

# Neuroscience focus will lead to medical, economic advances

Medical research has solved challenges that once seemed insurmountable. We live longer and healthier lives because of it. To succeed in the 21st century, we need to bring again big life-changing ideas. Sir Alexander Fleming's discovery of penicillin allowed for control of infections by antibiotics. Polio, which afflicted President Franklin D. Roosevelt with crippling paralysis, was defeated by the vaccine developed by Albert Sabin and Jonas Salk.

In our time, there is urgency in conquering brain diseases. Aiming to approach big issues through translational neurosciences, which turns scientific ideas tested at the laboratory bench into clinical solutions for patients, will expand this concept of "big" into one that is "huge" for society.

The human brain is one of the last frontiers of knowledge, and no brain disease has a cure today, no matter how early a diagnosis is made. That is why we should focus on neuroscience in our region. This focus will contribute to tackling the growing challenges of neurological and age-related diseases, such as macular degeneration, Parkinson's, depression, neuropathic pain, schizophrenia, addictions and Alzheimer's disease, which wreaks havoc on aging and is growing at an alarming rate around the world.

The focus on neurosciences will allow us to tackle ALS (amyotrophic lateral sclerosis). With heroic initiatives and efforts Steve Gleason, the former New Orleans Saints special teams star, and his exemplary team keep reminding us to think big, to do it well and do it now. Moreover, the current pioneering work in our region using hyperbaric medicine is ready to contribute solutions to major riddles in the therapy of brain disorders.

We have made strides already in our center on traumatic brain injury, including the development of new innovative potential therapies. We are poised to expand this program and to contribute to conquering this type of injury that often leads to severe consequences, including dementia.

Of course, Louisiana patients will benefit, however the increasing prestige of neurosciences will

attract patients from all over the nation and abroad. A short-term goal is for our region to become a champion in neurosciences (at least from Birmingham, Ala., to Houston), in a manner that the salient prestige will make us well known, like the MD Anderson Center in Houston is for cancer. Our region cannot become No. 1 in every area of medicine at once; but to succeed now, we need to focus in one area. We have here a strong track record in neuroscience research, outstanding clinician-neuroscientists and a vision, with a mission and a strategy of how to make it happen.

From an economic standpoint, focusing on neuroscience will contribute to solving the "innovation deficit" in our local and national economy. It will create high-paying jobs and foster a new neurobiotech industry that will evolve around it. Overall, it will attract well-educated and well-trained professionals and spark the development of a new regional workforce. This research and innovation will lead to intellectual property and to start-up companies in neurobiotech and information technology related to neuroscience. As a result, supporting subsidiary companies will be developed, and branches of big pharmaceuticals companies interested in tapping into the neurodiscoveries and innovation will move in. This will foster expanded collaborations with Europe, South America and other regions of the world and create a demand for establishing and expanding international airline hubs at the Louis Armstrong International Airport.

Thus, the solution to the neurological diseases that increasingly plague our society is not just talking about them, but getting to the root of these issues buried deep within the human brain. We should concentrate our efforts on cultivating clinical and fundamental neuroscience and industry within our region. I believe this is where a focus on neuroscience will eventually lead us — if we allow it.

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