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WOLVERINE PATHWAYS
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# FACULTY FORUM ON OUTREACH AND ENGAGEMENT

# *WOLVERINE PATHWAYS* SUSTAINABLE COLLABORATIONS ACROSS CAMPUS

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# WELCOME

Catalina Ormsby

Associate Director
Center for Educational Outreach

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# Land Acknowledgement

***The University of Michigan is located on the traditional territory of the Anishinaabe people. In 1817, the Ojibwe, Odawa, and Bodewadami Nations made the largest single land donation to the University of Michigan, offered ceremonially as a gift in the text of the Treaty at the Foot of the Rapids so that their children could be educated. Through these words of acknowledgment, their contemporary and ancestral ties to the land and their contributions to the University are renewed and reaffirmed***

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# Carla O'Connor, PhD

Director
Wolverine Pathways

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# WOLVERINE PATHWAYS

# OVERVIEW

- Year-round, supplementary, college preparatory program serving scholars residing in Detroit, Southfield, and Ypsilanti

- PRIMARY GOALS:
  - increase scholars' likelihood of admission to the most selective colleges, including the University of Michigan.

  - engage scholars around the prospect of attending U-M by exposing them to
    - the range and rigor of U-M's academic majors and schools
    - the vitality of U-M undergraduate student life

  - prepare scholars for the academic, social, and cultural demands of elite college settings like our own

# The Wolverine Pathways Opportunity

Scholars admitted to
Ann Arbor or Dearborn
campus receive
FOUR YEAR TUITION
SCHOLARSHIP

Scholars admitted to
Flint
considered for
other scholarship
opportunities

# The Wolverine Pathways Scholarship

Scholars have up to
**2 years**
to transfer
to Ann Arbor campus

Can transfer from any college

# OUTCOMES

- **First Two Graduating Classes (2018 & 2019)**
  - 176 graduates; 163 applied to U-M
  - 98 admitted to Ann Arbor (56% of graduating classes; 60% of applicants); 69 admitted to Dearborn; 2 admitted to Flint
  - 87 enrolled at Ann Arbor (89% yield); 25 enrolled at Dearborn; 2 enrolled at Flint
  - 96% 1st year retention (Ann Arbor)
  - Scholars otherwise admitted to a wide range of selective colleges including:
    - Albion College
    - Brown University
    - Clark-Atlanta University
    - Columbia University
    - Georgetown University
    - Hampton University
    - Harvard University
    - Howard University
    - Johns Hopkins University
    - Michigan State University
    - Morehouse College
    - New York University
    - Oberlin College
    - Spelman College
    - Wellesley College
    - Xavier University

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# ENROLLMENT & ADMISSIONS

- Current Enrollment: 640; grades 7 - 12

- Academic Criteria for Admission to Middle School Program
  - GPA 2.8; Overall GPA 3.0

- Academic Criteria for Admission to High School Program
  - GPA 3.2; Overall GPA 3.4
  - Enrolled in Algebra I or most rigorous math course in middle school

- Application Components
  - 2 letters of recommendation
  - short answers/essays

# CURRENT STRUCTURE

- **Terms**
  - Fall and Winter
    - 7 Saturdays 9-12:30pm (at/near three community sites)
    - Academic Core: Math; ELA; Science
    - Supplementary cultural and on-campus opportunities
  - Summer
    - Content and Length (3 - 6 Weeks) dependent on grade
    - Increased On-Campus opportunities
- **Instructional Staff**
  - Certified secondary teachers
  - Instructional assistants with degrees in relevant discipline
  - U-M graduate students, postdoctoral fellows, and faculty
- **Transition/Completion Supports**
  - OAMI/Success Connects

# Scholar & Family Advising

- Selecting the Right High School
- Establishing a High School Plan & Habits to Support College Going
- Maximizing Your High School Curriculum
- Building a Competitive High School Profile
- Identifying Reach, Match, & Safety Colleges & Universities
- Crafting College Admissions Essays
- Applying for Financial Aid & Scholarships

# SAMPLE CONTENT

- **Middle School**
  - Math Literacy, Identity, & Efficacy
  - Socio-Emotional Learning
  - Financial Literacy
  - Foundations of Research - Media Impact on Elections & Memorial Controversies
  - Water Science and Justice

- **High School**
  - Math Literacy, Identity & Efficacy
  - Rhetorical Analysis & Writing
  - Multimodal Exploration of Police Violence
  - Interdisciplinary Study of Social Inequality in Southeastern Michigan
  - SAT Prep

