

## CASA Dean's MMU (Monday Morning Update)

### *A Tradition of Excellence; A Standard of Success*

Monday, December 11, 2017

Dear Colleagues,

This is the last MMU in this calendar year. As 2017 draws to a close, I would like to take a moment to wish you and your family a wonderful holiday season and express my sincere appreciation for all of your contributions throughout this year.

SIUC is at an exciting time to envision its future. Under the leadership of new Chancellor, Dr. Carlo Montemagno, we are targeting two goals, among others, by 2025: (1) SIUC will have 18,300 students; and (2) SIUC will move up to an R1 institution. It requires significant changes, including academic programs and administrative structure, to meet these two ambitious goals. Currently I am reading Joseph E. Aoun's new book: *Robot-Proof: Higher Education in the Age of Artificial Intelligence*, and I'd like to share some of my thoughts on higher education innovations in general, and on the roadmap toward our two goals by 2025 in particular. Let us review two recent higher education related news events, which I refer to as two "hypothesis."

**Hypothesis One:** Within the next 15 years, nearly 15% of the global workforce may need to switch jobs, according to a new report released recently by the McKinsey Global Institute. By 2030, 75 million to 375 million workers will change occupation categories while another 400 to 800 million could be displaced by automation and will be required to find new jobs entirely. While new jobs will be created during that same period, the big question is if workers will have the necessary skills to transition into these new roles effectively. [NPR November 30, 2017: Automation Could Displace 800 Million Workers Worldwide by 2030, <https://tinyurl.com/ydd7jm4p>].

**Hypothesis Two:** There are over 4,000 colleges and universities in the United States. Harvard Business School professor Clayton Christensen says that half are bound for bankruptcy in the next few decades. The U.S. Department of Education and Moody's Investors Service project that in the coming years, closure rates of small colleges and universities will triple, and mergers will double. The tuition for American colleges increased nearly 400 percent in the last 30 years, while median household income growth was relatively flat. Student debt soared to more than \$1 trillion. College enrollment has declined for five consecutive years. [CNBC November 15, 2017, Half American colleges will be bankrupt in 10 to 15 years, <https://tinyurl.com/ymsg68kd>; The Atlantic July 26, 2017, This is the Way the College 'Bubble' Ends, <https://tinyurl.com/y73ppmkp>].

Hypothesis One directs us to think about what changes we need, as a 21st century university, to better prepare the next generation of lifelong learners. Are our academic programs keeping pace with changes in the workforce? What new curriculum and new programs should we develop to make our students robot-

proof? Hypothesis One also gives us an opportunity to meet our enrollment goal of 18,300 students in 2025, noticing that 18,300 is just 0.0002 percent of the 800 million people who will need to switch jobs world-wide. But we need a significant change in our ways of operating. As Dr. Aoun well put it, “We will need to re-envision the curriculum, invest in experiential education, and put lifelong learning at the heart of what we do. AI can serve as an enabler, assisting students in their learning journey through innovations such as adaptive learning that facilitate knowledge acquisition so that teachers will have more time to devote to helping students integrate their learning.”

Hypothesis Two provides a solid background for reorganizing of our academic programs and structure so that SIU meets its 18,300 enrollment goal as well as its research goal of R1 status in 2025. The U.S. News had an article several years ago listing 10 reasons to be a research university [<https://tinyurl.com/y7qq94t2>], and to many people, R1 is considered sort of the pinnacle of higher education. Most government money and grant support go to R1 institutions. Therefore, this research goal will enhance SIU graduate education and supplement state funding with more grant dollars.

## **CASA WINTER POTLUCK**

We hope you'll be able to join us for the CASA Winter Potluck this Thursday, December. 14. We'll begin at 11 a.m. in the TEC Multipurpose Room, where the Dean's office will provide turkey and ham to go along with all the delicious side dishes faculty and staff will bring.

There will be competition! Upon arrival, you will receive ballots for best appetizer, best salad, best hot dish, and best dessert; after sampling all contenders, fill out the appropriate ballot with the corresponding number from the tag on your favorite dish. The ballot then goes in the highly decorated ballot box provided on each food group table. Winner for each category will be the dish with the most votes.

You will also receive a token to use as you vote for the ugliest/tackiest sweater; to cast your vote, hand the token to the person wearing what is, in your opinion, the tackiest/ugliest sweater in the room. The person with the most tokens at the end of the festivities WINS!

