The U.Va. Engineering School Celebrates Participation in the
Nanosystems Engineering Research Center for Advanced Self-Powered Systems of Integrated Sensors and Technologies (ASSIST)

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Chair and Associate Professor, Department of Electrical and Computer Engineering, faculty lead on incorporation of medical requirements into the ASSIST systems

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Assistant Dean for Diversity, Director of the Center for Diversity in Engineering, lead on education component

Funded by the National Science Foundation
to foster research that creates self-powered devices to help people monitor their health
The University of Virginia and three other universities are partners on a national nanotechnology research effort to create self-powered devices to help people monitor their health and better understand how their environment affects it.

ASSIST, to be headquartered on North Carolina State University’s Centennial Campus, includes in its global research consortium U.Va., North Carolina State, Pennsylvania State University and Florida International University, plus five other affiliated universities and about 30 industry partners. ASSIST will be funded by an initial five-year, $18.5 million National Science Foundation grant.

ASSIST researchers will use the tiniest of materials — nanomaterials and nanostructures — to develop self-powered health-monitoring sensors and devices that use body heat and motion as power sources. These devices could be worn on the chest like a patch, on the wrist like a watch, as a cap that fits over a tooth, or in other ways, depending on the biological system that is being monitored.