



UF COLLEGE OF PHARMACY 2021 IMPACT REPORT

Our Vision

Preeminence in education, pharmaceutical sciences research and patient care that optimizes the health and wellness of individuals and communities.

Our Mission

We improve the lives of others locally and globally through a climate of discovery to develop future leaders in pharmacy practice and science, support research across the spectrum from drug discovery to medication use in society, advance pharmacy practice to optimize patient-centered care and health care delivery, and foster lifelong learning.

ON THE COVER: Julio Duarte, Pharm.D., Ph.D., FAHA, an assistant professor of pharmacotherapy and translational research

STRATEGIC PLAN 2021-25

PROFESSIONAL EDUCATION

Prepare Pharm.D. graduates to become leaders who improve the health and wellness of individuals and communities and advance pharmacy practice into the future.

RESEARCH AND GRADUATE EDUCATION

Discover new knowledge to improve the lives of others through high-impact research and provide outstanding research training in areas core to the college.

CLINICAL PRACTICE

Create, evaluate and disseminate innovative and transformative pharmacy practice models that result in high-quality, cost-effective, patient-centered care that improves lives.

DIVERSITY & INCLUSION

Stimulate a culture that promotes diversity and inclusion within an exceptional community of students, faculty and staff.

LIFELONG LEARNING

Foster a culture that supports lifelong learning for faculty and staff and expands access for a global community seeking advanced knowledge and skills.

What is our impact?

On the surface, it appears as a fairly simple, straightforward question. But when it comes to measuring all the ways the University of Florida College of Pharmacy is impacting society and the world, there are endless possibilities for answering this question.

There is the first-generation pharmacy student who is seeking to change the trajectory of her family and make a profound impact on generations to come. Our college enrolled more than 60 first-generation students in the Pharm.D. class this fall.

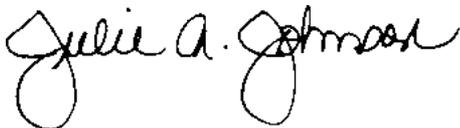
There is the recent graduate who navigated the extremely competitive match program amid a global pandemic to secure a residency position and jump-start their career. Our college celebrated nearly 150 graduates who matched into a residency this year.

There is the researcher who secured a federal grant to help clinicians better identify patients at high risk for opioid abuse. Our college secured nearly \$28 million in grant funding this year.

There is the clinical pharmacist who has been administering COVID-19 vaccines to help stem the pandemic. Our college stepped forward to help vaccinate thousands of Floridians in 2021 to give us all hope for a better tomorrow.

There is the donor who gave to the Crisafi Challenge in memory of his father and seeks to ease the financial burden facing many pharmacy students today. Our college gives thanks to the more than 200 donors who helped raise over \$125,000 for student scholarships in this year's challenge.

Everyone associated with the UF College of Pharmacy has a similar story to share. In this report, we offer a glimpse into the many ways we are impacting pharmacy and the pharmaceutical sciences. It's truly amazing to see the impact we are having on the world.



Julie Johnson, Pharm.D.
Dean and Distinguished Professor





The College

For nearly a century, the University of Florida College of Pharmacy has been developing future leaders in pharmacy practice and science.

OUR RANKINGS

#1

IN RESIDENCY PLACEMENTS

Led the nation in graduates matching into pharmacy residency programs five of the last six years

#1

IN DIVERSITY

The most racially/ethnically diverse Pharm.D. student body among the top 40 pharmacy colleges ranked by U.S. News & World Report

