



**UNIVERSITY OF
GEORGIA**
College of Pharmacy



**University of Georgia
Pharmaceutical and Biomedical Sciences**

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Program



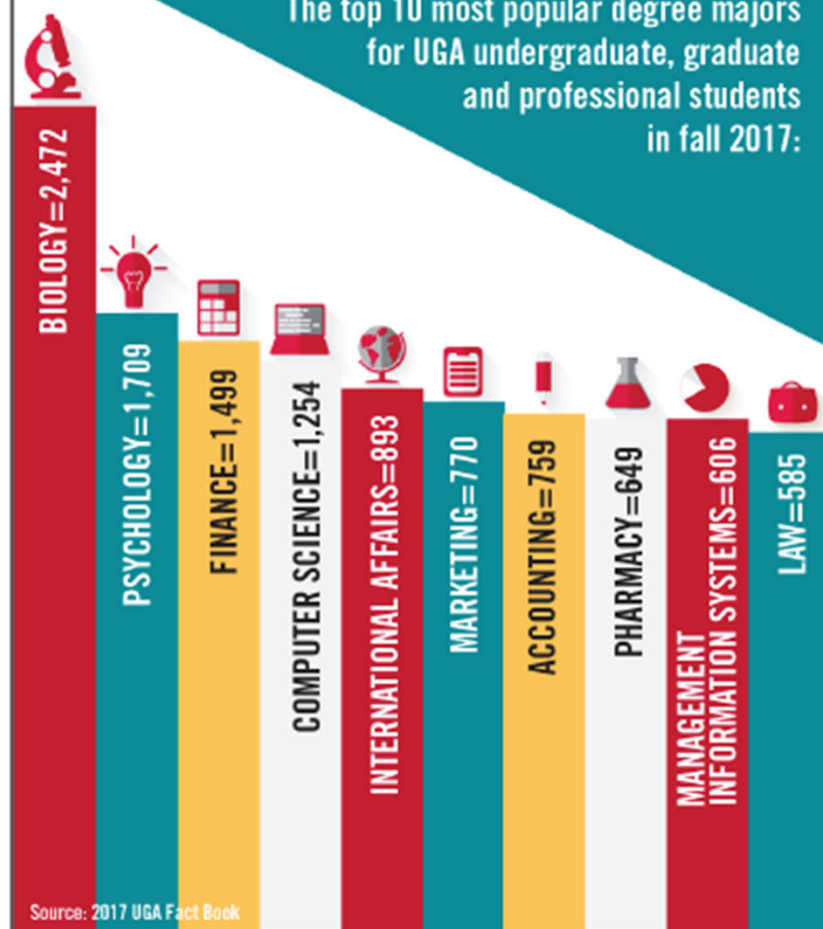
- I. Welcome
- II. How do you choose a major?
- III. BS Pharm Sci Course Curriculum
- IV. Faculty introductions
- V. Questions
- VI. Reception

