

# UConn School of Medicine and CCMC Formalize New Research Agreement

A new research agreement between Connecticut Children's Medical Center and the University of Connecticut Health Center means endless possibilities for both institutions. The new agreement formalizes and establishes parameters for investigators from Connecticut Children's to have access to laboratory space, equipment and core facilities at the UConn Health Center.

One such researcher benefiting from the newly-signed pact is Juan C Salazar, MD, MPH, Connecticut Children's Chief of Pediatric Infectious Diseases who also is an Associate Professor of Pediatrics with the UConn School of Medicine. Dr. Salazar is conducting several translational research projects studying the pathogenesis of syphilis and Lyme disease, and has received funding for each of these studies from the National Institutes of Health (NIH).

"Both the Connecticut Children's and the University of Connecticut realize the impact of conducting research that benefits children and adolescents," Dr. Salazar said. "This agreement is a win-win for everyone." Connecticut Children's Director of Research Georgine Burke, PhD, said the agreement is mutually beneficial because there's a demand for mentorship and lab space at Connecticut Children's and for the UConn Health Center, it makes available pediatric experts as well as valuable NIH dollars. "The leadership at Connecticut Children's including Physician-in-Chief Paul Dworkin, MD, has been dedicated to supporting promising investigators like Dr. Salazar," Dr Burke said.

Dr. Burke added that an additional part of the research agreement involves the handling of intellectual property claims which are handled through UConn's Center for Science and Technology Commercialization. "If one of our investigators makes an invention or a discovery that could be patented, we now have the benefit of their expertise available to us," she said.

In addition to Dr. Salazar, other investigators from Connecticut Children's have dedicated research space at the UConn Health Center including Surgeon-in-Chief Fernando Ferrer, MD; Director of General Surgery Christine Finck, MD; neonatologist Adam Matson, MD; pediatric gastroenterologist Francisco Sylvester, MD and pediatric otolaryngologist Tulio Valdez, MD.

Dr. Salazar has received more than \$500,000 in NIH funding since he joined Connecticut Children's in 1998 and is now awaiting word on a prestigious NIH R01 grant that will provide approximately \$2.3 million for a Lyme disease study. As part of the project, he is studying how the Lyme disease spirochete is recognized and cleared by human immune cells. The ultimate goal of his Lyme disease work is to understand why some children and adolescents get sicker from the disease than others as well to assist in the development of new Lyme disease treatment and prevention strategies. Dr. Salazar said his R01 proposal scored in the top 9 percent of those submitted to his study section at the NIH and that he hopes to receive final notice of the award by early summer.

A recent research accomplishment for Dr. Salazar is that he was the lead author of a paper published in the Proceedings of the National Academy of Sciences (PNAS), one of the most prestigious scientific journals. The paper — which was published in the March edition of PNAS — describes a novel mechanism for how human immune cells sense the Lyme disease bacterium and generate inflammatory signals. Dr. Salazar utilized NIH and Connecticut Children's strategic

research dollars to conduct the study in his laboratory at the UConn Health Center.

“The PNAS publication describes work conducted by my research team over the past three years. I’m honored that such a prestigious scientific journal recognized the importance of our findings”, Dr. Salazar said. Dr. Salazar also is quick to distribute credit for the success of his research to everyone on his team at the UConn Health Center. Team members include Research Assistant and Lab Manager Carson Karanian; post-doctoral fellows Jorge Cervantes, MD, PhD and Star Dunham, PhD; and Nurse Manager Tom Kiely, RN.

Additionally, Dr. Salazar credits the success of his research to his scientific mentor, Justin Radolf, MD, who also played a vital role in the new Connecticut Children’s/UConn research agreement. Dr. Radolf is a world renowned spirochetologist who is Professor of Medicine, Pediatrics and Genetics and Developmental Biology at the Health Center. “Dr. Radolf is a visionary physician-scientist who recognizes the importance of pediatric translational research and has utilized his skills in helping Connecticut Children’s physicians, like myself to become better researchers,” Dr. Salazar said.

Dr. Burke also has seen firsthand the impact Dr. Radolf had on Dr. Salazar’s research efforts. “Dr. Salazar has worked so hard and I’ve watched his knowledge and skills grow into that of a topflight investigator,” Dr. Burke said. “Dr. Salazar wasn’t initially hired as a physician scientist, but when he decided to re-focus his career in that direction, Dr. Radolf helped him acquired the necessary skills to conduct state of the art translational research in today’s competitive environment.”