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Dissecting the Sex-dependent Neurochemical Effects of the Rapid-acting Antidepressant Drug Ketamine with In Vivo Brain Microdialysis in Mice

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Beginning in 2015, the Miami Valley Hospital Foundation (MVHF) has partnered with MVH to bring the Dayton community a program to aid in the battle to quit smoking. Currently, the MVHF has provided the hospital with the necessary funding to start the program. Moreover, MVHF has helped fund 11 counselors to provide talk therapy to patients hoping to quit smoking. Since its establishment in 2016, the program has helped over 220 people quit smoking. However, the MVHF and the hospital are looking to expand the program by training additional counselors and obtaining nicotine replacement medicines.

### Miami Valley's smoking cessation program

Beginning in 2015, the Miami Valley Hospital Foundation (MVHF) has partnered with MVH to bring the Dayton community a program to aid in the battle to quit smoking. Currently, the MVHF has provided the hospital with the necessary funding to start the program. Moreover, MVHF has helped fund 11 counselors to provide talk therapy to patients hoping to quit smoking. Since its establishment in 2016, the program has helped over 220 people quit smoking. However, the MVHF and the hospital are looking to expand the program by training additional counselors and obtaining nicotine replacement medicines.

### Are there that many smokers in Dayton?

Although many of the health risks of smoking are currently known, many of our friends and family members still suffer from this devastating addiction.

- Nearly 17 people out of every 100 are chronic cigarette smokers\(^1\)
- Almost 24,000 Dayton community members suffer from this disease
- Nicotine remains one of the most addictive substances, surpassing alcohol and heroin\(^1\)

### Health risks associated with smoking

Chronic tobacco use is the leading cause of preventable disease and death within the US. Shockingly, it is responsible for nearly 1 in 5 deaths in the US annually\(^1\).

- Cigarettes contain nearly 7,000 chemicals\(^1\)
- Increased risk for developing lung cancer\(^1\)
- Increased risk for developing cardiovascular disease and stroke\(^1\)
- Elevated risk for developing lung diseases (i.e COPD)\(^1\)

### Steps needed to expand the program

In order to expand the already established program, additional funding was needed. Our group:

- Identified a potential grantmaker using the Foundation Directory Online Database
- Conducted extensive research on MVHF, MVH and grantmaking institutions to obtain relevant background information
- Is developing an effective grant to procure funding for MVH's smoking cessation program

### How did this project prepare us for our professions?

"As an aspiring neuroscientist, this project proved invaluable as it taught me how to write analytically. Overall, I know that I am much more prepared to enter the professional world." - Jonathon Sens

"This grant proposal project has given me the opportunity to gain experience in consulting, analyzing client needs, and translating those requirements into a proposal." - Jacob Allsop

"This project provided me with insight into a different style of writing that I have never experienced before." - Colin Wilson

### References: