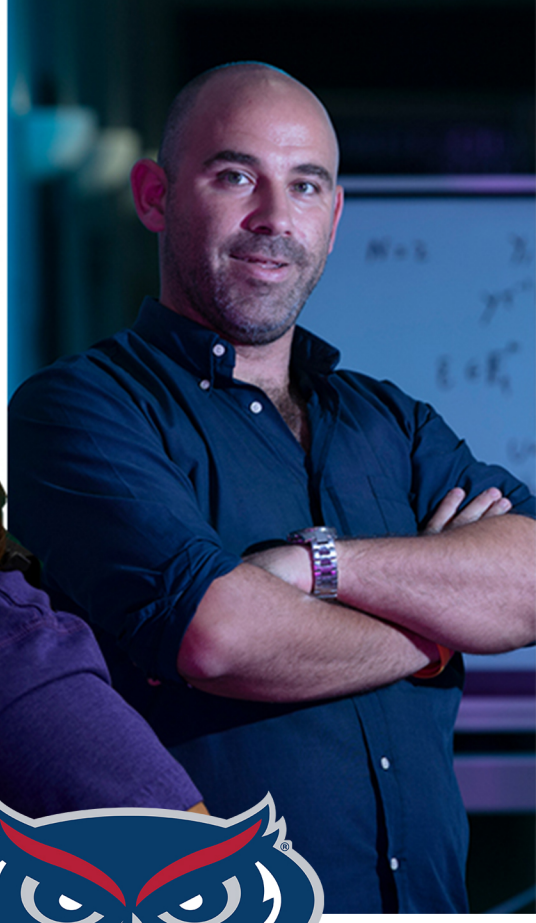

2022 ANNUAL REPORT

CHARLES E. SCHMIDT COLLEGE OF SCIENCE
FLORIDA ATLANTIC UNIVERSITY

science.fau.edu

Message From the Dean

Welcome to the inaugural edition of the Charles E. Schmidt College of Science Annual Report.

The goals of the report are to provide a convenient overview of key metrics, statistics, and time trends; a record of achievements and other highlights from the foregoing year; and documentation of our research activity, educational programming, outreach efforts, and fundraising.

The Schmidt College of Science and Florida Atlantic University (FAU) emerged from a largely virtual world to come back in-person in 2022 to again host events, hold classes, and visit with our friends of the College. This period of rejuvenation, along with me stepping in as the new dean in the Fall of 2022, allowed us to focus our efforts and get a fresh start for this diverse and ambitious college.

Our undergraduate programs continue to be some of the most popular at the University, with four of the top 10 degrees in terms of enrollment all within our College. We awarded the second most degrees, have the second highest enrollment, and teach the most student credit hours at Florida Atlantic.

Graduate programs in the Schmidt College of Science earned acclaim, ranking in *U.S. News & World Report's* "Best Graduate Programs." We have six graduate programs ranked among the best in the nation. And Florida Atlantic moved up in the *U.S. News & World Report* list of "Top Public Schools," marking the largest rise out of all public universities in the state of Florida.

Our success stems from our diversity. FAU is the most diverse public university in the state of Florida, and the Schmidt College of Science is home to the most diverse population of students across all the colleges at Florida Atlantic.

We also have a great diversity of academic and research offerings for our students, with eight departments across three major campuses at Florida Atlantic, we have degree programs with expert faculty from microbiology to astrophysics.

You can find the most undergraduate researchers of any college here in the Schmidt College of Science. Experiential learning is one of our top priorities. Our undergraduate students are products of that mission, earning research funding and getting published in scientific journals, as well as gaining valuable skills that prepare them for advanced degrees and in-demand careers. You can read more about the accomplishments of our talented undergraduate, and graduate, students in this report.

Sponsored research funding totaled $9.4 million, with the biomedical sciences and environmental sciences accounting for the greatest proportion of our research expenditures. The majority of our research funding comes from federal agencies such as the National Science Foundation and the National Institutes of Health, which underwrite major programs of research by our faculty and students.

The College also contains seven research centers and numerous faculty with active collaborations with Florida Atlantic's research institutes, such as the Stiles-Nicholson Brain Institute, the Institute for Sensing and Embedded Network Systems Engineering (I-SENSE), the Harbor Branch Oceanographic Institute (HBOI), and the Institute for Human Health and Disease Intervention (I-HEALTH).

We also collaborate and are partners with research institutions such as the prestigious Max Planck Florida Institute for Neuroscience. Alongside the Schmidt College of Medicine, we created a new M.D./Ph.D. joint neuroscience program, creating world-class training for our students and addressing the patient-care needs of the growing South Florida population.

The range of our research collaborations speaks to the depth of our multi-disciplinary research and the expertise of our faculty. I am convinced that working across disciplines is the key to solving some of the most complex issues facing society, and the sciences are the foundation to tackling urgent issues of today and tomorrow.

A strategic faculty hiring initiative began in the Fall of 2022 to recruit 16 new faculty members in eight departments across the themes of environment, health, and computational data-driven science. This comprehensive hiring initiative ensures multi-disciplinary research and academics are embedded into our ethos.

Issues that we are facing today in South Florida are profound and have far reaching impacts around the world, such as climate change and sea level rise. We are on the frontlines, and one of the key reasons is our geographic location, which is in the most populated metropolitan area in the state and includes fast-growing and low-lying urban landscapes, the Everglades, and the Atlantic Ocean. Not only does the environment impact human health; in South Florida, the environment is key to our economy.

As these critical challenges increasingly put the future of our ecosystems and humankind at risk, educating and supporting the next generation of problem solvers is imperative to establishing the next generation of scientists, healthcare professionals, and policy makers.

The environment has also come into focus for the University. The environment, FAU Health, and student success/scholarships are the priorities for the University's recently launched Transcend Tomorrow comprehensive fundraising campaign, which aligns well with the strengths of the College. The College is looking forward to supporting the campaign and drawing collective synergies as we face these varied challenges that will transform our tomorrow.

This annual report serves as a way for us to highlight achievements, share our story, and also to document milestones on our way to emerging as a leader in the sciences.

Valery E. Forbes, Ph.D.

Dean and Professor
Charles E. Schmidt College of Science

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2022 Highlights

New Leadership: Dean Valery Forbes
Florida Atlantic University announced Valery Forbes, Ph.D., as its new dean of the Charles E. Schmidt College of Science, effective Aug. 10, 2022. Forbes brings more than 25 years of experience as a robust, enterprising researcher and academic leader with international experience that pairs well with FAU's already thriving scientific community.

Ranked in 'U.S News & World Report's' 2023 'Best Graduate Programs'
In the Fall of 2022, Florida Atlantic University's Charles E. Schmidt College of Science graduate programs were ranked in *U.S. News & World Report's* "Best Graduate Programs" for 2022-2023. The Best Graduate Schools rankings in these areas are based on two types of data: expert opinions about program excellence and statistical indicators that measure the quality of a school's faculty, research and students. Schmidt College of Science 2022-2023 "Best Graduate Programs" include: Earth Sciences (Geosciences) at No. 148, Mathematics at No. 155, Physics at No. 162, Psychology at No. 185, Biology at No. 203, and Chemistry at No. 204.

Strategic Faculty Hiring Initiative
The Schmidt College of Science began a major strategic hiring initiative in Fall of 2022 to recruit 16 new tenure-track faculty members across the College's eight academic departments that will build on our areas of strength in Environment, Health, and Computational and Data-Driven Science.

Jumpstart Postdoctoral Program
Dean Valery Forbes launched the new Jumpstart Postdoctoral Program in Fall 2022, with the aim of "jumpstarting" new multidisciplinary research collaborations between faculty and postdoctoral associates to solve some of today's complex societal challenges. The first cohort of postdocs from this program were announced in Spring 2023. Each postdoctoral scholar will receive a salary following the NIH postdoc scale, with benefits, and $5,000 per year for research supplies and research-related travel.

FAU-Max Planck Joint Program Creates New M.D./Ph.D. Dual Degree
FAU Charles E. Schmidt College of Medicine and the Charles E. Schmidt College of Science, along with the Max Planck Florida Institute (MPFI) for Neuroscience, signed a new M.D./Ph.D. joint neuroscience program into effect in early October 2022. The new accelerated academic dual-degree program is the latest addition to the innovative partnerships between FAU and MPFI, expanding student opportunities in South Florida and nationwide.

Inaugural Pre-Health Professions Summit
In October 2022, the College's Pre-Health Professions Office hosted the inaugural Pre-Health Professions Summit. The three-day event featured healthcare professionals from surrounding universities and local community practitioners. Students had the opportunity to explore career options regarding research and medicine and participate in several workshops. The summit was an interprofessional collaboration between multiple offices, community leaders and student organizations, and included partners from Yale University's School of Medicine.

Inaugural Nat and Dorothy Hyman Lecture Series
The College hosted the inaugural Nat and Dorothy Hyman (NDH) Science Lecture on "The Webb Effect: A Revolution in Space Astronomy," in November 2022, with noted space expert Louis-Gregory Strolger, Ph.D., astronomer, Space Telescope Science Institute. The NDH Science Lecture Series was created to encourage and inspire students in the sciences and provide access to educational lectures by leaders in various scientific fields for FAU students, faculty, and community members, free of charge.

Diversity in Science Festival
A Diversity in Science Festival was hosted by the College in Spring 2022 that included science-related exhibitions, interactive games and activities. Panelists and speakers facilitated candid dialogue on transparency, accountability, inclusion and equity. The festival encouraged partnerships between the university, clubs and local communities to promote the ideals of mutual respect and inclusion.

Data-Driven Science and AI Conference
The fourth Data-Driven Science and AI Conference was held in Spring 2022 to advance education and research in state-of-the-art analytical methods in data science and to apply these methods to address complex problems in the sciences, industry, and government. Faculty, student researchers, and tech industry professionals, and community partners gathered for this conference to network, learn the latest industry trends, enjoy data demos, meet experts in the field, and more.

FAU Health Network
Three South Florida counties that collectively are home to the largest metropolitan population in the state serve as an academic health network that is a true collaboration of the region's leading public and private academic and medical leaders. The Schmidt College of Science is a strategic partner through our academic and research programs to support the newly launched initiative. FAU's Health Network will bring premier academic medicine to Southeast Florida, driving our community forward and improving the lives of our citizens.

College Snapshot

By the Numbers (number of students, postdocs, faculty)

- 7,400+ undergraduates
- 600 graduate students
- 9 postdoctoral fellows
- 114 tenure/tenure track faculty members (including faculty with joint appointments)
- 15 non-tenure track research faculty
- 41 instructors

Academics

41+ degree programs

- 17 baccalaureate
- 15 master's
- 7 Ph.D.
- 2 professional master's programs
- 9 certificate programs

1,630+ Degrees Awarded Annually

- 1,480+ bachelor's
- 110 master's
- 37 doctoral

Interdisciplinary Degree Programs

- Environmental Science
- Neuroscience Graduate Program
- Marine Science and Oceanography Program

Departments

- Biological Sciences
- Chemistry and Biochemistry
- Exercise Science and Health Promotion
- Geosciences
- Mathematical Sciences
- Physics
- Psychology
- Urban and Regional Planning

Centers

- Center for Biological and Materials Physics
- Center for Complex Systems and Brain Sciences
- Center for Cryptology and Information Security
- Center for Environmental Studies
- Center for Geo-Information Science
- Center for Molecular Biology and Biotechnology
- Center for Urban and Environmental Solutions

Field Stations and Arboretum

- Riverwoods Field Laboratory
- FAU Marine Science Lab at Gumbo Limbo
- Robert J. Huckshorn Arboretum, Jupiter campus

Campuses

- The College's programs extend across the University's 110-mile South Florida service region (Davie, Boca Raton, Jupiter, and the Harbor Branch Oceanographic Institute in Fort Pierce).
- Each campus offers unique opportunities for science majors that we encourage students to explore as they build their curriculum and progress through their college experiences.

The Rubin and Cindy Gruber Sandbox

- One of the nation's first multi-disciplinary, state-of-the-art artificial intelligence (AI) labs located in a university library, the collaborative, 3,400-square-foot experimental space was designed for students of all levels, from all disciplines, to directly engage with the fast-advancing field of AI.
- The Sandbox is dedicated to advancing the field of AI through interdisciplinary collaboration, hands-on student research, and education.

