

St. Jude and UF Proton Therapy Institute to begin proton therapy clinical trial

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St. Jude Children's Research Hospital and the University of Florida Proton Therapy Institute have formed a collaboration to provide proton therapy for St. Jude patients. The announcement follows the approval of the first clinical study to evaluate the use of proton therapy for rare brain cancers in children younger than 3 years old.

Under the clinical protocol, St. Jude will refer patients to receive proton therapy at the UF Proton Therapy Institute in Jacksonville, Fla. The purpose of the clinical study is to improve response rates and decrease treatment-related side effects.

Proton therapy is being studied as a way to reduce potential damage to healthy tissue that may result from conventional radiation therapy. This is especially important in treating children with brain and spinal tumors to potentially avoid interference with development, growth and [cognitive functioning](#).

St. Jude has the world's largest protocol-based, pediatric brain tumor research and treatment program, which puts it in an excellent position to scientifically document the advantages realized with proton beam radiation therapy.

"Proton beam therapy is potentially of great importance to St. Jude and our patients," said Dr. Joseph H. Laver, St. Jude executive vice president and clinical director. "Although most proton facilities operating in the U.S. recognize pediatrics as a major area of focus, there is very little

meaningful data using this modality in children. Working with UF Proton Therapy Institute, we are well-positioned to answer key questions regarding this therapy for children with cancer."

St. Jude patients accepted for the clinical study will be in Jacksonville for proton therapy treatment for six to eight weeks. It is expected that up to 15 patients will receive treatment during the first year of the study. While in Jacksonville, hospital care for St. Jude patients will be provided by Nemours Children's Clinic Jacksonville and Wolfson Children's Hospital. The Ronald McDonald House in Jacksonville will house St. Jude patients while they are receiving treatment in Florida.

"It is central to our mission to realize the full potential of protons in the treatment of children," said Dr. Nancy Mendenhall, medical director at UF Proton Therapy Institute. "In cooperation with St. Jude, we will have both clinical and research expertise to provide the best outcomes for patients and to create new knowledge that will guide the development of proton therapy for future patients."

St. Jude leads the field in the application of intensified modulated radiation therapy, known as IMRT. The technique is effective at avoiding damage to adjacent tissues; however, IMRT can still deliver significant radiation doses to underlying tissues resulting in unavoidable side effects for some children. Proton therapy can be focused more precisely and intensely on specific areas of cancerous activity. Protons can also be energized for a desired degree of tumor penetration, thus sparing underlying tissues from radiation exposure.

UF Proton Therapy Institute is one of only six proton therapy centers in the United States. Since opening in August 2006, UF [Proton Therapy](#) Institute has treated 100 pediatric patients.

Source: St. Jude Children's Research Hospital

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