

For Immediate Release

NICO Awards \$75,000 Grant for Advanced Organoid Growth in Brain Tumor Research Emory University neurosurgeon leads study using NICO's novel biological tissue preservation system

INDIANAPOLIS, IN (August 21, 2023) – Tomas Garzon-Muvdi, MD, MSc, assistant professor of Neurosurgery at Emory University School of Medicine, has been awarded a \$75,000 Investigator Initiated Study (IIS) grant from <u>NICO Corporation</u> to evaluate potential increased efficiency of high-throughput organoid formation and cultures for brain tumor biology research and molecular diagnosis using NICO technologies. Organoids are three dimensional tissue cultures that allow researchers to study the complexity and heterogeneity of tumor cells, making them valuable research assets for precision medicine and drug discovery.

Dr. Garzon-Muvdi's study, *Increasing Efficiency of Organoid Formation and Culture for Brain Tumor Research and Molecular Diagnosis*, will use 10 patients with skull base metastases or other primary tumors to compare tissue samples collected through traditional en bloc or dissection methods with samples collected using the patented NICO Myriad and Automated Preservation System (APS).

"The study is to determine tissue quality using an automated preservation system and the impact it has on our ability to create organoids for molecular research and advanced analyses," said Dr. Garzon-Muvdi. "Automating and standardizing the way brain tissue is collected, maintained, and prepared in a uniform size would save valuable time for lab members working on brain tumor biology research, and it would streamline our work to improve brain tumor patient outcomes."

The quality of tissue collected using the NICO Myriad and APS includes critical molecular information that is valuable to researchers and may improve how a patient's brain tumor is treated with various therapies, said Jim Pearson, president and CEO of NICO Corporation. Surgeons typically collect large pieces of tissue and must go through a manual, time consuming disassociation process when tissue is received to prepare it for use in research efforts, such as organoid formation.

"Organoids hold great promise for advancing our understanding of human biology, disease progression and drug discovery," Pearson said. "We are hopeful that our technologies can contribute to advancements in science for improved precision medicine therapies. This ultimately impacts the most important factor in this equation, which is the patient with a brain tumor."

The NICO Investigator Initiated Study (IIS) grant program is dedicated to supporting novel pre-clinical and clinical research efforts related to improved patient and economic outcomes using NICO technologies. The program supports physicians and researchers across a wide range of neuro-specialties committed to building clinical and scientific data to achieve better outcomes for patients and healthcare providers, as well as expanding the body of evidence for vascular, tumor and oncology clinical practices. Learn more about the IIS program areas of interest and how to apply for a grant.

NICO is a pioneer and leader in minimally invasive neurosurgery. It advocates for and supports development of scientific evidence promoting safe and novel approaches to brain disorders and expanding clinical research efforts in pursuit of improved patient outcomes using MIPS. All projects supported by the IIS grant program are conducted by the applicant(s) and their respective affiliate institution(s); NICO is neither involved in collecting information, conducting research, or in the publication of any study project findings.

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