At the potluck, new, unwrapped toys will be accepted to Stuff the Truck with Toys for Tots, sponsored by Robert Broomfield of SAH. This is Robert's 15<sup>th</sup> year of collecting toys for area organizations. T/TT and NTT Teacher of the Year Awards (departmental and College) will be recognized during this celebration, as well. It's going to be fun! Please join us!

## **COMMENCEMENT**

The fall 2017 commencement ceremony for all colleges begins at 2 p.m. on Saturday, December 16, at the SIU Arena. There are 864 candidates who will receive their degrees: 662 bachelor's, 152 master's, 27 doctoral, 12 law, and 11 associate degrees. In our College, both Automotive Technology (AUT) and Master of Architecture (M-ARCH) will have record numbers at this commencement.

Richard J. Mark, president of Ameren Illinois Companies (AIC) is the keynote speaker. Mark was appointed president in June 2012 and is responsible for electric and gas distribution to more than 1.2 million electric and 816,000 gas customers across three quarters of Illinois.

## CONGRATULATIONS

- The CASA Teacher of the Year (TOY) Committee has selected this year's Teacher of the Year winners: **Nancy L. Martin**, Associate Professor from School of Information Systems and Applied Technologies, and **Thomas M. Roy**, Lecturer from Department of Aviation Technologies, are 2017 CASA T/TT Teacher of the Year, and 2017 CASA NTT Teacher of the Year, respectively. Congratulations!

### CASA Tenure/Tenure-Track (T/TT) Teacher of Year 2017: Nancy L. Martin

	<p><b><u>Nancy L. Martin</u></b> Associate Professor of Information Systems Technologies (IST) During the 2016-2017 academic year, Dr. Martin developed two new courses: IST 470 Advanced Database Concepts, and ISAT 350-001 Advanced Database Programming. She revised IST 345 Health Information Technology covering health informatics content. Dr. Martin was the faculty advisor for the AITP Web Development team finished 3rd place at the AITP NCC. Congratulations!</p>
--	---

### CASA Non-Tenure-Track (NTT) Teacher of Year 2017: Thomas M. Roy

	<p><b><u>Thomas M. Roy</u></b> Lecturer of Aviation Technologies (AVT) Mr. Roy has served as Lecturer for AVT for four years and he has excellent rapport with the students and consistently receives highest ICE scores in the department. This came from his excellent teaching skills backed up by his many years of experience with the US Air Force and Navy as a helicopter test pilot and maintainer. Mr. Roy developed and taught the program's very first UAV course and he participated in the drone demo and professional panel at the 2017 CASA Multidisciplinary Research Symposium.</p>
---	---

Congratulations!
------------------

I would like to extend my sincere thanks to the CASA Teacher of the Year Committee for their review and selection. The Committee consists of the following faculty members: Julie Davis, Sandra Collins, Tom Imboden, and Tom Shaw. Barb Lipe provided administrative assistance for the Teacher of the Year nomination and selection process. Thank you all for the great job done!

- **Martin A Hebel**, Associate Professor of Electronic Systems Technologies (EST), received recognition for his patent during the 2017 SIU Patent Celebration at the Dunn-Richmond Economic Development Center on Thursday, November 30, 2017. SIU filed 103 patent applications during last year. As shown in the picture below, Chancellor Montemagno and Professor Hebel stand before Martin's poster during the event. Congratulations!



- Dr. **Yuli Liang**, Lecturer of Fashion Design & Merchandising, received Best Paper Award for 2<sup>nd</sup> place for Doctoral Level at International Textiles and Apparel Associate (ITAA), St. Petersburg, FL, November 14-18, 2017. She was invited to present her paper awarded at the conference, entitled "*Do Consumers Favor Websites or Apps? A Comparison of Consumer Acceptance on Online Apparel Mass Customization across Web and Mobile Channel*". Below is the photo taken at the award ceremony during the conference. Congratulations!



