

Rupshi @ NeuroArt (FENS 2018)

To me, art and science are not different, but the same subject appreciated and experimented differently in our brain. An artist's brain observes the world, creates a unique beauty and extends our world through own creative art. A scientist's brain observes the same world and figures out its full beauty through experiments and innovation. Being a neuroscientist and an artist, I appreciate how our brain makes us who we are, both in elements of science and art. My first art-piece in tying our understanding of art and science and the immense potential of our brain is 'Brain is wider than the sky and deeper than the sea' inspired by Emily Dickinson's poem. In this artwork, I tried to capture my vision of brain and its neuron that I regularly draw for my scientific research, as a central feature of our cognitive ability. I painted a realistic 3D neuron expanding its branch from the depth of a brain, which itself is immersed in a deep sea under wide expanse of a calm blue sky. I want to tell a story to the layman that our highest capacity for understanding this Universe lies deep within our brain, in every turns and twists of our neurons.



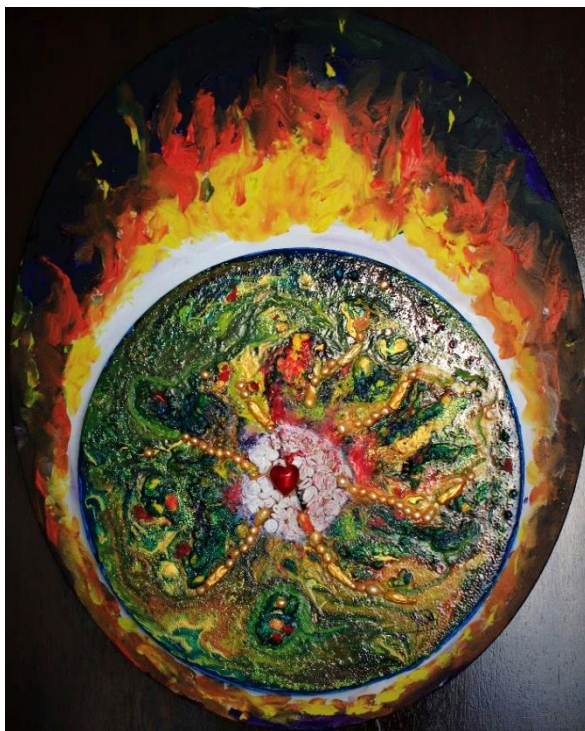
I have been a neuroscientist for over two decades now. I focus on neurons of the brain, specifically those in the area of our emotions and fear, the amygdala. The central theme of my research is the impact of different environments on the brain, specifically on neurons of the amygdala and how the effect of environment on structure and function of neurons influence/correlates with ensuing fear-behavior, namely anxiety. This impact of our environment and our

experience in our lifetime is artistically captured in my painting 'In search of my neuronal history.' I positioned an individual on the far-reaches of a neuronal tree, from where he looks beyond the horizon, in quest of his neuronal history and life's very many experiences.

A significant extension of my research is to alleviate compromised brain reserve (namely, neuronal structure, function, and behavior) through changes in outside environment specifically that of housing where an individual resides during most of its life. With critical changes in housing environment, one can induce life-long resilience in an individual, as recently published in scientific journals from my laboratory. This impact of environment and its different colors in standard laboratory rats is captured in my painting 'Colors of Resilience'.



In this artwork, a white Wistar rat is seen hidden within the enriching colors of its housing environment. The intricate designs on its body represent a resilient and creative outlook.



With growing understanding in the fine-tuned working of the brain through neuroscientific discoveries and in the creative revolution through brain awareness and cognitive perspective, our human uniqueness stands as 'the most precious element of this Universe.' My respect and appreciation for this unique human brilliance are represented in the painting 'Precious Mind: a heart following a brain.' This artwork is about a message and a concept about our mind, which when well-coordinated between heart and brain becomes our most precious possession as human beings. My motivation behind this painting is my thought on the origin of human nature where love and intellect seem to intersect in a unique chance meeting among many random events.

Through my art and science, I aim to reach a meaningful unison of our artistic and scientific Universe, the core of which I think, resides within our brain.