Signature Programs or Events

- Nat and Dorothy Hyman Science Lecture Series
- Frontiers in Science Public Lecture Series
- Future Doctors Reception
- Pre-Health Professions Week and Graduate and Professional Fair
- Science Fest
- Pumpkin Drop and Physics Carnival
- Science Olympiad
- FAU Observatory
- Math Days

Undergraduate Students

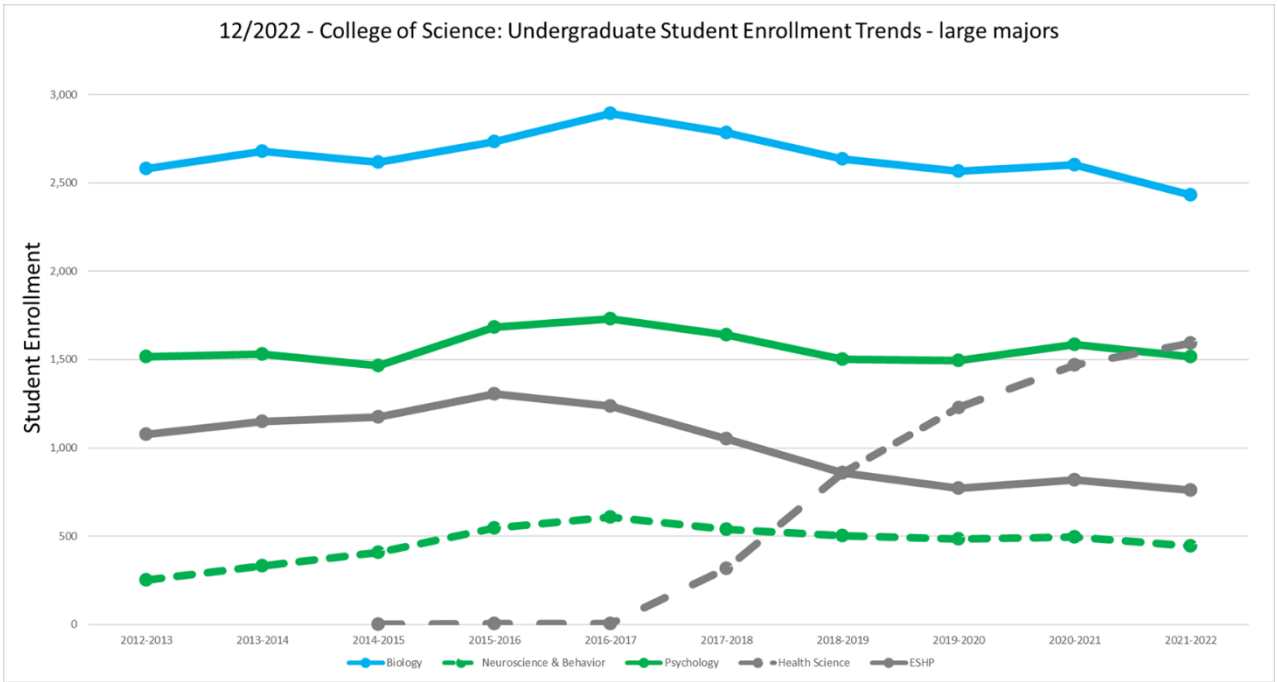
Top Undergraduate Degree Programs, Respectively, by Enrollment, at the University

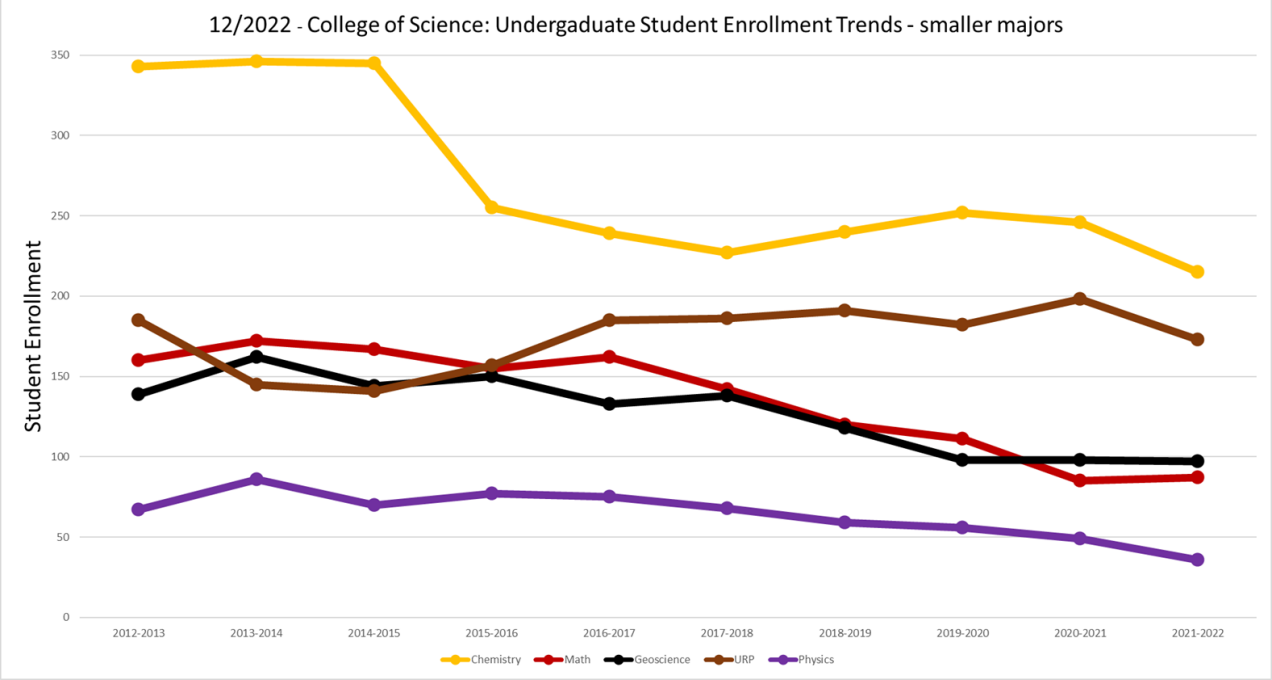
- #1. B.S. Biological Sciences
- #2. B.A. Psychology
- #3. B.A. in Health Sciences
- #8. B.S. in Exercise Science

Key Enrollment Metrics (2021-2022 AY)

- 7,483 undergraduates enrolled
- 6,803 Florida residents (91%)
- 1,587 first-generation college students (21%)
- 2,266 Hispanic (30%)
- 1,808 Black/African American (24%)
- 5,385 Female (72%)
- 4,030 FTIC students (54%)
- 2,382 transfer students (32%)

Majors


12/2022 - College of Science: Undergraduate Student Enrollment Trends - large majors
Student Enrollment
3,000
2,500
2,000
1,500
1,000
500
0
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
2020-2021
2021-2022
Biology
Neuroscience & Behavior
Psychology
Health Science
ESHP


12/2022 - College of Science: Undergaduate Student Enrollment Trends - smaller majors
Student Enrollment
350
300
250
200
150
100
50
0
2012-2013
2013-2014
2014-2015
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
2020-2021
2021-2022
Chemistry
Math
Geoscience
URP
Physics

Bachelor Degrees Awarded

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Biological Science	380	430	439	484	488
Chemistry	24	33	27	34	35
Exercise Sci. and Health Promotion	186	179	156	175	135
General Studies	56	70	107	78	58
Geography (incl. online)	12	15	9	4	1
Geology/Geosciences (incl. online)	19	11	19	6	14
Health Science	13	67	185	211	260
Mathematics	26	27	32	13	13
Neuroscience and Behavior	78	113	118	125	109
Physics	11	5	9	9	8
Psychology	390	361	343	307	327
Urban and Regional Planning	25	34	24	23	16
Urban Design	24	24	16	23	31

Retention and Graduation Rates (2021-2022)

- Academic Progress Rate (FT with a GPA of 2.0) 74.4% (FAU 77.6%)
- Six-year FTIC graduate rate (FT) 61.1% (FAU 61.6%)
- FTIC Pell recipient six-year graduation rate (FT and PT students) 61% (FAU 61.3%)
- Percent of bachelor's degrees awarded to minorities 54.2% (FAU 51.2%)
- Four-year FTIC graduation rate (FT) 51.1% (FAU 49.1%)
- Percent of bachelor's degrees awarded in areas of strategic emphasis 86.5% (FAU 67.5%)
- Percent of undergraduates enrolled (FT) 69.2% (FAU 64.3%)
- Percent of undergraduate degrees in areas of strategic emphasis 73.2% (FAU 61.4%)
- Two-year new FL AA transfers graduation rate 41.2% (FAU 47.0%)
- Three-Year New FL AA Transfers Graduation Rate (FT and PT) 61.8% (FAU 59.9%)

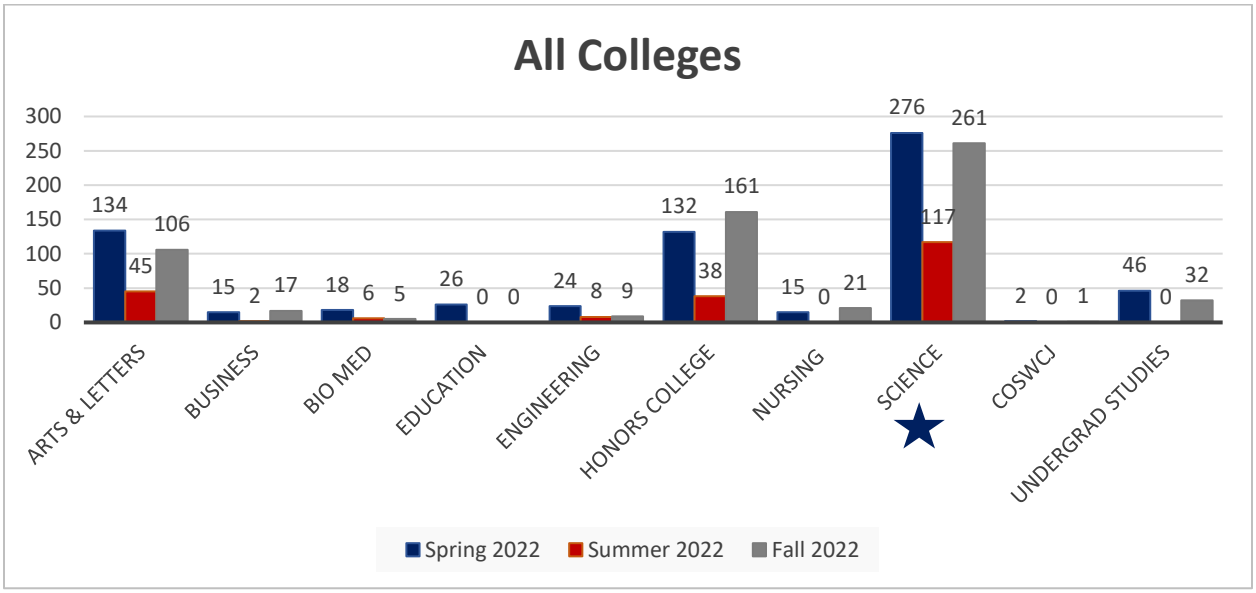
Undergraduate Research

The College emphasizes outstanding, real-world experiences for our undergraduate science majors. We work closely with the Office of Undergraduate Research and Inquiry (OURI) to encourage undergraduate student research. Our undergraduate student scientists get funded, published, recognized, and are involved with research, scholarship, and creative activities.