# PROGRAMMING VIA PARTNERSHIPS

- **Plug-In & Co-Designed Summer "Camps"**
  - Department of Earth & Environmental Science - Earth Camp
  - College of Architecture - ArcStart
  - Department of Chemistry - DRISE
  - Michigan Medicine -- Michigan Health Science Pre-College Exposure Academy
  - FTVM - Film Studies, Screenwriting, & Production

- **Career, Research & Service Internships**
  - Individual Faculty & Postdoctoral Fellows
  - Accenture Consulting
  - School of Pharmacology

- **Complementary Pathways**
  - Engineering Pathways

- **Pre-College Summer Courses that Mimic Demands of U-M 1st Year Classrooms**
  - In Development

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# Yeidy Rivero, PhD

Department Chair
Film, Television, and Media (FTVM)
College of Literature, Science and the Arts

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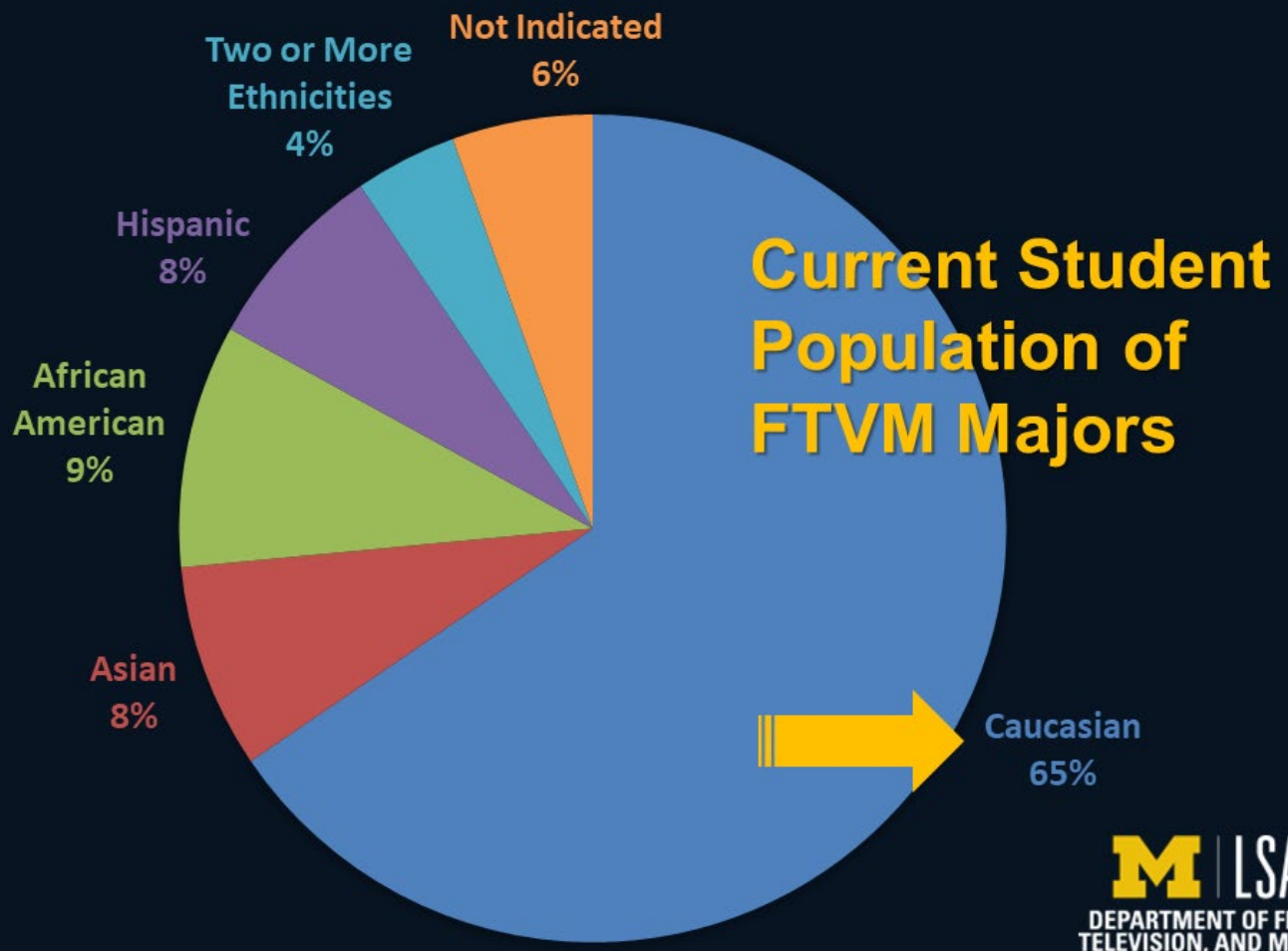
# FTVM Film & Media Camp with Wolverine Pathways Scholars




