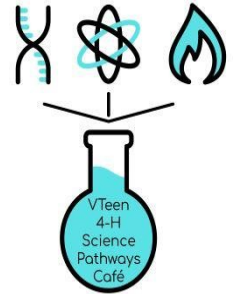




# VTeen Science Explorations



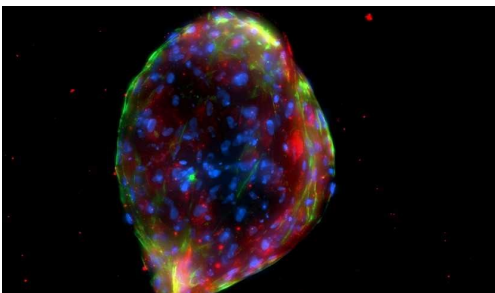
## Three Dimensional (3D) Cell Culture: Why Flat Stanley is a Great Learning Tool...But Not for Studying Cells

Wednesday, December 2, 2020, 3:30-4:45 pm

Open to all youth entering grades 7-12 in VT and across the country!

Register@ [www.uvm.edu/extension/youth/announcements](http://www.uvm.edu/extension/youth/announcements)

"Like" us @[www.facebook.com/VTeen4HScienceCafe](https://www.facebook.com/VTeen4HScienceCafe)



Traditionally tests to develop new treatments for cancer, to test environmental chemicals to see if they may harm humans, and other tests, have used cells in a flat layer. When you look at a person, however, you realize that we are not two-dimensional (2D) beings, and our cells do not exist in only two dimensions. This has led to false results and failed treatments, costing time, money, and potentially lives. Recently, newer three-dimensional (3D) cell culture models have replaced older 2D models due to the recognition that they more

closely represent what would be seen inside the body of an animal or a person, or what is known as in vivo biology. In this cafe we will learn more about these new models and how they are being used to create more effective treatments and a safer population.

### ABOUT OUR SPEAKER

**Brad Larson** has been at BioTek Instruments since 2009, first as a Principal Scientist in the Applications Group and most recently as a Field Scientist in the South Region. Brad's early roles included optimizing new assay processes on BioTek's line of automation, liquid handling, microplate detection, and imaging instrumentation, in addition to supporting new product development. Currently his role is supporting academic, biotech, and pharmaceutical researchers across five states. Prior to joining BioTek, he acquired extensive experience while employed in various capacities with multiple reagent providers. During his 25 year career in the Biotech Industry he has worked with numerous automation and detection platforms, as well as a variety of cell models, to optimize 2D and 3D cell culture assays across multiple research fields. His current work has led to publications in Assay and Drug Development Technologies, The Journal of Laboratory Automation, The Journal of Biomolecular Screening, and Combinatorial Chemistry and High Throughput Screening, among others.

**What is a Virtual Teen Science Café?** It is a free, fun way for teens to explore science, engineering and technology with local scientists, engineers and technology experts. Teens will "meet a scientist", learn about their work, and be able to participate in informal discussions.

**Questions?** Contact [lauren.traister@uvm.edu](mailto:lauren.traister@uvm.edu)

*To request a disability-related accommodation to participate in this program, please contact the 4-H Office at 802-888-4972 or [lauren.traister@uvm.edu](mailto:lauren.traister@uvm.edu) by November 18, 2020 so we may assist you.*



[www.uvm.edu/extension/youth](http://www.uvm.edu/extension/youth)

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