

CASA Dean's MMU (Monday Morning Update)

A Tradition of Excellence; A Standard of Success

Monday, October 30, 2017

Dear Colleagues,

Mark Twain once said: "History doesn't repeat itself but it often rhymes." In 1995, SIU Carbondale did a reorganization when the College of Technical Careers (CTC) was renamed as the College of Applied Sciences and Arts (CASA). Twenty-two (22) years later, another reorganization disbands CASA and merges its programs into three different colleges.

CASA's history traces back to April 24, 1950, when President Delyte Morris made the following statement to the Board of Trustees of SIU: "The University is of the opinion that there is a serious need in Southern Illinois for intensely practical training in such fields as industrial education, agriculture, home economics, and business. While substantial offerings are already available on the University level, there seems to be an unmet need for vocational training for people not interested in a college education as such, but interested in acquiring job proficiencies." President Morris met Ernest J. Simon in June of 1950, then Director of Vocational Education for the State of Illinois, and offered him the position of SIU Director of the Technical Institute and Associate Director of Adult Education, and Mr. Simon accepted the position.

In October of 1950, the first adult education course of the Vocational-Technical Institute (VTI) began. It was a course in blueprint reading for carpenter apprentices in a classroom at Old Main. The total enrollment for the entire year ending June 30, 1951, was only 500. However, by the end of June of 1952, its enrollment reached 2,517. At its peak time in 1959 Fall semester, VTI had a total enrollment of 10,000 non-traditional students, which was 45.74% of the overall SIU student population at that time. Now CASA's enrollment takes approximately 18% of the overall SIUC student population, and CASA is the largest college in the University.

This College's mission has been changed since 1990's, when we dropped all the associated degree programs except Aviation Flight and Physical Therapist Assistant. Now CASA offers fourteen Bachelor's degree programs and seven Master's degree programs. Our mission is to create and implement outstanding academic programs, conduct high-impact research and creative activity that build on industry collaboration and regional need, and provide community and professional service that make a difference to the people of the State of Illinois and beyond. Even though this College's mission is consistent with the University's mission, please remember that SIUC is embarking on a remarkable transformation from an R2 to an R1 institution through its Vision 2025 plan. This requires a significant structure change to revitalize academic programs and to create new programs in high demand areas.

I am confident that CASA's academic programs will not be closed or marginalized from this reorganization. On the contrary, I believe most of our current programs will play a leading role in their new colleges. Many CASA programs are highly ranked, nationally renowned, and much sought after.

Some of them are the only programs of their kind in the state or one of only a few programs in the nation. I am sure our programs will continue thriving no matter where they will be located. We will continue to embrace a tradition of excellence, innovation in research and creativity, and outstanding teaching focused on nurturing student success.

FROM R2 TO R1

The Carnegie Classification, created by the Carnegie Foundation for the Advancement of Teaching and first published in 1973, is the widely accepted industry standard for classifying schools by higher education researchers and others. The U.S. Department of Education and many higher education associations use the classifications to organize data as well as determine a school’s eligibility for grant money. The classifications are also used by U.S. News and World Report in grouping institutions by type for its popular Best Colleges rankings guide.

The Carnegie Classification is done approximately every five years. The most recent one was conducted in 2015 and released on February 1, 2016, when 15 universities nationwide moved from R2 into R1, the top category in the ranking system, and 8 universities dropped from R1 to R2. “Our strategy is to become an R1 institution,” according to Chancellor Carlo Montemagno, “that means we have to move from about 100 Ph.D. students to about 300 Ph.D. students graduating in a year,” and that means a significant increase in the annual research expenditures in the science & engineering fields as well as other non-science & engineering areas. This vision and goal have been built into the recently proposed new academic structure - the straw man proposal. Considering the timeline and cycles of the Carnegie Classification, the next opportunity for SIUC to move up to an R1 institution is 2020.

Below is a brief summary of SIUC graduate students, the Masters and Doctoral degrees awarded in the past 45 years.