Popular Majors at UGA



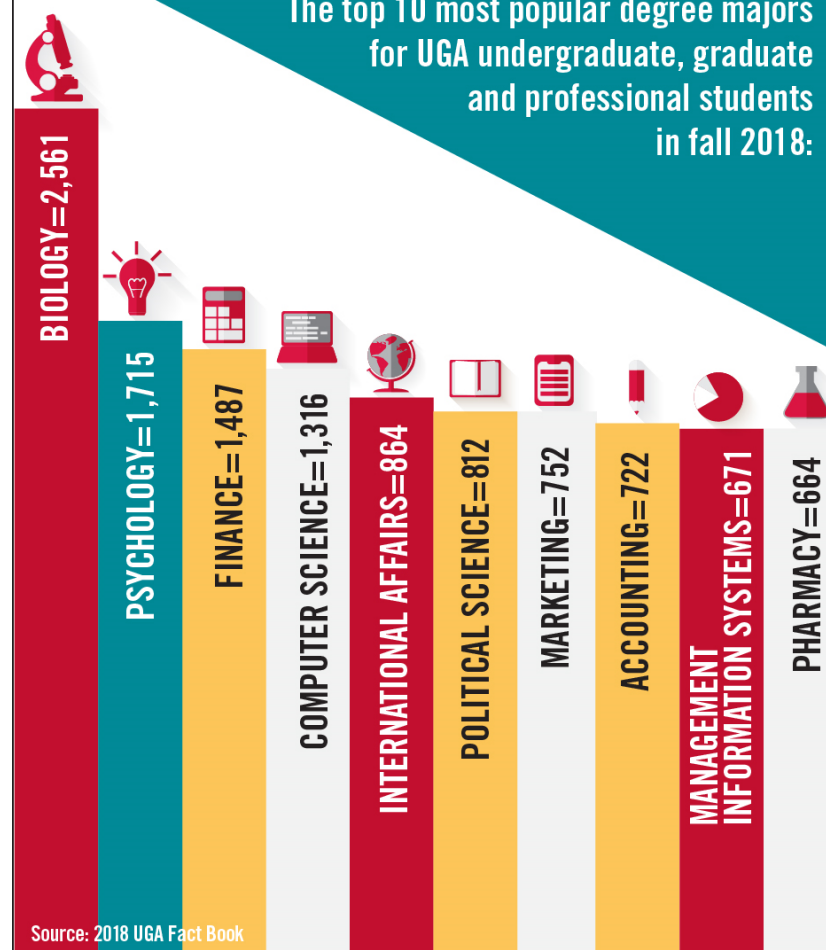
MAJOR DECISIONS

The top 10 most popular degree majors for UGA undergraduate, graduate and professional students in fall 2017:



MAJOR DECISIONS

The top 10 most popular degree majors for UGA undergraduate, graduate and professional students in fall 2018:



Academic Programs



- ☐ Undergraduate Degree
 - ☐ Bachelor of Science in Pharmaceutical Sciences
- ☐ Double Dawgs BS/MS Degree in 5 YR
- ☐ Professional Degree
 - ☐ What is the Difference Between a Pharmaceutical Scientist and a Pharmacist?
- ☐ Graduate Program in Pharmaceutical and Biomedical Sciences
 - ☐ Masters
 - ☐ PhD



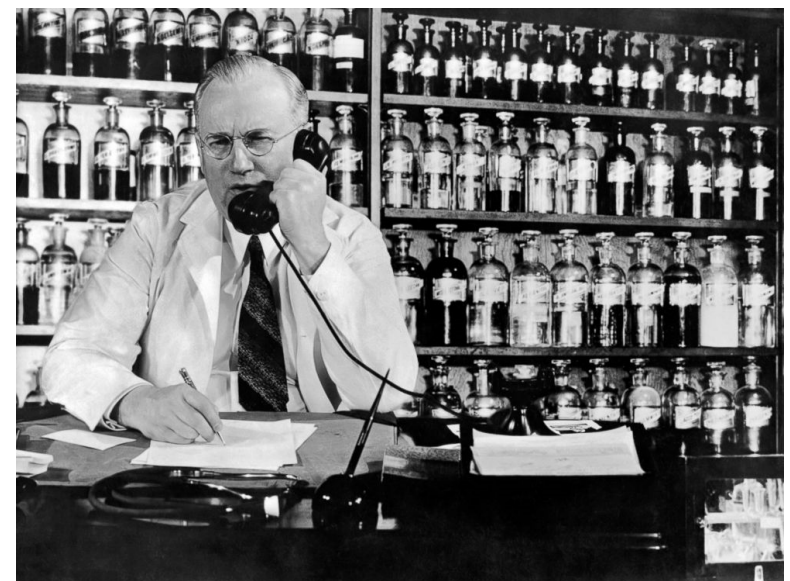
The University of Georgia®

CAREER PATH

PHARMACEUTICAL SCIENTIST vs REGISTERED PHARMACIST



- ☐ **Design and develop** new safe and effective medicines
- ☐ Drug discovery & Drug delivery
- ☐ Experts in **chemistry and biology**



- ☐ Provide **advice** on the safe and effective **USE** of medicines
- ☐ Patient care, Pharmacies, Hospitals



Is a Career in the Pharmaceutical Sciences Right for Me?

How Do I Know If a Career in the Pharmaceutical Sciences is Right for Me?

- Do you enjoy science and want to pursue a science-based career?
- Do you like to work hands-on in a laboratory setting?
- Do you have a desire to contribute to the health and well-being of society through the development of medicines and therapies?

If so, a career in pharmaceutical sciences may be a good choice for you!



