inStem outreach and science communication public talk titled ‘Skeletal muscle – life's mover and shaker!’

In the weekly public lecture series “The Human Body: InsideOUT” organized by the Bangalore Life Science Cluster (DBT-inStem, NCBS-TIFR, and C-CAMP), in which a scientist talks about one human body part covered by their research. The lecture series, which started a month ago, is curated for high school and college students, spans material ranging from basic information in textbooks to the latest research on the subject.

Dr. Arvind Ramanathan from DBT’s Institute For Stem Cell Science and Regenerative Medicine (inStem), Bengaluru, spoke on October 16, 2020 about one muscle type - skeletal muscle – covering aspects of its structure, function as well as muscular disorders and underlying genetic causes, in his talk. He explained how the main function of skeletal muscle is mechanical work and how the muscle fibre is adapted to use ATP, from glycolysis (fast twitch) and oxidative metabolism (slow twitch). Loss of muscle homeostasis is the basis of numerous diseases such as sarcopenia and muscular dystrophy.
The session attracted close to 200 participants and included few quiz polls along with Q&A session for the audience to participate. This 85 minutes session was LIVE streamed on BLiSC Facebook page and live tweeted on DBT-inStem Twitter handle.

Dr. Ramanathan is an Associate Investigator at the Regulation of Cell Fate theme at inStem and his lab studies metabolic regulation of tissue homeostasis during injury, environmental stress and aging- from basic biology to translation.