SPECIAL RESEARCH SEMINAR

Presented by the Center for Vascular and Heart Research at the Fralin Biomedical Research Institute at VTC





WEBSTER L. SANTOS, Ph.D.

Professor
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Department of Chemistry
College of Science
Director, Center for Drug Discovery
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In Person Seminar: Exercise in a Pill: A Chemist Approach and Drugging the S1P Pathway; and a Discussion of the Virginia Tech Center for Drug Discovery

In this presentation, Dr. Santos will highlight his team's investigations on developing small molecule protonophores selective for mitochondria as potential treatment for obesity and fatty liver disease. The goal is to develop molecules that increase energy expenditure without the need for exercise. On the next part, Dr. Santos will discuss developing inhibitors of proteins in the sphingosine-1-phosphate (S1P) pathway for the treatment of multiple sclerosis and chronic kidney disease. S1P is an endogenous signaling molecule that functions as a chemotactic agent that is important in inflammation, fibrosis, and cancer. In both programs, the medicinal chemistry approach, assay development, and in vivo studies will be presented. Finally, he will discuss the VT Center for Drug Discovery and potential collaborations.