☐ Background

- ✓ replace the old B.S. Pharmacy program as an entry level degree for industry
- ✓ provide a more appropriate and interdisciplinary background for advanced degree(s) focused on drug development

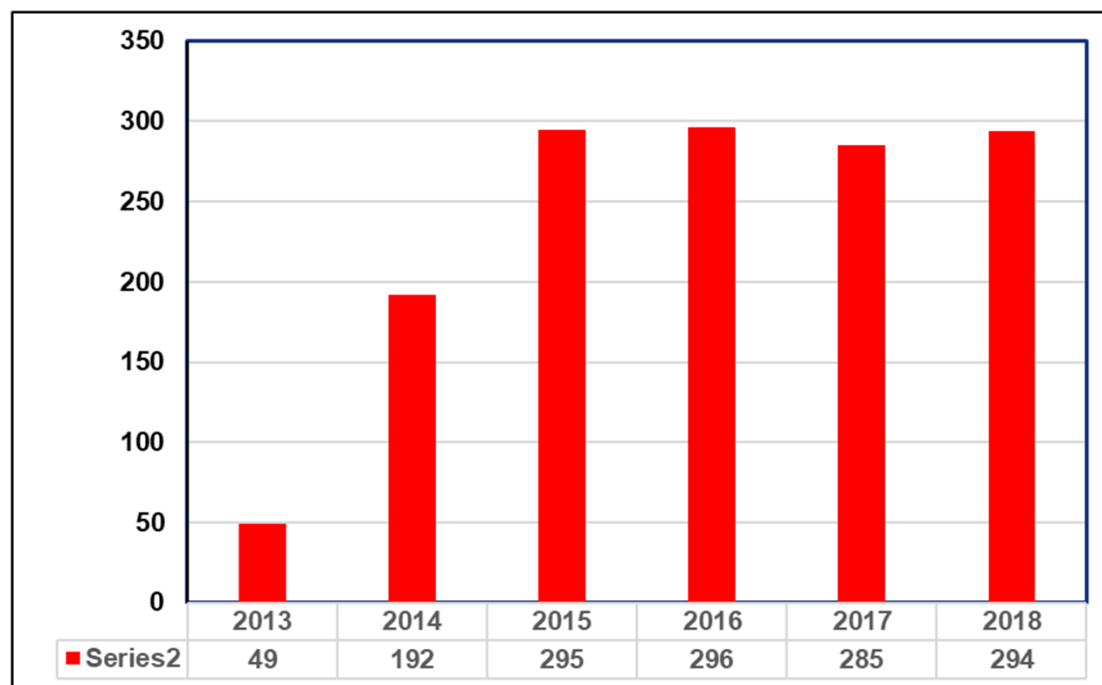
☐ Objective

- ✓ prepare students with broad training in mathematics and basic sciences with a strong emphasis on the pharmaceutical sciences
- ✓ graduates will be able to integrate their knowledge with significant research experience to enhance career path development

Major in Pharmaceutical Sciences



- ❑ Started in 2013
- ❑ 1st BS PS 2015
- ❑ 1st BS/MS Class
Started 2018
Graduated 2019



Numbers represent – Pre-Pharmacy and
Pharmaceutical Sciences major students



Structure of Program



- ❑ Two years of math and basic sciences
- ❑ Fulfill GA general education core requirements
- ❑ Final two years at the College of Pharmacy
 - ❑ **Courses and labs in Pharmaceutical Sciences**
 - ❑ **Undergraduate Research**
 - ❑ **Major Electives**

Admission Statistics

2022: A Competitive Class

99%

took at least one course at an advanced level such as AP, IB, or Dual Enrollment.

3800

More than 3800 have a core high school GPA of 4.00 or higher.

285

More than 285 graduated first or second in their class.

UGA General Education Core Curriculum



Core Area	Courses
I	ENGL 1101, ENGL 1102, MATH 2250
II	CHEM 1211+L, BIOL 1107+L
III	PHYS 1211 or PHYS 1211+L
IV	World Language and Culture, COMM 1110
V	History and 2 Social sciences
VI	CHEM 1212+L, CHEM 2211+L, CHEM 2212+L, STAT 2000

Freshman Year



Fall

Course	Description	Credits
ENGL 1101	Eng. Comp. I	3
CHEM 1211	Fresh. Chem. I	3
CHEM 1211L	Lab	1
MATH 2250	Calculus I	4
Gen Elective	Area IV or V	3
FYOS 1001	Odyssey Sem.	1
Semester		15

Spring

Course	Description	Credits
ENGL 1102	Eng. Comp. II	3
CHEM 1212	Fresh. Chem. II	3
CHEM 1212L	Lab	1
PHYS 1211/L	Prin. of Physics	4
COMM 1110	Intro. Pub. Sp.	3
Semester		14