Students Registered in Directed Independent Research (DIR) Courses Fall 2022

College of Medicine	College of Engineering	College of Business	Honors College	**College of Science**
5	2	9	22	**196**

Undergraduate Students Conducting Research (DIR, DIS, RES)



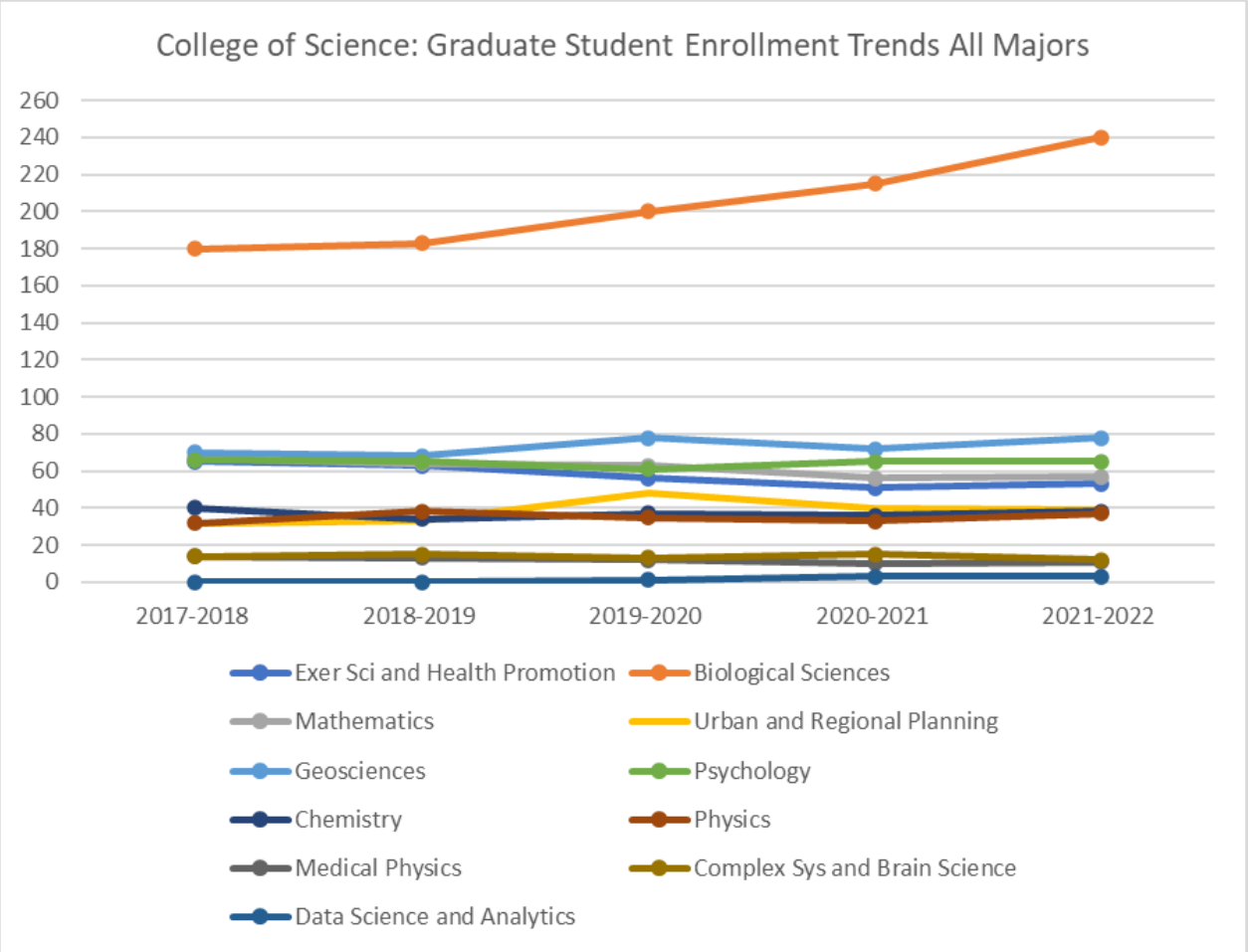
Undergraduate Awards and Recognition

- Inaugural cohort member of Schmidt College of Science Soar in 4 Scholar program Jorge Torres awarded Golberg Scholarship
- Two Schmidt College of Science students presented research at the Florida Capital: Vanessa Stubbs and Michael Amin
- Satviki Singh named FAU Undergraduate Researcher of the Year and Jo Laura named FAU University Scholar at the 53rd Annual Honors Convocation
- Earned awards at the FAU Office of Undergraduate Research and Inquiry Research Day: Jo Laura, Maria F. Garcia Morillo and Scarlett Tischer, Joseph Alexander, Ivet Boneva, Sara Thomas
- Undergraduate researcher Alexis Surtel published in Nature, co-authoring the first study to link weed killer Roundup® to convulsions in animals
- Dodlee Mosilme, a first-year Biological Sciences student, was the first FAU student to join the 2022 Yale Summer Enrichment Medical Academy in New Haven, Connecticut

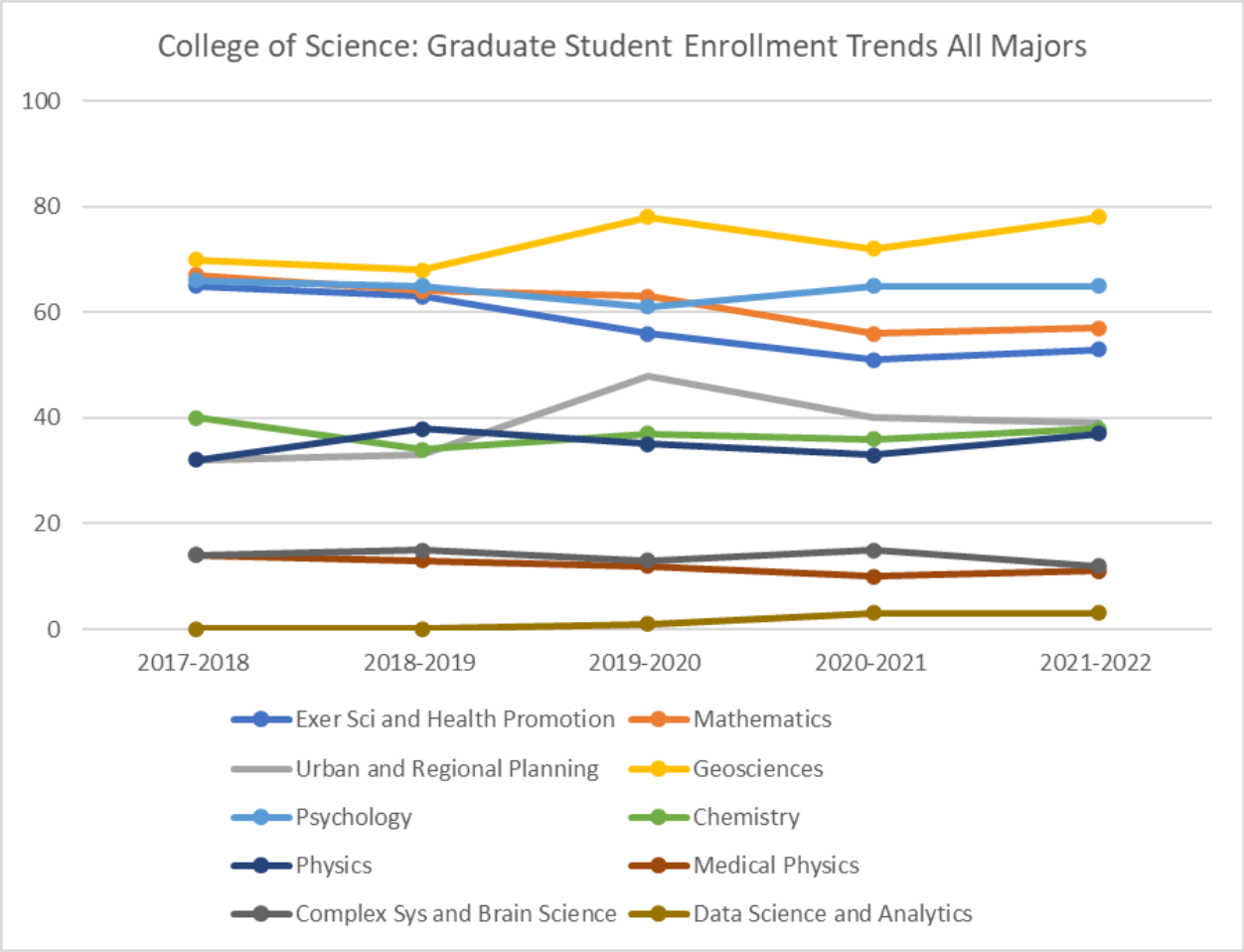
- Alumna Deborah Santos de Azevedo Named National Geographic Young Explorer
- Michelle Gras named a Morton Fellow
- Jared Kahn received the Most Outstanding Senior Undergraduate Organic Chemistry Student award from the American Chemical Society, Division of Organic Chemistry
- Cassidy Hoover named FAU Talon Award recipient
- 36 current Soar in 4 Scholars
- 27 students (85% of our applications) accepted into medical school or health professional programs (AY 2021-2022)

Graduate Students

Enrollment for All Departments



Enrollment for All Departments Without Biological Sciences



Degrees Awarded: Master's

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Applied Math and Statistics	2	2	5	7	1
Biological Science	35	25	24	18	30
Business Biotechnology	4	4	1	5	3
Chemistry	5	6	2	4	3
Data Science and Analytics				2	1
Environmental Science	9	8	8	5	11
Exer Sci and Health Promotion	22	21	26	14	20
Geosciences	12	15	15	9	18
Marine Science and Oceanography		3	3	11	9
Mathematics	12	7	11	8	7
Medical Physics	3	7	4	7	3
Physics	2	7	1	1	4
Psychology	14	9	6	10	9
Urban and Regional Planning	10	9	13	9	13

Degrees Awarded: Doctorate

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Chemistry	5	5	3	3	3
Complex Sys and Brain Science	1	3		3	5
Experimental Psychology	6	5	8	6	5
Geosciences	2	4	1	4	4
Integrative Biology	11	11	14	16	7
Mathematics	6	6	6	4	3
Physics	2	5	3	1	4

Percent of graduate degrees in areas of strategic emphasis 86.5% (FAU 67.5%).

Graduate Student Awards and Recognition:

- FAU Three Minute Thesis (3MT®) Championship Winners: Morgan Slevin, Dr. Eric H. Shaw 3MT® Championship Endowed Award; Amish Mishra, 3MT® Championship Runner-Up Award; Haley Davis, 3MT® Championship Second Runner-Up Award
- 58th annual Florida Society of Geographers Awards: Asha Paudel, Outstanding Oral Presenter Ph.D. Award; David Brodylo, Outstanding Poster Presenter Ph.D. Award

- Research funding from the National Parks Conservation Association: Garrett Maggio, Kayla O'Brien, Nate Winn, Olivia Rothberg
- Sarajedini Family Endowed Scholarship awardees: Damian Czapp, Nhi Trann
- Graduate Research Support Scholarship awardees: Sarah Naylon, Emily Turla, Samantha Trail,
- Andrew and Marjorie Buglione Endowed Scholarship awardees: Holland Larsen, Ryu Morrison, Nhi Tran
- Dean Perry Endowed Scholarship awardee: YashoNandini Sing
- Published the first study to link the weed killer Roundup® to convulsions in animals: Akshay S. Naraine
- Featured on the TODAY Show for sea turtle research: Emily Turla and Samantha Trail
- Accepted in medical physics residency programs: Taindra Neupane, Shahabeddin Aslmarand, Shakeel Pereira, and Maxwell Kassel
- Earned Graduate and Professional Research Day awards: Subhosit Ray and Steven Soini
- Earned awards at the FAU Division of Research Art of Science Contest: Sydney Bell, Second Place Winner; Haley Davis, Third Place Winner; Dawn Raja Somu, Student in the Lab Winner; Clark Morgan, Student in the Field Winner; Alexis Morgan, Video Winner
- Knauss Marine Policy Fellow: Kate Shlepr

Faculty

New Hires (Fall 2022)

- Ashkaan K. Fahimipour, Ph.D., assistant professor, Department of Biological Sciences
- Laura Fontenas, Ph.D., assistant professor, Department of Biological Sciences
- Michelle Peterson, Ph.D., assistant scientist, Department of Biological Sciences
- Melissa Reiterer, Ph.D., instructor, Department of Biological Sciences
- Renjie Wang, Ph.D., assistant professor, Department of Chemistry and Biochemistry
- Francesco Sica, Ph.D., assistant professor, Department of Mathematical Sciences
- Veronika Kuchta, Ph.D., assistant professor, Department of Mathematical Sciences
- Maxime Murray, Ph.D., instructor, Department of Mathematical Sciences
- Kevin Darby, Ph.D., assistant professor, Department of Psychology
- Alexandra Schmidt, M.S., instructor, Department of Exercise Science and Health Promotion

Promotions (Fall 2022)

- Maciej Stawikoski, Ph.D., associate scientist, Department of Chemistry and Biochemistry
- Deguo Du, Ph.D., professor with tenure, Department of Chemistry and Biochemistry
- Weibo Liu, Ph.D., associate professor with tenure, Department of Geosciences
- Shi Bai, Ph.D., associate professor with tenure, Department of Mathematical Sciences
- Lun-Ching Chang, Ph.D., associate professor with tenure, Department of Mathematical Sciences

- Edoardo Persichetti, Ph.D., associate professor with tenure, Department of Mathematical Sciences
- Papiya Bhattacharjee, Ph.D., senior instructor, Department of Mathematical Sciences
- Robert Lubarsky, Ph.D., university instructor, Department of Mathematical Sciences
- Andy Khamoui, Ph.D., associate professor, Department of Exercise Science and Health Promotion
- Susan Moosai, Ph.D., university instructor, Department of Mathematical Sciences
- Angelica Hotiu, Ph.D., senior instructor, Department of Physics
- Louis Merlin, Ph.D., associate professor with tenure, Department of Urban and Regional Planning
- Jesse Saginor, Ph.D., professor, Department of Urban and Regional Planning

Faculty Retirements and Departures

Retirements (FY 2022-2023)

