20TH Century Pharmacist
• Mostly males whose education ended after BS pharmacy degree
• More likely a local businessman than a healthcare professional
• Doesn’t know patients’ diagnosis or have access to labs or medical records
• Doesn’t participate in clinical activities

21TH Century Pharmacist
• Mostly females who seek additional training after PharmD
• Works as part of interprofessional health care team
• Prescribes under a collaborative practice plan
• Interprets patient labs and writes in medical record
• Leads own clinic; integral to clinical activities
• Performs Medication Therapy Management, administers immunizations
University of Michigan

Ann Arbor, Michigan

19 Schools and colleges (Ann Arbor)

Total enrollment Ann Arbor, Fall 2017: 46,002

Regular faculty, Fall 2017: 7,022

All Staff, Fall 2017: 20,573

Research volume, 2017: $1,480,000,000

Total revenue for operating activities, 2017: $8,177,000,000
Academic and Research Excellence

Our programs are among the most sought after in the U.S.

- Bachelor of science (BS) in pharmaceutical sciences
- Doctor of Pharmacy (PharmD)
- Doctor of Philosophy (PhD) in Medicinal Chemistry, Pharmaceutical Sciences, Clinical Translational Science
College of Pharmacy
People and Programs

79
Faculty

Tenure Track 36
Clinical Track 28
Research Track 15

482
Students

PharmD 342
PhD 81
BS 59
History and Milestones

Founded 1876
First College of Pharmacy at a Public University

Founded at U-M
- Phi Delta Chi
- Academic Honor Society in Pharmacy
- Pharmacy Residency

U-M Families
- Walgreens
- Lilly
- UPJOHN
University of Michigan
College of Pharmacy

PharmD Enrollment – 342
PharmD Class Size – 85
Over 4000 Alumni Worldwide
11:1 Student/Faculty Ratio
Attrition Rate < 5%
<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>65%</td>
<td>MI Residents</td>
</tr>
<tr>
<td>96%</td>
<td>Hold 4 year degrees</td>
</tr>
<tr>
<td>66%</td>
<td>Women</td>
</tr>
<tr>
<td>7%</td>
<td>Underrepresented Minority Students</td>
</tr>
<tr>
<td>7%</td>
<td>International Students</td>
</tr>
</tbody>
</table>
High Level PharmD Curriculum

- 4 year program (3 years didactic, 1 year rotations)
- New curriculum established in 2010; do not require summer classes (P4 year begins in May of final year)
- 137 credits required for graduation
- Patient contact begins in first year
- PharmD Investigations Research projects important component of the Michigan curriculum
- Significant presence with Interprofessional Education opportunities
PharmD Program

**P1 First Year**
- Foundational Pharmaceutical Sciences
- Medicinal Chemistry & Pharmacology
- Communications
- Service Learning

**P2 Second Year**
- Pharmaceutical Sciences
- Medicinal Chemistry & Pharmacology
- Therapeutics
- Health Systems
- Scientific Inquiry
- Community

**P3 Third Year**
- Therapeutics
- IPE Clinical Decision Making
- Acute Care Practice
- Research Project

**P4 Fourth Year**
- Experiential Education
- 5 Week Rotations
- Research Forum
PharmD Program Highlight, Experiential Education

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitudinal Partners</td>
<td>4</td>
</tr>
<tr>
<td>Service Learning</td>
<td>1</td>
</tr>
<tr>
<td>Community Introductory Pharmacy Practice Experience</td>
<td>1</td>
</tr>
<tr>
<td>Institutional Introductory Pharmacy Practice Experience</td>
<td>1</td>
</tr>
<tr>
<td>Direct-care Introductory Pharmacy Practice Experience</td>
<td>1</td>
</tr>
<tr>
<td>Advanced Pharmacy Practice Experience (8 x5-week rotations)</td>
<td>3</td>
</tr>
</tbody>
</table>

**NEW IPPE FOR FALL 2018 – P2 YEAR**

Ambulatory Care Introductory Pharmacy Practice Experience (1 semester)

Over 500 Preceptors Across the US

International sites in England and China

Service Learning Partners for P1 Year
- Catholic Social Services of Washtenaw County
- Community Action Network
- Heartland Hospice
- Hope Clinic
- Jewish Family Services of Washtenaw County
- Packard Health
- Peace Neighborhood Center
- St. Joseph Mercy Hospital, Ann Arbor
- Ypsilanti Meals on Wheels
- U-M Ypsilanti Health Center
- UMHS Guest Assistance Program
Dual PharmD Programs

PharmD/PhD – Pharmaceutical Sciences

PharmD/MBA – Ross Business School (#11)

PharmD/MPH – UM Public Health (#4)
PharmD Student
Community Engagement

Community Service & Professional Events 2017-18
Michigan Medicine

#1 Hospital in the State of Michigan
#6 Best Health System in the Nation

2017-18 U.S. News & World Report’s “Best Hospitals”
UMHS Relationship

P3 students are responsible for a substantial portion of medical reconciliation for UMHS and its 47,000 hospital stays per year.