Year	Master	Ph.D.		Year	Master	Ph.D.		Year	Master	Ph.D.
1972	820	168		1987	723	150		2002	903	300
1973	831	174		1988	727	165		2003	941	298
1974	825	197		1989	674	149		2004	844	331
1975	792	172		1990	736	170		2005	853	344
1976	751	194		1991	641	143		2006	897	340

1977	817	187		1992	789	340		2007	905	322
1978	765	166		1993	785	350		2008	1014	315
1979	769	169		1994	786	228		2009	960	362
1980	650	149		1995	794	377		2010	963	316
1981	807	151		1996	790	385		2011	983	358
1982	729	152		1997	785	399		2012	998	354
1983	706	201		1998	838	314		2013	995	345
1984	696	152		1999	813	311		2014	1165	347
1985	658	172		2000	800	312		2015	1035	364
1986	707	170		2001	808	313		2016	865	173

COMMENT ON SIUC REORGANIZATION

State Sen. Chapin Rose, R-Mahomet, is pushing legislation that would streamline all of Illinois' universities. He said Chancellor Montemagno should be praised for recognizing that bureaucratic bloat is one of the biggest problems on campuses in the state. "I realize that change is painful, the change can be unpopular," Rose said.

Ted Dabrowski, president of the Illinois fiscal watchdog group WirePoints, said of the explosion in administrative bloat in Illinois that between 2005 and 2015, the number of administrators on all college campuses in the state jumped 26%. At the same time, teaching staff grew by just 2%, and student enrollment fell by 3%.

More information is available at:

https://www.ilnews.org/news/schools/siu-carbondale-chancellor-says-bureaucratic-roadblocks-halting-recovery/article_797991c4-b8dd-11e7-85ca-4b73c7498962.html.

RESEARCH SYMPOSIUM

This coming Saturday will be our last ASA Multidisciplinary Research Symposium. Please come to participate and encourage both graduate and undergraduate students to attend on Saturday, November 4, 2017, 8:30am – 3:30pm at the Transportation Education Center. This event will allow students to see faculty research and hopefully provide opportunities for them to collaborate with their professors. Please remember there is no cost to attend the event, and lunch is provided with pre-registration at <http://asa.siu.edu/research/regi.html>. The event schedule is available at: <http://research.asa.siu.edu/symposium/event-schedule.php>.

CONGRATULATIONS

- Please join me in congratulating **Mike Behrmann** and all Automotive Technology Advisory Committee members, faculty, staff, and students on another successful Advisory Board meeting on Thursday - Friday, October 25 - 26, 2017!

Twenty-five representatives of the SIU National Automotive Advisory Board were in attendance this past week at their Fall 2017 meeting conducted at the Transportation Education Center. This multi-day gathering of industry representatives includes an external program review each year to support constant program improvement. The Department opens itself up for review so this group of industry representatives can gather information and provide valuable guidance to the program.





The annual Board review is conducted in multiple phases:

1. Closed door session meeting with faculty to gather input on positives as well as thoughts on improvement points.
2. Open meeting with students, faculty, staff, and administration to provide feedback on what is occurring within the industry and how to best prepare students to enter the field. Students scholarship awards are also presented at this meeting.
3. Closed door meeting with students. Here, the Board asks students questions on their perceptions of things that are working as well as things that need improvement.
4. The Board asks each student to complete an anonymous survey to gather valuable student population trends as well as feedback on issues they did not want to bring up in front of peers.
5. Business meeting with Department faculty, staff, administration, and student group leaders. This full-day session is divided into various components where program personnel provide updates to the Board on enrollment, entering student profiles, budget, initiatives, curriculum, graduation, placement, and progress on implementing previous Board recommendations. During this meeting, the Board provides feedback gathered from the students, student surveys, and faculty, along with their recommendations for the program to investigate and take action for improvement.
6. The Board concludes its visit with a closed session with program administration to provide critical feedback.

During the open session, nineteen student scholarships were presented. Pictured below from left to right are Chris Micha, Board Co-Chair from Fiat Chrysler Automobiles; Dan Sherman, Board Co-

Chair from Mitsubishi Motors North America; Alicia Johnston, Outstanding Student of the Year recipient; Andy Wang, CASA Dean; Mike Behrmann, Department Chair.