- James Kumi-Diaka (Department of Biological Sciences)
- Dianne Owen (Department of Biological Sciences)
- Charles Carraher (Department of Chemistry and Biochemistry)
- Daniel Huchital (Department of Chemistry and Biochemistry)
- Roger Goldwyn (Department of Mathematical Sciences)
- Lee Klingler (Department of Mathematical Sciences)
- Shen Li Qiu (Department of Physics)
- David Warburton (Department of Geosciences)

Departures (FY 2022-2023)

- Sheryl Van der Heiden (Department of Biological Sciences)
- Steven Bourassa (Department of Urban and Regional Planning)
- Bryan McConnell (Department of Urban and Regional Planning)

Retirements (FY 2021-2022)

- Chen DeHuai (Department of Physics)
- Brenda Claiborne (Department of Biological Sciences)
- Jeromy Haky (Department of Chemistry and Biochemistry)

Departures (FY 2021-2022)

- Brian Benscoter (Department of Biological Sciences)
- Kenneth Dawson-Scully (Department of Biological Sciences)
- Nathan Dorn (Department of Biological Sciences)
- Alex Keene (Department of Biological Sciences)
- Diane Baronas-Lowell (Department of Biological Sciences)
- Shaefali Rodgers (Department of Exercise Science and Health Promotion)
- Jaree Hudson (Department of Mathematical Sciences)
- Rade Musulin (Department of Mathematical Sciences)
- Lilah Besser (Department of Urban and Regional Planning)

Faculty Awards and Recognition

Schmidt College of Science faculty earned acclaim throughout 2022. Selected highlights include:

- Papiya Bhattacharjee, Ph.D., a faculty member in the Department of Mathematical Sciences, received the United States Distance Learning Association's Innovation Award, one of the world's most prestigious distance learning awards, in conjunction with FAU's Center for Online and Continuing Education
- Assistant Professor of Biological Sciences, Marianne Porter, Ph.D., receives prestigious NSF Early CAREER Award
- Warner Miller, Ph.D., inducted into FAU Chapter of the National Academy of Inventors
- I-HEALTH Pilot Grant Awardee: Shailaja Allani, Ph.D., Associate Scientist, Department of Chemistry and Biochemistry
- I-HEALTH Pilot Grant Awardee: Chad Forbes, Ph.D., Associate Professor, Department of Psychology
- Alumna and Affiliate Scientist Chelsea Bennice, Ph.D., discovers a species of octopus new to Florida
- Anton Oleinik, Ph.D., named first place winner of FAU Art of Science Contest
- Jeanette Wyneken, Ph.D., named Faculty in the Field Winner of FAU Art of Science Contest
- Stephen Kajiura, Ph.D., and Vicki Sarajedini, Ph.D., selected as role models for a pediatric cancer warrior as part of National Pediatric Cancer Foundation event
- $1 million NSF ADVANCE ADAPTATION grant to help transform faculty diversity and ensure appropriate representation of women in STEM continues the work of late Schmidt College of Science research professor Emmanuelle Tognoli, Ph.D.
- Nwadiuto Esiobu, Ph.D., recognized as the Distinguished International Mentor by the American Society for Microbiology, and she was also recognized by the Society for Advancement of Chicanos/Hispanics and Native Americans in Science for excellence in mentoring
- Salvatore Lepore recognized by National Academy of Inventors

Research

Publications and Patents (2022, list in appendix 1)

- Journal articles: 206
- Books/book chapters: 24
- Invention disclosures: 4
- Field/provisional patents: 2
- Issued patents: 1

Funded Grants (2021-2022, list in appendix 2)

Environmental/Ecology Sciences: 31

- Center for Environmental Studies: 5
- Center for Urban and Environmental Solutions: 1
- Department of Biological Sciences: 15
- Department of Chemistry and Biochemistry: 2
- Department of Geosciences: 4
- Department of Urban and Regional Planning: 4

Data Science: 17

- Department of Mathematical Sciences: 7
- Department of Physics: 10

Biomedical Sciences: 18

- Center for Complex Systems and Brain Sciences: 3
- Department of Biological Sciences: 6
- Department of Chemistry and Biochemistry: 4
- Department of Psychology: 4
- Center for Molecular Biology and Biotechnology: 1

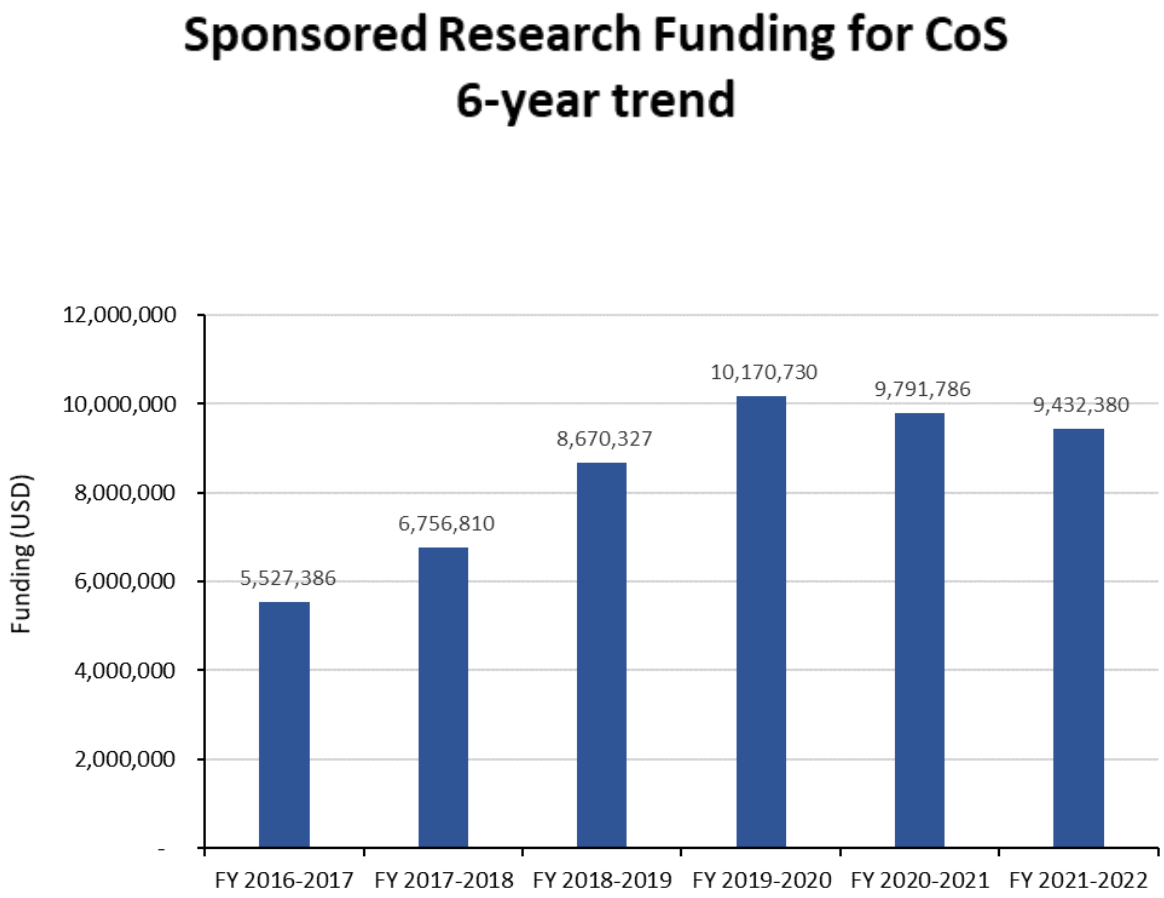
Education/Training: 13

- Department of Biological Sciences: 7
- Department of Mathematical Sciences: 3
- Department of Physics: 1
- Department of Psychology: 1
- Department of Chemistry and Biochemistry: 1

Total Expenditures

Sponsored research funding FY 2021-2022: $9.4M

- Biomedical Sciences: $3.8M (41%)
- Data Science: $1.3M (14%)
- Education/Training: $1.6M (17%)
- Environmental Sciences: $2.5M (27%)



Outreach and Engagement

Activities

- Inaugural Nat and Dorothy Hyman Science Lecture: The Webb Effect: A Revolution in Space Astronomy with Louis Strolger, Ph.D.
- Frontiers in Science Public Lecture Series
- Inaugural Soar-in-4 Reception
- Science Sophomore Social
- Science Olympiad
- Modeling the Ocean: The Conservation and Science of Marine Aquariums with CEO and founder of Polo Reef, Andrew Sandler

- FAU Young CryptograpHers Summer Camp
- FAU Astronomical Observatory Open Viewing Nights
- Combinatorics, Computing, Group Theory and Applications Conference: Aug. 14-21
- Mu Alpha Theta Mathematics Competition
- Data-Driven Science and AI Conference
- The Rubin and Cindy Gruber Sandbox Data and AI Research Exhibitions event
- FAU Marine Science Lab at Gumbo Limbo Nature Center: 243,518 visitors (May 2022-April 2023)
- Diversity in Science Festival
- Special lectures from renowned author Dr. Temple Grandin
- Visualizing Sea Level Rise Experiences in West Palm Beach

Advancement

Development (April 2022-April 2023)

Total: $1,074,000

Donors: 123

- 667 unique gifts
- 169 alumni gifts
- 10 corporate gifts
- 436 faculty and staff gifts
- 6 foundation gifts
- 26 friend's gifts

Gift Intervals

- 1 gift of $250k
- 3 gifts of $100k-250k
- 4 gifts of 50k-100k
- 18 gifts of $10k-50k
- 641 gifts of $1-10k

Alumni recognition

Armand Grossman, MBA '77, M.S. '70, B.S. '67 has served as president of the FAU Alumni Association, chair of the FAU Foundation Board of Directors, and a member of FAU's Board of Trustees. Inducted into Majestic Owls Society in Oct. 2022

Rik J. Deitsch, B.S. '97, Charles E. Schmidt College of Science. FAUAA recognized him with a 2022 Distinguished Alumni award

Maria Altieri, M.S., M.D., named Section Chief of Gastrointestinal Surgery at Pennsylvania Hospital, University of Pennsylvania

Media Relations

Schmidt College of Science faculty and students are actively engaged in communicating their science to a wider public. Selected highlights of our media coverage include:

- The published research of Marianne Porter, Ph.D., on the epaulette "walking" shark earned worldwide coverage, with an estimated 600+ million audience reach with an estimated ad value equivalency of $6 million
- TODAY Show Features FAU Sea Turtle Release and Conservation Research, Jeanette Wyneken, Ph.D., and FAU Marine Science Lab featured
- NBC Nightly News: Climate Change Causing More Turtles to Be Born Female, spotlights FAU Marine Science Lab and Jeanette Wyneken, Ph.D.
- WSVN-TV: Turtle Trackers: FAU researchers follow young sea turtles in groundbreaking project, with interviews of postdoctoral researcher Sean Williamson, Ph.D., and graduate student Emily Turla from the FAU Marine Science Lab
- WPTV Interview: Climate Change Tipping the Gender Balance of Some Species, Jeanette Wyneken, Ph.D., and FAU Marine Science Lab featured
- History Channel taps Michael Zourdos, Ph.D., as expert in an episode of Ancient Workouts
- Stephen Kajiura, Ph.D., spoke with *Newsweek* for the article Fall Equinox Triggers Great White Shark Migration South
- Stephen Kajiura, Ph.D., appeared in four episodes of National Geographic television documentaries, such as When Sharks Attack and Planet Shark – Ocean Voyagers
- Stephen Kajiura, Ph.D., appeared in television documentaries from PBS and ITV, and served as a technical consultant for an episode of True to Nature on BBC
- Stephen Kajiura, Ph.D., provided numerous television interviews discussing shark research with local and national media, including CBS12, WPTV, WSVN, and FOX 13, News Nation
- The Road to Popularity Can Be Paved With Unpleasantness, Study Featured in *The Wall Street Journal*, featuring the work of Brett Laursen, Ph.D.
- Wild Palm Beaches documentary features Sarah Milton, Ph.D., about the survival story of sea turtles and the critical conservation research in this field
- The Schmidt College of Science had two amazing students featured on Amazon Prime's Video, "The College Tour"
- WPTV: 30-year Anniversary of Hurricane Andrew: John Renne, Ph.D., addresses his research efforts with evacuation planning
- John Renne, Ph.D., appeared on Fox Weather for a spotlight on Hurricane Preparedness: Evaluating Plans for Large Cities Across the U.S.
- John Renne, Ph.D., interviewed in *The Washington Post's* article Ian is Florida's Deadliest Hurricane Since 1935
- John Renne, Ph.D., joined Michael Williams on WPTV's To the Point to discuss changes needed for our coastal communities as they rebuild following the destruction caused by Hurricane Ian
- WPLG Local 10: Sea Level Rising More Rapidly Than Previously Predicted, with interview from Colin Polsky, Ph.D.

