



2021-2022 POCC Lecture Series

March 24, 2022, 7:30 PM

Virtual reception to start prior to the seminar at 7 PM

Dr. Jeff Sperry

Vertex Pharmaceuticals

Improving Lab Safety in Academia: Free and Inexpensive Methods to Identify High-Risk Chemistry

Virtual Seminar by Zoom ([LINK](#))

The Philadelphia Organic
Chemist's Club



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Abstract: The transition from an academic lab to an industrial lab can be quite challenging for new graduates. When entering the pharmaceutical industry, the expectations for lab safety can come with a steep learning curve, especially when the new employee comes from an environment where lab safety is not up to industry standard. This talk will focus on how pharmaceutical companies approach safety for lab-scale chemistry. Additionally, it will offer suggestions for free and low-cost methods to ensure high-risk chemistry is identified and performed safely. Recent case studies also will be presented to show how the methods described may have prevented the incidents.

Bio: Jeff grew up on a farm in rural Ohio and attended Ohio University where he received his bachelor's degree in Chemistry in 2001. He began his graduate studies at the University of Florida as an Alumni Fellow but transferred to Dartmouth College after his second year when his advisor accepted a new position there. Jeff graduated from Dartmouth College with his Doctorate in 2006 with his thesis titled "Electrochemical Intramolecular Cyclizations Involving Silyl Enol Ethers and Appended Heterocycles". That year, Jeff joined the labs of Prof. Amos B. Smith, III at the University of Pennsylvania as a National Institutes of Health Postdoctoral Research Fellow. While at UPenn, Jeff completed the total syntheses of (-)-oleocanthal, (-)-decarbomethoxy oleuropein aglycone and the gram-scale synthesis of (+)-spongistatin I. After his postdoctoral appointment, Jeff joined Wyeth Pharmaceuticals in 2008 as a process chemist. After being acquired by Pfizer in 2009, Jeff moved to Groton to continue his career as a process chemist in early development where he led the development of multiple oncology, rare disease and neuroscience assets until taking an opportunity to lead the Process Safety Group in 2015. As the Team Lead for Process Safety, Jeff and his group ensured the safe execution of chemistry from early discovery through commercial launch. In June of 2019, Jeff joined Vertex Pharmaceuticals as Associate Director of Process Chemistry. He was tasked with building a Process Safety team and lead early development of assets coming from Vertex's Boston site. He currently has responsibilities for high-throughput experimentation and separation sciences as well. Jeff's current title is Director, Process Chemistry.

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