- The School of Allied Health (SAH) held the first of two open house events on Thursday, October 26th, 2017. Three high schools, DuQuoin, Benton, and Pinckneyville attended and brought about 60 students interested in healthcare fields. Next Thursday, November 2nd, is the second open house and approximately 160 students are scheduled to attend from Marion, Christopher, Herrin, Johnston City, and Carbondale High Schools. Please join me in congratulating SAH for a successful recruiting event!

All our CASA chairs and directors are actively recruiting students in various ways. For instance, **Mike Behrmann** visits more than 20 high schools and community colleges every year, meeting students and their instructors and counselors. **Scott Collins** organizes SAH-wide open house events as well as online recruiting sessions with geofencing technologies targeting interested student populations. **John Dobbins** will visit a high school in Evansville for their career day next week. **Mike Burgener** just visited Ottumwa, Iowa, recruiting aviation students last week. **Sam Chung** and ISAT faculty organized a Cyber Security Day as a marketing and recruiting event as well as security awareness training event last week.

Why are these program-based recruiting events important? SIU Admission Office recruiters are working for the whole campus. They may not know our individual degree programs as well as we do. Our program directors, faculty, staff, and student ambassadors are doing an exceptional job talking to prospective students and their family members at open house and other recruiting events. Enrollment is critically important for SIU's future, and it requires everyone's help to meet next year's enrollment target. Per Chancellor Carlo Montemagno, our goal is to reach 18,300 on the SIUC campus in a few years.

Many programs in our College depend heavily on transfer students. Architectural Studies, for instance, has approximately 48% of its students transfer from community colleges. However, the Illinois community college system fall 2017 enrollments continue to decline, which adds challenges to our enrollment goals. According to a recent report, Fall 2017 enrollments in Illinois community colleges show a decrease in headcount (-3.5 %) and a decrease in the number of full-time equivalent enrollments (-3.7 %) compared to last year. System-wide, 293,533 students enrolled at Illinois community colleges in credit coursework in fall 2017. The number of students enrolling in credit courses at Illinois community colleges as of the end of regular registration for fall 2017 is 10,640 fewer than in fall 2016. This changing trend reminds us of the importance of our program-based recruiting effort.

The School of Allied Health was used as a model structure by Chancellor Carlo Montemagno during his talks about the academic reorganization. In my opinion, it is not only the structure, namely one school director plus a number of program coordinators/directors, but also the synergy and collaboration among different programs in this School make it outstanding. The school-level open house is just one such example.

Below are pictures showing information sessions with high school students during the SAH laboratories at the October 26 SAH Open House event.











- The week of October 20 was a busy week for Public Safety Management (PSM) faculty and staff. **Mark Rivero** and **Gary Kistner** attended the annual EMS Expo at the Las Vegas Convention Center where they had approximately 10,000 visitors over a 3-day period. **Lindsay Laycoax** was at the Tri-State Emergency Services conference in Dubuque IA where they had approximately 3,000 visitors from MN, WI, IL, and IA.





- December commencement will have the highest number of M-ARCH degree graduates ever, almost 40. Commencement is Saturday, December 16, 2017, at 2:00pm in the SIU Arena. **Dalton Thompson**, AVM/AF and Honors Program student, University Excellence Scholar, and Flying Saluki, will be our gonfalon carrier. Congratulations!

ILLINOIS INNOVATION NETWORK

Governor Bruce Rauner and the University of Illinois System unveiled plans for an Illinois Innovation Network (IIN) to help ignite the state's economy through a \$1.2 billion network of research universities, businesses, and public sector partners focused on the development of solutions in **computing and big data, advanced materials, food and agriculture, and biosciences and health**. The network will help ensure a knowledge-based, 21st century economy in Illinois where discovery and innovation are the focal

points. The plan is to nurture the inventors and entrepreneurs of tomorrow by allowing them to hone their talents in Illinois. The network will be led by the University of Illinois System, with universities in Urbana-Champaign, Chicago, and Springfield, and satellite campuses in Peoria and Rockford. The University of Chicago and Northwestern University will be inaugural partners. “We anticipate that over time other Illinois state universities as well as world renowned international research universities will join the network to help spread Discovery Partners Institute’s impact around the state and around the world,” Governor Rauner said.