# Current Student Population of FTVM Majors

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*“What I'm finding to be extremely interesting these days is the level to which women are helping women out --*
*and just as importantly, how women are very much in demand in the television business, especially women in the "diversity" category.*

*I've been meeting with several literary managers and am hearing the same thing: they are receiving calls almost every day for women writers, women showrunners, women of diverse backgrounds, as well as men of diverse backgrounds.*

*It's actually never been a better time to be a woman or a member of a traditionally under-represented group.”*

*Janet Leahy, Writer and Producer*

# Wolverine Pathways and FTVM

FTVM partnered with Wolverine Pathways this past summer to offer a two-week film & media camp to a group of 38 rising scholars.

# FTVM's Film & Media Camp Offered Students…

- One and one half hours of screenwriting
- Two hours of production work in our studios
- One and one half hours of media studies

# Screenwriting

Using clips from popular movies as points of departure, scholars examined the screenplays from which these “moments of movie magic” were born.

FTVM Screenwriting faculty Dan Shere guides students in an editing session.

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# Production

In a hands-on experience in our studios, scholars were introduced to the fundamental concepts, terms, and techniques that form the foundation of every type of motion picture production.

Production Faculty David Marek discusses the elements of composition and framing in preparation for a live TV shoot.

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# Studies

Scholars were taught how to think critically about the deep impact digital media has on entertainment, art, communication, politics, and social life.

Professor Sarah Murray discusses the politics and economies of the industry in her media studies class.

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Wolverine Pathways Rising Scholars in Action

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# Until next year… !

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# Lyonel Milton

Managing Director
Center for Engineering Diversity & Outreach
College of Engineering

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# CEO Faculty Forum
# Wolverine Pathways

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# Lyonel J Milton

Managing Director, CEDO

October 29, 2019

# Overview

- CEDO: Mission and Objectives
- Reimagine Outreach Initiatives
- Engineering OnRamp
- Engineering Pathways
- Q&A and Discussion

# CEDO: Mission & Objectives

CEDO's mission is to provide expertise, leadership and programming that supports the College's belief that an excellent educational experience is intrinsically linked to fostering a climate that celebrates diversity, equity and inclusion for faculty, staff and students.

