

<b>RESEARCH AND DEVELOPMENT DISCLOSURE REPORT</b>								
<b>February 25, 2019 through April 29, 2019</b>								
<b>Reason for Conflict</b>	<b>External Entity</b>	<b>Owner</b>	<b>Principal Investigator</b>	<b>Co - P.I.'s</b>	<b>College</b>	<b>Period of Performance</b>	<b>Award Amount</b>	<b>Project Description</b>
Employee Owned Business Involved in Research	Mayfair Group, LLC	Edward Fox	Edward Fox	Dr. Hsaio	Computer Science	February 15, 2019 through December 31, 2019	\$23,000	Dr. Edward Fox, professor in computer science, has an equity interest in Mayfair Group, LLC in Norfolk, VA. Saurabh Chakravarty a computer science student is working toward his PhD, which is focused on summarization of legal depositions, closely related to Mayfair Group, LLC technologies. He has a fellowship covering \$18,000 in tuition paid by Mayfair for spring and fall semesters 2019. Dr. Fox is Saurabh's academic advisor. The fund anticipated to be used for this effort is Dr. Fox's Foundation Fund in Sponsored Programs 444465. Dr. Fox is teaching a course CS4624 this spring semester titled Multimedia, Hypertext, and Information Access). This is a project based course where students select one of several projects from existing small companies. Mayfair is listed as a potential project. Six students have selected the Mayfair project and the entity will provide \$5,000 to the foundation to support this class project, VTF 876659. A management plan was developed to mitigate the risk of this conflict.

Employee Owned Business Involved in Research	Zebra Analytix, LLC	Masoud Agah	Masoud Agah	GQ Lu	Electrical and Computer Engineering	February 20, 2019 through December 31, 2019	50,000	Dr. Masoud Agah, professor in electrical and computer engineering, has an equity interest in Zebra Analytix, Inc. and serves as the Chief Technology Officer. Zebra Analytix, Inc. plans to contract with the university to fabricate, coat, and initial tests of chips/sensors and subsequent follow-up analysis and collaboration. A management plan was developed and Dr. GQ Lu, professor in Materials Science Engineering, will serve as the independent co-PI for research, student, and financial oversight.
Employee Owned Business Involved in Research	AVEC, Inc.	Richard Burdisso	Todd Lowe	n/a	Aerospace & Ocean Engineering	January 30, 2019 through June 30, 2019	61,000	Dr. Richard Burdisso, Virginia Tech professor in Mechanical Engineering, has an ownership interest in AVEC, Inc. a non-publicly traded entity. Burdisso also serves in a management role as the President of AVEC, Inc. The company plans to issue a contract to Virginia Tech for R&D. A management plan was developed for this conflict and Dr. Burdisso has recused himself from being involved in this project. Dr. Todd Lowe, associate professor in Aerospace & Ocean Engineering, will be the lead principal investigator on the project. Dr. Lowe has confirmed that he nor does his research team have a significant financial interest or any other financial, advisory, or managerial relationship with AVEC, Inc.

Employee Owned Business Involved in Research	Continuum Biosciences, Inc.	Webster Santos	Webster Santos	David Kingston	Chemistry	March 11, 2019-February 29, 2020	500,000	This is a continuation of an existing sponsored project. Dr. Webster Santos holds equity interest in a start-up company Continuum Biosciences, Inc. The company is licensing IP work in Santos' lab which is jointly owned by VT and UVA. This entity seeks to contract R&D with Virginia Tech for a project titled Mitochondrial Uncoupler Drug Discovery. This is a continuation of work conducted with this entity at the University under a new contract. A continuation award has been received by the Office of Sponsored Programs from Continuum Biosciences with Dr. Santos as the lead investigator. The project is titled Mitochondrial Uncoupler Drug Discovery and the proposed work is to develop mitochondrial uncouplers that do not depolarize plasma membranes. A management plan was developed and Dr. David Kingston will serve as independent oversight.
Employee Owned Business Involved in Research	Zebra Analytix, LLC	Masoud Agah	Masoud Agah	GQ Lu	Electrical and Computer Engineering	February 25, 2019 through June 30, 2019	52,000	Dr. Masoud Agah, professor in electrical and computer engineering, has an equity interest in Zebra Analytix, Inc. and serves as the Chief Technology Officer. Zebra Analytix, Inc. plans to contract with the university to fabricate and test chips/sensors. A management plan for Dr. Agah has been developed. Dr. GQ Lu, professor in Materials Science Engineering will serve as the independent co-PI for research, student, and financial oversight. This plan will be reviewed and approved by appropriate management at the department, college and the COI Officer prior to execution of the sponsored agreement.