#3

IN NIH RESEARCH FUNDING

As ranked by the American Association of Colleges of Pharmacy

#5

COLLEGE OF PHARMACY

As ranked by U.S. News & World Report

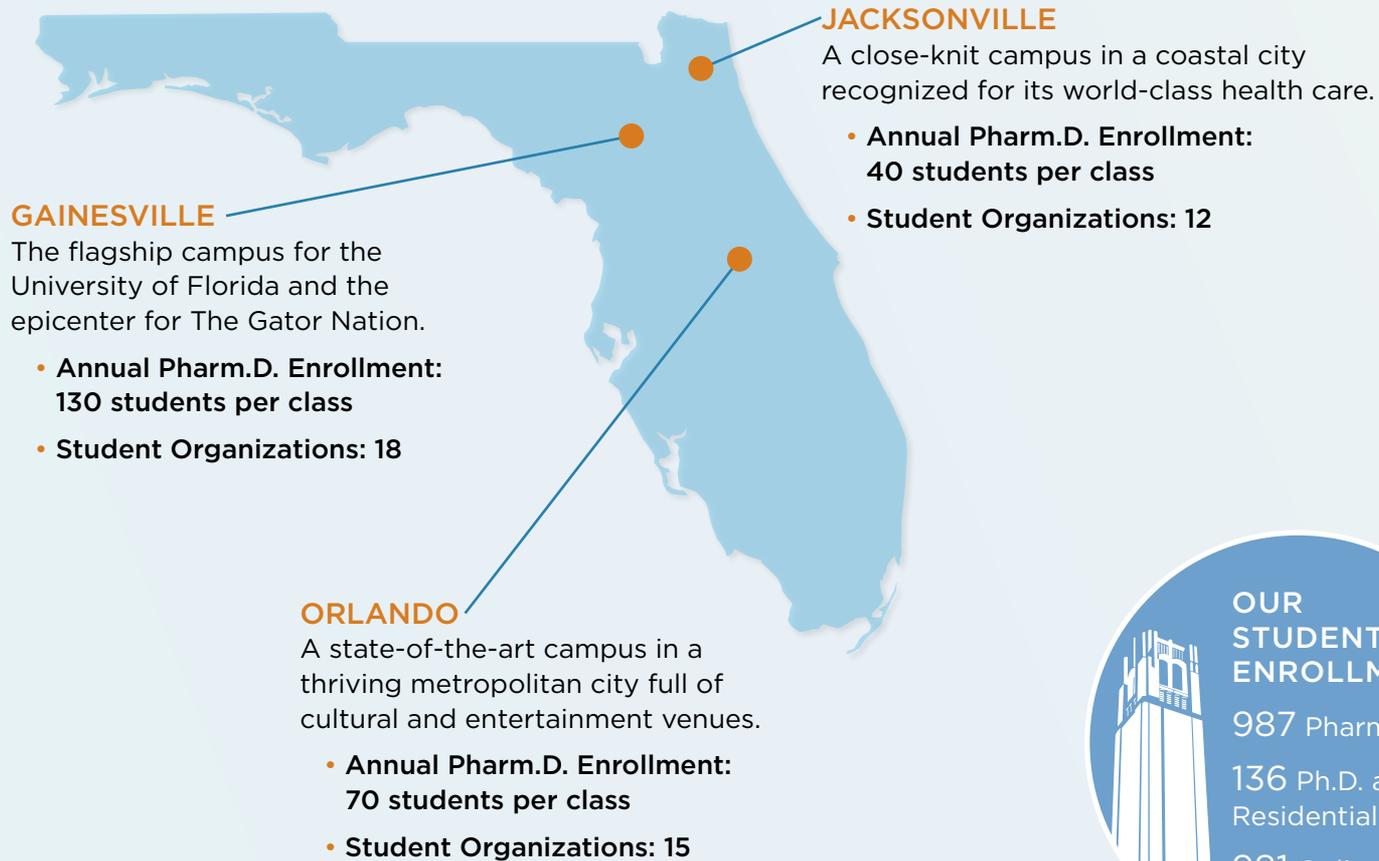
#5

PUBLIC UNIVERSITY (UF)

As ranked by U.S. News & World Report

OUR CAMPUSES

At campuses in Gainesville, Jacksonville and Orlando, award-winning faculty, staff and students are improving lives and health through pharmacy education, high-impact research and clinical innovation.





Pharm.D. Education

Our modernized Pharm.D. curriculum prepares graduates to meet the health care challenges of today and decades from now.

A curriculum focusing on **team-based, patient-centered care**

A curriculum offering **professional developmental and experiential learning and meeting milestones relevant to current industry and workforce needs**

A curriculum providing a strong **educational foundation in biomedical, pharmaceutical, social/administrative and clinical sciences**

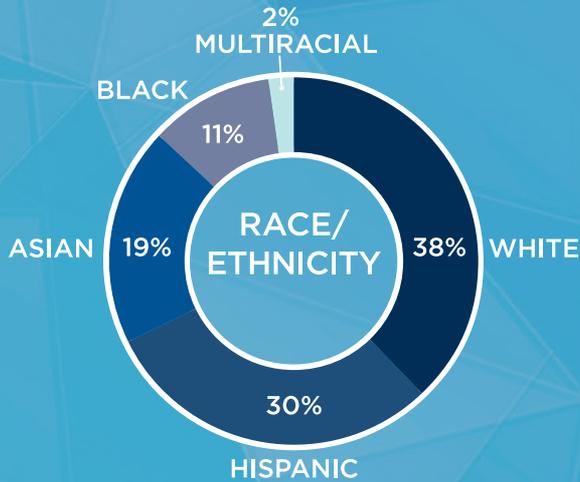
A curriculum featuring **case-based learning, skills lab and interprofessional activities**

➤ **JOSEPH WASHINGTON** embodies what it means to be a student leader in the UF College of Pharmacy. As a student ambassador, he learned the importance of collaboration and visionary leadership. These qualities served him well when he took over as president of the Student National Pharmaceutical Association in 2020. Leading a national organization of more than 5,000 student pharmacists through a pandemic presented many challenges, but he kept the organization focused on its service to minority communities. The experience taught Washington that whenever he combines his passion with a purpose, he has the potential to accomplish anything.

— Joe Washington | UF College of Pharmacy Class of 2022

UF COLLEGE OF PHARMACY
PHARM.D. CLASS OF

2025



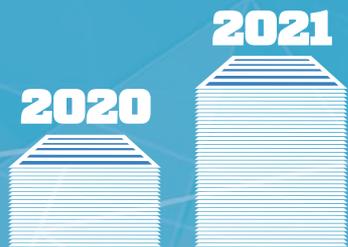
247
ENROLLED
STUDENTS

41
OUT-OF-STATE
STUDENTS

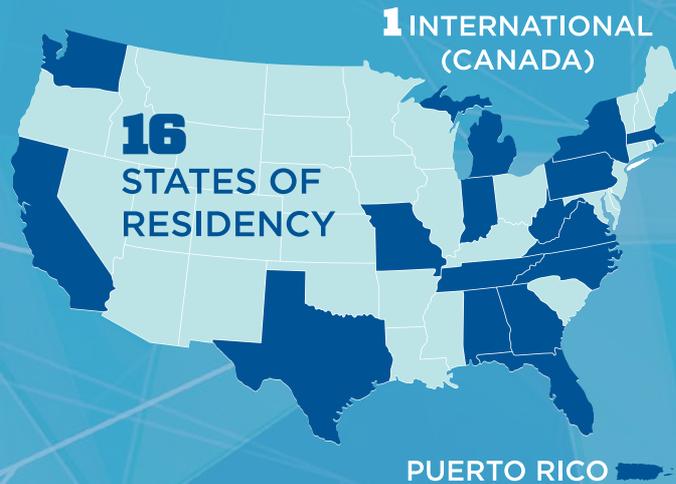
75%
B.S./B.A. DEGREE

27%
FIRST-GENERATION

29%
OF STUDENTS
ATTENDED UF AS AN
UNDERGRADUATE



APPLICATIONS
INCREASED BY NEARLY
50% THIS YEAR





PREPARING PRACTICE-READY PHARMACISTS

UF College of Pharmacy graduates are highly sought after to fill residencies, fellowships and professional positions — and there is a good reason why. We're preparing practice-ready pharmacists through our innovative curriculum and practice experiences that set the course for future success.