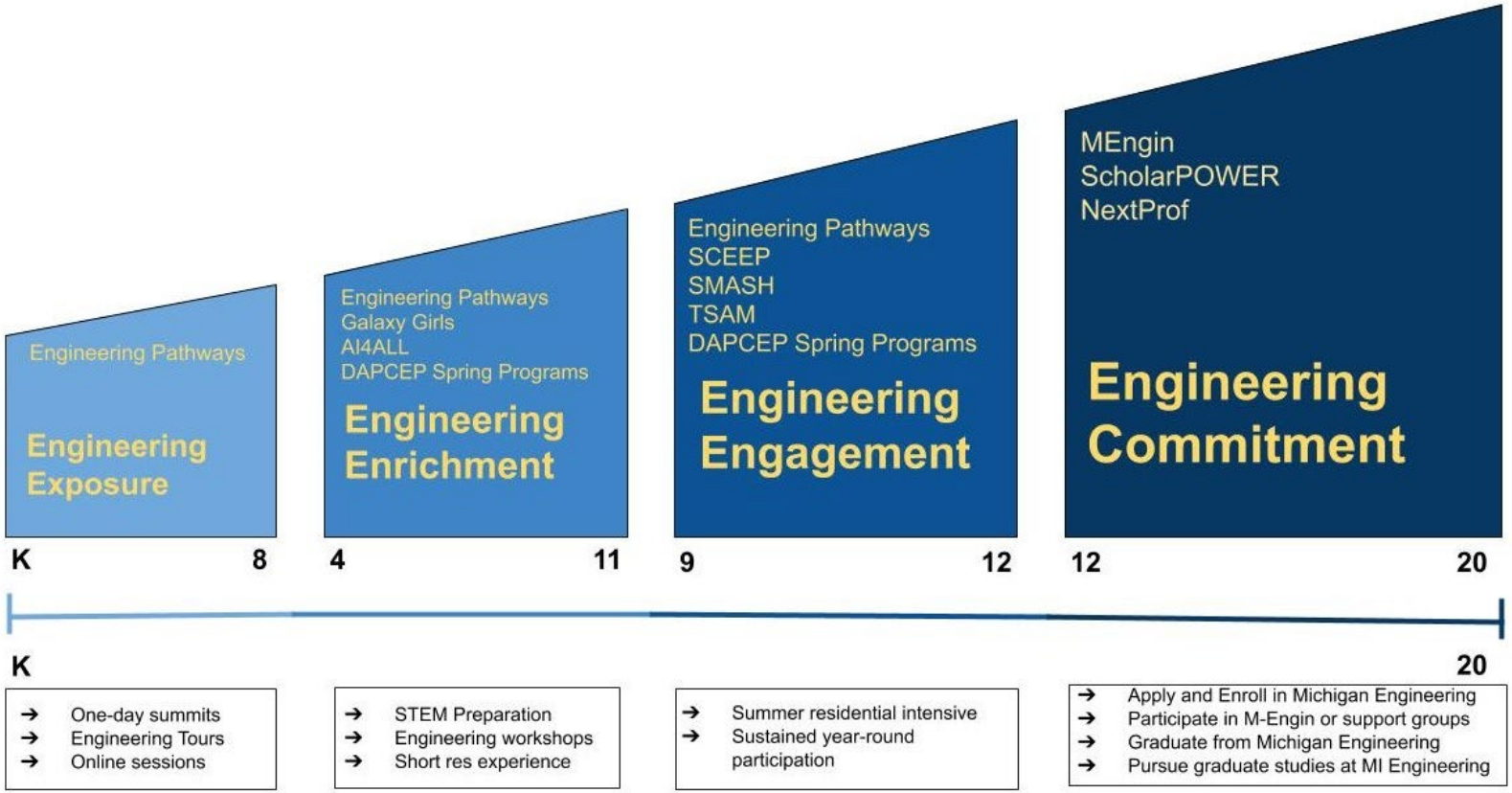
CEDO has three objectives - access, achievement and inclusion:

1. Access — Provide K-12 outreach and pipeline development programs
1. Achievement — Develop initiatives and programs designed to help Michigan Engineering students excel academically, culturally, personally and professionally
1. Inclusion — Promote and steward multicultural engagement throughout the College, fostering a sense of belonging for every individual

# Engineering OnRamp

- Strategic Alliances
- Cohort Model
- Year-long engagement
- University-wide integration
- Recruitment focus

# K-12 Outreach Initiatives



# Strategic Alliances

- Faculty and Department Involvement
- DAPCEP
- The School of Education (Marygrove)
- SMASH
- Wolverine Pathways (Engineering Pathways)

# Wolverine Pathways

- Pilots
  - Summer 2017 (MEHS – 22 rising seniors)
  - Summer 2018 (MOST – 22 rising seniors)

- Engineering Pathways
  - Summer 2019
    - EP8: 1-day experience (140 rising 8th graders)
    - EP9: 3-day residential experience (20 rising 9th graders)
    - EP11: 5-day residential experience (35 rising 11th graders)

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# Thank you

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# Alexandra Bouza & Julie Philippe

