

Cole DeForest Wins NSF CAREER Award

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The National Science Foundation (NSF) announced on Monday that Assistant Professor **Cole DeForest** (<https://www.cheme.washington.edu/facresearch/faculty/deforest.html>) was one of the recipients of the Faculty Early Career Development (CAREER) award. The prestigious award recognizes teaching excellence, outstanding research and a dedication to the integration of educational and research activities.

DeForest's project, "User-programmable hydrogel biomaterials to probe and direct 4D stem cell differentiation," is funded with \$500,000 over five years from the Biomaterials (BMAT) Program of the NSF Division of Materials Research.

"Human tissue undergoes constant change. Though such alterations are critical in combatting disease, wound healing, and allowing us to live happy, healthy lives, the specifics of how these changes affect tissue function are largely unknown," said DeForest. "We seek to address this knowledge deficiency through the development of biomaterials that can be modified reversibly and on demand with bioactive signaling proteins that mimic the dynamic biochemical properties of native tissue." These advanced materials will be used to study the effects of changes in local signaling, providing new insight into disease/healing processes and a clear path forward for future research.



DeForest also looks forward to creating new laboratory classes and to providing a strong foundation in the fundamentals of polymer chemistry. The award will support the development of new courses, collaboration with local outreach programs, and the pursuit of careers in engineering. Modules will be used to help encourage a diverse cohort of students to study biomaterials. In partnership with the University of Washington, a new facility will be built for young scientists, furthering the research in this field.



will be built for young scientists, future leaders in the field of biomaterials.

"In a little over 3 years, Cole has built a highly innovative research program in regenerative medicine and single cell proteomics. I am delighted that NSF recognized his remarkable potential through this award. I look forward to working with Cole and his team in the future."
François Baneyx.

Cole's monumental achievement comes on the heels of recent awards in research and education, including the *Society PMSE Young Investigator*, the *2016 University of Washington Distinguished Teaching Award*, and the *2016 University of Washington Distinguished Teaching Award*.