More information about IIN is available at: <https://www.illinoisinnovation.com/>.

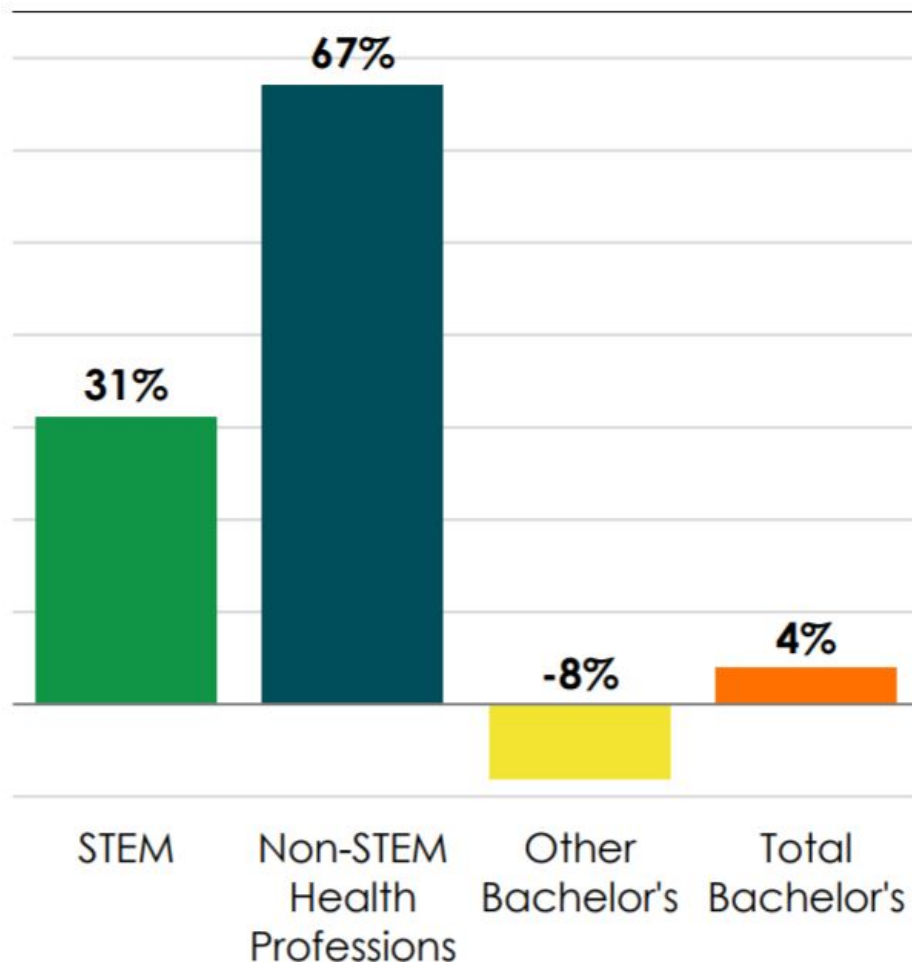
BACHELOR’S DEGREE PRODUCTION TRENDS AT ILLINOIS PUBLIC UNIVERSITIES (2006-2016)

Over the last decade, bachelor’s degree production in Science, Technology, Engineering, and Mathematics (STEM) and in the Health Professions at Illinois Public Universities has significantly increased both in real numbers and in the proportion of all bachelor’s degrees awarded.

- As shown in the figure below, in 2016, Illinois public universities produced 31% more bachelor’s degrees in STEM relative to 2006 (+2,141). In that same time, they also produced 67% more bachelor’s degrees in the health professions (+1,066).
- More importantly, the proportional increase in STEM and Health degrees was accompanied by a 4% overall increase in the number of bachelor’s degree awarded. In other words, STEM and Health degrees have become relatively larger pieces of the pie.

Source: IBHE, <http://www.ibhe.org/DataPoints/BADegreeProdTrends.pdf>.