Graduate Students
Department of Pharmacology
Medical School

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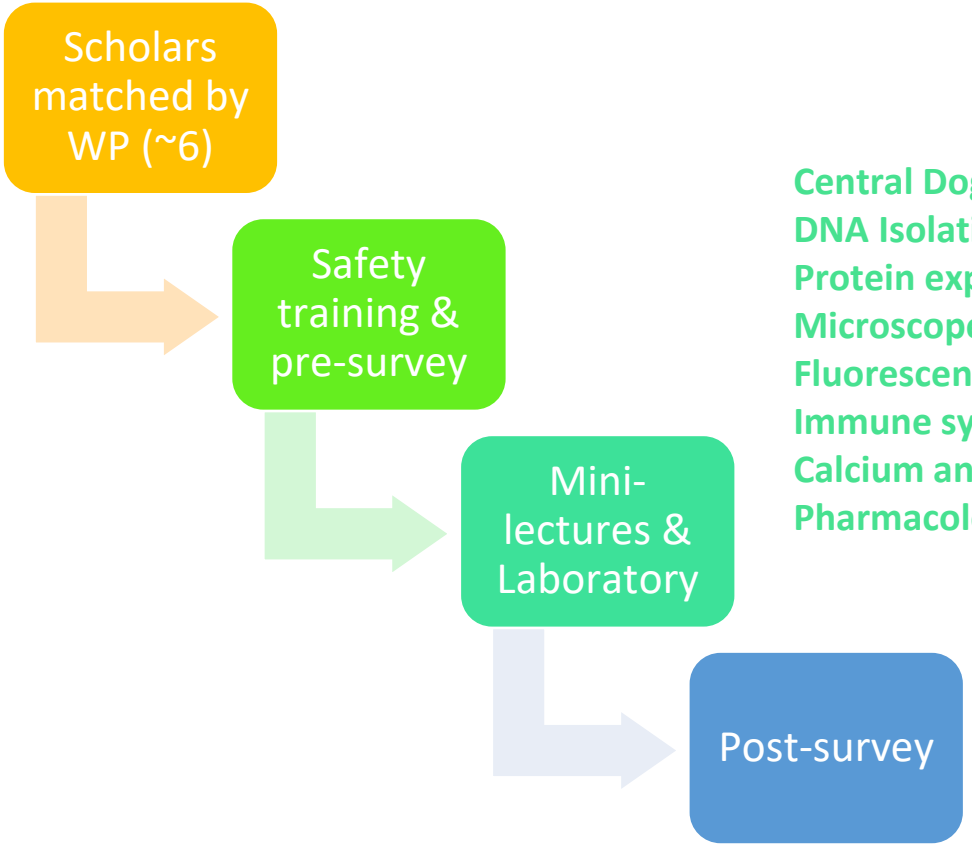
# Pathways to Pharmacology

A partnership between Wolverine Pathways & the Department of Pharmacology

# Goals of partnership

- Provide access to a laboratory experience!
- Reduce barriers for underrepresented students to pursuing STEM education and careers
  - Connected to the community!
  - Increased confidence!
  - Mentorship!
  - Critical thinking skills!
  - More accessible!

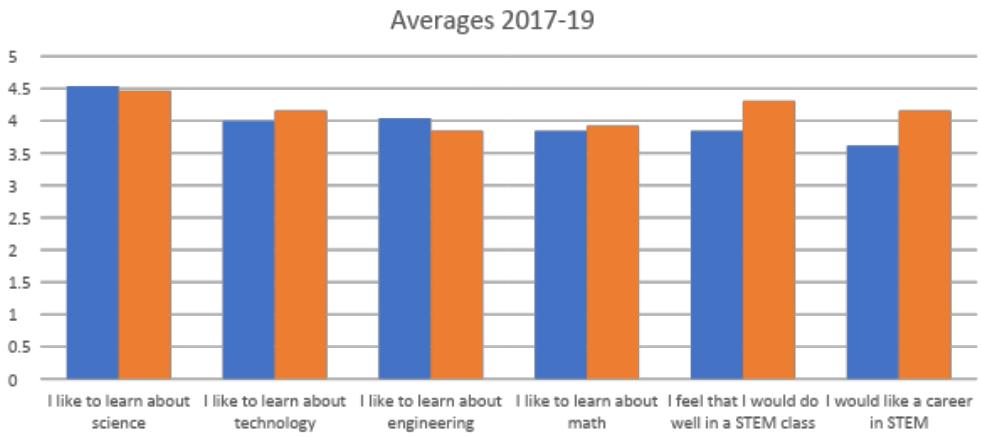
# Curriculum & Assessment




**Central Dogma of Biology**
**DNA Isolation, Cloning, Electrophoresis**
**Protein expression**
**Microscope building**
**Fluorescence and fluorescence microscopy**
**Immune system & use of antibodies in experiments**
**Calcium and mitochondrial imaging in live cells**
**Pharmacology**