- Dr. **Seung-Hee Lee**, Professor of Fashion Design & Merchandising, was elected as Chair of the Faculty Fellowships and Awards Committee at International Textiles and Apparel Associate (ITAA), St. Petersburg, FL, November 14-18. Congratulations!
- The 2017 Retirement and Service Recognition Ceremony was held on Friday, December 1st, 2017, in the SIU Student Center Ballrooms, where 306 employees were honored for their service to the University and 124 people who retired between August 1, 2016 and July 31, 2017 were recognized. The College of Applied Sciences and Arts (CASA) has nineteen (19) employees and seven (7) retirees who were honored during the ceremony. They have a combined total of 280 years of service to the university. Please join me in congratulating these employees and retirees for their contribution and service to the University!
- **Shannon S. McDonald**, AIA, Associate Professor of Architecture and Interior Design (ARC & ID), has the following recent accomplishment:
  1. Had a presentation proposal accepted to the National Conference for the American Institute of Architects in New York City this June. Only 12% of submissions were accepted.
  2. Working on a Mineta Transportation Institute Grant that will begin this week.
  3. Was invited to speak to the American Society of Civil Engineers at their Transportation and Development conference this summer.
  4. The Spartan Superway from San Jose State and Ron Swenson has sponsored the fall comprehensive masters studio and will be assisting one student with an externship this holiday break. The research result will be submitted to the Innovation 2020 challenge and San Jose City Hall is interested in exhibiting our student work.
  5. Presented at two conferences this semester.Congratulations!

- **Judy Huyck**, Lecturer of Fashion Design and Merchandising (FDM), has again won an award for one of her creations! She was presented the award at the Association of Sewing and Design Professional's National Conference held on October 19-23 this year in Orlando, FL. Her garment was first selected for the Threads Magazine Design Challenge 2017 as one of the 15 finalists out of 100 submissions. At the Conference, her garment was voted the Audience Choice winner, and will be featured in the June/July issue of Threads Magazine 2018. Unfortunately, we will have to wait to show a picture of the winning garment, as Threads Magazine holds all photography rights till then. However, our colleagues in the School of Architecture saw Professor Huyck wearing the garment, and it is fabulous! Congratulations!
- SIU Security Dawgs, the cybersecurity team, placed 5th overall out of 179 other teams during the National Cyber League (NCL, <https://www.nationalcyberleague.org/>) competition from November 17th to 19th, 2017.

The NCL competition challenged its competitors in various categories, from open source intelligence to binary analysis and offers students a valuable opportunity to exercise their skills in a competitive manner with complex challenges that put their knowledge and problem solving skills to the test. The team had the following competition result:

- 5th out of 179 other teams overall;
- 2nd in the Silver bracket;
- 2nd overall in the categories of Wireless Access Exploitation; and
- 2nd overall in the categories of Network Traffic Analysis and Password Cracking.

Congratulations to **Belle Woodward** (faculty advisor) and all the Security Dawgs who participated in this NCL competition!

<ul style="list-style-type: none"> <li>• Trenton Taylor</li> <li>• Ronald DeBernardi</li> <li>• Christian Scott</li> <li>• Benjamin Hughes</li> </ul>	<ul style="list-style-type: none"> <li>• Mark Blume</li> <li>• Jackson Kestner</li> <li>• John Nolen</li> </ul>	<ul style="list-style-type: none"> <li>• Thomas Birch</li> <li>• Bri Yagow</li> <li>• Jacob Kupres</li> </ul>
---	---	---

