**Marshall University SRIMS Program Mentors**

**Mentor Description of Research**

Dr. Subha Arthur Intestinal assimilation of Na± and nutrients in the causation of cardiovascular diseases risk factors – obesity, diabetes, and hypertension. [(Biosketch)](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/clinical-and-translational-science/arthur/)

Dr. Ji Bihl Primary research interest is the impact of diabetes on cerebrovascular disorders including ischemic and hemorrhagic stroke.

1. Extracellular microvesicles (MVs) and exosomes (EXs) in brain disorders and diabetic vascular complications.

2. Endothelial progenitor cells (EPCs) in neurological dysfunction, vascular protection, and tissue repair.

3. Exosomal communications between adipose tissue and brain/vessels.

4. MVs and EXs in skin injury and wound healing. [(biosketch)](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/bihl-ji/)

Dr. Alip Borthakur 1. Probiotic bacteria stimulate intestinal nutrient/ion absorption and counteract dysregulated ion transport in IBD and infectious diarrhea.

2. Gut microbe regulation of energy homeostasis in obesity. [(biosketch)](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/clinical-and-translational-science/alip-borthakur/)

Dr. Alfred Cecchetti Analytics and programming for clinical research. [(biosketch)](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/clinical-and-translational-science/cecchetti/)

Dr. Price Dickson System based approach for the discovery and characterization of genetic and genomic mechanisms driving addiction vulnerability. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/price-e-dickson/))

Dr. Jennifer Haynes Regulation of nutrient and electrolyte transporters in human primary intestinal epithelial cells. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/clinical-and-translational-science/jennifer-haynes/))

Dr. Brandon Henderson Characterizing the impact of vaping flavorants on nicotine addiction focusing on the neurocircuitry of addiction. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/brandon-henderson/))

Dr. Balasubramanian Palaniappan 1. Mechanism of regulation of Down Regulated Adenoma (DRA) in obesity associated colitis induced colon cancer.

2. Unique Regulation of Glucose and NaCl absorption in diet-induced obesity. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/clinical-and-translational-science/balasubramanian-palaniappan/))

Dr. Rajan Lamicchane To integrate the development of novel analytic approaches and their application to a wide range of areas in health and health care. His current research interests include sampling, time series, model selection, big data analytics, and machine learning. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/clinical-and-translational-science/rajan-lamichhane/))

Dr. Wei Li Examine the mechanistic role of thymidine phosphorylase (TYMP) in thrombosis and in the development of atherosclerotic disease. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/wei-li/))

Dr. Yongke Lu The effects nicotine and high-fat diets on both alcohol-associated and nonalcoholic fatty liver disease. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/yongke-lu/))

Dr. Christopher Risher 1. Synapse growth and maturation.

2. Mechanism by which gabapentin and opioids interact.

([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/chris-risher/))

Dr. Louise Risher How adolescent binge drinking influences brain function. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/louise-risher/))

Dr. Travis Salisbury The impact of obesity on cancer progression. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/salisbury/))

Dr. Maria Serrat Dysregulated Growth Factor Transport and Accelerated Bone Elongation in Childhood Obesity. ([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/maria-serrat/))

Dr. Soudamani Singh 1. Adipose derived secretome (ADS) uniquely regulates intestinal epithelial cell nutrient absorption during obesity.

2. Regulation of Na-glutamine co-transport by adipose-derived secretome in intestinal epithelial cells.

([biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/clinical-and-translational-science/singh-soudamani/))

Dr. Jinju Wang Impact of exercise-regulated exosomes in cerebrovascular disease.

**1. To study the role of exosomes released from endothelial progenitor cells (EPCEXs) in the beneficial effects of exercise on hypertension-associated ischemic stroke.**

**2. To investigate the functional role of exosomes released from adipose tissue (ATEXs), especially perivascular adipose tissue, on vascular dysfunction and remodeling in diabetes.**

**(**[biosketch](https://jcesom.marshall.edu/research/office-of-research-and-graduate-education/research-faculty/biomedical-sciences/wang-jinju/)**)**