❑ For Full HOPE / Zell Miller Scholarships 15 credit hours is reqd per semester

Sophomore Year



Fall

Course	Description	Credits
CHEM 2211	Org. Chem. I	3
CHEM 2211L	Lab	1
BIOL 1107	Prin. of Biology	3
BIOL 1107L	Lab	1
PE Elective	Phys. Education	1
Gen Elective	Area IV or V	3
Gen Elective	Area IV or V	3
Semester		15

Spring

Course	Description	Credits
CHEM 2212	Org. Chem. II	3
CHEM 2212L	Lab	1
STAT 2000	Intro Stats	4
Elective	Area IV or V	3
Elective	Area IV or V	3
Elective	Area IV or V	3
Semester		17

Admission Requirements



- ☐ Cumulative GPA of 2.5 or higher (60 Hours)
- ☐ ENGL, MATH, BIOL, CHEM, PHYS, Courses
- ☐ Grade of “C” or better
- ☐ “Intended Pharmaceutical Sciences Major”
- ☐ STUDENT ADVISING

Student Advising / Questions



- ❑ **Franklin College Advising Office (Years 1 & 2)**
 - ❑ **Ilya Winham or Dave Evans**
- ❑ **College of Pharmacy (Years 3 and 4)**
 - ❑ **Leslie Standridge**
- ❑ **Make appointments using **SAGE****
- ❑ **Website www.rx.uga.edu**
 - ❑ **Program information**
 - ❑ **Scholarships / Internships information**

Junior Year



Fall

Course	Description	Credits
BCMB 3100	Biochemistry	4
PMCY 3000	Human Physiology	4
PMCY 3500	Pharm. Analysis	3
MATH 2260	Calculus II	4
Semester		15

Spring

Course	Description	Credits
PMCY 3200	Pharm. Sci. I	3
PMCY 3300L	Pharm. Tech.	1
PMCY 3800	Pharmacology	3
PMCY 4300	Med. Chem.	3
Major Elective	PMCY, BIOL.,	3
Gen. Elective	Area IV or V	3
Semester		16

- ❑ Other courses may be selected depending on total credit requirements
- ❑ **For Transfer Credits** www1.admissions.uga.edu/transfer

Senior Year



Fall

Course	Description	Credits
PMCY 4200	Pkinetic & P'dynam	3
PMCY 4500/L	Pharm Drug Dev.	4
PMCY 4960	Pharm Research I	2
ENGL 3590W	Tech Writing	3
Major Elective	PMCY, BIOL,....	3
Semester		15

Spring

Course	Description	Credits
BCMB 3600	Genomics	3
PMCY 4510/L	Adv Drug Dev	4
PMCY 4970	Pharm Researc II	2
Major Elective	PMCY, BIOL ...	4
Semester		13

Experiential Learning (EL)



- ❑ **PMCY 4960 Pharmaceutical Sciences Research I**
- ❑ **PMCY 4960 / 4970 (2 Credits each)**
- ❑ **Approved Research Courses – BIOL 3110L,
GENE 4210L / 4220L / 4230L / 4240L**
- ❑ **CURO Res Assistantship / Summer Fellowship \$\$\$**
- ❑ **INTERNSHIPS (\$\$\$)**
 - ❑ **Pharmaceutical Companies, UGA I-Corps**
 - ❑ **Study Abroad**



Experiential Learning
UNIVERSITY OF GEORGIA

'Learning by doing'

April 2015

*UGA to become one of largest public universities in US to require
experiential learning for undergraduates*

Major Electives



- ☐ **Total of 9 -10 credit hours required**
- ☐ **Electives can be chosen to meet professional school admissions requirements**
 - ☐ **Pharmacy School (PharmD), Medical School**
 - ☐ **Physician Assistant, Nursing, Public Health**
 - ☐ **Sales/Marketing**
- ☐ **BIOL, CHEM, PHYS, STAT, PMCY Courses**
- ☐ **At least 2 courses must be at 3000 / 4000 level**
- ☐ **All Major electives must be completed with a “C” or better**

Minor in Pharmaceutical Sciences



- ☐ Total of 15 credit hours required
- ☐ 9 hours of PMCY courses (3000 or above)
- ☐ 6 hours from the major electives list
- ☐ **Area VI courses can be counted for your minor**
- ☐ **MAJORS** - Biology, Chemistry, Marketing
- ☐ **MAJORS** - BioChemical Engineering

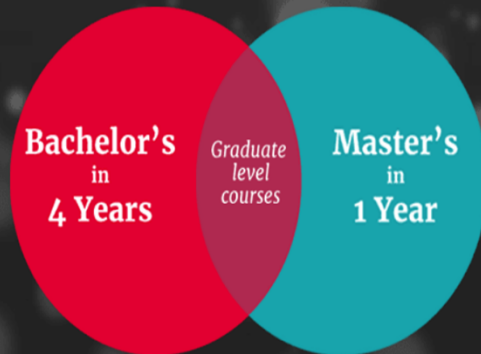
BS/MS

DoubleDawgs

The University of Georgia Advantage

- ❑ **Ambitious and Motivated Students**
- ❑ **AP Credits ~ 30 credits**
- ❑ **Competitive Advantage**
- ❑ **Career Placement – jobs**
- ❑ **Graduate / Medical Programs**
- ❑ **Interdisciplinary Education**
- ❑ **MS Tracks**
 - Pharmaceutical Sciences
 - Regulatory Sciences
- ❑ **New Tracks – Proposed**
 - Public Health, Engineering, Management, Pharmacy, Law
 - Bio fermentation (Biotechnology)

Undergrad + Grad = 5 Years or less





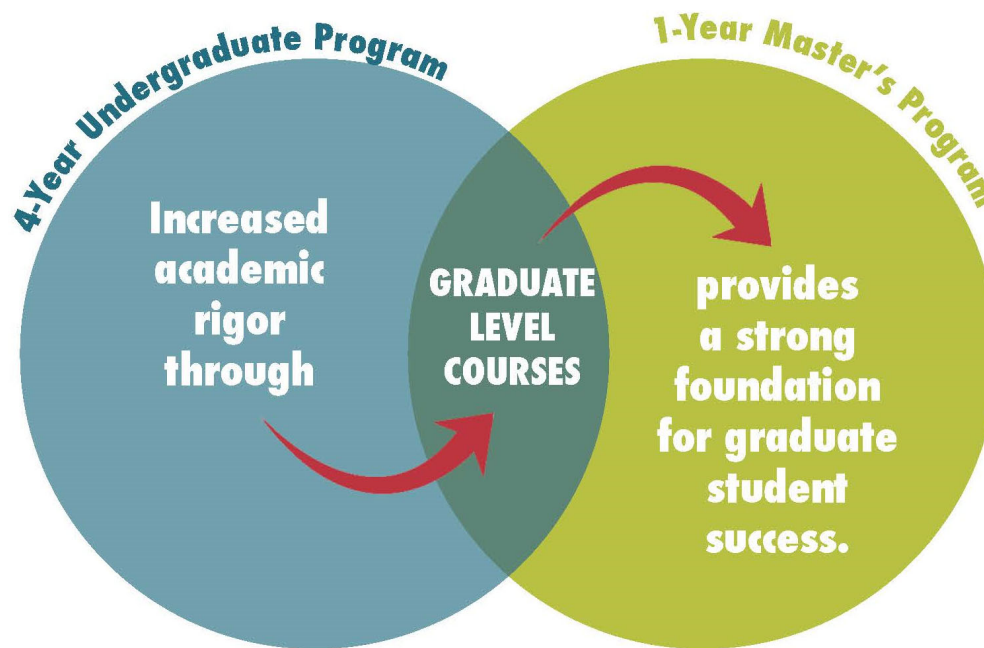
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DOUBLE DAWGS PROGRAM



QUALITY & RIGOR

GRADUATE LEVEL COURSES taken while earning an undergraduate degree benefit the student and the quality of the degree program.



Because graduate-level courses taken during an undergraduate degree program count toward a master's degree, students can finish both degrees in 5 years rather than the traditional 6 years.

THE UGA ADVANTAGE: Double Dawgs

Excellent Gateway for



☐ Professional Schools

- ☐ Pharmacy, Medical, Nursing,
- ☐ Dental, Veterinary, Physician Assistant

☐ Graduate Studies

- ☐ MS, PhD Pharmaceutical & Biomedical Sciences
- ☐ Regulatory and Clinical Programs

☐ Career & Job Opportunities

- ☐ Pharmaceutical, Biopharmaceutical
- ☐ Government, Research Universities
- ☐ Medical Devices, Nutraceuticals, Cosmetics

Spring 2019 Graduating Class



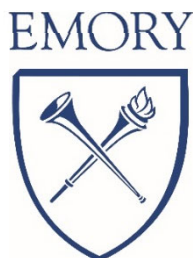
Graduate Schools / Professional Programs



