

The PADs Scentinel

News from the program that trains Parkinson's Alert Dogs for the detection of Parkinson's Disease.

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Sniffing for Odors Unique to Parkinson's Disease.

PADs is engaged in an exciting new avenue of research to help discover causes of Parkinson's Disease. Understanding these causes is the first step towards finding a cure.

In September of 2017, PADs worked with participants, who had previously donated T-shirt samples, to re-donate shirts with the goal of using laboratory equipment to determine if volatile organic compounds could be found that are unique to Parkinson's Disease. An equal number of control samples were also used in the research study. Laboratory analysis has so far

proven to be inconclusive, however the research team is continuing to search among the thousands of molecules found in the T-shirts to discover an odorant molecule unique to Parkinson's Disease.

Genomic analysis is proving to be more fruitful in unlocking the mystery of the signature Parkinsonian "smell" by leading to predictions of associated molecules. Consequently, these molecules have been artificially synthesized and tested with Parkinson's Alert Dogs (PADs). The dogs gave a positive result to a T-shirt swabbed with these molecules. These results were compelling and led to intensive research surrounding these



molecules which is currently ongoing.

We sincerely thank all of you who helped to make this research happen, with special thanks to the scientists, volunteers, sample donors and canine handlers who are dedicating their time, expertise and funding to this effort.

A wag of the tail to all of you!

The limitations of machine-based chemical analysis underscore the amazing ability of the dog in sniffing. There is no substitute for dogs when it comes to accurately detecting the presence or absence of a very small trace of molecular substance. Trained dogs can distinguish a single molecule out of millions (some experts say billions.)

Dr. Matthew Lawyer, Parkinson's Disease Researcher, had this to say about the value of sniffer dogs to his work: "PADs has been an extraordinary gift to scientific understanding. These dogs have been crucial in providing us with deeper insight into causes of Parkinson's Disease. Even if a theory proves itself wrong, the dogs continue to guide us to a better theory. I am forever grateful for the help of the PADs organization and dogs."

WHAT'S INSIDE: New Board Members . Seven New Noses . Sample Donors . In the News . Padding Forward

PADs for Parkinson's

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