EXPERIENTIAL PROGRAMS

Sarah Wheeler, Pharm.D., a 2013 graduate of the UF College of Pharmacy and a clinical pharmacy specialist at UF Health, mentors fourth-year student Brian Boriotti during his rotation.

1,600+
PRECEPTORS

480
ACTIVE
ROTATION
SITES

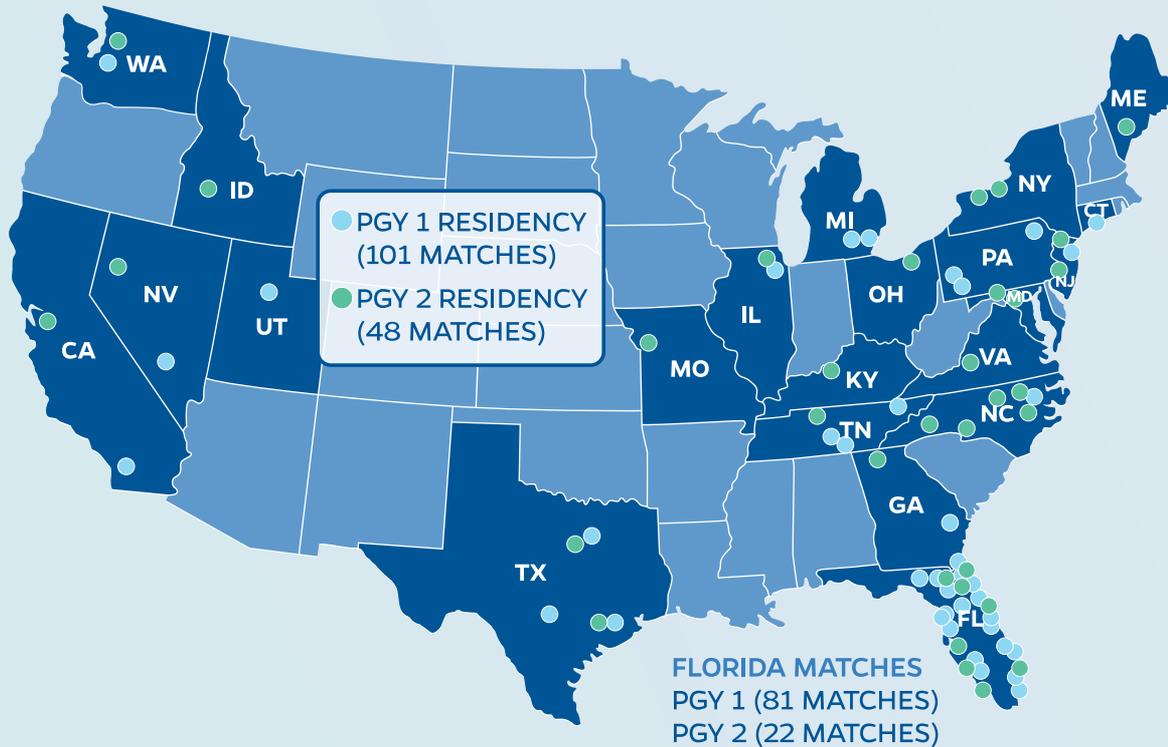
22
STATES HAVE
ACTIVE
SITES

11
INTERNATIONAL
ROTATION SITES

AUSTRALIA
BAHAMAS
FINLAND
GERMANY (TWO)
JAPAN
MALTA
PUERTO RICO
SPAIN
THAILAND
UNITED KINGDOM

2021 RESIDENCY MATCH

The UF College of Pharmacy matched the second most pharmacy graduates into residencies this year among the nation's pharmacy colleges.



“Gator pharmacists are well-positioned to secure postgraduate residency placements and other job opportunities, as a result of the rigorous program offered at the UF College of Pharmacy and the tremendous support provided by our faculty and preceptors.”

— Solmaz Karimi, '21,
PGY1 resident at Duke University
Hospital in Durham, North Carolina

Graduate Education & Research

GRADUATE EDUCATION

Students in the pharmaceutical sciences graduate program train alongside world-renowned faculty and advance science through innovative and transformative research.



127
PH.D.

9
M.S.

136
STUDENTS

47%
AMERICAN

13%
UNDER-REPRESENTED MINORITIES

ACCOMPLISHMENTS

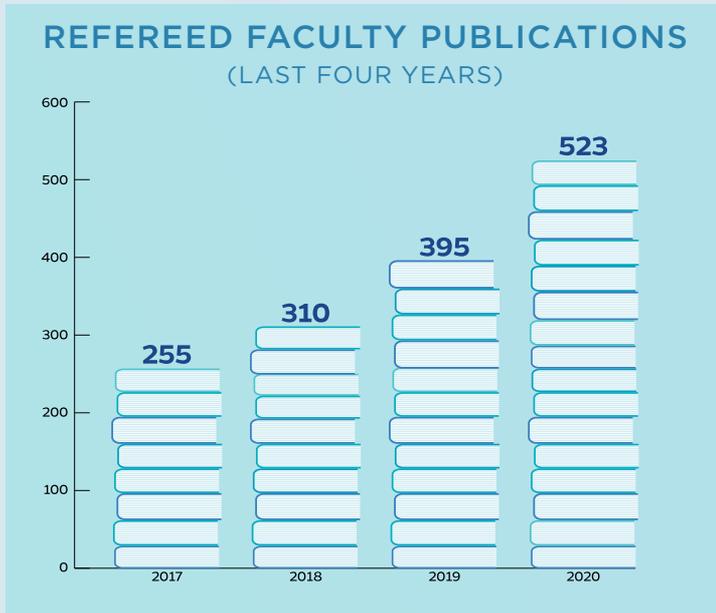
72
FIRST-AUTHOR PUBLICATIONS

PREDOCTORAL FELLOWSHIPS:
MANASA CHEKKA
(American Heart Association)

LOBNA ELSADEK
(National Institutes of Health — N31)

RESEARCH

Researchers in the UF College of Pharmacy are pushing the boundaries of science and leading discoveries that are significantly impacting the lives of patients around the world.

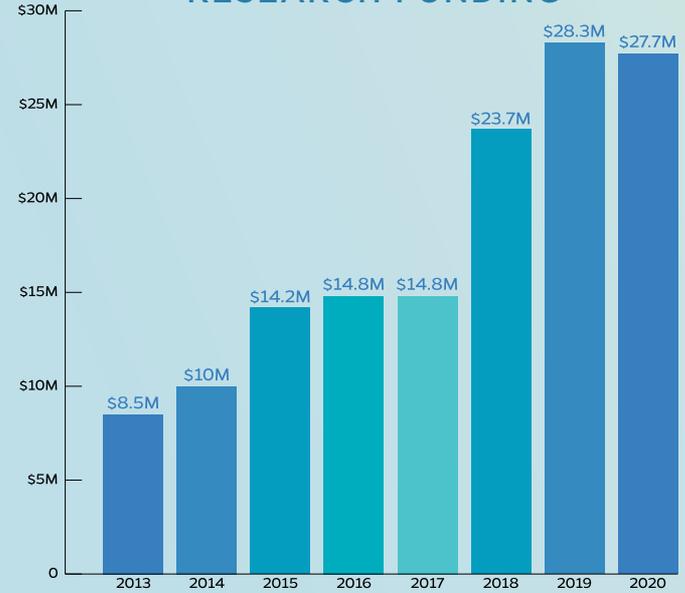


RESEARCH RANKINGS

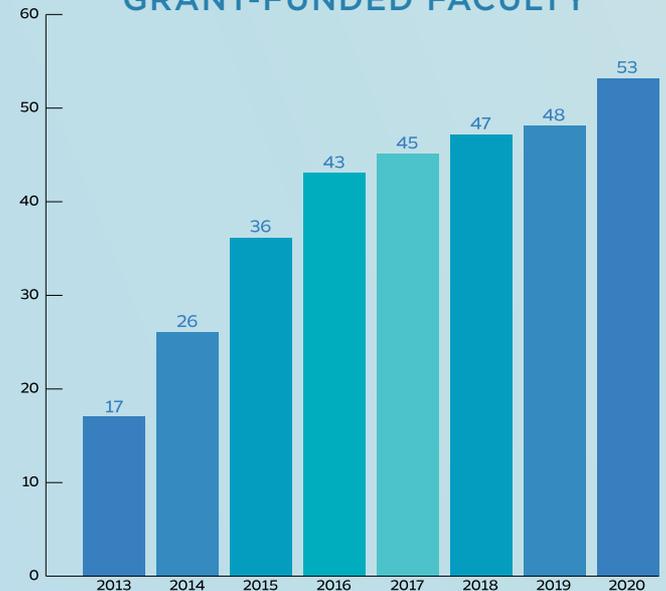


(ACCORDING TO THE AMERICAN ASSOCIATION OF COLLEGES OF PHARMACY)

RESEARCH FUNDING



GRANT-FUNDED FACULTY



NEW AI TOOL WILL PREDICT PATIENTS AT HIGH RISK FOR OPIOID USE DISORDER AND OVERDOSE

University of Florida researchers are developing a new artificial intelligence tool that will help clinicians identify patients at high risk for opioid use disorder and overdose.

The tool will use data from patients' electronic medical records to guide clinicians in safely and effectively prescribing opioid medications. The project is supported by a five-year, \$3.2 million grant from the National Institute on Drug Abuse, or NIDA, and aims to reduce the unprecedented rise in opioid overdose and opioid use disorder in the United States.

"In 2019, almost 12 million Americans reported misuse of prescription opioids, and this public health crisis is placing a substantial burden on individuals, families, society and our health care system," said Wei-Hsuan "Jenny" Lo-Ciganic, Ph.D., M.S., M.S.Pharm., an associate professor of pharmaceutical outcomes and policy in the UF College of Pharmacy and the principal investigator of the NIDA grant. "If we can more accurately identify patients who are at a high risk for opioid use disorder and overdose, then we can better allocate resources and provide timely and targeted interventions."

For UF researchers, identifying high-risk patients begins by leveraging ongoing NIDA-funded work and an analysis of health care claims data using a type of AI called machine-learning. This NIDA grant will use electronic health records or integrated health care data to help clinicians identify patients most susceptible to opioid use disorder and overdose. The data analysis requires advanced AI technology, which UF provides researchers through its HiPerGator AI supercomputer.

"Machine learning is an innovative analytic technique that handles complex interactions in large data, discovers hidden patterns through modeling and generates more accurate prediction algorithms in real-time that are often superior to traditional statistical techniques," Lo-Ciganic said. "Although AI techniques are widely used in activities from fraud detection to genomic studies, this is one of the first examples where machine learning will be applied and implemented in a clinical setting to address the nation's opioid epidemic."

Lo-Ciganic estimates the new algorithm will accurately identify between 70-90% of high-risk patients. The algorithm will exclude the large majority of prescription opioid users with negligible opioid use disorder or overdose risk while evaluating the benefits and risk tradeoffs of prescription opioid use for high-risk patients.

The second part of the NIDA grant involves designing and developing a clinical decision support tool that integrates AI-based risk scores to warn clinicians about high-risk patients. The tool will be integrated into patients' electronic health records and provide clinicians with early warnings and risk mitigation strategies. UF researchers, in collaboration with primary care providers and information technology experts at UF Health, will create the dashboard that lives in the electronic health record and provides real-time information to clinicians.

When fully developed, the new clinical decision support tool will be piloted at three UF Health primary care practices. UF researchers will study its usability, accessibility and feasibility in deciding whether the tool warrants broader use.



Wei-Hsuan "Jenny" Lo-Ciganic, Ph.D., M.S., M.S.Pharm., an associate professor of pharmaceutical outcomes and policy in the UF College of Pharmacy, is using artificial intelligence to identify patients at high risk for opioid use disorder and overdose.

Faculty Excellence

UF College of Pharmacy faculty are more than teachers, researchers and clinicians — they are bold leaders who are defining the future of pharmacy and the pharmaceutical sciences.



Renad Abu-Sawwa, Pharm.D.

COLLEGE OF PHARMACY FACULTY

131

FULL-TIME
FACULTY

56

TENURE-
TRACK

52

CLINICAL
FACULTY

23

RESEARCH
FACULTY

NEW FACULTY HIRES (SINCE OCT. 1, 2020)

Renad Abu-Sawwa, Pharm.D.

Clinical Assistant Professor

Kaitlin Alexander, Pharm.D.

Clinical Associate Professor

Thomas Burris, Ph.D.

Director and Professor

Jingchuan Guo, M.D., Ph.D.

Assistant Professor

Sajid Khan, Ph.D.

Research Assistant Professor

Yinzhi Lang, Ph.D.

Research Assistant Professor

Maddalena Parafati, Ph.D.

Research Assistant Professor

Bradley Phillips, Pharm.D.

Clinical Assistant Professor

Luisel Ricks-Santi, Ph.D.

Associate Professor

Mark Rogge, Ph.D.

Research Professor

Masoud Rouhizadeh, Ph.D.

Assistant Professor

Chardaé Whitner, Pharm.D.

DIHE Campus Coordinator and
Clinical Assistant Professor

Zhixing Wu, Ph.D.

Research Assistant Professor

Bowen Yan, Ph.D.

Research Assistant Professor

Fan Zhang, Ph.D.

Assistant Professor



CHILDS-KEAN



CICALI



COOK



DeREMÉR



FARLAND



JOHNSON



LALONDE



McCURDY



MOTYCKA



SCHMIDT



VOGEL ANDERSON



WINTERSTEIN

NATIONAL AWARDS

Lindsey Childs-Kean, Pharm.D.

2021 Emerging Teaching Scholar Award,
American Association of Colleges of Pharmacy

Emily Cicali, Pharm.D.

2021 Innovation in Pharmacogenomics Teaching Award,
ACCP Pharmacogenomics Special Interest Group

Kelsey Cook, Pharm.D.

2021 Innovation in Pharmacogenomics Teaching Award,
ACCP Pharmacogenomics Special Interest Group

Julie Johnson, Pharm.D.

Rawls-Palmer Progress in Medicine Award, American
Society for Clinical Pharmacology and Therapeutics &
Luminary Award, Precision Medicine World Conference

Richard Lalonde, Pharm.D.

Oscar B. Hunter Career Award, American Society for Clinical
Pharmacology and Therapeutics

Stephan Schmidt, Ph.D.

Excellence in Academia Award, MIDD+ Scientific Conference

Katie Vogel Anderson, Pharm.D.

Fellow, American College of Clinical Pharmacy

MAJOR LEADERSHIP & SERVICE ROLES (IN THE LAST 5 YEARS)

David DeRemer, Pharm.D.

Immediate Past President, Hematology/Oncology
Pharmacy Association

Michelle Farland, Pharm.D.

President, Team-Based Learning Collaborative

Julie Johnson, Pharm.D.

Past President, American Society for Clinical
Pharmacology and Therapeutics

Chris McCurdy, Ph.D.

Past President, American Association of
Pharmaceutical Scientists

Carol Motycka, Pharm.D.

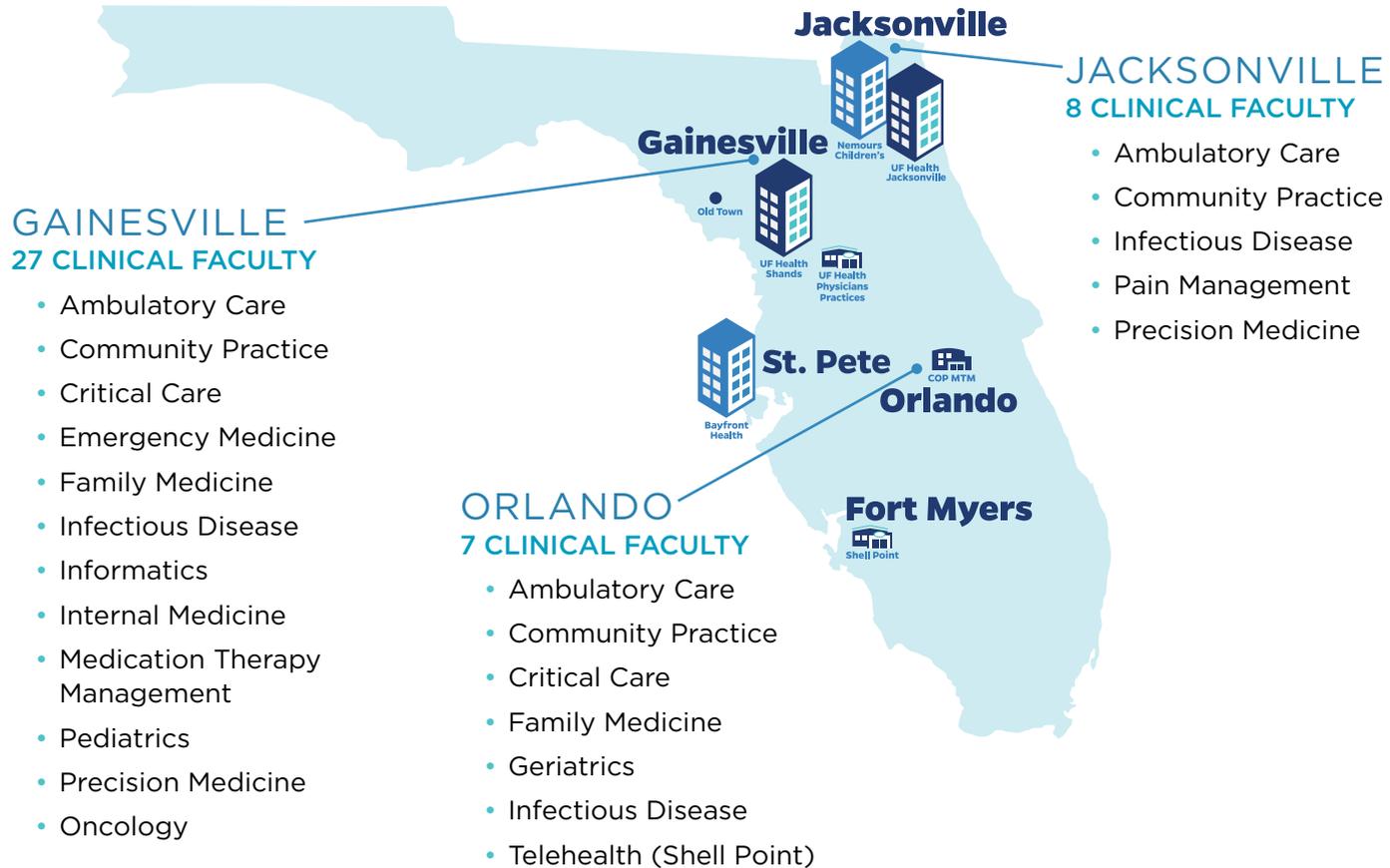
President-Elect, Florida Pharmacy Association

Almut Winterstein, Ph.D.

Immediate Past President, International Society of
Pharmacoepidemiology

Clinical Footprint in Florida

Our clinical footprint in Florida stretches from the First Coast to the Gulf Coast, as UF pharmacists improve the health and lives of the patients they serve.



TELEHEALTH PHARMACY:

AN INNOVATIVE APPROACH TO HEALTH CARE AT SHELL POINT

When the COVID-19 pandemic emerged in spring 2020, clinical pharmacists in the University of Florida College of Pharmacy pivoted to telehealth to help patients manage their medications. With physician practices and clinics shuttered and many people staying home, video conferencing became a lifeline between pharmacists and their patients. The service model proved so effective that the college began exploring new ways to deliver pharmaceutical services through telehealth.

In the summer of 2021, the college formalized an alliance with the Shell Point Retirement Community in Fort Myers, Florida, to launch the first telehealth anticoagulation consultation service. Three mornings a week, a clinical pharmacist from the UF College of Pharmacy's Orlando campus provides medication consultations with Shell Point residents nearly 200 miles away. The pharmacist has access to the patient's medical records and can record notes in real-time. They also work closely with the four physicians and four nurse practitioners providing on-site care at the retirement community.

"Anticoagulation medications require careful and constant management, and this new collaboration with Shell Point allows our UF pharmacists to share their expertise and provide a high-quality service to the Shell Point community," said John Gums, Pharm.D., FCCP, associate dean for clinical and administrative affairs and a professor of pharmacotherapy and translational research in the UF College of Pharmacy.

The anticoagulation clinic is the first to launch at Shell Point, and the college plans to add a polypharmacy service in early 2022. This telehealth offering will help patients taking multiple medications to reduce their side effects, costs and likelihood of a drug-induced emergency room visit or hospital admission.

If the innovative telehealth approach proves successful at Shell Point, then it may open new opportunities for the UF College of Pharmacy to partner with other communities and organizations.

"If a year from now we can show that Shell Point patients taking anticoagulation drugs have better control of their medications, fewer emergency room visits and less side effects, then we will have a good indication that our telehealth program is working and improving their overall health," Gums said. "Then we can take this telehealth model and explore ways to offer clinical pharmacy services to other communities around the state."





Diversity, Inclusion & Health Equity

The UF College of Pharmacy strives to stimulate a culture that promotes diversity and inclusion within an exceptional community of students, faculty and staff.

OUR DIVERSITY RANKINGS

#1

The most racially/ethnically diverse Pharm.D. student body among the top 40 pharmacy colleges ranked by U.S. News & World Report

#1

Highest under-represented minority percentage in professional student body among UF's academic health colleges

#2

Highest Pharm.D. student under-represented minority headcount nationally

Underrepresented in pharmacy as defined by the American Association of Colleges of Pharmacy

HEALTH PROFESSIONS HIGHER EDUCATION EXCELLENCE IN DIVERSITY AWARD | INSIGHT INTO DIVERSITY MAGAZINE



Top Colleges for Diversity

INSIGHT Into Diversity magazine selected the UF College of Pharmacy as a 2021 Health Professions Higher Education Excellence in Diversity Award winner. It's the first time the college has received the award, which is presented annually by the oldest and largest diversity-focused publication in higher education.

The UF College of Pharmacy was one of only three pharmacy colleges nationally to receive the award. INSIGHT Into Diversity magazine selected the college based on many strides made in recent years to become more diverse and inclusive.



MAKING STRIDES TOWARD A MORE DIVERSE & INCLUSIVE COLLEGE

A holistic admission process led to the college's most diverse incoming fall class ever, with 41% of students from under-represented racial/ethnic backgrounds and 27% first-generation.

Pipeline programs, such as the Summer Health Professions Education Program, are assisting in the recruitment of under-represented students.

Curriculum revisions are introducing students to topics that increase their understanding of diversity, inclusion and health equity.

The appointment of John Allen, Pharm.D., as the college's first associate dean for diversity, inclusion and health equity, has accelerated new ideas and thinking.

