

### Academic Affairs Committee September 20, 2019 Minutes

The meeting was called to order at 9:05 a.m. by Governor O'Brien in the Room BC at the McGregor Memorial Conference Center. Secretary Miller called the roll. A quorum was present.

Committee Members Present: Governors Busuito, Kelly, Kumar, O'Brien, and Trent; Brad Roth, Faculty Representative, renèe hoogland, Faculty Alternate Representative; Ali Fakih, Student Representative and Student Alternate Representative

Also Present: Governors Barnhill, Gaffney, and Thompson; President Wilson; Provost Whitfield; Vice Presidents Burns, Decatur, Lanier, Lessem, Staebler, and Wright; and Secretary Miller

### APPROVAL OF MINUTES, June 21, 2019

ACTION: Upon motion made by Professor Roth, supported by Governor Trent, the minutes of the June 21, 2019 Academic Affairs Committee were approved as submitted. The motion carried.

### COLLEGE OF ENGINEERING

Provost Whitfield introduced Dean Farshad Fotouhi, for a presentation on the College of Dean Fotouhi began with an overview of the college and its eight departments, which include biomedical engineering, chemical engineering, computer science, industrial and systems engineering, civil and environmental engineering, engineering technology and electrical and computer mechanical engineering. engineering. Several of their departments are ranked in the top 100 programs in the country in their respective fields; industrial and systems engineering ranks at number 52. He spoke briefly about multidisciplinary programs, among which is the Electric Drive Vehicle program, which currently enrolls 50 students. The Data Science Analytics program was introduced in 2014 in collaboration with the Mike Ilitch School of Business, and recently, the College of Liberal Arts joined the program. Other multidisciplinary programs include an annual data science symposium, and a new program in cyberphysical systems, which is part of a program with the Michigan Mobility Institute. The I2C building offers additional opportunities, and the College has a Ford Fusion in that space, and will be moving the robotics team there as well. A number of corporations have expressed interest in partnering with the college on these projects, which include degree programs in fields such as connectivity, autonomous driving, and a smart infrastructure.

In terms of faculty, the college has an outstanding group of faculty. Seventy-seven percent have received funding since they joined the college, with 41% having received funding from the NSF or DOE. Twenty percent are fellows of their national societies, and a good portion of research activities are in collaboration with other schools outside of the COE. Dean Fotouhi used faculty member Dr. Leela Arava, who joined the university in 2013, as an example of faculty excellence. Dr. Arava's research has led to patented and award winning activities, and to innovation in k-12 education. His research focus is on development of the smallest high temperature lithium ion rechargeable battery, among other research. He has received more than \$2million in research funding, published many papers, received an NSF career award, and has developed innovations that led to eight patents. This faculty member is also involved in community engagement - he and his students developed a Mobile Energy Lab, and took the Lab to high schools to talk with students about alternative energy technology. Through their work in area high schools a program was developed to bring high school students to campus in the summer time for research opportunities. Students come not only from Detroit but from surrounding communities as well, working on battery development and drone technology, among other areas.

In terms of diversity and inclusion, the college has formed a diversity council, consisting of faculty, staff, students and alumni. Some of their initiatives in this area include bringing in distinguished alumni to discuss the value of diversity, multicultural training, and a panel discussion with students. They have had an increase in the number of female students in the college (now 25%), and an increase in the number of Hispanic students (up 157% since 2012). 21% of new faculty hires are female, and two of 8 department chairs are female. The student population is also diverse, with students from 46 countries in the college.

In terms of innovation and entrepreneurship, there has been an increase in new invention disclosure and the number of patent applications filed by the faculty. The college is also encouraging student involvement in this area. They have begun a Student Innovation and Design day, and have distributed more than \$400,000 from the Anderson Institute to 13 start-ups since late 2014. Another area of interest at the college is the increase in enrollment, graduation rate and retention. Enrollment is at 3637, about a 49% increase since 2012. Despite this increase, there has been a drop in the number of graduate students in the college - about 70% of the graduate students are international students, which is one of the main reasons for the decrease. The college is now focusing on domestic recruitment. The six year graduation rate is at 52%, one of the highest at the University, and retention of 1st year to 2nd year students is 85%, an increase of about 10% since 2012. Students are encouraged to take advantage of the internship and co-op opportunities available in Detroit - 75% of the college's undergraduate students receive internships and 40% of those secure jobs with the company where they intern.