MBB Program



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RUTGERS

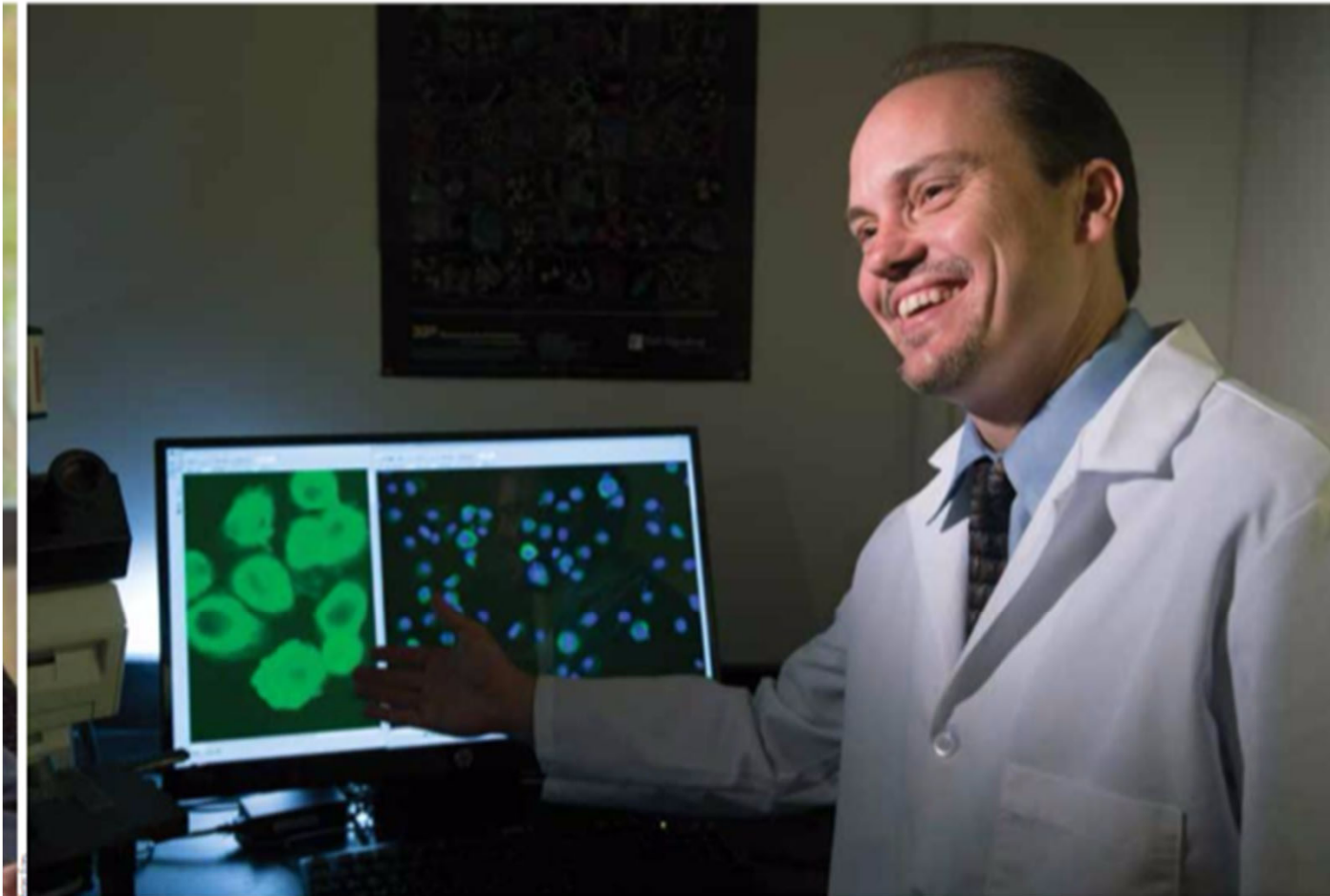


Molecular & Cellular Biology in Seattle
AN INTERDISCIPLINARY Ph.D. PROGRAM offered through the
UNIVERSITY OF WASHINGTON and FRED HUTCH



UNIVERSITY OF
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College of Pharmacy





**"I could have
gone into medicine
and become a doctor
and maybe helped
thousands of people
in my lifetime,
but if you develop
a drug, you can
help millions."
—Rick Shimkets**

Kirby Alton (BS '74, PhD '81), far left, and Rick Shimkets (BS '93) are leaders of Abeome, a biotech startup incubated through Innovation Gateway, UGA's technology transfer program. The company focuses on creating antibodies targeted to autoimmune diseases.

THANK YOU!
Questions

