



For Immediate Release

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**NICO Awards \$50,000 Grant to Better Understand the Biological Weakness of Rare Chordoma Tumors**  
*Study outcomes could provide insights into new targeted treatments to manage this challenging disease*

INDIANAPOLIS, IN (September 22, 2023) – Zachary C. Gersey, MD, MS, neurosurgery resident at the University of Pittsburgh Medical Center, has been awarded a \$50,000 Investigator Initiated Study (IIS) grant from [NICO Corporation](#). The study aims to determine if immediate biological preservation of patient-derived chordoma tumor tissue, collected intraoperatively and implanted for serial sampling in translational research, will provide new insights into the biological weakness of the disease and contribute to developing improved treatment therapies.

The study – *Creating a New Chordoma PDX Model* – uses NICO’s Myriad automated tissue resection technology that is connected to its proprietary Automated Preservation System (APS) to establish a unique standardized method of *intraoperative* tissue collection. The technologies together enable freshly resected chordoma tissue to be harvested and immediately implanted into hosts to study the molecular characteristics of chordoma regrowth in a controlled setting.

“This kind of study where we take human tumor tissue during surgery has never been done before and is truly unique to this chordoma model,” said Dr. Gersey. “If we are able to further understand the drivers for chordoma recurrence, we may be able to help patients prevent and treat recurrences in a more targeted and effective manner.”

Chordoma is a slow growing, rare bone tumor that forms in the spine or skull base and is always cancerous. It can be difficult to remove and treat due to its location near the spinal cord or brainstem and other critical structures, such as arteries and nerves. In about 30 to 40 percent of patients, the tumor eventually spreads, or metastasizes, to other parts of the body.

In this study, data on tumor size, rate of growth and patient survival will be collected and compared to control subjects for which NICO technologies were not used to obtain tissue. The goal is to develop a working chordoma PDX model using tissue obtained from NICO technologies. Once a model is established, it can be used in various research studies to test targeted therapies, chemotherapeutics, as well as restricted diets in a functioning *in vivo* chordoma model.

“We are very excited to be working with UPMC, a leader in the field of chordoma research and advancements,” said Jim Pearson, president and CEO of NICO Corporation. “They have a rich research environment for this disease, and we believe our technologies offering biological preservation of tumor tissue can enable enhanced research opportunities and more answers for this complicated disease – providing new hope for patients.”

Although surgical techniques and adjuvant therapy practices have improved over the years, the

standard of care for skull base chordoma has changed very little in recent decades. Modern research techniques that lead to better treatment options will be key to changing average survival rates for this cancer.

“The pressing need remains for better treatments for chordoma patients,” said Josh Sommer, co-founder and executive director of the [Chordoma Foundation](#). “In the years ahead, our sights are set on treatments that can prevent recurrence, eliminate tumors rather than just slow their growth, and preserve patients’ quality of life. Thankfully, advances provide ever more tangible reasons to believe this is not only possible, but probable.”

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 Minimally Invasive Parafascicular Surgery (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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