The Dean touched on three other areas - corporate partnerships, global experiences, and community service. The College has a strong corporate partnership program, which has assisted in a number of areas, including funding support, curriculum development,

providing representatives to meet with student organizations, and those partnership opportunities are continuing to increase. The College received a \$1 million donation which has allowed them opportunities to expand the Center for Global Engineering Education. Students are traveling to places such as China, Japan, Mexico, France, Italy and Austria to do research abroad, study abroad, and work in internships in international firms. Community engagement is expressed in a wide array of activities in the college, include high school mentoring and tutoring, summer K-12 robotics camps, and other student competitions including Still Bridge, Formula SAE, and other ground vehicle robotics.

Dean Fotouhi completed his presentation with comments on fundraising and student success. The college has successfully added to its endowment, and currently has approximately \$40 million in endowed funds. In terms of student success, the college is home to approximately 17 student organizations, and looks for opportunities to include leadership training in its student success programming. They have instituted "pop up mentoring" where college leaders meet students outside the classroom, finding alternative ways to engage students. They have an industry mentorship program that pairs students and alumni for a semester, which has had some very positive results. The mentorship program is growing, and both mentors and mentees are pleased with the program.

In response to a question from Governor Kelly on the gender make-up of the college's student body, Dean Fotouhi advised that 25% of the students are female; 21% of the newly hired faculty are female, and he provided some examples of female faculty in departments throughout the college.

Governor Trent encouraged expansion of the K-12 Pipeline program to a broader number of Detroit high schools. She expressed appreciation for the data on the increase in the number of minority students in the college, but hopes more can be done to attract students to this field, and pipeline programs can help that happen. Governor Thompson asked how the African American student population has changed over the last five years. Dean Fotouhi advised that there has been about a 2% increase in that period, which is not growing as fast as he'd like it to be.

Governor Thompson asked for clarification on the distribution of funds for startup companies, and whether or not those funds are earmarked for students or faculty. Dean Fotouhi advised that the funding comes through the Anderson Institute, from a gift from a \$25 million gift from Jim and Patty Anderson. The students pitch their ideas for start- ups in a competition in front of the Anderson Board. Faculty use a different mechanism, through the University, file patents through the University, and have an opportunity to come to Anderson for funding once that has been completed.

Governor Barnhill commended the Dean for good works, and offered his congratulations on the College being part of a collaborative awarded funding through the U.S. Department of Transportation funding opportunities for automated driving systems. Governor Barnhill

added that only three awards were given, and he was very proud that Wayne State was one of the recipients.

Governor Barnhill asked the Dean what is driving some of the growth seen in gender diversity, patent applications, and other areas. Dean Fotouhi advised that faculty across the college are aiding in identification of potential diversity applicants - both the faculty and department chairs understand the value of diversity, and the college is seeing some success in this area. Part of the review process for new applicants includes a review of their research portfolios, from which new patent applications can be developed. Those areas also help to bring in funding from federal sources, and all of the above is part of the factors in a promotion and/or tenure package.

Ms. Aktar expressed interest in methods used to improve graduate enrollment, and suggested that the tuition discount offered for undergraduate students be offered to graduate students as one way to make progress. She believes that the college should be encouraging undergraduate students to enroll in graduate school. Dean Fotouhi described various activities the school has undertaken, including recruitment trips throughout the State, working with students from other WSU schools to connect them with appropriate Engineering graduate programs, opportunities for 3 + 2 programs with other colleges, where students study the first 3 years in their home institution, and the last 2 years at WSU, and end up with a Master's degree program from WSU. In terms of tuition discounts for graduate students, that is under study, as well as opportunities to increase scholarship opportunities.

Ms. Aktar raised questions as well on increasing the graduation rate and expanding the number of women in Engineering programs. Dean Fotouhi advised that there have been tremendous strides in increasing the graduation rate in the college, and work on this area continues. The college is expanding its cohort model, mentoring programs and advising methods, which are adding to the success experienced thus far. In response to a question about diversity, 46 different countries are represented in the student and faculty bodies in the College. An example of an initiative geared specifically towards female students is a partnership the college has with the Michigan Council of Women of Technology for a summer camp for female students.

