

**RESEARCH AND DEVELOPMENT DISCLOSURE REPORT
October 20, 2018 through February 25, 2019**

Reason for Conflict	External Entity	Owner	Principal Investigator	Co - P.I.'s	College	Period of Performance	Award Amount	Project Description
Faculty-Employee Owned Business	Toxcel, LLC	Bryan Katz	Tripp Shealy		Civil & Environmental Engineering	10/17/18- 09/30/2019	\$30,000	Dr. Bryan Katz, part-time employee and associate professor of practice in Civil and Environmental Engineering is the Vice President of Engineering at Toxcel, LLC and has an ownership interest with this entity. Dr. Tripp Shealy, assistant professor of Civil and Environmental Engineering will be the lead PI on an award sponsored by Virginia Transportation Research Council that includes a subcontract to Toxcel, LLC. Dr. Katz will be working on Toxcel's subcontract as PI. Dr. Shealy does not report to Dr. Bryan Katz.
Faculty-Employee Owned Business	VoltMed, Inc.	John Rossmeisl (Rafael Davalos-previously reported)	Rafael Davalos	John Rossmeisl	BEAM & Veterinary Medicine	01/01/18- 12/31/19	\$750,000	This is a blanket agreement to cover multiple proposals pending. An award was received for \$84,000 NIH SBIR from Voltmed. The scope of work will include conducting canine studies involving spontaneous brain tumors with devices and technical support. A management plan has been developed to ensure there is separation and appropriate mitigation of risks.
Faculty-Employee Owned Business	FirstString Research, Inc.	Robert Gourdie Jane Jourdan	Robert Gourdie	Nikolaos Dervisis Earl Foster John Rossmeisl Zhi Sheng	FBRI Veterinary Medicine Materials Science & Engineering Small Animal Clinical Sciences	11/01/18-12/13/19	\$358,289	Dr. Gourdie, equity holder of FirstString, Inc., will be the lead principal investigator for the Virginia Tech subcontract from the business. A management plan is under development, independent research and financial oversight will be appointed according to Policy 13010. Dr. Gourdie will only participate on the Virginia Tech scope of work on this project. Dr. Christina Grek will serve as the lead PI of the FirstString, Inc. scope of work and the overall project. Grek is not an employee at Virginia Tech. The objective of this Phase II SBIR proposal is to translate the success of our Phase I data through more extensive preclinical development in a veterinary clinical trial in canine GBM patients.
Faculty-Employee Owned Business	After Architecture, LLC	Katherine MacDonald	Jona Hauptman		School of Architecture and Design	12/01/18-05/31/20	5,000	Katherine MacDonald is a Collegiate Assistant Professor in the School of Architecture and Design. She also holds equity interest in After Architecture, LLC. She is a co-owner of this company with her spouse Kyle Schuman a non VT employee. Katherine MacDonald is a co-investigator for Virginia Tech on a project which has budgeted her husband to serve as a consultant on the project. Katherine MacDonald has confirmed that After Architecture, LLC will have no involvement in this project. Kyle Schumann is responsible for the coding portion of the project and will co-design the built pavilion with Katherine MacDonald. Kyle Schumann will be consulting as an individual, not through After Architecture. Kyle Schuman is presently an external consultant but may become a VT employee in the near future. If so the COI Office must be notified immediately so adjustments can be made to this plan as necessary. Katherine MacDonald will not be able to approve any transactions or payments to the spouse. A subfund will not be required in this instance because these charges will be approved by the grant primary investigator Jonas Hauptman who will serve as research, student and fiduciary oversight.

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Faculty-Employee Owned Business	CytoRecover, Inc.	Rafael Davalos	A. Lynn Abbott		Center for Embedded Systems for Critical Applications	12/01/18-03/31/19	30,000	Dr. Rafael Davalos holds an ownership interest in CytoRecovery, Inc. CytoRecovery, formerly known as PhenoChip, LLC, had previously licensed Davalos' IP. CytoRecovery, Inc. will be working with Dr. Provo Director of the Office of Economic Development at Virginia Tech through his Economic Development Administration (EDA) grant to further develop software involving CytoRecovery, Inc. CytoRecovery, Inc., will not be the sponsor or subcontract, but will be a collaborator.
Faculty-Employee Owned Business	Fluxteq, LLC	Thomas Diller	Chris Williams		Mechanical Engineering	01/01/19-13/31/19	600	Dr. Chris Williams, associate professor in Mechanical Engineering, is the lead PI on a proposed project with Honeywell Federal Manufacturing & Technologies LLC. Dr. Williams has budgeted approximately \$600 to purchase heat sensors from Fluxteq, LLC. This entity is a faculty owned business; equity interest holder is Dr. Thomas Diller, professor in Mechanical Engineering. This project will investigate how different polymers interact with the CO2 laser standardly equipped in commercially available SLS systems, beginning with the polymers and combining an embedded heat flux sensor (Fluxteq sensor). The project will evaluate the extent of energy absorbed by different polymer systems, both neat and composite. In November 2018, Virginia Tech Procurement researched the availability of other products that would meet the needs of the university to acquire heat flux sensors. Their research indicated that the only one competitor to FluxTeq LLC offered a similar product at ~\$400 per unit while Fluxteq sensors are \$25 per unit.
Faculty-Employee Owned Business	Open Source Electronic Health Record Agent (OSEHRA)	Seong K. Mun	Seong K. Mun		Arlington Innovation Center	01/15/19-05/15/19	104,328	The US Department of Veterans Affairs (VA) is funding sponsored work at Virginia Tech. By law, the VA cannot directly award VT, so the funding is made to a non-profit OSEHRA. Virginia Tech faculty member Dr. Seong K. Mun is acting Chief Executive Officer of this non-profit. OSEHRA has issued a funding increment to continue funding through May 2019. Through this sponsored project the Department of Veterans Affairs (VA) is continuing to develop and promote an open source electronic health record which can be shared across VA facilities nationwide. These efforts are managed through OSEHRA under the technical leadership of Dr. Mun. Given the large percentage of Dr. Mun's salary funding by OSEHRA, we will have independent oversight from the College of Science as a primary part of our management plan.

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Faculty-Employee Owned Business	AVEC, Inc.	Richard Burdisso	Todd Lowe		Aerospace & Ocean Engineering	01/30/19-06/30/19	\$45,000	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. Dr. Richard Burdisso has filed a AVEC, Inc. disclosure for the university and has filed a VA Statement of Economic Interest Disclosure. Dr. Burdisso will not be involved on the Virginia Tech or the entity side of this work. Dr. Todd Lowe, associate professor in Aerospace & Ocean Engineering, will be the lead principal investigator on this 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.
Faculty-Employee Owned Business	FirstString Research, Inc.	Robert Gourdie Jane Jourdan	Robert Gourdie		FBRI	01/01/19-12/31/19	401,750	Dr. Robert Gourdie, Virginia Tech professor in Fralin Biomedical Research Institute, has an ownership interest in FirstString Research, Inc. a non-publicly traded entity. Gourdie also serves in as a scientific board member with the entity. Gourdie disclosed in year 4 of an NIH project that he has a significant financial interest in FirstString Research, Inc. that has an exclusive license for a peptide used in this NIH project. FirstString is not a sponsor nor a subcontractor on this grant but does have an interest in the peptide. Dr. Friedlander will serve as the independent research oversight. A management plan for Dr. Gourdie is currently under development.
Faculty-Employee Owned Business	Mayfair Group, LLC	Edward Fox	Edward Fox		Computer Science	02/20/19-06/30/19	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.