Appendix 1: Faculty Publications and Patents for 2021-2022

Center for Complex Systems and Brain Sciences

2021

Journal Articles (total 35):

1. Alexander, W.H. and Womesldorf, T. (2021). Interactions between medial and lateral prefrontal cortex in hierarchical predictive coding. Frontiers in Computational Neuroscience.
2. Bedford, R., Leno, V. C., Wright, N., Bluett-Duncan, M., Smith, T. J., Anzures, G., Pickles, A., Sharp, H., Hill, J. (2021). Emotion recognition performance in children with callous unemotional traits is modulated by cooccurring autistic traits. Journal of Clinical Child & Adolescent Psychology, 50, 811-827. https://doi.org/10.1080/15374416.2020.1833338
3. Anzures, G., Mildort, M. (2021). Do perceptual expertise and implicit racial bias predict early face-sensitive ERP responses? Brain and Cognition, 147, 105671.
4. Barenholtz, E., Krotulski, A. J., Morris, P., Fitzgerald, N. D., Le, A., Papsun, D. M., ... & Palamar, J. J. (2021). Online surveillance of novel psychoactive substances (NPS): Monitoring Reddit discussions as a predictor of increased NPS-related exposures. International Journal of Drug Policy, 98, 103393.
5. Daskagianni, E., & Barenholtz, E. (2021). The contribution of different contextual informational sources in visual object recognition. Visual Cognition, 29(5), 318-337.
6. M. Abd, R. Paul, A. Aravelli, O. Bai, L. Lagos, M. Lin, and E. Engeberg, "Hierarchical Tactile Sensation Integration from Prosthetic Fingertips Enables Multi-Texture Surface Recognition," Sensors, vol. 21, Issue 13,
7. 2021, https://doi.org/10.3390/s21134324 *Most Notable Article in Sensors and Robotics Topic Area, June August, 2021
8. Lin, S. Shapiro, J. Doulgeris, E. Engeberg, C. Tsai, and F. Vrionis, "Cage-screw and anterior plating combination reduces the risk of micromotion and subsidence in multi-level anterior cervical discectomy and fusion – A finite element study," The Spine Journal, vol. 21, Issue 5, p. 874-882, May 2021; DOI: https://doi.org/10.1016/j.spinee.2021.01.015
9. M.D. Hssayeni, A. Chala, R. Dev, L. Xu, J. Shaw, B. Furht, and B. Ghoraani, "The Forecast of COVID-19 Spread Risk at The County Level," Journal of Big Data, 2021.
10. D. Hssayeni, J. Jimenez-Shahed, M.A. Burack, and B. Ghoraani, "Ensemble deep model for continuous estimation of Unified Parkinson's Disease Rating Scale III", Biomedical engineering online, 20(1), pp.1-20.January 2021.
11. B. Ghoraani, J.E. Galvin and J. Jimenez-Shahed, Response to "Comment on :"Point of view: Wearable systems for at-home monitoring of motor complications in Parkinson's disease should deliver clinically actionable information". Parkinsonism & related disorders, June 2021

12. D. Hssayeni, J. Jimenez-Shahed, M.A. Burack, and B. Ghoraani, "Dyskinesia estimation during activities of daily living using wearable motion sensors and deep recurrent networks". Scientific reports 11 (1), 1-12. January 2021
13. B. Ghoraani, J. Galvin, J. Jimenez-Shahed, "Point of View: Wearable Systems for at-home monitoring of motor complications in Parkinson's disease should deliver clinically actionable information", Parkinsonism and Related Disorders, 84, 35-39, January 2021.
14. M.D. Hssayeni, B. Ghoraani, "Multi-modal Physiological Data Fusion for Affect Estimation Using Deep Learning", IEEE Access 9, 21642-21652. January 2021.
15. B. Ghoraani, L.N. Boettcher, M. Hssayeni, A. Rosenfeld, M.I. Tolea, and J.E. Galvin, "Detection of Mild Cognitive Impairment and Alzheimer's Disease using Dual-task Gait Assessments and Machine Learning," Journal of Biomedical Signal Processing and Control, 64, p.102249, 2021.
16. Teti, M., Hahn, W. E., Martin, S., Teti, C., & Barenholtz, E. (2021). A controlled investigation of behaviorallycloned deep neural network behaviors in an autonomous steering task. Robotics and Autonomous Systems, 142, 103780.
17. StClair,R. A., Hahn, W. E., Barenholtz, E. (2021). The Role of Bio-Inspired Modularity in General Learning. International Conference on Artificial General Intelligence, 261-268
18. Lee, J., & Hong, S. W., & Chong, S. C. (2021). Multivariate summary of a complex scene. Vision Research, 189, 11-26
19. Argueta, A., Sloan, A., Jones, N., & Kelso, J.A.S. (2021). Emergence of agency in infants. FAU Undergraduate Research Journal, 10, 17-20.
20. Benites, D., Tognoli, E., & Kelso, J. A. S. (in press). Dinâmicas de Coordenação e Metaestabilidade. In V. G. Haase & G. Gauer (Eds.), Elementos de Psicologia Cognitiva. Porto ALegre: ARTMED.
21. Kelso, J.A.S. (2021). Unifying large- and small-scale theories of coordination. Entropy, 23(5), 537; https://doi.org/10.3390/e23050537
22. Kelso, J.A.S. (2021). The Haken-Kelso-Bunz (HKB) Model: From Matter to Movement to Mind. Biological Cybernetics, 115 (4), 305-322. https://doi.org/10.1007/s00422-021-00890-w
23. Kelso, J.A.S. (2021). On Coordination: The Coordination Dynamics of (Animate) Moving Bodies, https://www.researchgate.net/publication/354582995
24. Torrents, C., Balagué, N., Hristovski, R., Almarcha, M., & Kelso, J.A.S. (2021) Metastable coordination dynamics of collaborative activity in educational settings. Sustainability, 13, 2696.
25. Cohen SJ, Cinalli Jr, D, Ásgeirsdóttir HN, Barenholtz E and Stackman Jr RW (under revision) Every picture tells a story: Evidence for picture-object equivalence in mice. Scientific Reports.
26. Abd, M., Ingicco, J., Douglas Hutchinson, D., Tognoli, E., Engeberg, E.d. (submitted). Toward prosthetic hand dexterity: the crucial role of multichannel haptic feedback.
27. Ibrahim A.K., Zhuang, H., Tognoli E., Erdol, N. Ali, A.M. (submitted). Epileptic Seizure Prediction Based on Multiresolution Convolutional Neural Networks. Biomedical Signal Processing and Control McKinley J, Zhang M, Wead A, Williams C, Tognoli E., Beetle C (accepted). Third party stabilization of unstable coordination in systems of coupled oscillators. Journal of Physics: Conference Series (JPCS).

28. Pavlov, Y.G., Adamian, N., Appelhoff, S., Arvaneh, M., Benwell, C., Beste, C., Bland, A., Bradford, D.E., Bublatzky, F., Busch, N. and Clayson, P.E., Tognoli, E., et al., (2021). #eegmanylabs: Investigating the Replicability of Influential EEG Experiments. Cercor
29. Vertes, R.P. and Linley S.B. No cognitive processing in the unconscious, anesthetic-like, state of sleep. J. Comp. Neurol. 529:524-538, 2021.
30. Linley, S.B., Athanason, A.C., Rojas, A.K.P. and Vertes, R.P. Role of the reuniens and rhomboid thalamic nuclei in anxiety-like avoidance behaviors in the rat. Hippocampus 31:756-769, 2021.
31. Viena, T.D., Vertes, R.P. and Linley, S.B. Discharge characteristics of neurons of nucleus reuniens across sleepwake states in the behaving rat. Behav. Brain Res. 410:113325, 2021.
32. Vertes, R.P. and Linley. S.B. Structural and functional organization of the midline and intralaminar nuclei of the thalamus. In: The Thalamus, Halassa, M. (Ed), Cambridge University Press, New York, in press.
33. Vertes, R.P., Linley, S.B. and Viena, T.D. Nucleus reuniens: circuitry, function and dysfunction. In: In: Electrophysiological Recording Techniques, 2nd ed, Vertes R.P. and Allen T.A. (Eds.), Humana Press, New York, in press.
34. Wu J.-Y. and Prentice, H. Potential new therapeutic intervention for ischemic stroke. J Transl Int Med. 9(1): 1–3. (2021). *Corresponding Author
35. Dumbuya, J.S., Chen, L., Wu, J.-Y. and Wang, B. (2021). The role of G-CSF neuroprotective effects in neonatal hypoxic-ischemic encephalopathy (HIE): current status. J Neuroinflammation. 2021 Feb 21;18(1):55.

2022

Journal Articles (total 14):

1. Alexander,W.H. & Gershman, S. (revised). Learning state representations using dopamine prediction errors. Neurons, Behavior, Data analysis, and Theory
2. Kocaoglu, B. and Alexander,W.H. (2022). Degeneracy measures in biologically plausible random Boolean networks. BMC Bioinformatics, 23(1), 71.
3. Cogliatti-Dezza, I., Cleeremans, A., and Alexander,W.H. (2022). Independent and Interacting Value Systems for Reward and Information in the Human Brain. ELife, 11
4. Anzures, G., Mildort, M., Bell, C., & Soethe, E. (*in press*). Visual examination of own- and other-race face identities and implicit racial bias. Current Psychology.
5. Anzures, G., Mildort, M., Fennell, E., Bell, C., & Soethe E. (2022). Race and early face-sensitive ERPs in children and adults. Journal of Experimental Child Psychology, 214, 105287. https://doi.org/10.1016/j.jecp.2021.105287
6. Y. Wu and B. Ghoraani, "Biological Signal Processing and Analysis for Healthcare Monitoring," Sensors, 2022.
7. Y. Wu, S. Krishnan, and B. Ghoraani, "Computational Methods for Physiological Signal Processing and Data Analysis," Computational and Mathematical Methods in Medicine, 2022.
8. M. Seifallahi, A.H. Mehraban, J.E. Galvin, and B. Ghoraani, "Alzheimer's disease detection using comprehensive analysis of Timed Up and Go test via Kinect V. 2 camera and machine learning," Transactions on Neural Systems and Rehabilitation Engineering, 2022.

9. St Clair, R., Teti, M., Pavlovic, M., Hahn, W., Barenholtz, E. (2022-5). Predicting residues involved in antiDNA autoantibodies with limited neural networks. Medical & Biological Engineering & Computing, 60 (5): 12791293
10. Hong, S. W.*, & Yoon, K. L. (in press). Intensity dependence of facial expression adaptation aftereffect. Psychonomic Bulletin and Reviews.
11. Park, Y. E., Sy, J. L., Hong, S. W., & Tong, F. (in press). Reprioritization of features of multi-dimensional objects stored in visual working memory. Psychological Science.
12. Tognoli, E., Benites, D., & Kelso, J.A.S. (submitted). A blueprint for the study of the brain's spatiotemporal patterns.
13. Cohen SJ, Cinalli DA Jr, Ásgeirsdóttir HN, Hindman B, Barenholtz E, Stackman RW Jr. Mice recognize 3D objects from recalled 2D pictures, support for picture-object equivalence. Sci Rep 2022 NE 9;12(1):4184. Varela C, Wilson MA. Reversal Learning: It's just a phase. Current Biology. Vol. 32, Issue 15, pr849r851, AUGUST 08 (2022). https://doi.org/10.1016/j.cub.2022.06.045
14. Becker LA, Penagos H, Flores FF, Manoach DS, Wilson MA, Varela C. Eszopiclone and Zolpidem Produce Opposite Effects on Hippocampal Ripple Density. Frontiers in Pharmacology. (2022). https://www.frontiersin.org/articles/10.3389/fphar.2021.792148/full

Center for Environmental Studies

2021

Journal Articles (total 2):

Under Department of Urban and Regional Planning

Center for Molecular Biology and Biotechnology (CMBB):

2021

Journal Articles (total 1):

1. Allani, S., Weissbach, H., & Lopez-Toledano, M. (2021). Role of methionine sulfoxide reductase in Alzheimer's disease. The FASEB Journal, 35.

2022

Journal Articles (total 2):

1. Strong, R., Miller, R. A., Cheng, C. J., Nelson, J. F., Gelfond, J., Allani, S. K., ... & Harrison, D. E. (2022). Lifespan benefits for the combination of rapamycin plus acarbose and for captopril in genetically heterogeneous mice. Aging cell, e13724.
2. Allani, S. K., Rayala, R., Rivera, O., Prentice, H. M., Chen, X., Ramírez-Alcántara, V., ... & Weissbach, H. (2022). A novel sulindac derivative protects against oxidative damage by a cyclooxygenase-independent mechanism. Journal of Pharmacology and Experimental Therapeutics, 382(2), 79-87.