Governor O'Brien asked for clarification on the number of Latino students in the College. Dean Fotouhi advised that there are 150 Latino students, out of an undergraduate body of about 2600 students. The increase is exciting but there is much work to do. Governor Kumar added his thanks for the presentation, and congratulated the Dean on the accomplishments of the college.

### PRESENTATION - UPDATE ON SUMMER PROGRAMS

Provost Whitfield introduced Tonya Matthews, who prior to joining Wayne State served as the President of the Michigan Science Center. She currently serves as the Associate Provost for Inclusive Workforce and director of STEM Learning Innovation. One project

she has been dedicated to since her arrival is to organize the university's summer campus programs, the focus of her presentation for today's meeting.

Dr. Matthews began with a brief film summarizing, in a video presentation, the wide array of programming that occurs on the WSU campus each summer. To frame her narrative, she talked briefly about two students. Naresh started at WSU in the 7<sup>th</sup> grade as a Math Corp. student, which she continued through high school, and after working in industry, has returned and is currently a Ph.D. student in the Math department. K'Jana is a recent graduate from the university's BUILD program, a multi-million dollar, multi-year award from the NIH, dedicated to increasing the number of underrepresented students with terminal research ready degrees in the biosciences. K'Jana started at Wayne as a Go Girl.

Currently, Wayne serves more than 14,000 K-12 students annually. They come through a wide variety of programs, some small, and some large signature programs. The K-12 programs work heavily and closely with not only the Detroit Public School Community district, but also includes schools and students from the entire tri-county region. All 13 of the university's schools and colleges are engaged, with more than 150 programs comprising the offerings. Programs range from a single half day program to a 6 week residential program, and faculty are engaged in the leadership and design of many of these programs. Faculty engage in support and mentoring as well as research. There are free and low cost programs, and for those that do have cost, some scholarships are available. The advantage of having all schools and colleges engaged is that the university can offer a full range of programs in all kinds of subjects. The subject matter is widely inclusive, not only in the STEM fields of science, technology, engineering and math, but also in art, dance, athletics, sociology, and epidemiology, just to name a few.

Dr. Matthews reviewed as an example, the SMASH (summer, math and science academy) program, which is about to begin its 3<sup>rd</sup> year at Wayne. Students interview in their 9<sup>th</sup> grade year, and join the program as rising seniors and stay until they graduate from high school - a three-year embedded program. SMASH is a national program that began in the Silicon Valley area, with a goal of targeting underrepresented and urban students and engaging them in science, engineering and technology, but also in art and history. Although only completing its second year at Wayne, the university's SMASH cohort is the largest in the country.

This past spring, the University launched the K-12 marketplace, as a pilot program. The marketplace gathers information from all of the schools and colleges into one site which includes not only offerings, but links for scholarship opportunities as well. Prior to the marketplace, parents, students and counselors could search up to 150 different websites to look at programs individually by unit - the marketplace is much more user friendly to individuals looking for opportunities for their student. It includes filters by age, student interest, and dates of availability. They are looking to build up the capabilities of the site.

Dr. Matthews concluded her presentation by summarizing the importance of the university's commitment to K-12, to its strategic initiatives and its central role in the

university's commitment to community engagement. As a research university, program assessment and evaluation of impact can help the university reinforce these programs, and also provide opportunities to add research experiences into Wayne K-12. Wayne State is the largest university provider of K-12 engagement and support in Detroit, on campus and in the neighborhood. These programs are fully interdisciplinary because all of the schools and colleges are involved. Both the C2 Pipeline and Math Corps are national models for what they do and in fact, Math Corps has recently begun to engage in international conversations as well. With investment in these programs, some stewardship, and a lot of strategy, WSU will continue to be a national leader, and a hometown jewel.

