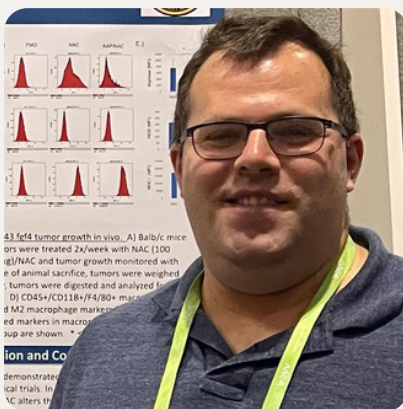


"Thank you to Swim Across America – Richmond for your generosity and commitment to our mission and for your faith in the promise of cancer research.

With your gift, you are transforming and saving lives."

– Robert A. Winn, M.D.,
Massey Cancer Center director
& Lipman Chair in oncology

Update from Alexander Neuwelt, M.D.



Support from the Swim Across America Young Investigator Award has provided critical, pilot program funding to support the work of a promising researcher at Massey and advance a novel research idea. Scientific data from a successful pilot project can often be a key component in securing grant funding necessary to propel the project to the next stages of research. In this way, funding for pilot projects can result in a powerful return on investment and make a real impact on cancer research at Massey and beyond.

We are pleased to share an update on your FY22 gift, which is supporting Alexander Neuwelt, M.D. Dr. Neuwelt's research has shown promising outcomes and is currently being finalized for publication, with patient enrollment beginning for an early-phase clinical trial.

“ The Swim Across America grant has been incredibly important for our lab over the past year. We are investigating the effects of high-dose acetaminophen (e.g., Tylenol) on the tumor immune microenvironment, including how, at high doses, it can modulate the body's natural immune response to help “reject” tumor cells and prevent them from growing.

While our research started off with studying its effects on T-cells, over the course of our work, we observed the profound effect of acetaminophen on macrophages, which are specialized cells involved in the detection and destruction of bacteria and other harmful organisms.

Over the past year, our work has optimized a variety of models and continued to refine our rescue strategy, and our T-cell research is ongoing. Our models suggest that we can administer roughly 100-fold higher than the standard doses of acetaminophen without detectable evidence of toxicity. This can have profound anti-cancer effects, as high-dose acetaminophen can lead to complete responses in commonly used pre-clinical cancer models that are known to be resistant to standard first-line therapies.

We plan to begin enrolling patients in an early-phase clinical trial, in collaboration with partners in the pharmaceutical industry, focused on studying the safety and efficacy of high-dose acetaminophen in treating advanced cancer within the next year. ”

Dr. Neuwelt's lab was the first to show that antidotes to acetaminophen to prevent toxicity, such as n-acetylcysteine (NAC), can be administered simultaneously with acetaminophen to prevent liver toxicity, while allowing safe dose escalation to levels required for anti-cancer effects (Neoplasia, 2021).

An abstract summarizing Dr. Neuwelt's work was accepted for publication at the April 2023 annual meeting of the American Association of Cancer Research, the largest pre-clinical cancer research meeting in the world.

Thank You

We are profoundly thankful for Swim Across America - Richmond for your commitment to Massey and to furthering the health of our community. With your support, Massey researchers and physician-scientists are transforming cancer research and saving lives; for that, we are tremendously grateful.

your support

**is moving us closer
to our vision for a
future without cancer.**



SWIM ACROSS AMERICA - RICHMOND
FY2022 IMPACT REPORT

Prepared May 2023



A future without cancer starts with YOU.

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