Department of Biological Sciences

2021

Journal Articles (total 42):

1. Joseph M. Niederhauser, J. M. Niederhauser, Morgan C. Slevin, M. C. Slevin, Erik G. Noonburg, E. G. Noonburg, & Rindy C. Anderson, R. C. Anderson. (2021). Body size, habitat quality, and territory defense in Bachman's sparrow. *Behaviour, 158*, 479-502. doi: 10.1163/1568539X-bja10079
2. Erik G. Noonburg, E. G. Noonburg, & Rindy C. Anderson, R. C. Anderson. (2021). Asymmetric competition and floater dynamics. *Ecology, 102*, e03238. doi: 10.1002/ecy.3238
3. Nirthieca Suthakaran, N. Suthakaran, Sanjana Chandran, S. Chandran, Michael Iacobelli, M. Iacobelli, & David Binninger, D. Binninger. (2021). Hypoxia Tolerance Declines with Age in the Absence of Methionine Sulfoxide Reductase (MSR) in Drosophila melanogaster. Antioxidants, 10, -. doi: 10.3390/antiox10071135
4. C.O. Bennice, W.R. Brooks & R.T. Hanlon. Behavioral dynamics provide insight into resource exploitation and habitat coexistence of two octopus species in a shallow Florida lagoon. 2021. Journal of Experimental Marine Biology and Ecology. https://doi.org/10.1016/j.jembe.2021.151592
5. J.L. Frahm, W.R. Brooks. The Use of Chemical Cues by Sargassum Shrimps Latreutes fucorum and Leander tenuicornis in Establishing and Maintaining a Symbiosis with the Host Sargassum Algae. Diversity, 13, 305. 2021. https://doi.org/10.3390/d13070305
6. Anderson, K. E., & Fahimipour, A. K. (2021). Body size dependent dispersal influences stability in heterogeneous metacommunities. Scientific reports, 11(1), 1-12.
7. Ishaq, S. L., Parada, F. J., Wolf, P. G., Bonilla, C. Y., Carney, M. A., Benezra, A., ... & Morar, N. (2021). Introducing the Microbes and Social Equity Working Group: considering the microbial components of social, environmental, and health justice. MSystems, 6(4), e00471-21.
8. Pritikin, B., Hein, A., Fahimipour, A., & Celis, M. (2021, December). Preparing Data for Machine Learning Neural Network to Track and Identify Fish Species. In AGU Fall Meeting Abstracts (Vol. 2021, pp. ED35A-0585).
9. Ishaq, S. L et al., (2021). Introducing the Microbes and Social Equity Working Group: Considering the Microbial Components of Social, Environmental, and Health Justice, 4(6)
10. Fontenas, L., & Kucenas, S. (2021). Spinal cord precursors utilize neural crest cell mechanisms to generate hybrid peripheral myelinating glia. Elife, 10.
11. Ali, M. F., Latimer, A. J., Wang, Y., Hogenmiller, L., Fontenas, L., Isabella, A. J., ... & Kucenas, S. (2021). Met is required for oligodendrocyte progenitor cell migration in Danio rerio. G3, 11(10), jkab265.
12. Raimondo S, Schmolke A, Pollesch N, Accolla C, Galic N, Moore A, Vaugeois M, Rueda-Cediel P, Kanarek A, Awkerman J, Forbes VE. 2021. Pop-GUIDE: Population modeling Guidance, Use, Interpretation, and Development for Ecological Risk Assessment. Integr Environ Assess Manage 17: 767-784.
13. Accolla C, Vaugeois M, Grimm V, Moore AP, Rueda-Cediel P, Schmolke A, Forbes VE. 2021. A review of key features and their implementation in unstructured, structured, and agent-based population models for ecological risk assessment. Integr Environ Assess Manage 17: 521-540.

14. Vaugeois M, Venturelli PA, Hummel SL, Forbes VE. 2021. A simulation-based evaluation of management actions to reduce the risk of contaminants of emerging concern (CECs) to walleye in the Great Lakes Basin. Sci Total Environ 768: 144326.
15. Forbes VE, Agatz A, Ashauer R, Butt KR, Capowiez Y, Duquesne S, Ernst G, Focks A, Gergs A, Hosson ME, Holmstrup M, Johnston ASA, Meli M, Nickisch D, Pieper S, Rakel KJ, Reed M, Roembke J, Schafer RB, Thorbek P, Spurgeon DJ, van den Berg E, van Gestel CAM, Zorn MI, Roeben V. 2021. Mechanistic effect modeling of earthworms in the context of pesticide risk assessment: Synthesis of the FORESEE Workshop. Integr Environ Assess Manage 17:352-363.
16. Accolla C, Forbes VE. 2021. Temperature dependence of population responses to competition and metabolic stress: An agent-based model to inform ecological risk assessment in a changing climate. Sci Total Environ 763: 144096.
17. Jang J, Hochstein R, Forbes VE, Sadowsky M. 2021. Bioturbation by the marine polychaete Capitella teleta alters the sediment microbial community by ingestion and defecation of sediment particles. Sci Total Environ. 752: 142239.
18. Nawaratne, V., Kudumala, S., Kakad, P. P., & Godenschwege, T. A. (2021). The conserved MASRPF motif in the Attractin homolog, Distracted, is required for association with Drosophila E3-ligase Mgrn1. Micropublication Biology, 2021.
19. Integrative genomic and epigenomic analyses identified IRAK1 as a novel target for chronic inflammation-driven prostate tumorigenesis. Saheed Oluwasina Oseni1,*, Olayinka Adebayo2, Adeyinka Adebayo3, Alexander Kwakye4, Mirjana Pavlovic5, Waseem Asghar5, James Hartmann 1, Gregg B. Fields6, and James Kumi-Diaka. bioRxiv preprint doi: https://doi.org/10.1101/2021.06.16.447920; this version posted June 16, 2021. Not peer reviewed.
20. Chapter 5: Cancer Therapy, Immunotherapy, Photothermal Therapy. G. Liddle, J. Wei and J. Hartmann. In: Metal Oxides for Biomedical and Biosensor Applications. ISBN: 978-0-12-823033-6 Date Posted as PDF Dec. 2021. Not peer reviewed.
21. Ayres, KA, JT Ketchum, RG Armas, R Gonzalez-Armas, F Galvan-Magaña, A Hearn, FR Elorriaga-Verplancken, RO Martinez-Rinco, EM Hoyos-Padilla, SM Kajiura. 2021. Seasonal Aggregations of Blacktip Sharks Carcharhinus limbatus at a Marine Protected Area in the Gulf of California, Assessed by Unoccupied Aerial Vehicle Surveys. Marine Ecology Progress Series 678: 95-107. https://doi.org/10.3354/meps13897
22. Shea-Vantine, C. S., Galloway, K. A., Ingle, D. N., Porter, M. E., & Kajiura, S. M. (2021). Caudal spine morphology and puncture performance of two coastal stingrays. Integrative and Comparative Biology 61(2): 749-758. https://doi.org/10.1093/icb/icab077
23. Ayres, K. A., Ketchum, J. T., González- Armas, R., Galván-Magaña, F., Hearn, A., Elorriaga- Verplancken, F. R., Hoyos-Padilla, E. M., & Kajiura, S. M. (2021). The use of an unoccupied aerial vehicle to survey shark species over sand and rocky-reef habitats in a marine protected area. Journal of Fish Biology, 1–6. https://doi.org/10. 1111/jfb.14838
24. Butcher, PA, AP Colefax, RA Gorkin III, SM Kajiura, NA López, J Mourier, CR Purcell, GB Skomal, JP Tucker, AJ Walsh, JE Williamson & V Raoult. 2021. The Drone

Revolution of Shark Science: A Review. Drones 5(1): 8. https://doi.org/10.3390/drones5010008
25. Strazisar, T., Koch, M., Madden, C. (2021) Abiotic and Biotic Interactions Control Ruppia maritima Life history development within a heterogeneous coastal landscape. Estuaries and Coasts. 44, pages1975–1993.
26. McCoy, M. W., Stunkle, C. R., Davidson, A. T., Shuart, W. J., & Vonesh, J. R. (2021). Taxa-Specific Responses to Flooding Shape Patterns of Abundance in River Rock Pools.
27. Stunkle, C. R., Davidson, A. T., Shuart, W. J., McCoy, M. W., & Vonesh, J. R. (2021). Taxa-specific responses to flooding shape patterns of abundance in river rock pools. Freshwater Science, 40(2), 397-406.
28. Albecker, M. A., Stuckert, A. M., Balakrishnan, C. N., & McCoy, M. W. (2021). Molecular mechanisms of local adaptation for salt-tolerance in a treefrog. Molecular Ecology, 30(9), 2065-2086.
29. Davidson, A. T., Hamman, E. A., McCoy, M. W., & Vonesh, J. R. (2021). Asymmetrical effects of temperature on stage-structured predator–prey interactions. Functional Ecology, 35(5), 1041-1054.
30. Peralta, A. L., Muscarella, M. E., Stucy, A., Werba, J. A., & McCoy, M. W. (2021). Bacterial composition reflects fine-scale salinity changes while phylogenetic diversity exhibits a strong salt divide. bioRxiv.
31. Perrault, J. R., Barron, H. W., Malinowski, C. R., Milton, S. L., & Manire, C. A. (2021). Use of intravenous lipid emulsion therapy as a novel treatment for brevetoxicosis in sea turtles. Scientific reports, 11(1), 1-12
32. Sposato, P., Keating, P., Lutz, P. L., & Milton, S. L. (2021). Evaluation of immune function in two populations of green sea turtles (Chelonia mydas) in a degraded versus a nondegraded habitat. The Journal of Wildlife Diseases, 57(4), 761-772.
33. Reiterer, M., Bruce, L., & Milton, S. (2021). Differential Responses of Methionine Sulfoxide Reductases A and B to Anoxia and Oxidative Stress in the Freshwater Turtle Trachemys scripta. Metabolites, 11(7), 458.
34. Cassandra M. Donatelli, Alexus S. Roberts, Eric Scott, Kylene DeSmith, Dexter Summers, Layanne Abu-Bader, Emily M. Standen, Marianne E. Porter, Adam P. Summers, and Eric D. Tytell. Foretelling the flex- vertebral shape and swimming kinematics in elongate fishes. Integrative and Comparative Biology; Published June, 2021. Integrative and Comparative Biology, icab110, https://doi.org/10.1093/icb/icab110
35. Caitlin Shea-Vantine*, Katherine Galloway*, Danielle Ingle*, Marianne Porter, Stephen Kajiura. Stingray spine puncture performance. Published 14 May 2021. Integrative and Comparative Biology, icab077, https://doi.org/10.1093/icb/icab077
36. Lydia F. Naughton, Sebastian Kruppert, Beverly Jackson, Marianne E. Porter, Cassandra M. Donatelli. A Tail of Four Fishes: An analysis of kinematics and material properties of elongate fishes. Published 06 May, 2021. Integrative and Comparative Biology, icab060, https://doi.org/10.1093/icb/icab060
37. Katherine Galloway and Marianne Porter. 2021. Predator- prey interactions examined using lionfish spine puncture performance. Integrative Organismal Biology. Published January 27, 2021. https://doi.org/10.1093/iob/obaa049

38. Danielle Ingle and Marianne Porter. 2021. Variation in the microarchitecture of cetacean vertebral trabecular bone is influenced by swimming mode and diving behavior. Journal of Anatomy. https://onlinelibrary.wiley.com/doi/10.1111/joa.13329
39. Field, A., McGlashan, J. K., & Salmon, M. (2021). Evidence for Synchronous Hatching in Marine Turtle (Caretta caretta) Embryos and Its Influence on the Timing of Nest Emergence. Chelonian Conservation and Biology: Celebrating 25 Years as the World's Turtle and Tortoise Journal, 20(2), 173-183.
40. Ingle DI, TL Meredith, JR Perrault, J Wyneken. 2021. Two heads are not always better than one: craniofacial and axial bifurcation in cheloniid embryos and hatchlings (Chelonia mydas and Caretta caretta). Journal of Morphology 1-12 https://doi.org/10.1002/jmor.21366
41. Mansfield KL, J Wyneken, J Luo. 2021 Proceedings of the Royal Society B. First Atlantic Satellite Tracks of "Lost Years" Green Turtles Support the Importance of a Sargasso Sea as a Sea Turtle Nursery. Proc. R. Soc. B.2882021005720210057 http://doi.org/10.1098/rspb.2021.0057
42. Lolavar As, J Wyneken. 2021. Effects of supplemental watering on loggerhead (Caretta caretta) nests and hatchlings. Journal of Experimental Marine Biology and Ecology. 534: Article 151476 https://doi.org/10.1016/j.jembe.2020.151476

Books/Book Chapters (total 2):

1. Adetunji, C. O., Nwankwo, W., Olayinka, A. S., Olugbemi, O. T., Akram, M., Laila, U., ... & Esiobu, N. D. Computational Intelligence Techniques for Combating COVID-19. In Medical Biotechnology, Biopharmaceutics, Forensic Science and Bioinformatics, 2021 (pp. 251-269). CRC Press
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11. Nwaokorie, F. O., Udotong, I. R., Esiobu, N. D., & Enweani-Nwokelo, I. Microbiome and Metagenomics Researches in Nigeria: Evolution, Current Status and Prospects. Microbiomes and Emerging Applications, 2022, 1-16.
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Department of Chemistry and Biochemistry

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4. Bloetscher, F., A. Abbate, J. Huber, W. Liu, D. Meeroff, D. Mitsova, S. Nagarajan, C. Polsky, H. Su, R. Teegavarapu, Z. Xie, Y. Yong, C. Zhang, R. Jones, G. Oglesby, E. Suarez, J. Weaver, M. Hoque, and T. Hindle. (2021). Establishing a Framework of a Watershed-wide Screening Tool to Support the Development of Watershed-based Flood Protection Plans for Low-lying Coastal Communities. Journal of Infrastructure Policy and Development, 5, 1273.
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2022

Journal Articles (total 10):

1. Dumbaugh, E. Y. Li, D. Saha, and W. Marshall. "Why do Lower-Income Areas Experience Worse Road Safety Outcomes? Examining the Role of the Built Environment in Orange County, Florida." *Transportation Research Interdisciplinary Perspectives*. Accepted October 3, 2022
2. Dumbaugh, E. Y. Li, D. Saha, and W. Marshall. "Why do Lower-Income Areas Experience Worse Road Safety Outcomes? Examining the Role of the Built Environment in Orange County, Florida." Transportation Research Interdisciplinary Perspectives. Accepted October 3, 2022
3. Xu, Y., Yan, X., Sisiopiku, V.A., Merlin, L.A., Xing, F. and Zhao, X. (2022) Micromobility trip origin and destination inference using General Bikeshare Feed Specification Data. Transportation Research Record. https://doi.org/10.1177%2F03611981221092005.
4. Merlin, L.A., Freeman-Costin, K., Hoermann, S., Renne, J. (2022) Clustered Randomized Controlled Trial Protocol of a Mobility-as-a-Service App for College Campuses. Transportation Research Interdisciplinary Perspectives. https://doi.org/10.1016/j.trip.2022.100572.
5. Besser, L.M., Mitsova, D., Wiese, L., and Williams, C. 2022. Redlining and neighborhood walking among older adults: The 2017 National Household Travel Survey. American Journal of Preventive Medicine, 63(6):926-934. doi: 10.1016/j.amepre.2022.06.010
6. Besser, L.M., Meyer, O.L., Jones, M.R., Tran, D., Booker, M., Mitsova, D., Peterson, R., Galvin, J.E., Bateman, J.R., Hayden, K., Hughes, T. (2022). Neighborhood segregation and cognitive change: Multi-Ethnic Study of Atherosclerosis; Alzheimer's & Dementia: The Journal of the Alzheimer's Association, 2021; 82(1):221-233; doi: 10.3233/JAD-210370.
7. John Renne and Estefania Mayorga. What Has America Learned Since Hurricane Katrina? Evaluating Evacuation Plans for Carless and Vulnerable Populations in 50 Large Cities across the United States International Journal of Disaster Risk Reduction (Impact Factor: 4.3). Vol. 80, 103226, 2022. DOI: https://doi.org/10.1016/j.ijdrr.2022.103226
8. Lilah Besser, Cherilyn Bean, Amanda Foor, Serena Hoermann and John Renne. Evaluating Racial/Ethnic Equity in Planning-Related U.S. Health Impact Assessments Involving Parks and Greenspaces. Journal of the American Planning Association (Impact Factor: 6.1). 2022 DOI: https://doi.org/10.1080/01944363.2022.2096100
9. Jyothi Chava and John Renne. Transit-induced gentrification or vice versa? A study of neighborhoods around light rail stations from 1970 – 2020. Journal of the American Planning Association (Impact Factor: 6.1). 88:1, 44-54, 2022. DOI:https://doi.org/10.1080/01944363.2021.1920453
10. Deborah Matherly, Patricia Bye, Joan McDonald, William Ankner, Jane Mobley, Karl Kim, Eric Yamashita, Pam Murray-Tuite, Anurag Pande, John Renne, and Brian Wolshon. Resilience Primer forTransportation Executives. NCHRP Report 976. Washington, DC: The National Academies Press, 2021. DOI: https://doi.org/10.17226/26195

Books/Book Chapters (total 3):

1. Tingvall, C., J. Michael, P. Larsson, A. Lie, M. Segui-Gomez, S.V. Wong, O. Kobusingye, M. Khayesi, E. Dumbaugh, S. Cockfield, and A. Furas. (2022). "Saving Lives Beyond 2020: The Next Steps." Vision Zero Handbook: Theory, Technology, and Management for a Zero Casualty Policy. New York: Springer
2. Li, Yanmei, and Sumei Zhang. 2022. *Applied Research Methods in Urban and Regional Planning*. Springer.
3. John Renne, Brian Wolshon, Anurag Pande, Pamea Murray-Tuite, and Karl Kim. Creating ResilientTransportation Systems: Policy, Planning and Implementation. London: Elsevier, 2022. https://www.elsevier.com/books/creating-resilient-transportationsystems/renne/978-0-12-816820-2

Patents and Invention Disclosures

Filed Provisional Patent Applications

Inventors	Invention Title
Vivian Merk, Satviki Singh, Daniela Scheurle	Biocompatible Metal Ion-Chitosan Hydrogels with Antimicrobial Properties
Kenneth Dawson-Scully, Salvatore Lepore, Samantha Stilley, Krishna Yadavalli	Bridged Bicyclic Compounds and Their Derivatives as Antiepileptic Agents
Gregory Macleod, Karlis Justs, Daniele Riboul, Carlos Oliva, Robert Renden, Ryan Durbin	Motor Neurons Rely on Phosphagen Systems for Energetic Support

Issued Patents

Inventors	Invention Title
Gregg Fields, Dmitry Minond, Marcello Giulianotti	Methods for Treating Melanoma Using Small Molecules

Invention Disclosures

Inventors	Invention Title
Shailaja Allani, Herbert Weissbach	Pharmacological Protective Agents Against Oxidative Stress Sensitize Cancer Cells to Anti-Cancer Drugs

Vivian Merk, Daniela Scheurle, Satviki Singh	Biocompatible Metal Ion-Chitosan Hydrogels with Antimicrobial Properties
Kenneth Dawson Scully, Salvatore Lepore, Samantha Stilley, Krishna Yadavalli	Bridged Bicyclic Compounds and Their Derivatives as Antiepileptic Agents
B. Sue Graves, Jordan Mayberry, Abhijit Pandya, Riki Patel, Harshal Sanghvi	Artificial Intelligence and Augmented Reality Assisted Device for Addressing Social Interventions
Ryan Durbin, Karlis Justs, Gregory Macleod , Carlos Oliva, Robert Rende, Daniele Riboul	Motor Neurons Rely on Phosphagen Systems for Energetic Support
Maciej Stawikowski, Qi Zhang	Environment-Sensitive Fluorescent Cholesterol Analogs with Modular Structure, Their Methods of Preparation and Application

Appendix 2: Funded Grants

PI	Department	Sponsor	Title	Status	$ Total
Alexander, William	CENTER/COMPLEX SYSTEMS & BRAIN	Harvard University	The neural architecture of reinforcement learning in partially observable environments	Continuation	78,604
Anderson,Rindy	BIOLOGICAL SCIENCE, DEPARTMENT	Miami Dade College	MDC - FAU Stem Research SubContract-Fall 2021	Supplement	6,300
Anderson,Rindy	BIOLOGICAL SCIENCE, DEPARTMENT	Miami Dade College	FAU-MDC STEM Research Program	Supplement	10,512
Bai,Shi	DEPARTMENT OF MATHEMATICAL SCI	National Science Foundation	Collaborative Research: CISE-ANR: CNS Core: Small: Cryptographic Hardness of Module Lattices	New	246,337
Baldwin,John	BIOLOGICAL SCIENCE, DEPARTMENT	National Parks Conservation Association	Graduate student research related to protection and restoration of the Greater Everglades and/or coral reef ecosystems.	New	5,000
Barenholtz, Elan	DEPARTMENT OF PSYCHOLOGY	University of Florida	National Drug Early Warning System Coordinating Center	Continuation	45,750

Bourassa,Steven	URBAN & REGIONAL PLANNING	Land Economics Foundation	Comparing Walk Accessibility Measures' Impact on Home Values	New	11,500
Briggs,Tiffany Roberts	DEPARTMENT OF GEOSCIENCES	Palm Beach County Department of Environmental Resources	Geomorphic Influences on Healthy Beach Habitat	New	5,034
Brooks,William	BIOLOGICAL SCIENCE, DEPARTMENT	Florida Atlantic University Foundation	Octopus Microbiome: Identifying and understanding the Bacteria Community that Lives on Octopus Skin	New	2,025
Chang,Lun-Ching	DEPARTMENT OF MATHEMATICAL SCI	University of Miami	Multicultural Community Dementia Screening	Continuation	29,900
Chang,Lun-Ching	DEPARTMENT OF MATHEMATICAL SCI	University of Miami.	Reducing Disparities in Dementia and VCID Outcomes in a Multicultural Rural Population	New	53,387
Chang,Lun-Ching	DEPARTMENT OF MATHEMATICAL SCI	University of Miami	Impact of COVID on VCID Outcomes in a Multicultural Rural Population	New	30,095
Chang,Lun-Ching	DEPARTMENT OF MATHEMATICAL SCI	University of Miami	Multicultural Community Dementia Screening	Continuation	54,636
Comas,Xavier	DEPARTMENT OF GEOSCIENCES	National Science Foundation	Collaborative Research: Collaborative Research: How does the deep critical zone (CZ) structure impact the hydrology and coupled carbon cycling of northern peatlands?	New	218,992
Comas,Xavier	DEPARTMENT OF GEOSCIENCES	US Department of Energy	Predicting hot spots and hot moments of biogenic gas accumulation and release in a subtropical ecosystem using airborne ground-penetrating radar (GPR)	New	57,555
Dawson-Scully,Ken	BIOLOGICAL SCIENCE, DEPARTMENT	Max Planck	FAU MPFI Data Neuroscience Collaboration	New	30,000
Dawson-Scully,Ken	BIOLOGICAL SCIENCE, DEPARTMENT	Max Planck	Characterizing the molecular mechanisms for neuroprotection in D. melanogaster and C. elegans	Continuation	59,961
Dawson-Scully,Ken	BIOLOGICAL SCIENCE, DEPARTMENT	Max Planck	FAU PhD and MS student supplement grants	Continuation	122,535

Dawson-Scully,Ken	BIOLOGICAL SCIENCE, DEPARTMENT	National Science Foundation - Federal	NSF I-Corps Sites Program Supplemental Funding	Supplement	49,409
Dumbaugh, Eric	URBAN & REGIONAL PLANNING	University of North Carolina, Chapel Hill	(SUPP)-Collaborative Sciences Center for Road Safety	New	223,000
Dumbaugh, Eric	URBAN & REGIONAL PLANNING	Florida Department of Transportation	Refining C3 Context-Classification Criteria for Low-Income and Minority Populations	New	80,862
Engle,Jonathan	DEPARTMENT OF PHYSICS	National Science Foundation	Dynamics and Symmetry in Quantum Gravity	Continuation	64,999
Esiobu,Nwadiuto	BIOLOGICAL SCIENCE, DEPARTMENT	Florida Atlantic University Foundation - Foundation	Skin and Scalp Microbiome Studies	New	3,000
Fields,Gregg	PILLAR-HEALTH/INTERVENTION	State University System - Florida Board of Governors	Research University Alzheimer's Research Using Exablate Neuro-focused Ultrasound	New	750,000
Fields,Gregg	PILLAR-HEALTH/INTERVENTION	Memorial Foundation	A Grassroots Initiative to Increase Access to Care - Equitable Imaging and Diagnostic Testing Services	New	22,670
Fields,Gregg	PILLAR-HEALTH/INTERVENTION	State University System - Florida Board of Governors	Research University Alzheimer's Research Using Exablate Neuro-focused Ultrasound	Continuation	750,000
Han,Muxin	DEPARTMENT OF PHYSICS	National Science Foundation	Loop Quantum Gravity with Cosmological Constant	New	55,972
Hartmann,James	BIOLOGICAL SCIENCE, DEPARTMENT	FAU Foundation/University Advancement	In vitro Study of Cytokine production by peripheral blood cells from Healthy Donors and Systemic Lupus Erythematosus Patients	Continuation	15,625
Hoffman,Frederick	DEPARTMENT OF MATHEMATICAL SCI	Various Program Income - Other	Program Income for CGTC53 (2022) and CGTC54 (2023)	New-Program Income & Funding in Anticipation	40,286
Jones,Nancy	DEPARTMENT OF PSYCHOLOGY	Washington State University	Precursors of Anxiety: The role of Lateralized brain activation and maternal sensitivity	New	112,288