- 255 semester-long Introductory Pharmacy Practice Experiences per year
- 765 five-week Advanced Pharmacy Practice Experiences per year

![Graph showing UMHS Relationship](image-url)
PharmD Student Admissions

2017 Admissions Cycle

- 309 Applied
- 139 Admitted (45%)
- 89 Enrolled: 82w/BS

7 Year Average

- 328 Applied
- 133 Admitted (43%)
- 83 Enrolled: 72w/BS
## UM PharmD Prerequisites

<table>
<thead>
<tr>
<th>Subject</th>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (with laboratories)</td>
<td>2</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>1</td>
</tr>
<tr>
<td>Calculus (AP not accepted)</td>
<td>1</td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td>General and qualitative (with laboratories)</td>
<td>2</td>
</tr>
<tr>
<td>Organic (with laboratories)</td>
<td>2</td>
</tr>
<tr>
<td>English composition</td>
<td>1</td>
</tr>
<tr>
<td>Genetics</td>
<td>1</td>
</tr>
<tr>
<td>Human anatomy</td>
<td>1</td>
</tr>
<tr>
<td>Human physiology</td>
<td>1</td>
</tr>
<tr>
<td>Humanities or foreign language</td>
<td>2</td>
</tr>
<tr>
<td>Microbiology (with laboratories)</td>
<td>1</td>
</tr>
<tr>
<td>Physics (general, with laboratory)</td>
<td>2</td>
</tr>
<tr>
<td>Social science</td>
<td>2</td>
</tr>
<tr>
<td>Statistics</td>
<td>1</td>
</tr>
</tbody>
</table>
Our financial aid leads all other pharmacy schools

40% of incoming class receives significant scholarship support (Merit based, GPA, PCAT, and evidence of significant community engagement, health care experience, and demonstrated leadership)

PhD candidates are fully funded
Overview of Financial Aid and Scholarships

Pharmacy Scholarship (new 2018)
Residents: $4000 per year first three years, $6000 in fourth year; 
Non-Residents: $8000 per year first three years, $12,000 in fourth year.

All Continuing: Dean’s merit based scholarships are awarded to all students achieving a 3.60-4.00 gpa for years 2, 3 and 4. [$500 to $4000]

Leaders Scholars: Selection process.
Ten to twelve P3 students [$5,000] and 1 P4 student [$10,000] selected for scholarship annually.

One of the largest scholarship programs of any Pharmacy School.
# 2018-2019 PharmD Tuition and Fees

<table>
<thead>
<tr>
<th>Year</th>
<th>Tuition</th>
<th>Fees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MICHIGAN RESIDENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PY1 (Fall, Winter)</td>
<td>$30,202</td>
<td>$328</td>
<td>$30,530</td>
</tr>
<tr>
<td>PY2 (Fall, Winter)</td>
<td>$30,202</td>
<td>$328</td>
<td>$30,530</td>
</tr>
<tr>
<td>PY3 (Fall, Winter)</td>
<td>$30,202</td>
<td>$328</td>
<td>$30,530</td>
</tr>
<tr>
<td>PY4 (Spring/Summer, Fall, Winter)</td>
<td>$45,303</td>
<td>$492</td>
<td>$45,795</td>
</tr>
<tr>
<td><strong>NON-MICHIGAN RESIDENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PY1 (Fall, Winter)</td>
<td>$36,338</td>
<td>$328</td>
<td>$36,666</td>
</tr>
<tr>
<td>PY2 (Fall, Winter)</td>
<td>$36,338</td>
<td>$328</td>
<td>$36,666</td>
</tr>
<tr>
<td>PY3 (Fall, Winter)</td>
<td>$36,338</td>
<td>$328</td>
<td>$36,666</td>
</tr>
<tr>
<td>PY4 (Spring/Summer, Fall, Winter)**</td>
<td>$54,507</td>
<td>$492</td>
<td>$54,999</td>
</tr>
</tbody>
</table>

*Based on full-time enrollment of (9+ credits); rates may increase each academic year.