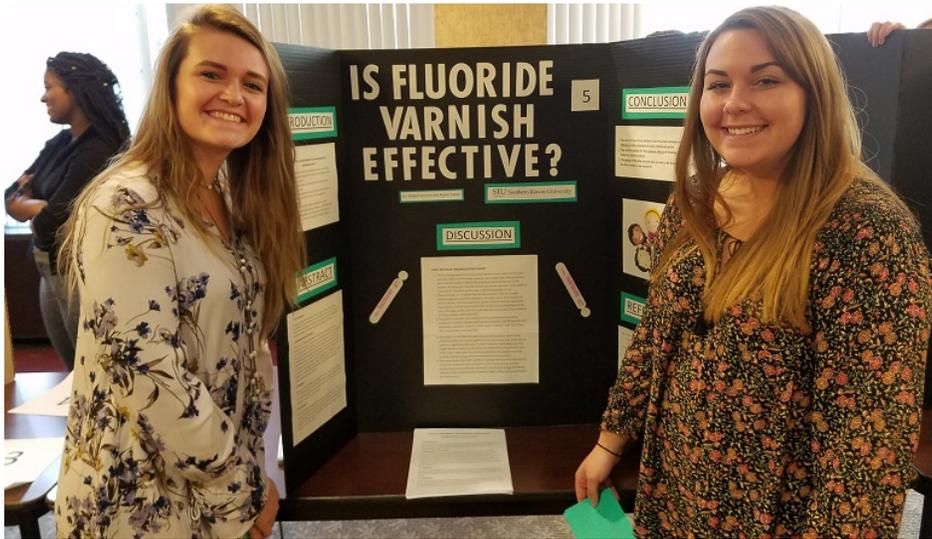
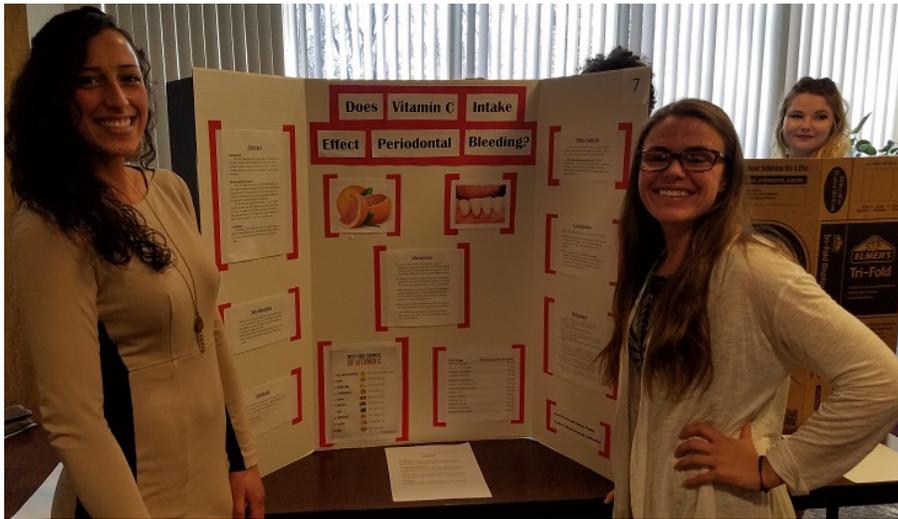


- SIU is the only NAAB-accredited public university in the US offering an online program in the profession. NAAB stands for National Architectural Accrediting Board, an accrediting agency for architectural education in the United States. ArchDaily, the weblog covering architectural news and related stories, has published an interesting article about how online architectural education is changing the way architects learn, making it more humane along the way. SIU is noted in the article: <https://tinyurl.com/y9ucwfpc>.

Our EESA option is growing every semester. EESA stands for Education Equivalency Service for Architects. The NAAB evaluates the education received by architects in other countries and provides a list of topics those students must fulfill to have a US-equivalent education for licensure. The NAAB does not officially endorse any school in particular, but when the students ask NCARB, the National Council of Architectural Registration Boards, they routinely refer them to SIU.

Finally, the online Integrated Path to Architectural Licensure (IPAL) program approved by NCARB this year, begins in the fall. When it comes to innovation in architectural education, our School of Architecture faculty lead the way for the whole world! Congratulations!

- Please join me in congratulating the School of Allied Health (SAH) for its transfer articulation agreement with College of Lake County, Grayslake, IL. The agreement has been signed by SIU administration and College of Lake County leaders. According to the agreement, all graduates of the College of Lake County with an Associates of Applied Science (A.A.S.) degree in Medical Imaging and meeting SIU Carbondale admission requirements will be considered for admission into SIU Carbondale's Bachelor of Science (B.S.) degree in Radiologic Sciences (RADS): *Education & Management (online)*, *Magnetic Resonance Imaging (MRI) & Computed Tomography (CT)*, or *Radiation Therapy Technology* options in the College of Applied Sciences and Arts based upon the Department's enrollment criteria and space availability. Congratulations to school director **Scott Collins** and all SAH faculty/staff!
- This year's Dental Hygiene (DH) Senior Research Day was held at the SIU Student Center Old Main Lounge on Friday, December 1, 2017 from 3:00 to 4:30 PM. Seventeen posters were presented on a myriad of research topics. **Jennifer S. Sherry**, Associate Professor of Dental Hygiene, was the faculty mentor for this course project in the DH 440 Research Methods course. They began with a literature review and then formulated a poster from the information gathered. Thanks to the following judges: Assistant Professor Robert Rados and Professor Sandra Collins (HCM), Associate Professor and Associate Dean Thomas Shaw (MSFS), and retired faculty Associate Professor Sherri Lukes and Professor Charla Lautar (DH). Dean Andy Wang, Professor Scott Collins, Director of the School of Allied Health, faculty, students, and staff attended the student poster presentations. Congratulations on a successful DH Senior Research Day!





