James & Esther King Biomedical Research Program

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Chemistry
University of Miami

2010 Program
Technology Transfer Feasibility
(1-year project)

Project Title: Flourescent monoamine transporter probes

Project Summary: The goal of this project is to develop new molecular tools as a commercially viable technology. The work we have outlined includes demonstrating these molecular probes in two applications. The first is aimed at the pharmaceutical industry, specifically in the search for nicotine cessation therapies where the probes will help in the screening process and understanding the mode of action. The second application is to develop a clinically relevant diagnostic procedure that will identify one of the biological markers associated with smoking that is correlated with increased risk of cardiovascular disease. Knowledge gained from our studies will guide the further development and selection of appropriate nicotine cessation therapies as well as provide tools for assessing patient health. This ultimately will lead to improved rates of cessation amongst tobacco users and decrease rates tobacco-related disease.