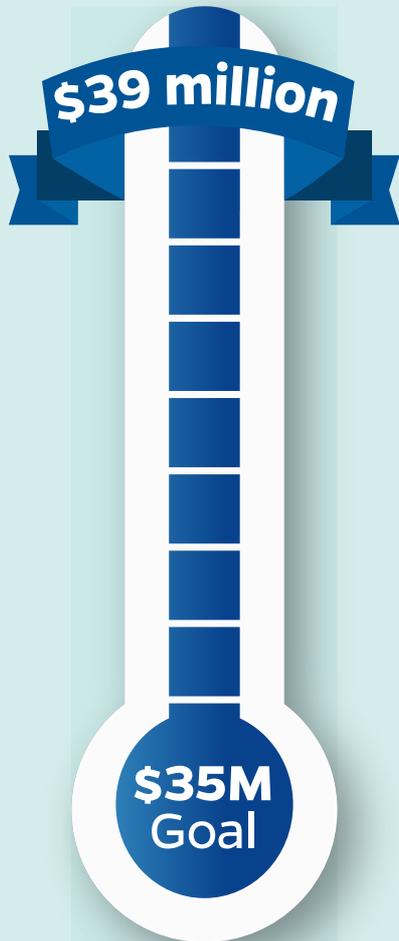
New faculty with expertise in health disparities are joining the college to broaden perspectives and knowledge in these areas.

"It's an honor to receive one of higher education's top awards in diversity and inclusion. Our college has made intentional and strategic commitments to support diversity and inclusion, and this award validates the effort put forth by many people to cultivate a nurturing and welcoming campus environment for everyone."

— John Allen, Pharm.D.,
associate dean for diversity,
inclusion and health equity

Alumni & Development

Gator pharmacy alumni reside in all 50 states and more than 40 nations around the world.



GO GREATER CAMPAIGN

The University of Florida's \$3 billion Go Greater campaign positions UF to be a leader in addressing 21st century challenges. It establishes the university and the UF College of Pharmacy as a guidepost that our state, nation and world look to for leadership and innovation.

CAMPAIGN GOAL

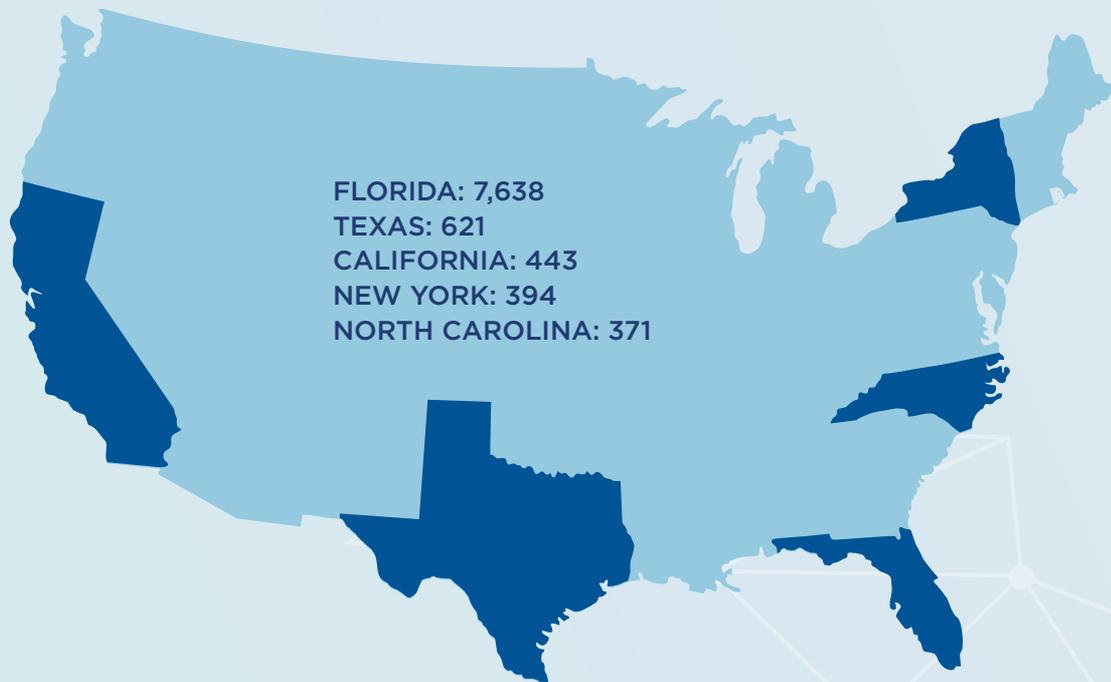
UF College of Pharmacy
\$35 million by 2022
\$39 million raised as of Dec. 1, 2021



Theresa Tolle, B.S. Pharm., FAPhA, a 1988 graduate of the UF College of Pharmacy, was elected president of the American Pharmacists Association, the largest pharmacy organization in the United States. She will serve a one-year term beginning in March 2022.

TOP 5 STATES

WHERE ALUMNI RESIDE



14k+
LIVING
ALUMNI

50
STATES

40+
COUNTRIES



Gary Cacciatore, Pharm.D., J.D., '88, vice president of regulatory affairs and associate regulatory counsel for Cardinal Health Inc., received the 2021 UF College of Pharmacy Outstanding Alumnus Award and served as the commencement speaker.



CRISAFI CHALLENGE

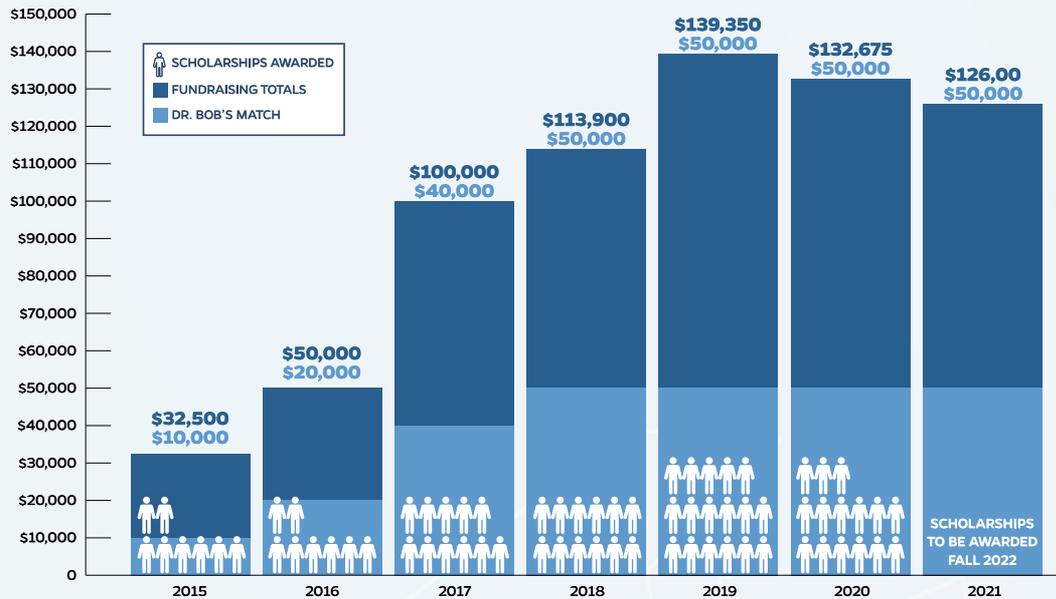
Bob Crisafi, Ph.D., founded 12 successful pharmaceutical companies and made major contributions to reduce medication errors in our nation's hospitals, but ask this prosperous entrepreneur about the greatest experiences of his life, and he will tell you about his years in the mid-1950s working in the manufacturing laboratory at the University of Florida College of Pharmacy.

Crisafi, '56, attributes his successes in life to his education from the University of Florida, and he is compelled to help future pharmacy students follow in his footsteps. That's why he established the Crisafi Challenge.

For 10 days every October, alumni and friends of the college are challenged to raise \$50,000 for student scholarships, and Dr. Bob matches every donation up to that amount.

In seven years, the Crisafi Challenge has become the UF College of Pharmacy's most successful scholarship fundraising campaign and raised nearly \$700,000 for recruitment scholarships. Thanks to the generosity of Dr. Bob and others, more than 70 pharmacy students over the years have benefited financially from a Crisafi scholarship.

CRISAFI CHALLENGE IMPACT



2020-21 STUDENT SCHOLARSHIPS AND GRANTS

\$1.14
MILLION

\$297k

(AWARDED TO
NEWLY ADMITTED
STUDENTS)

199

STUDENTS
RECEIVED
AWARDS

“My parents always taught me to value the things that I had, because they were worth sacrifice to get them. To finally say that I am a student of pharmacy here at UF, and receive a Crisafi scholarship, is definitely a huge accomplishment for me.”

— Emidelys Quintana Valentin,
class of 2025



A photograph of a graduate in a black cap and gown with 'UF' on the chest, looking upwards during a ceremony. The background shows other graduates in similar attire, some with orange and blue stoles, seated in a large hall.

Lifelong Learning

Through flexible online education programs, the UF College of Pharmacy is helping working professionals expand their knowledge and advance their careers.

ONLINE EDUCATION

The college's online programs are among the largest and most successful in the world, having received multiple national awards for excellence in distance education.

981
ONLINE M.S.
STUDENTS

30%
UNDER-
REPRESENTED
MINORITIES

26%
MALE



74%
FEMALE



9

M.S. AND CERTIFICATE PROGRAMS

CLINICAL TOXICOLOGY
DRUG DEVELOPMENT
FORENSIC DNA AND SEROLOGY
FORENSIC DRUG CHEMISTRY
FORENSIC SCIENCE
MEDICATION THERAPY MANAGEMENT
PHARMACEUTICAL CHEMISTRY
PHARMACEUTICAL OUTCOMES
& POLICY
PRECISION/PERSONALIZED
MEDICINE



Nearly 6,000 graduates have earned degrees from the UF College of Pharmacy's online and distance learning programs since they began in 1994.



CONTINUING PHARMACY EDUCATION

The Office of Continuing Pharmacy Education provides high-quality, evidence-based educational opportunities for pharmacy technicians.

From Oct. 1, 2020 to Sept. 30, 2021:

- 8,228 unique registrations
- 2,480 continuing education units reported

NEW CERTIFICATE PROGRAMS

The first accredited provider in the state of Florida approved by the Florida Board of Pharmacy, in consultation with the Board of Medicine and the Board of Osteopathic Medicine, to offer these certificate programs:

- Collaborative Practice Agreement
- Test & Treat

IMMUNIZATION TRAINING

- 941 pharmacists were trained nationwide to meet COVID-19 vaccination needs from Oct. 1, 2020 to Sept. 30, 2021.



TOP

5

7



TOP PUBLIC UNIVERSITY
U.S. NEWS & WORLD REPORT



“YOU CANNOT GET THROUGH A SINGLE DAY WITHOUT HAVING AN **IMPACT** ON THE WORLD AROUND YOU. WHAT YOU DO MAKES A DIFFERENCE, AND YOU HAVE TO DECIDE WHAT KIND OF DIFFERENCE YOU WANT TO MAKE.”

— JANE GOODALL, PH.D., PRIMATOLOGIST

UF UNIVERSITY of
FLORIDA
College of Pharmacy
P.O. Box 103570
Gainesville, FL 32610

NON-PROFIT
ORGANIZATION
U.S. POSTAGE
PAID
GAINESVILLE, FL
PERMIT No. 94



MALACHOWSKY HALL FOR DATA SCIENCE & INFORMATION TECHNOLOGY | OPENING SPRING 2023

UF's new hub for artificial intelligence will include data scientists from the College of Pharmacy.