

FY 2019 INFRASTRUCTURE REPORT SUMMARY

	Total \$	Detailed Allocations
Library Support	\$25,328	PO #60972-\$11,261.33 -Ebsco-Nature, England, Online Journal 2020 PO #61328-\$5447.62 Ebsco-cell online journal 2020-Infobase Learning-Allied Health-Nursing Video Coll. - PO#61580 - \$5020.20 Technical & Trade Education Video Collection; Invoice #402507 to Infobase - for Allied Health, Nursing, Tech & Trade Ed Video Collection
IR&E Qualtrics License	\$7,150	PO #819462 -Campus license for survey software-12 month Research License for Qualtrics.
SPSS campus-wide licenses	\$1,440	PO #818951-Pd \$1440.30 of a \$5485.90 invoice on 7/31/2019 for use by faculty.
Research Collaborative - faculty	\$5,300	\$4,000.00-Kylee Britzman . Social Sciences Division-Assessment Plan for process and results: With the pilot study, we will assess the results to make sure the go/no-go association worked (i.e. confirm we are actually measuring people's implicit rather than explicit political attitudes). Once we are confident that the design works, will implement the larger study on a national platform. The results will generally be analyzed through a statistical regression analysis. \$1,300.00-Collin Fehr . The purpose of this research collaboration is to explore the effects of BEMER technology on recovery and performance parameters in anaerobic exercise. If found to be effective at enhanced recovery in active populations, this intervention could prove viable for reducing injury risk and positively affect return-to-exercise outcomes. Additionally, the improved recovery may secondarily lead to legitimate performance-enhancement in sport.
HERC Research Grant	\$1,500	\$1,500.00-Darci Graves . Out of sight, out of mind: Exploring the individual impact of "sweeping" homeless camps. I have utilized grant funds to purchase two audio recording devices and noise-cancelling microphones. These devices will be used to record qualitative research interviews and came equipped with a USB port that allows the researcher to plug the device into a computer and download the audio files for transcription. I also purchased, with IRB approval, gift cards with a face value of \$15.00 to Subway and McDonalds. These are intended to be gifted to research participants as compensation for their time and participation in the study.
HERC-DONSAM-Faculty Affairs Grants	\$5,441	\$1813.65-Keegan Schmidt . Creating a multidisciplinary, student-centered research program in remote sensing and planetary structure; geoscience aspects. \$1813.65 Heather Moon . Creating a multidisciplinary, student-centered research program using mathematical techniques for remote sensing of planetary structures. \$1813.65 Charles Addo-Quaye . Improving the accuracy of in silico DNA mutation detection methods.
DONSAM-Floor Centrifuge	\$27,000	The floor centrifuge that we purchased is a Sorvall LYNX 4000 Superspeed Floor Centrifuge from Thermo Scientific and a Fiberlit rotor for use with 250mL vessels in the centrifuge. Thermo Scientific provided estimates with two rotors needed for very different (described later) purposes in our laboratories. After being granted funds to purchase the floor centrifuge, the cost of the rotors and centrifuge were beyond the funding amount. We asked Thermo Scientific if they could give us an option that was within our budget. We were able to get a newer model centrifuge (the model stated above) with the following accessories <ul style="list-style-type: none"> • A set of 6 adapters to allow the rotor to be used with 15mL conical tubes. • This purchase includes installation by a technician from Thermo Fisher. • And at no additional cost (because we opted for the above package): <ul style="list-style-type: none"> ◦ Additional sets of adapters (6 each) ◦ For 50mL conical tubes (Regular price \$3200) ◦ For 50mL round-bottom tubes (Regular price \$1400) ◦ For 16mL round-bottom tubes (Regular price \$2150) The floor centrifuge is used in Biology (BIOL 182, 250, 341) and Chemistry (CHEM 481) courses and for faculty and student research projects in the lab of Leigh Latta. We estimate that each semester 50-60 students gain educational benefit (in the classroom and research) through use of the floor centrifuge
DONSAM-Water Purification System	\$10,000	The water purification system that we purchased is an Elix 10 from MilliporeSigma which will dispense 10L per hour of reverse osmosis purified water. The accessories that came with our purchase were <ul style="list-style-type: none"> • 2 pre-treatment internal filters, • 1 pre-treatment external filter, • 2 CO2 trap filters to allow use of a reservoir, • 2 filter units for the E-pod unit At no additional cost, MilliporeSigma added an E-pod dispensing console valued at \$1900. This is a handheld unit that can be set to dispense a set volume, reducing the chance of overfilling vessels. <p>Also included in the purchase is the cost of installation by an engineer.</p> The water purification system is used to prepare solutions for almost all Biology and Chemistry courses. The courses that use the system the most are BIOL 182, 341, 250, CHEM 111, 1112, 325, 454, and 481. Student and faculty research in Eric Stoffregen's lab adds to the demand when working with fly food and daphnia media. Chemistry courses and research use the system to prevent contamination when working with solutions and reactions. Nancy Johnston's research lab (students and faculty research) also require the use of the purification system. All-in-all, 100-150 students gain educational benefit in coursework and research through use of the water purification system.
BEMER Equipment (MaSS)	\$6,000	Invoice #410200 -The BEMER Pro Set package was used to support faculty-student research on Physical Vascular Therapy experience. The purpose of this research collaboration was to explore the effects of BEMER technology on recovery and performance parameters in anaerobic exercise. This technology represents an investment in future high-impact practices for students at LCSC. The BEMER Pro Set includes a comprehensive set of application modules and accessories; the application modules direct the BEMER Signal from the control unit to the treatment area. The BEMER Pro Set includes: B.BOX Professional, B.BODY Pro, B.SPOT incl. Fixing Strap & B.GRIP, B.PAD, B.LIGHT incl. Protective Goggles, B.SCAN, Wall Mount, Foot Protection, Car Power Cable.

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Student-HERC	\$1,085	\$448 to Judy Boozer for miscellaneous supplies (fish tanks, filters, water heaters) related to her project on the use of amphioxus as a model for regenerative medicine. Her project this semester was to establish an amphioxus culture on campus and then study the feasibility of maintaining the culture, as well as initiating a pilot study on regeneration. \$138 to Ryan Glimp and McKenzie Malm for miscellaneous supplies (latex gloves, pregnancy tests, alcohol wipes, bleach) related to their project on body dysmorphia occurrence in college athletes versus college students who are not athletes. \$579 to Mari Carillo for travel to southern Idaho to complete her research on Medical Pluralism: Shifts in Traditional Knowledge and Practice among Sobadores. Mari's research included interviews with traditional healers, such sobadores, in Latino communities	
Research Symposium	\$10,000	Research Symposium	
HERC Allocation	\$1,196	Stipend for Eric Stoffregen for a written proposal to National Institutes of Health. DNA damage adversely affects health and disease. The overall goal of this project is to investigate how the Bloom (BLM) DNA helicase prevents damage caused by repetitive DNA sequences, which pose a challenge to the DNA replication machinery. We will use the genetic and molecular biology tools of the model fruit fly to better understand how a lack of BLM protein in human patients leads to the developmental abnormalities, premature aging, and cancer susceptibility seen in Bloom Syndrome.	
Total Allocation	\$101,440	Expensed FY20 appropriation and \$1,1440 of FY19 carry-forward.	
	Detailed Allocations		
Publications in Refereed Journals			
Presentations at Professional Meetings and Conferences			
Grants Received as a Result			
Grants Pending			
Student Participation	See above		
Faculty Participation	See above		
Other Participation	Community members, faculty and staff emeritus, and alumni are invited to attend the research symposium each year.		
Patents Awarded			
Patents Pending			