Employee Owned Business Involved in Research	Jensen Hughes	Brian Lattimer	Kramer Luxbacher	n/a	Mining and Minerals Engineering	March 28, 2019 through December 31, 2019	45,000	Professor Brian Lattimer is an adjunct professor in Mechanical Engineering. He teaches a semester long course for the university in the spring and fall of each academic year. He is not involved in research at the university in his role as an adjunct. Dr. Lattimer is employed by Jensen Hughes and informed the COI Office in March of 2019 that he has an equity interest in Jensen Hughes since 2016. Jensen Hughes is listed as a subcontractor on a Center for Disease Control project titled Investigation of Reduced Order Fire Modeling for Improved Safety and Response in Underground Coal Mines. Dr. Lattimer is listed as the PI of the Jensen Hughes subcontract. This conflict will be mitigated by Dr. Brian Lattimer recusing himself from any involvement in the research project on the Virginia Tech scope of work and will only be engaged in research on the Jensen Hughes subcontract.
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Employee Owned Business Involved in Research	Jensen Hughes	Brian Lattimer	Timothy Long	n/a	Chemistry	March 28, 2019 through December 31, 2019	92,000	Professor Brian Lattimer is an adjunct professor in Mechanical Engineering. He teaches a semester long course for the university in the spring and fall of each academic year. He is not involved in research at the university in his role as an adjunct. Dr. Lattimer is employed by Jensen Hughes and informed the COI Office in March of 2019 that he has an equity interest in Jensen Hughes since 2016. Jensen Hughes is listed as a subcontractor on a US Department of Defense project titled Designing Next Generation Polymer Based Surfactants for Fire Suppression. Dr. Lattimer is listed as the PI of the Jensen Hughes subcontract. Dr. Timothy Long, professor in Chemistry, is the lead principal investigator on this project and in this role will serve as the independent research, financial and research oversight. This conflict will be mitigated by Dr. Brian Lattimer recusing himself from any involvement in the research project on the Virginia Tech scope of work.
Employee Owned Business Involved in Research	Zebra Analytix, LLC	Masoud Agah	Masoud Agah	GQ Lu	Electrical and Computer Engineering	April 12, 2019 through December 31, 2019	75,000	Dr. Masoud Agah, professor in electrical and computer engineering, has an equity interest in Zebra Analytix, Inc. and serves as the Chief Technology Officer. Zebra Analytix, Inc. has received an NIH SBIR Phase I and plans to contract with the university to design and fabricate of purge and trap microchips. A management plan was developed and Dr. Lu will serve as the independent oversight.

Employee Owned Business Involved in Research	Mayfair Group, LLC	Edward Fox	Edward Fox	Narendran Ramakrishnan	Computer Science	March 18, 2019 through December 31, 2019	50,000	Dr. Edward Fox, professor in computer science, has an equity interest in Mayfair Group, LLC in Norfolk, VA. Dr. Ed Fox has submitted a proposal to the NSF i-Corp program to conduct a customer discovery assessment for summarization techniques. While Mayfair Group, LLC is not receiving any funds from the project the proposal is based upon technologies and processes in which Dr. Fox and Mayfair Group, LLC have a financial interest. Additionally, the CEO and CFO are unpaid collaborators on this grant. Dr. Ramakrishnan will serve as independent oversight of this project. A management plan was developed.
Employee Owned Business Involved in Research	Mayfair Group, LLC	Edward Fox	Edward Fox	Narendran Ramakrishnan	Computer Science	April 26, 2019- December 31, 2019	25,000	Dr. Edward Fox, professor in computer science, has an equity interest in Mayfair Group, LLC in Norfolk, VA. Dr. Ed Fox has submitted a proposal to receive funding from Dr. Provo's Economic Development Administration grant titled CatalyzeVT to further develop and commercialize a software solution for the summarization of deposition transcripts. Independent financial and research oversight will be appointed to oversee this effort.