Governor O'Brien opened the floor for questions. Governor Barnhill agreed with the importance of sharing the story about WSU and these programs, loudly and often, and wondered how the narrative can be used to explain the contributions the university makes to the community, and how it serves a critical function in supplementing and augmenting K-12 education. Dr. Matthews agreed, and added that the goal is to make college a potential choice for all students, and a measure of that success is that they go to college. So a component here is the ability to track that result. Through partnering with regional public school systems, there is a challenge on college readiness, and continuing these discussions with those systems, and broadening opportunities for students will be key. Alumni can also be engaged to tell the story.

Governor Thompson expressed her appreciation for the presentation and information provided, but wondered about students and families for whom internet access is not a given, and how information about these programs can be shared more broadly. These are students who could really benefit from these opportunities. Dr. Matthews agreed, and commented that the most powerful recruiting tool is word of mouth and person-to-person. She advised that many of the programs go directly into the schools to bring information. Person-to-person information exchange, with a phone number and direct registration, are some of the ways to address this question.

Governor Trent expressed her own appreciation about the site to Dr. Matthews, as she explored the site as a parent looking for options for summer programs for her son, and found the site very helpful, and a very different experience than in past years. In the past, it was difficult to track down camps, and this year, it took 5 minutes to find what she was looking for and get her son registered. She commented that many of the offerings seem geared for students in the 7th grade or older, and she encouraged a broadening of the offerings to include younger students, thereby expanding the pipeline. She mentioned Cal State Long Beach as an institution that has programs for younger students as a potential model to review. She added that Math Corp students continue to be the best advocates for that program, as she was at a recent event where two Math Corp students talked about the program, and their excitement was palpable. She commended partnerships that the university has in place that help provide exposure to students who are not from the metro area.

Ms. Aktar asked how long these programs have been in place, if there is data on whether students attending summer programs come to Wayne for college, and how summer programs like these are funded. Dr. Matthews advised that some of the programs go back 20 to 25 years. In terms of tracking, they are currently developing a tracking mechanism and hope to connect this enrollment information in the future with existing university systems. She believes that Math Corp students and the C2 Pipeline have the strongest likelihood of transition to Wayne State. In terms of funding, some have corporate sponsors, some are funded through development initiatives, and some are considered for strategic investments.

Mr. Fakih asked about the geographic reach for students in these programs, and whether there are incentives or scholarship programs in place to incent participation. Dr. Matthews advised that the programs have a broad reach through the entire region, and asked Dawn Medley, Associate Vice President for Enrollment Management, to comment on the scholarship question. Ms. Medley commented that the Raise Me scholarships, microscholarships for students that they can earn themselves and apply if they come to Wayne State, were developed as one opportunity in this area.

Professor hoogland asked if there was a connection between AP programs and the K-12 initiatives. Dr. Matthews agreed, and indicated that one of the strongest connections is AP day, where students come to campus for a day, receive an orientation to Wayne State, and get to experience a real college course.

# INFORMATIONAL REPORT- REVISIONS FOR THE NEW PROGRAM FOR THE BACHELOR OF GENERAL STUDIES

Provost Whitfield presented an informational update as a follow-up item to a previous discussion on the Bachelor's in General Studies. Professor Roth advised the committee that the document before it clarifies language about the criteria to be used by the admissions committee to be sure candidates are eligible for this degree - there is no automatic admission to this program, and this document speaks to that issue. Professor hoogland reminded the committee that the document presented in June to the Academic Affairs Committee was not the more expansive proposal that the CLAS Faculty Council had previously approved, and that the document before it provides more of the rationale that the Council had used to act on this proposal.

A question was raised on whether or not the informational report should be formally accepted by the Board. After some discussion, a formal vote was agreed upon, with the following action:

**ACTION:** Upon motion made by Professor Roth, and supported by Governor Trent, the Academic Affairs Committee adopted the revised program description for the Bachelor of General Studies, as presented. The motion carried.