- The first class of Pennsylvania Community College of Beaver County (CCBC) Aviation students is completing their in resident SIU BS Degree in Aviation management (AVM). The AVM off-campus degree program is open to all CCBC Aviation students wishing to attain their Bachelor's degree at CCBC. It is an intense 16 contiguous months, 48 credit hour course of study, and when combined with some additional core studies available at CCBC, results in the awarding of a Bachelor's of Science Degree from SIU. This unique program allows CCBC aviation students to continue to pursue their flying requirements while continuing to work toward their advanced education. Additionally, upon completion of all degree requirements, SIU will certify our pilot students at 1000 flight hours, down from 1500 hours, enabling our pilots to attain their Restricted Airline Transport Rating (ATP) 500 Hours sooner. Congratulations!



SIU AVM Students at CCBC from right to left: Matt Zanella, Adriaan Wieken, Nathen Tkach, Kholsen Hightower, Andrew Jeog, and Mathew Engle

- **Keith Young**, a senior in Architectural Studies (ARC), won the 2017 AIA Scholarship Award for \$1,250. AIA stands for American Institute of Architects, a professional organization for architects in the United States. AIA offers education, government advocacy, community redevelopment, and public outreach to support the architecture profession and improve its public image. The AIA also works with other members of the design and construction team to help coordinate the building industry. Congratulations!
- **Kim Lamprecht**, a current student enrolled in our Public Safety Management (PSM) program, was recently promoted to Columbia Emergency Medical Services (EMS) director. Ms. Lamprecht has 13 years of experience as a paramedic supervisor and 21 years in the EMS field with 18 as a paramedic. She is an adjunct professor at Southwestern Illinois College teaching paramedicine and she is currently completing her Bachelor of Science in PSM in SIU. Congratulations!



- **Patricia W. Fuller**, a CASA graduate and owner of Good Sport Captioning, was recently honored as a distinguished alumnus of Hillsboro High School. Patti graduated from SIU in 1979 and began a career as a court reporter in both state and federal courtrooms in Illinois and Missouri. She started her own business later focusing on sports captioning. “As a captioner, I’ve got to first hear it correctly, input through my ears, process in my brain, and slide it out via finger strokes into a form that’s readable to the audience, all at 250 words per minute or higher,” she said. Congratulations!
- **Brian A. Wagner**, a CASA graduate and Associate at Myefski Architects, was one of the winners of the 2017 Design Evanston Awards Program. Design Evanston identifies significant aesthetic and functional improvements in the Evanston community and recognizes them with the

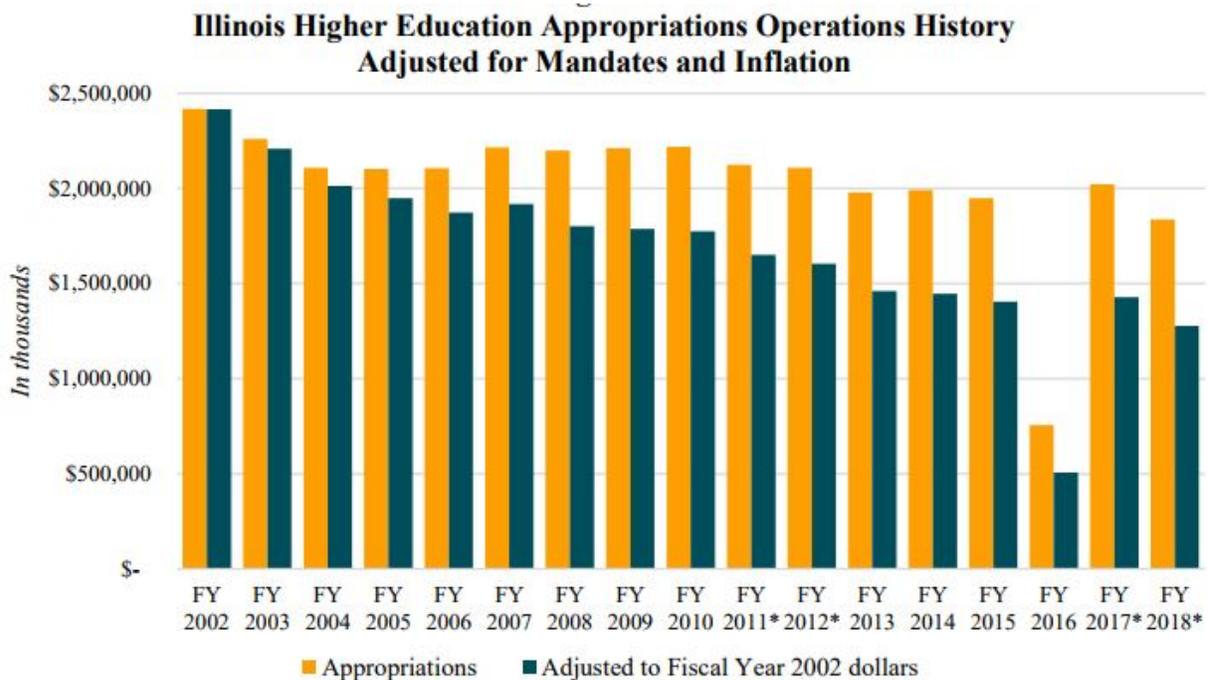
Design Evanston Awards. Specifically designed not to be self-serving for design professionals, the awards are presented to owners responsible for the design excellence of local projects. Congratulations!