Kajiura,Stephen	BIOLOGICAL SCIENCE, DEPARTMENT	Florida Atlantic University Foundation	FAU FND-Quantification Massive Seasonal Shark Aggregations in Palm Beach County SCI095	Supplement	81,817
Kajiura,Stephen	BIOLOGICAL SCIENCE, DEPARTMENT	Bonefish & Tarpon Trust	Testing Methods and Feasibility of Aerial Surveys to Estimate Species Abundance in Annual Migration of Atlantic Tarpon (Key Largo to Bahia Honda Channel)	New	49,747
Kajiura,Stephen	BIOLOGICAL SCIENCE, DEPARTMENT	Year on Earth Productions Limited	A day on Planet earth	Continuation	3,000
Keene, Alex	JUPITER LIFE SCIENCE INIT.	National Institutes of Health	The neural basis of fatty acid taste	Continuation	285,401
Keene, Alex	JUPITER LIFE SCIENCE INIT.	Pennsylvania State University	Elucidation of Genetic Effects on Sleep and Circadian Traits	Continuation	173,307
Koch-Rose,Marguerite	BIOLOGICAL SCIENCE, DEPARTMENT	South Florida Water Management District	Sediment O2 demand and plant oxidation capacity control H2S intrusion into Seagrass (Thalassia testudinum) with implications for major die-off events	New	40,000
Louda,J. William	DEPARTMENT OF CHEMISTRY & BIOC	South Florida Water Management District	Chemotaxonomic Analysis of Phytoplankton in St. Lucie Estuary: Relationship to Freshwater Inflows and Water Quality	Supplement	8,000
Lundberg,Erik	DEPARTMENT OF MATHEMATICAL SCI	Simons Foundation - Foundation	Probabilistic and extremal problems of real and complex polynomials	Continuation	8,400
Merk,Vivian	DEPARTMENT OF CHEMISTRY & BIOC	National Science Foundation	Investigating the role of carbohydrate-mineral interactions	New	244,109
Miller,Warner	DEPARTMENT OF PHYSICS	Qubitekk, Inc. - Federal Flow Through	Quantum Entanglement on Drones (QED)	New	150,000
Miller,Warner	DEPARTMENT OF PHYSICS	Qubitekk, Inc.	Quantum Entanglement on Drones (QED)	Continuation	150,000
Milton,Sarah	BIOLOGICAL SCIENCE, DEPARTMENT	FAU Foundation/University Advancement	Physiology and Health Studies of Green Sea Turtles in Southeast Florida	Continuation	25,050
Mitsova,Diana	URBAN & REGIONAL PLANNING	University of Miami	SRS-RN Planning: Integrated and Convergent Sea Level Adaptation for Urban and Rural Systems in the Gulf of Mexico Coastal Region	New	9,985

Muhammad,Wazir	DEPARTMENT OF PHYSICS	CRDF Global	Training LMIC Investigators in Artificial Intelligence and Machine Learning to Guide Radiation Therapy	New	40,000
Murphey,Rodney	JUPITER LIFE SCIENCE INIT.	Max Planck	Integrative Biology and Neuroscience (IBNS); a Joint Graduate program between the Max Planck Florida Institute and Florida Atlantic University - FALL 2021	New	298,018
Murphey,Rodney	JUPITER LIFE SCIENCE INIT.	Max Planck	Integrative Biology and Neuroscience (IBNS); a Joint Graduate program between the Max Planck Florida Institute and Florida Atlantic University - Spring 2022. Award Mechanism*	New	250,537
Murphey,Rodney	JUPITER LIFE SCIENCE INIT.	National Institutes of Health	U-RISE at Florida Atlantic University	Continuation	364,760
Murphey,Rodney	JUPITER LIFE SCIENCE INIT.	Max Planck	Integrative Biology and Neuroscience (IBNS); a Joint Graduate program between the Max Planck Florida Institute and Florida Atlantic University - Summer 2022.	New	168,771
Murphey,Rodney	JUPITER LIFE SCIENCE INIT.	National Institutes of Health	U-RISE at Florida Atlantic University	Continuation	3,577
Persichetti, Edoardo	DEPARTMENT OF MATHEMATICAL SCI	National Security Agency - Federal	Determining Cryptographic Security Margins in the Presence of Quantum Computing	Continuation	161,089
Petersen, Michelle	BIOLOGICAL SCIENCE, DEPARTMENT	US Geological Survey	Movement patterns of wading birds as a mechanism linking freshwater wetlands and coastal ecosystems in the Greater Everglades	Continuation	73,937
Petersen,Michelle	BIOLOGICAL SCIENCE, DEPARTMENT	US Army Corps of Engineers - Federal	Wading Bird Colony Location, Size, and Timing in Lake Okeechobee (CA W912HZ-19-2-0040)	Supplement	94,430
Peterson, Michele	BIOLOGICAL SCIENCE, DEPARTMENT	US Army Corps of Engineers	Dry season prey concentration	Continuation	214,719
Polsky,Colin	FL. CTR FOR ENVIRON. STDS	Florida Atlantic University Foundation	Walter and Lalita Janke Innovations in Sustainability Science Research Funds	Continuation	52,000

Polsky,Colin	FL. CTR FOR ENVIRON. STDS	Florida Atlantic University Foundation-	Curriculum Partnership for K-12 Education and Outreach Prepared for The Everglades Foundation	Continuation	34,400
Polsky,Colin	FL. CTR FOR ENVIRON. STDS	South Florida Water Management District - Other	Riverwoods Field Lab-Site Maintenance and Support FY 20-22	Continuation	117,807
Polsky,Colin	FL. CTR FOR ENVIRON. STDS	South Florida Water Management District Other	Riverwoods Site Maintenance, Technical Support and Environmental Outreach FY2020-2022	Continuation	188,241
Polsky,Colin	FL. CTR FOR ENVIRON. STDS	University of Central Florida	Why Location Matters: How Smarter Decision-Making by Renters and Homebuyers Will Increase Coastal Resilience	Continuation	53,045
Popova,Daniela	DEPARTMENT OF MATHEMATICAL SCI	National Science Foundation	Conference: 2022 Combinatorics, Computing, Group Theory and Applications (CCGTA) in South Florida	New	49,138
Porter,Marianne	BIOLOGICAL SCIENCE, DEPARTMENT	National Science Foundation	CAREER: Tuning fish: mechanics of biomaterials change with changing demands of locomotion	Supplement	58,568
Renne,John	CTR. URBAN/ENVIRON. SOLUTIONS	City of West Palm Beach	Visualizing Sea Level Rise in West Palm Beach	New	400,000
Rezler,Evonne	DEANS OFFICE - SCIENCE, COLLE	Palm Beach State College - Fed Flow	STEM Articulation and Transfer Collabrative	New	40,000
Rosselli,Monica	DEPARTMENT OF PSYCHOLOGY	University of Florida	1 Florida ARDC Consensus Conference	New	5,000
Rosselli,Monica	DEPARTMENT OF PSYCHOLOGY	University of Florida,	Florida Alzheimer's Disease Research Center	Continuation	37,279
Rosselli,Monica	DEPARTMENT OF PSYCHOLOGY	University of Florida.	1 Florida ARDC Consensus Conference	New	29,250
Sarajedini, Ata	DEPARTMENT OF PHYSICS	Space Telescope Science Institute	A challenge to dSph formation models: are the most isolated Local Group dSph galaxies truly old?	Supplement	13,578
Sarajedini, Ata	DEPARTMENT OF PHYSICS	Space Telescope Science Institute - Federal Flow Through	Opening the Window on Galaxy Assembly: Ages and Structural Parameters of Global Clusters Towards the Galactic Bulge	Continuation	10,167

Sarajedini, Ata	DEPARTMENT OF PHYSICS	Space Telescope Science Institute Federal Flow Through	A challenge to dSph formation models: are the most isolated Local Group dSph galaxies truly old?	Continuation	13,578
Sarajedini, Ata	DEPARTMENT OF PHYSICS	Space Telescope Science Institute	Opening the Window on Galaxy Assembly: Ages and Structural Parameters of Global Clusters Towards the Galactic Bulge	Continuation	10,167
Stackman,Robert	DEPARTMENT OF PSYCHOLOGY	Max Planck	FAU PhD and MS student supplement grants	Continuation	81,517
Stackman,Robert	DEPARTMENT OF PSYCHOLOGY	Max Planck - State	FAU PhD and MS student supplement grants	Continuation	133,927
Tichy,Wolfgang	DEPARTMENT OF PHYSICS	National Science Foundation	RAISE: Creation of an advanced public binary neutron star initial data code for the Einstein Toolkit	New	300,000
Valera, Carmen	DEPARTMENT OF PSYCHOLOGY	Whitehall Foundation	Thalamocortical Dynamics Underlying Flexible Memory Consolidation	Continuation	75,000
Varela,Carmen	DEPARTMENT OF PSYCHOLOGY	Massachusetts General Hospital	Optimizing sleep spindle measurements as translational markers of memory consolidation	New	144,487
Varela,Carmen	DEPARTMENT OF PSYCHOLOGY	Alzheimer's Association	Non-Invasive Assay of Sleep Microarchitecture and Thalamic Engagement	New	149,871
Varela,Carmen	DEPARTMENT OF PSYCHOLOGY	Massachusetts General Hospital	Optimizing sleep spindle measurements as translational markers of memory consolidation	Continuation	137,760
Vertes, Robert	CENTER/COMPLEX SYSTEMS & BRAIN	Florida International University	The role of the nucleus reuniens in the temporal organization of memory and behavior	Continuation	134,550
Vertes,Robert	CENTER/COMPLEX SYSTEMS & BRAIN	National Institutes of Health	Serotonergic modulation of nucleus reuniens in affective and cognitive behaviors	New	411,125
Wang,Yuan	DEPARTMENT OF MATHEMATICAL SCI	Institute for Advanced Study - Other	Florida Women in Mathematics Day 2022	New	4,000
Weissbach, Herbert	MOLECULAR & BIOTECHNOLOGY CENT	NutraPharm Health, LLC	Chemical Synthesis of MCI-100 and the KOR lectin compound with sulindac attached-Amendment #11	Supplement	12,055
Weissbach, Herbert	MOLECULAR & BIOTECHNOLOGY CENT	NutraPharm Health, LLC	Chemical Synthesis of MCI-100 and the KOR lectin compound with sulindac attached	Supplement	11,314

Wille,Luc	DEPARTMENT OF PHYSICS	National Science Foundation	Florida Atlantic University Data-Driven Science and AI Conference	New	15,045
Wyneken,Jeanette	BIOLOGICAL SCIENCE, DEPARTMENT	Florida Atlantic University Foundation	Loggerhead Hatchlings from SCCF	New	22,800
Wyneken,Jeanette	BIOLOGICAL SCIENCE, DEPARTMENT	Florida Atlantic University Foundation	Nelligan Sea Turtle Research	Supplement	15,000
Wyneken,Jeanette	BIOLOGICAL SCIENCE, DEPARTMENT	Florida Atlantic University Foundation	Measuring Nest to Surf Mortality in Loggerhead Sea Turtles	New	21,786
Wyneken,Jeanette	BIOLOGICAL SCIENCE, DEPARTMENT	Sea Turtle Conservancy	The effects of nest temperatures on the skin microbiome of leatherback hatchlings.	New	16,303
Yildirim,Ilyas	DEPARTMENT OF CHEMISTRY & BIOC	National Institutes of Health	In Silico Drug Design Targeting RNA Repeat Expansions	New	419,485
Zhang,Caiyun	DEPARTMENT OF GEOSCIENCES	US Army Corps of Engineers	Characterizing Permafrost Terrains Through Machine Learning Data Mining Techniques	Continuation	79,249
					9,432,380