## Facilities and Resources

***[Sample descriptions provided below – only include descriptions of the PI/Co-PI’s colleges/departments]***

The **Washkewicz College of Engineering** at Cleveland State University consists of five departments: Chemical and Biomedical Engineering, Civil and Environmental Engineering, Electrical Engineering and Computer Science, Mechanical Engineering, and Engineering Technology. The college offers a college-wide doctoral research degree by the name Doctor of Engineering (DRE). The college has about 60 full-time faculty, many adjunct faculty, and several active faculty searches because of the Administration’s support for the College. Faculty research is funded by a range of external sponsors, including local industry, NASA, NSF, DOT, DOE, NIH, AFRL, and DARPA. The College of Engineering maintains a large, permanently-staffed machine shop, including rapid prototyping equipment, for the fabrication of customized hardware.

The College of Engineering resides in a 200,000 square-foot building. Because of its growth in enrollment and funding, the College recently raised $44 million for construction of a new 100,000 square-foot building to augment its current facilities. The building, which includes collaboration space, modern laboratory facilities, and the Dan T. Moore MakerSpace, was completed in 2017. The Dan T. Moore Makerspace is equipped with high-resolution 3D printers and scanners, computer aided manufacturing (CAM) equipment, digital design tools, and electronic test equipment.

The **Centers for Outreach and Engagement in the Monte Ahuja College of Business** serve as advocates for Northeast Ohio businesses, organizations and individuals. Regarded in high esteem for their strategic development and delivery of programs that address current needs and future business challenges, the Centers help to position organizations for economic success. The Centers partner with the Northeast Ohio business community, government agencies, and academic institutions worldwide to deliver courses, seminars, research, and outreach initiatives.

CSU’s **College of Education and Human Services** prepares professionals who reflect our commitment to educational excellence across the life-span through teaching, research, and service focused on leadership, social justice, and partnerships in addressing contemporary urban needs. The College is housed in Julka Hall, a facility that has state of the art laboratories and access to current technologies, and offers 39 different degree programs. These include a range of graduate offerings, including 26 master's programs and 7 tracks in our doctoral program.

The **Department of Psychology is located in the College of Sciences and Health Professions** (COSHP) and offers undergraduate majors and minors in Psychology and several Masters Degrees in Clinical Psychology, Experimental Psychology, School Psychology, and Industrial-Organizational Psychology. Additionally, the Psychology Department offers a joint doctoral program with The University of Akron in Adult Development and Aging. Faculty in the Psychology Department conduct a variety of basic and applied research including studies in language processing and comprehension; interventions for coping and managing neuro-degenerative disorders; the role of self-regulation and group processing; understanding and intervening upon clinical disorders, including depressive disorder, anxiety disorders, and personality disorders; and factors related to school performance. A number of faculty have externally funded grants supporting their research programs.

Faculty and Students at Cleveland State University have access to open computing laboratories throughout campus. This infrastructure is supported and maintained by the university’s Division of Information Systems and Technology. All project personnel will be provided with office space, modern desktop computers, network connectivity, and remote storage for data archiving, as discussed in the data management plan. Personnel at Cleveland State University are well- equipped to conduct the research tasks described in the body of the proposal.

CSU is a member of OhioLINK, a large network of on-line and printed books and scholarly articles. OhioLINK includes access to all journals published by Elsevier, Springer, AIAA, ASBE, BMES, and most other relevant publishers. The CSU Library subscribes to all journals published by ASCE, ASME, and IEEE. CSU is also a member of the Microsoft Developers’ Network (MSDN) Academic Alliance, which makes professional versions of dozens of software titles available to support research.

CSU received the 2015 Community Engagement Classification from the Carnegie Foundation for the Advancement of Teaching. The Carnegie Foundation describes the purpose of community engagement as “the partnership of college and university knowledge and resources with those of the public and private sectors to enrich scholarship, research and creative activity; enhance curriculum, teaching and learning; prepare educated, engaged citizens; strengthen democratic values and civic responsibility; address critical societal issues; and contribute to the public good.” CSU is one of 83 first-time recipients of the Community Engagement Classification, selected from more than 130 applicants. CSU’s location in downtown Cleveland enhances its ability to engage with industrial partners. CSU networks with more employers than any other public university in Ohio and is one of 361 institutions nationwide to be recognized by the Carnegie Foundation for exceptional levels of community support. CSU recently launched the Cleveland Engagement Project, a community engagement web portal that lists CSU community projects and offers an opportunity to connect with stakeholders.

CSU received the 2017 Higher Education Excellence in Diversity (HEED) Award from INSIGHT Into Diversity magazine, the oldest and largest diversity-focused publication in higher education. The HEED Award is a national honor recognizing US colleges and universities that demonstrate outstanding commitment to diversity and inclusion. This is the second consecutive year that CSU has been named as a HEED Award recipient. CSU’s commitment to diversity and inclusion in research is represented by NSF Award #1432864 “Collaborative Research: Northern Ohio AGEP-T: A Racially and Ethnically Inclusive Graduate Education Model in Biology, Chemistry and Engineering” and ongoing Department of Education McNair Scholars Program.

Also in 2017, the Brookings Institution ranked CSU 18th in the nation among public universities that provide social mobility for their students and conduct vital research that benefits society. CSU is the only Ohio university ranked in the “Best of the Best” category.

CSU is a small urban university with a research program that is on the rise. According to the NSF Higher Education Research and Development Survey, [www.nsf.gov/statistics/srvyherd](http://www.nsf.gov/statistics/srvyherd), research funding at CSU over the past 5 years has increased as follows:

2014 − $61.8 million, ranked 176 in the US

2015 − $57.7 million, ranked 182 in the US

2016 − $77.7 million, ranked 182 in the US

2017 − $83.7 million, ranked 164 in the US

2018 − $83.6 million, ranked 166 in the US

During the decade from 2004 to 2013, CSU ranked 1st in the nation in percentage increase in total research funding, 1st in the nation in percentage increase in federal research funding, and 12th in the nation in percentage increase in corporate research funding.