## PURDUE ACQUIRED KAPLAN

Purdue University in Indiana seeks to expand its land grant mission by acquiring a largely online, adult-focused provider with national scope. The U.S. Department of Education and the Indiana Commission for Higher Education have approved plans for Purdue University to acquire Kaplan University and create the state's newest public institution, the NewU, which is exclusively online, expanding access to higher education for working adults and others for whom traditional campus study is not accessible or attainable. Kaplan's 32,000 students and 3,000 employees will transition to the new university.

## IBHE NEWS

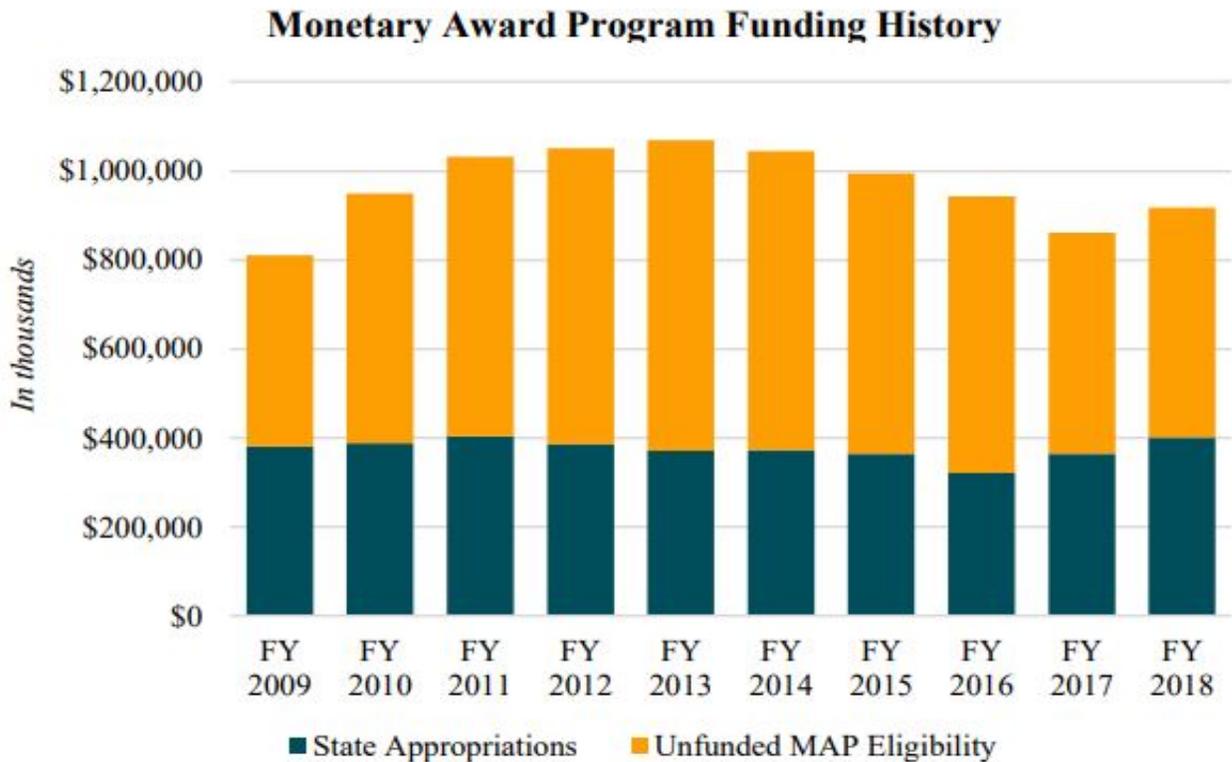
Higher education is the only major sector of the state budget that received less funding in Fiscal Year 2018 than it did in Fiscal Year 2002. Accounting for inflation and unfunded mandates added since Fiscal Year 2002, higher education operations Fiscal Year 2018 buying power is only 52.9 percent of what it was in Fiscal Year 2002 dollars. For public universities it is only 49.0 percent. On Tuesday, December 12, 2017, the Illinois Board of Higher Education (IBHE) will meet and approve the Fiscal Year 2019 Budget Recommendations for operations, grants, and capital improvements.



