When Two Worlds Become One

Ms. Yvette Renee Moore, University of Pittsburgh

Yvette has worked directly with undergraduate scholars in engineering and the arts and sciences. She is currently the director of the Pitt EXCEL program, an undergraduate diversity program within the Swanson School Engineering at the University of Pittsbu

Dr. Mary E. Besterfield-Sacre, University of Pittsburgh

Dr. Mary Besterfield-Sacre is Senior Associate Dean for Academic Affairs and Nickolas A. DeCecco Professor in Industrial Engineering at the University of Pittsburgh. She is the Founding Director for the Engineering Education Research Center (EERC).



CoNECD 2024

When Two Worlds Become One

Dr. Mary Besterfield-Sacre and Ms. Yvette Moore

Pitt EXCEL Undergraduate Diversity Program

Swanson School of Engineering University of Pittsburgh

Background It started in 1969!



Background

IMPACT

- 1969
- One of the first for MEPs in the US
- Mission recruit and retain Black and Brown talent in engineering
- Was a leading program for graduating Black engineers
- 3rd in the country for graduating Black and Brown female engineers
- Recruitment done by Dr. Karl Lewis directly visiting families
- Provisional admissions

EXCEL

- Open access re-envisioned IMPACT 1999-2002
- 2002 Pitt EXCEL
- Mission recruit, retain and graduate those scholars that are minoritized in engineering
- Continue to maintain leading retention and graduation numbers

University of Pittsburgh

Gender and Race Percentages Over Time

Percent Undergraduate Male and Female



Percent Undergraduate URM and Non-URM



Retention Rates

First Time Engineering Freshmen by Gender							
Retention Rates in the SSoE							
Cohort (Fall Term Initially Enrolled)	F	м	U				
1Year							
2181 (Fall 2017)	89.4%	86.5%					
2191 (Fall 2018)	89.9%	87.4%					
2201 (Fall 2019)	90.2%	87.5%					
2211 (Fall 2020)	82.4%	87.3%					
2221 (Fall 2021)	80.2%	78.3%					
2Year							
2181 (Fall 2017)	81.4%	79.8%					
2191 (Fall 2018)	81.9%	81.7%					
2201 (Fall 2019)	88.0%	80.9%					
2211 (Fall 2020)	73.5%	77.8%					
3Year							
2181 (Fall 2017)	81.4%	78.0%					
2191 (Fall 2018)	81.1%	79.7%					
2201 (Fall 2019)	87.4%	76.8%					

First Time Engineering Freshmen by Ethnic Group Retention Rates in the SSoE							
Cohort (Fall Term Initially Enrolled)	AMERICAN INDIAN	ASIAN	BLACK	HISPANIC	2 OR MORE RACES	UNKNW	WHITE
		1Year					
2181 (Fall 2017)		91.7%	84.2%	100.0%	83.3%	100.0%	86.6%
2191 (Fall 2018)	100.0%	82.6%	92.6%	82.8%	95.5%	100.0%	88.9%
2201 (Fall 2019)		84.3%	100.0%	89.5%	91.7%	90.9%	88.1%
2211 (Fall 2020)		83.1%	74.1%	80.0%	89.3%	75.0%	87.1%
2221 (Fall 2021)		81.4%	58.3%	67.6%	76.5%	84.6%	80.6%
2Year							
2181 (Fall 2017)		86.7%	84.2%	94.4%	77.8%	33.3%	79.1%
2191 (Fall 2018)	100.0%	76.8%	92.6%	75.9%	86.4%	100.0%	82.0%
2201 (Fall 2019)		78.4%	93.8%	86.8%	91.7%	90.9%	82.6%
2211 (Fall 2020)		73.2%	70.4%	71.4%	78.6%	87.5%	77.3%
3Year							
2181 (Fall 2017)		81.7%	84.2%	94.4%	75.0%	66.7%	78.1%
2191 (Fall 2018)	100.0%	75.4%	88.9%	79.3%	86.4%	100.0%	80.1%
2201 (Fall 2019)		76.5%	81.3%	76.3%	83.3%	100.0%	80.9%

SSOE First Year retention to Sophomore AY2021-22 79%

6-Year Graduation Rates

First Time Engineering Freshmen Graduation Rates from SSOE

Cohort (Fall Term Initially Enrolled)	4Year	5Year	6Year
2171 (Fall 2016)	43.1%	78.9%	80.0%
2181 (Fall 2017)	43.3%	76.8%	
2191 (Fall 2018)	46.3%		

First Time Engineering Freshmen by Gender							
Graduation Rates from SSoE							
Cohort	F	м					
(Fall Term Initially Enrolled)	Г	IVI					
4Year							
2141 (Fall 2013)	42.7%	33.9%					
2151 (Fall 2014)	40.5%	44.1%					
2161 (Fall 2015)	38.6%	45.1%					
2171 (Fall 2016)	39.2%	45.1%					
2181 (Fall 2017)	37.3%	45.9%					
2191 (Fall 2018)	47.6%	45.5%					
5Year							
2141 (Fall 2013)	84.8%	73.4%					
2151 (Fall 2014)	78.5%	72.4%					
2161 (Fall 2015)	76.6%	74.8%					
2171 (Fall 2016)	78.9%	78.8%					
2181 (Fall 2017)	77.6%	76.4%					
6Year							
2141 (Fall 2013)	86.5%	76.2%					
2151 (Fall 2014)	78.5%	73.2%					
2161 (Fall 2015)	77.2%	75.9%					
2171 (Fall 2016)	79.9%	80.1%					