### **ESTABLISHMENT OF NEW PROGRAMS**

In the interest of time, Governor O'Brien suggested grouping like items together for consideration in one action. The first set were a group of six items from the College of Education, which all were establishments of programs in the College. With no opposition to grouping these items together, the following motion was made:

**MOTION:** Upon motion by Governor Trent, supported by Governor Busuito, the Academic Affairs Committee recommended that the Board of Governors approve the establishment of the following programs:

- Establishment of a new program for the Bachelor of Science with a Major in Community Health in the College of Education, effective Fall 2020
- Establishment of a Bachelor of Science with a Major in Health and Physical Education Teaching in the College of Education, effective Fall 2020
- Establishment of a Bachelor of Science with a Major in Exercise and Sport Science in the College of Education, effective Fall 2020
- Establishment of a Master of Science with a Major in Community Health in the College of Education, effective Fall 2020
- Establishment of a Master of Science with a Major in Health and Physical Education Teaching in the College of Education, effective Fall 2020
- Establishment of a Master of Science with a Major in Exercise and Sport Science in the College of Education, effective Fall 2020

Governor Gaffney asked for an explanation about career opportunities in exercise and sport science. Nate McCaughtry, Assistant Dean for Kinesiology, Health and Sports Studies advised that there are two subsets of students who seek these fields. One set are looking to complete prerequisite coursework to advance to professional programs such as physical therapy, occupational therapy, nursing, and medical school. The other subset of students look to go into industry - they may open health clubs, work at fitness centers, open training companies, compete in the exercise industry or in corporate wellness. Governor Barnhill added that there is a potential for synergy with all of the sports teams located in the downtown area, and with the sports management degrees also offered in the Ilitch School of Business.

**ACTION:** At the conclusion of the above discussion, Governor O'Brien called for the vote. The motion on the establishment of six new programs in the College of Education passed unanimously.

## ESTABLISHMENT OF A MASTER OF ARTS PROGRAM IN GEOLOGY (NON-THESIS OPTION)

The next order of business was the establishment of a new program in Geology. There were no questions on this proposal:

ACTION: Upon motion by Governor Trent, supported by Professor Roth, the Academic Affairs Committee moved that the Board of Governors establish a new degree program, the Master of Arts in Geology, effective fall 2019. The motion carried.

### PROGRAM DISCONTINUANCES

The committee next turned to recommendations for discontinuance of several programs, which Governor O'Brien suggested the committee consider with a single action. The following motion was placed on the table:

**MOTION:** Upon motion by Governor Kelly, supported by Governor Busuito, the Academic Affairs Committee recommended that the Board of Governors approve the discontinuance of the following programs:

- Discontinuance of the Bachelor of Science in Education with a Major in Health Education, College of Education, effective fall 2020.
- Discontinuance of the Bachelor of Science in Education with a Major in Kinesiology, College of Education, effective fall 2020.
- Discontinuance of the Master of Education with a Major in Health Education,
  College of Education, effective fall 2020.
- Discontinuance of the Master of Education with a Major in Kinesiology,
  College of Education, effective fall 2020.

Governor Thompson asked why students might remain in one of these programs, versus moving to one of the newly established programs discussed earlier, and for confirmation that students in these phased-out programs will be able to use the degrees they are earning. Associate Dean McCaughtry advised that students currently in these programs will be able to matriculate through, and complete their degrees under the existing programs. New students entering as of fall 2020 will join the new programs. One change before the committee relates to mandates by the Michigan Department of Education that two fields be united in the future. Wayne State has taken early action on that mandate. The WSU curriculum has been approved by the state, and students are being gradually moved into the new program.

**ACTION:** At the conclusion of the above discussion, Governor O'Brien called for the vote. The motion on the discontinuance of four programs in the College of Education passed unanimously.

### STATUS REPORT ON ACCREDITATION 2019

Provost Whitfield gave a brief overview. The accreditation process requires data collection and continuous monitoring, as well as preparation of a self-study report in the year of an accreditation visit. In reviewing the summary before the Board, the university is doing very well, and our programs are accredited by their respective accrediting agency and held in high respect.

Governor Thompson asked for an explanation about the College of Education program that is currently on probation, and what the impact is on that particular program. Assistant Dean for Teacher Education, Roman Centoclomus, affirmed that the Division had a very successful site visit in March from the CAEP (Council for Accreditation of Educator Preparation). The CAEP Board will be meeting in October to review and make a decision based on that visit, and they are confident that the program will receive accreditation for the remaining five years. That decision is expected in November 2019.

There being no further business, the committee meeting adjourned at 10:37 a.m.

Respectfully submitted.

Julie Hearshen Miller Secretary of the Board