*\* Veterans and National Guard waivers paid by universities and colleges estimated for Fiscal Years 2011, 2012, 2017, and 2018*

These recommendations request a modest increase of \$254.4 million to assure public higher education can maintain their current buying power as well as a small number of targeted increases. Even with the recommended increases, the total general fund request is still lower than the total funding provided to the higher education system for Fiscal Years 2015 and 2017.

**Monetary Award Program (MAP), \$100 Million** – MAP was the only program of the higher education budget that received additional funding for Fiscal Year 2018. However, by historic standards, MAP funding remains low, covering fewer students and less of their tuition and fee costs. The requested increase will help improve educational attainment by reducing accessibility gaps by socioeconomic status and improve college affordability, particularly for underrepresented groups. Increased MAP funds appropriated in a timely manner will help draw students back to Illinois college campuses.



FY2019 RECOMMENDATIONS  
UNIVERSITY OPERATIONS AND GRANTS  
GENERAL FUNDS

**FY 2019 PBF Allocation with 0.5% Performance Funding Set-Aside**

(\$ in thousands)	FY2018 Final Appropriation	Performance Funding			FY 2019 Before 0.5% Set-Aside	FY 2019 Final Recommendations
		Set Aside*	FY2019 Model Performance Funds	Net Change **		
<b>Public Universities</b>	\$ <b>1,083,448.4</b>	\$ <b>5,417.2</b>	\$ <b>5,417.2</b>	\$ <b>0.0</b>	\$ <b>1,107,584.5</b>	\$ <b>1,107,584.5</b>
Chicago State University	32,697.4	163.5	114.0	-49.5	33,417.0	33,367.5
Eastern Illinois University	38,678.1	193.4	207.9	14.6	39,540.9	39,555.5
Governors State	21,656.0	108.3	173.7	65.4	22,139.1	22,204.5
Illinois State University	65,004.0	325.0	330.1	5.1	66,454.0	66,459.1
Northeastern Illinois University	33,209.0	166.0	232.5	66.4	33,949.8	34,016.2
Northern Illinois University	81,983.5	409.9	323.7	-86.2	83,812.3	83,726.1
Western Illinois University	46,300.7	231.5	238.4	6.9	47,333.5	47,340.4
<b>Southern Illinois University</b> ***	<b>180,913.8</b>	<b>904.6</b>	<b>773.7</b>	<b>-130.9</b>	<b>184,927.1</b>	<b>184,796.2</b>
Carbondale	118,414.0	592.1	514.6	-77.4	121,040.9	120,963.4
Edwardsville	62,499.8	312.5	259.0	-53.5	63,886.2	63,832.8
<b>University of Illinois</b> ****	<b>583,005.9</b>	<b>2,915.0</b>	<b>3,023.2</b>	<b>108.2</b>	<b>596,010.8</b>	<b>596,119.0</b>
Chicago	272,291.0	1,361.5	1,430.1	68.7	278,364.9	278,433.6
Springfield	21,373.5	106.9	119.1	12.2	21,850.3	21,862.5
Urbana/Champaign	289,341.4	1,446.7	1,474.1	27.3	295,795.6	295,823.0

\* FY2019 Set Aside is based on a 0.5% reallocation of the final FY2018 budget level.  
 \*\* Net change may not total because of rounding within the Performance Funding Formula.  
 \*\*\* SIU system office is allocated on a pro-rated basis to each campus, SIU School of Medicine is included with the Carbondale Campus.  
 \*\*\*\* UI system office is allocated on a pro-rated basis to each campus.

Source: IBHE, <http://www.ibhe.org/Board/agendas/2017/December/IV2BudgetRec.pdf>.

## 2017 FALL TERM ENROLLMENT

As you see from the following enrollment table, SIUC has 758 more students than SIUE, as of this fall semester.

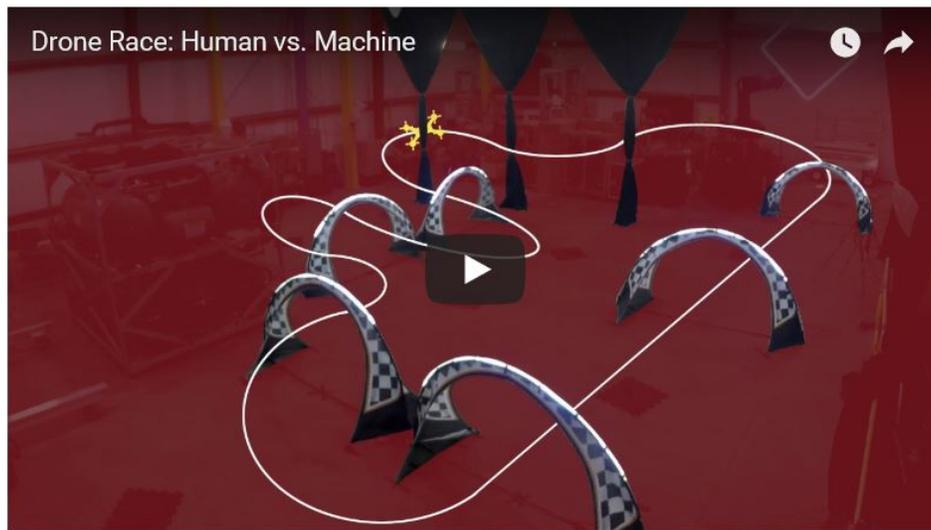
**Preliminary 2017 Fall Term Enrollment in Illinois Colleges and Universities**

Sector/Institution	Undergraduate		Graduate	
	Headcount	FTE	Headcount	FTE
<b>Public Universities</b>				
Chicago State University	2,095	1,535	1,091	894
Eastern Illinois University	5,568	4,442	1,462	897
Governors State University	3,326	2,387	1,859	1,167
Illinois State University	18,330	16,826	2,454	1,482
Northeastern Illinois University	7,113	4,902	1,871	875
Northern Illinois University	13,454	12,136	4,588	2,846
<b>Southern Illinois University</b>	<b>10,987</b>	<b>9,763</b>	<b>3,567</b>	<b>2,700</b>
Carbondale				
Southern Illinois University Edwardsville	11,402	9,912	2,394	1,611
U of I at Chicago	19,448	18,949	11,091	11,469
U of I at Springfield	2,932	2,282	2,024	1,244
U of I at Urbana/Champaign	33,955	34,657	14,261	15,079
Western Illinois University	7,599	6,981	1,842	1,153
<b>Public Universities Total</b>	<b>136,209</b>	<b>124,772</b>	<b>48,504</b>	<b>41,417</b>

## HUMAN PILOT BEATS AI IN DRONE RACE

Any thing you can do, AI can do better. Eventually. On October 12, NASA tested its autonomous drones with a human pilot. The AI and the human started out with similar lap times, but the human pilot eventually won out and ended up with a faster average lap time than the AI. The conclusion is important: autonomous drones may eventually be used for surveillance, emergency response, or inventory in warehouses.

### [Drone Race between Human vs AI](#)



### ON THIS WEEK'S CALENDAR

- Monday, December 11, 2017: 11:00am -12:00pm, Chancellor's meeting with School of Transportation and Applied Technology faculty, TEC.
- Tuesday, December 12, 2017: 11:00am - 12:00pm, Deans' Council Meeting, Anthony Hall Balcony Conference Room; 12:00pm - 2:00pm, State of the City Address, John "Mike" Henry, Mayor of Carbondale, Carbondale Civic Center.
- Wednesday, December 13, 2017: 3:00pm - 4:00pm, Aviation International Recruitment Meeting, Dean's office.
- Thursday, December 14, 2017: 11:00am - 1:30pm, CASA Winter Potluck, TEC Multipurpose Room.
- Friday, December 15, 2017: 7:00pm - 8:30pm, Academic Excellence Recognition Ceremony, Student Center Ballroom D.
- Saturday, December 16, 2017: 2:00pm - 4:00pm, Commencement.

## **AND FINALLY ...**

This is the last MMU this year, and in Spring 2018, the MMU will be published occasionally based on need. I have an international ABET accreditation travel during December 15 - 21, 2017. Associate Dean Mike Behrmann will be Acting Dean during my absence.

Please accept my holiday greeting with warm wishes at the close of this semester and this calendar year. I hope you have a safe and happy holiday season and a productive new year!

Andy Ju An Wang, Ph.D.  
Dean, College of Applied Sciences and Arts