Relative Change in the Number of Bachelor's Degree Awarded at Illinois Public Universities: 2006 to 2016



PUBLICATION INEQUALITY

Andrew Piper and Chad Wellmon observe that a small subset of elite universities are disproportionately represented in the most prestigious journals in the literary humanities. This "epistemic inequality," they write, "would surely be as undesirable as economic inequality. In fact, most of us would presume a relationship between the two." No doubt they are closely related: We might begin with the fact that elite graduate programs pay better and require less teaching than their non-elite peers, thereby allowing more time for research. Such advantages ramify, and surely have much to do with the end result: Ph.D.'s from the top 10 graduate programs "account for just over half of all articles published."

But Piper and Wellmon's point isn't simply that elite advantages in publication distribute prestige inequitably — it's that they produce a damaged body of knowledge. "By limiting the circulation of ideas to a precious few institutional frameworks," they suggest, the academy limits its ability "to create and share different kinds of knowledge, new kinds of knowledge, and more diverse kinds of knowledge."

Continue to read from Sam Fallon and Len Gutkin: The University is Not a Technology, The Chronicle Review, October 17, 2017, <http://www.chronicle.com/article/The-University-Is-Not-a/241471>.

ETHICAL GUIDELINES FOR DRIVERLESS CARS

Here is an example of synergy among the four schools in the newly proposed *College of Engineering, Physical Science, and Applied Technology*: The design of an autonomous vehicle.

Technological advances increase automation in cars to make them safer and reduce accidents, but it will not be possible to prevent accidents completely. This makes it essential that ethical decisions be taken when programming the software of highly-automated vehicles.

The following scenario is among the situations that are being considered by the software designers: In the event of an unavoidable crash, does the vehicle's system choose the outcome that will likely result in the greatest potential for safety for the vehicle's passengers, or does the vehicle's software system instead choose an option in which the least amount of potential harm is done to any of those involved in an accident, such as having the car crash into a stationary object (e.g., telephone pole, etc.) with the probability of causing some passengers serious but non-life-threatening injuries instead of striking and potentially causing a fatal injury to a pedestrian, cyclist, or motorcycle rider?

Computing ethics is a set of moral principles or guidelines that regulate the algorithms of automation, such as programming for a driverless car. The design and implementation of such ethical guidelines for an autonomous car require experts from all four schools in the new college, namely the *School of Transportation and Technology*, the *School of Physical Science*, the *School of Homeland Security*, and the *School of Engineering*.

WORLD'S FIRST ROBOT CITIZEN

Saudi Arabia granted citizenship to a humanoid robot named "Sophia," announced at an innovation conference in Riyadh on October 27, 2017. It claims to be the first nation to bestow citizenship upon a robot. Sophia was built by the Hong Kong-based company "Hanson Robotics" in 2015. Inventor David Hanson claims the robot is imbued with artificial intelligence and can recognize faces. The robot's silicon face can reportedly mimic 62 human facial expressions. More information is available through the following 5-minute Youtube video clip: <https://youtu.be/dMrX08PxUNY>.



ON THIS WEEK'S CALENDAR

- Monday, October 30, 2017: 8:00am - 4:30pm, The Old Campus: an Historical Exploration, Morris Library Hall of Presidents Exhibit Space.
- Tuesday, October 31, 2017: 10:00am - 12:00pm, Deans' Council Meeting, Anthony Hall Room 311.
- Wednesday, November 1, 2017: 9:00am - 10:00am, DE Higher Learning Commission main campus visit meeting, Dean's Conference Room.
- Thursday, November 2, 2017: 9:00am - 3:00pm, School of Allied Health Open House, SAH office and classrooms.
- Friday, November 3, 2017: 5:00pm - 6:00pm, SIU Leaders and Scholars Reception, Student Center Ballrooms.
- Saturday, November 4, 2017: 8:30am - 4:00pm, CASA 2017 Multidisciplinary Research Symposium, TEC Multipurpose Room and classrooms.

AND FINALLY ...

If you see something in this update that you want to comment on, please send an email to awang@siu.edu; or call me at 618-536-6682. Also, if you know of anyone interested in receiving the CASA Dean's MMU, please ask them to send me an email and we will gladly add them to our mailing list. If you prefer not to receive the CASA Dean's MMU, please let me know, as well. Thank you.

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