

For Immediate Release  
June 21, 2016

Contact: Dale R. Heffler  
(908) 731-6605  
[dheffler@njhf.org](mailto:dheffler@njhf.org)

Patricia Quigley  
(856) 256-4241  
[quigley@rowan.edu](mailto:quigley@rowan.edu)

**New Jersey Health Foundation and The Nicholson Foundation Award  
\$50,000 Grant to Rowan University Professor Developing Device  
to More Effectively Treat Orthopedic Related Infections**

New Brunswick, NJ –Shivakumar Ranganathan, PhD, assistant professor of mechanical engineering at Rowan University, has received a \$50,000 Innovation Grant from New Jersey Health Foundation (NJHF) and The Nicholson Foundation to develop an implant that has the ability to transform orthopedic care for patients who suffer from infections following surgery, announced James M. Golubieski, president of NJHF.

“With an increasing population that requires hip and knee surgeries and the high rate of deep bone infections in patients following those surgeries, the need to pursue new ideas for orthopedic implants is more important now than ever before,” explained George F. Heinrich, M.D., vice chair and CEO of New Jersey Health Foundation. “Dr. Ranganathan’s research will incorporate built-in design features within the implant that will act as antibiotic delivery vehicles to more effectively treat these difficult infections.”

Dr. Ranganathan’s project uses 3-D printing to produce multiple total knee replacement and plate implants with built-in drug delivery systems that can be specifically tailored to each patient. Collaborating closely with Tae Won Kim, M.D., a practicing orthopedic surgeon and

instructor of orthopedics at Cooper Medical School of Rowan University, Dr. Ranganathan and his team are able to incorporate the relevant clinical need into the implant design.

“Orthopedic trauma patients who suffer open fractures and patients undergoing hip and knee replacement surgeries are at high risk for developing post-operative surgical infections,” explained Dr. Ranganathan. “If successful, our device will provide a new and improved drug delivery system and personalized implants that can more efficiently treat these difficult infections.”

For more information, contact Mike Wiley, vice president of Foundation Venture Capital Group, at (908) 731-6612 or [mwiley@njhf.org](mailto:mwiley@njhf.org).

-30-

#### **About New Jersey Health Foundation**

[New Jersey Health Foundation](#) is a not-for-profit corporation that supports biomedical research and health-related education programs in New Jersey through its Grants Program and its affiliate, [Foundation Venture Capital Group](#) which makes private equity investments in life science start-up companies in New Jersey headed toward commercialization.

#### **About The Nicholson Foundation**

[The Nicholson Foundation](#) works to improve the quality and affordability of healthcare for vulnerable populations in New Jersey by transforming how it is paid for and delivered. The Foundation’s approach emphasizes partnerships and performance-based grant making; its goal is sustainable systems reform.

#### **About Rowan University**

In the past four years, [Rowan University](#) created a School of Biomedical Sciences & Health Professions; opened the Camden-based Cooper Medical School of Rowan University; and incorporated the School of Osteopathic Medicine and the Graduate School of Biomedical Sciences, making Rowan only the second university in the nation to grant both M.D. and D.O. medical degrees.