**P4 Year tuition is three semesters; the first semester rate is set at the previous year rate and the remaining two semesters is at the new rate which is always effective beginning in the fall term.
PharmD Student Success

Career Paths for Class of 2017

- Residency 54%
- Employment 34%
- Industry Fellowships 7%
- Unknown 5%

On-Time Graduation: 95%
MJPJ Law Exam Pass Rate: 96%
Residency Success for those who applied: 86%
NAPLEX License Exam Pass Rate: 91%

One of highest success rates in country

National Average 95%
Our alumni are leaders across many career paths

- Community & hospital pharmacy practice
- Industry & academic research
- Executive management
- Federal & state government service
Alumni Leadership

Leaders in health care, industry, academia & government service

OVER 4000 ALUMNI WORLDWIDE

97% Attribute their career success to their education at the college

94% Would chose the college again for their education
Learn Beyond the Classroom

Faculty-mentored research and clinical experience

Curricular and co-curricular leadership development

200+ experiential education sites (Alaska, both coasts and international sites), national conferences and competitions
<table>
<thead>
<tr>
<th>Student Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Association of Pharmaceutical Scientists - Student Chapter (AAPS)</td>
</tr>
<tr>
<td>American Pharmacists Association Academy of Student Pharmacists (APhA-ASP)</td>
</tr>
<tr>
<td>College of Pharmacy Graduate Student Organization (COPGSO)</td>
</tr>
<tr>
<td>Health-System Student Pharmacists (HSP)</td>
</tr>
<tr>
<td>International Society of Pharmacoeconomics and Outcomes Research/Academy of Managed Care Pharmacy (ISPOR/AMCP)</td>
</tr>
<tr>
<td>Multicultural Pharmacy Student Organization (MPSO)</td>
</tr>
<tr>
<td>Pharmacy Christian Fellowship (PCF)</td>
</tr>
<tr>
<td>Pharmacy Student Ambassadors (PSA)</td>
</tr>
<tr>
<td>Pharmacy Student Government Council (PSGC)</td>
</tr>
<tr>
<td>Phi Delta Chi (PDC) (ΦΔΧ)</td>
</tr>
<tr>
<td>Relay for Life</td>
</tr>
<tr>
<td>Rho Chi</td>
</tr>
<tr>
<td>Student Committee for International Opportunities (SCIO)</td>
</tr>
<tr>
<td>Student Michigan Pharmacists Association - Michigan Pharmacists Association (SMPA/MPA)</td>
</tr>
<tr>
<td>Student National Pharmaceutical Association (SNPhA)</td>
</tr>
</tbody>
</table>
Campus Support for You

GINSBERG CENTER
4000+
Students supported yearly through the advising, referral, resources & training of student organizations

SPECTRUM CENTER
80+
Annual events, educational outreach & peer mentorship for the LGBTQ community

INNOVATE BLUE
92
COMPANIES
Started by current students
Over the last 5 years

CAPS
Counseling and Psychological Services
EMOTIONAL WELL-BEING
Provided through resources like the wellness zone
Why Choose Michigan?

• Competitive tuition – consistently lower than our peers in the top ten pharmacy schools
• Substantial Scholarship support
Why Choose Michigan?

- World-class practice and teaching at the UM Health System
- Small class size
- Multi-year research projects
- Interprofessional classes with medical, dentistry, nursing, public health, kinesiology, and social work students
- Faculty who are nationally renowned clinical practitioners and researchers

Unmatched Opportunity
Why Choose Michigan?

Proven Success

• Over 95% on-time graduation rate
• 96% five-year average NAPLEX Pass Rate
• Unparalleled success of graduates recruited and selected for the nation’s leading residency and fellowship programs
• 94.8% of alumni report that the College contributed to their professional success
Why Choose Michigan?

Great Place to Live and Learn

• “Small American Cities of the Future,” Overall, #10 Ann Arbor, *fDi Magazine*
• “Top 100 Best Cities to Live,” #13 Ann Arbor, *Livability*
• “Best College Cities and Towns in America” #1 *WalletHub*
• “#1 Most educated city” *WalletHub*
• “#1 City for Millennials” *American Institute of Economic Research*
Our expectations of students

- Leadership
- Involvement
- Believe in yourself and your ability to make a difference in the lives/health care of those you desire to serve.
- We look to admit those who will be an asset to our student body and the profession of pharmacy.
- We value the “whole” person in the application process and regard those able to overcome challenges in life, education, illness, and showing sustained patient interaction/community service engagement as positive assets for success in the curriculum.
Since 1876, the University of Michigan College of Pharmacy has had one overarching goal: to make a profound, positive difference in the health of the world.