First Time Engineering Freshmen by Ethnic Group Graduation Rates from SSoE								
Cohort (Fall Term Initially Enrolled)	AMERICAN INDIAN	ASIAN	BLACK	HISPANIC	2 OR MORE RACES	UNKNW	WHITE	
(* == * = = = = = ; ; ; ; ; ; ; ; ; ; ; ;		4Ye	ear					
2141 (Fall 2013)		42.4%	35.0%	30.8%	54.2%	100.0%	34.8%	
2151 (Fall 2014)		45.5%	38.5%	57.1%	55.6%	33.3%	42.1%	
2161 (Fall 2015)		43.1%	44.4%	31.3%	62.5%	100.0%	42.1%	
2171 (Fall 2016)		55.2%	37.5%	35.3%	48.4%	50.0%	41.5%	
2181 (Fall 2017)		51.7%	21.1%	50.0%	44.4%		43.0%	
2191 (Fall 2018)		58.0%	51.9%	51.7%	45.5%		44.1%	
		5Ye	ear					
2141 (Fall 2013)		76.3%	70.0%	61.5%	83.3%	100.0%	77.9%	
2151 (Fall 2014)		76.4%	69.2%	85.7%	83.3%	50.0%	73.8%	
2161 (Fall 2015)		73.8%	74.1%	68.8%	87.5%	100.0%	75.1%	
2171 (Fall 2016)		76.1%	70.8%	52.9%	67.7%	100.0%	81.3%	
2181 (Fall 2017)		86.7%	68.4%	88.9%	69.4%	33.3%	76.1%	
6Year								
2141 (Fall 2013)		78.0%	75.0%	61.5%	87.5%	100.0%	80.1%	
2151 (Fall 2014)		78.2%	76.9%	85.7%	83.3%	50.0%	74.1%	
2161 (Fall 2015)		75.4%	77.8%	68.8%	87.5%	100.0%	75.9%	
2171 (Fall 2016)		77.6%	79.2%	58.8%	67.7%	100.0%	82.0%	

Academic Counseling The focus of EXCEL programming



- Creating a sense of belonging
- Space for the scholars to be themselves
- Space where academic, financial, and personal conversations can occur
- Connections for networking with industry, faculty, staff and alumni
- Academic Counseling an average of 46 1-on-1 scholar meetings a week (including weekends)



Scholars

Academic Counseling



Since the Pandemic began before, but COVID created the need for growth









GEM Fellowship

Awards



Scholars

Academic Counseling Workshops

Leadership Summit

100% Post-Graduate Employment



Pitt EXCEL Experiences and Engagement

- **10** scholars awarded prestigious GEM fellowship for sponsorship to graduate school
- **100%** Post-Graduate Employment (industry and graduate)
- **16** alumni of Pitt EXCEL received PhDs



Pitt EXCEL Experiences and Engagement

- 305 Scholars in Population and 215 active Scholars
- Pitt EXCEL highest amounts of donors and funds for Pitt Day of Giving the past 3 years raising over \$46,417.30
- Implemented the IMPACT/Pitt EXCEL Alumni Council - 150 active alumni and a 10-member council
- 21 Academic Workshop held this year for the scholars. Average of 40 scholars in attendance.
- Academic Counseling an average of 46 1-on-1 scholar <u>meetings a week</u> (including weekends)



Pitt EXCEL Experiences and Engagement

Rebranded the Midyear Motivation into the Leadership Summit

Here are some quick facts about the event:

- First in-person summit since 2020; 4 workshop tracks on **leadership**
- 50+ Scholars & 14 alumni convened for the Summit on Saturday
- Scholars led tours of Benedum facility for alumni
- 30 Senior Scholars attended the Senior Pep-Rally



Industry – Pitt EXCEL

Eaton PPG FedEx Turner Whiting-Turner NASA NNL





Pitt EXCEL Scholar Contract

The 3 Rs Resources and Relationships = Reciprocity



- There are 305 Undergraduate
 Diversity Scholars
- 215 Diversity Scholars signed the Pitt EXCEL Contract.
- The contract will be available for new scholars the first two weeks of each semester.
- Scholars that are struggling academically are mandated to be under contract.
- All scholars are monitored academically (those on contract and those not on contract).



Moving Towards Further Inclusiveness

Undergraduate Diversity Updates Revamping and Envisioning the Space if DEIA intersectionality of a Scholar **Place of Protection SANCTUARY SPACE**



Undergraduate Diversity Updates

Revamping and Envisioning the Space if DEIA









Leadership Balancing Diversity







Provide opportunities to develop Diversity by connecting the Diversity Programs to streams of funding





Increase opportunities for engineering employment in cultural contexts



Brainstorm and create space to assess and adjust as Diversity has its ebbs and flows



Looking through the lens of System Thinking



Improvement in Quality

Peace and Strength





Learning to cultivate an awareness of the known and unknown within one's being often leads to a healthier and more realistic sense of self.

Aberjhani

AZQUOTES

Known and Unknown

Teaching one another



Holistic Wellness



Change





Futuristic Diversity



Futuristic

Diversity is the Inner Core

Futuristic

Continuous Flow



Questions