

Dr. Suresh Alahari
Professor of Biochemistry and Genetics
LSU School of Medicine

Education

Andhra University, India	BS	July 1983	Life Sciences
Andhra University, India	MS	January 1986	Human Genetics
Drexel University	Ph.D	February 1994	Molecular Biology



Dr. Alahari obtained his Bachelor of Science in Biology and Master of Science in Human Genetics from India in 1983 and 1986 respectively. His Ph.D. in Molecular Biology was awarded by Drexel University, Philadelphia in 1994. From 1994 to 1998, Dr. Alahari did a post-doctoral fellowship at the University of North Carolina at Chapel Hill. In 2004, Dr. Alahari joined LSU Health New Orleans as Associate Professor of the Department of Biochemistry.

During his tenure at the University of North Carolina, he discovered a novel protein that he termed, Nischarin. Dr. Alahari has published several papers describing the function of Nischarin. He has served on editorial review boards and study sections. In addition, he availed visiting professorships at the University of Pennsylvania, Philadelphia and Rockefeller University, New York. Currently he is a fully tenured and endowed professor of Biochemistry.

Research

Dr. Alahari's lab at LSU Health New Orleans conducts research on various aspects of cancer including understanding the role of Nischarin, a novel protein discovered by him, and microRNAs in breast cancer. Recently his lab discovered four different novel small molecules that are effective in breast cancer therapies, and they are currently being tested in animal models.

Some of the major discoveries of his lab are as follows:

Research conducted by Dr. Alahari, has found that metformin, a commonly prescribed drug for Type 2 Diabetes, may be effective in treating cancers that lack a protein called Nischarin. The discovery that the effectiveness of certain drugs, such as metformin, are influenced by the level of Nischarin expression could help identify specific patients in whom it is most likely to prove beneficial. In this way, Nischarin expression could serve as a biomarker to help inform decisions in management by identifying a subset of patients most likely to benefit from AMPK activator therapies. Also, his lab research suggests Nischarin may be a promising therapeutic target to

treat or prevent metabolic disorders. The study also reported for the first-time metabolic distinctions between male and female mice. These results were published in Cancer Research, International Journal of Obesity, International Journal of Cancer and Journal of Biological Chemistry.

In addition, Dr. Alahari's lab has shown for the first time that a tiny piece of RNA (miR-27b) deregulates energy metabolism, an emerging hallmark of cancer. The finding identifies a new target for therapeutic intervention in breast cancer and the findings were published in Molecular Cancer.

Furthermore, Dr. Alahari's lab has shown that a combination of drugs already approved by the FDA for other cancers may be effective in treating chemo-resistant triple-negative breast cancer. These findings were published in Molecular Cancer and Oncogene Journals.