# Post-survey results

## Quantitative measures




Pre/Post

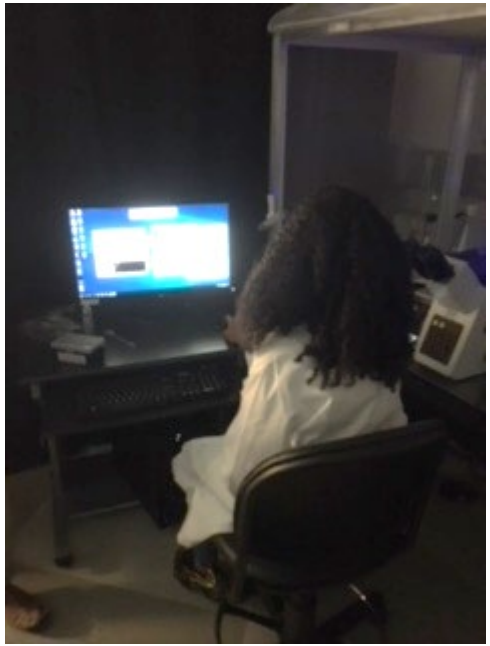
5.0/5.0 enjoyed their time at PTP

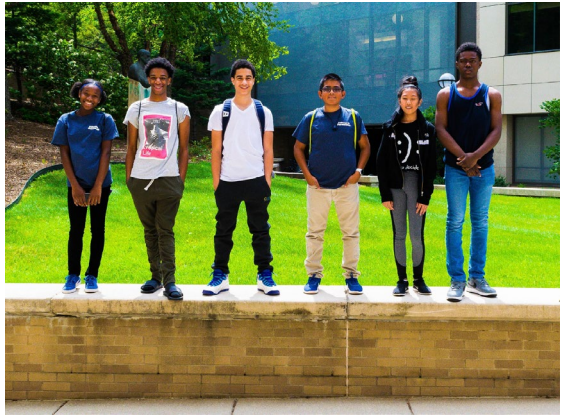
## Qualitative measures

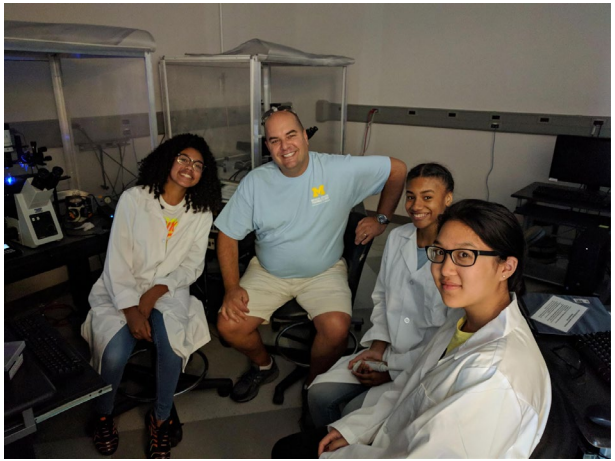
"Pathways to pharmacology has taught me so many scientific terms and devices and has really helped me develop my passion for science"

"Honestly the best educational experience of my life"

"I had so much fun learning about DNA and imaging! I find it so incredible that I have this opportunity and experience! I learned so much."







# Thank you to those who dedicated their efforts and resources!

DEI Mini-Grant
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Jim Offord
Alexa Pinsky
Kaylin White
Kathy Ignatoski
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Julie Philippe
Andrew Nelson
Amanda France
Andrea Pesch

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Amanda Davis
Nichelle Jackson
Millie Hernandez Lima
Kevin Jones
Arun Anantharam
Noah Schenk
Perry Abbineni
Kevin Bohannon
Kate Smith
Cindy Carruthers
Rachel Springsdorf

Lloyda Ruiz
Ian Chronis
Alina Chapman-Morales
Kate Smith
Josh Lott
Caroline Hernandez-Casner
Song Chen
Gwen Burgess
Bryan Sears
Neuroscience Program

**Wolverine Pathways**
Carla O'Connor
Davee Hunter
CaVar Reid
O'Shai Robinson
Dana Davidson

Staff Faculty Research Faculty Graduate Student Post-doc
Undergraduate

Dear Department of Pharmacology,
Thank you so much for this amazing opportunity! I really had a great time! My favorite was definitely the calcium imaging. Thank you to everyone who gave a lecture or/and helped us one on one. I wish I could do this program every summer!

[redacted]

Wolverine Pathways

Summer 2018

P.S. I will never forget

DNA → RNA → protein

Dear Department of Pharmacology,

Thank you so much for giving me the opportunity to learn about pharmacology! I had so much fun learning about DNA and imaging! I find it so incredible that I have this opportunity and experience! I learned so much. Thank you Allie, Amanda, Alexa, Nicole, Julia, Noah, Kate, Kathryn, Alex, Kevin, Dr. Jenkins, and everyone else who contributed to this program! I had so much fun and wish I could do this program all summer!

[redacted]

Wolverine Pathways Scholar 2018

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# QUESTIONS AND DISCUSSION

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# Robert M. Sellers, PhD

## Vice Provost for Equity and Inclusion and Chief Diversity Officer

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# Networking Reception

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# THANK YOU!

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