



First-rate Economy or Third-world State?

It's Up to Us: Protect and Grow
the CoEE Program

By Samuel Tenenbaum

*Retired Steel Executive,
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Centers of Economic Excellence Program*



NEW CAROLINA™
SOUTH CAROLINA'S COUNCIL ON COMPETITIVENESS

RISING AS ONE



For generations, South Carolina competed for jobs based on cheap land and cheap labor. Those days are gone forever, and it's time to stop gazing longingly in the rear-view mirror, because we're being left in the dust by other states and nations smart enough to recognize that today, economic growth comes from brainpower. Period.

The geography of innovation is changing. For much of the 20th century, the locus of leading edge thinking was in the United States, but today it is moving around the globe. All you have to do is to look at Ireland, Finland, Israel, Denmark and Singapore and you will see these small nations, similar in size to South Carolina, have become hotbeds of innovation, job creation and rising per capita incomes.

If South Carolina wants to join these innovative countries, we must meet industry needs for demonstrated research capacity and a critical mass of critical thinkers. This is the only way we can stay competitive in the knowledge economy and win higher-paying jobs.

There is nothing magical about how to accomplish this.

We have to educate all our children, build our talent base and prioritize innovation. We have to put our energy and resources into seeking new knowledge through research and then converting that knowledge into the marketable products and services on which all businesses base their success.

South Carolina's best hope for attaining full membership in the new economy is the visionary [Centers of Economic Excellence \(CoEE\) Program](#). The program was enacted by the [S.C. General Assembly](#) in 2002 and leverages state funds to create Centers of Economic Excellence at our

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three research universities – [Clemson University](#), the [Medical University of South Carolina](#) and the [University of South Carolina](#).

The CoEE program is already working. It has attracted 15* best-in-the-world scientists who are building academic programs and conducting cutting-edge research in South Carolina. These scientists, designated CoEE Endowed Chairs, are working in fields that hold the greatest promise for creating new, higher-paying jobs. Just five years after its creation, the program is already diversifying our economy and building our competitive position in emerging

high-growth industries such as health care, automotive engineering ([CU-ICAR](#)), hydrogen fuels and nanotechnology. Instead of competing against each other, our three research universities are working together to make our state's resources go further in the quest for new knowledge and novel uses for technology in the marketplace.

Without a doubt, the CoEE program supports New Carolina's goal of raising the per capita income in South Carolina. New Carolina has been very supportive of CoEE, including sponsoring a brochure that features the first 10 recruited CoEE scientists – each portrayed as a research

[“rock star”](#) who will play a central role in increasing South Carolina's capacity for innovation and technology transfer. The brochure has been very helpful in educating a wider audience about the importance of the program. New Carolina understands that CoEE is truly a win-win-win for the state.

Our companies gain access to nearby, high-level research with potential to improve existing products or help get a new product or service to market. As the work being done through the CoEE Program progresses and more and more talented scientists and researchers are drawn to our universities, the strength of our R&D capabilities will help convince knowledge-based companies that being located in South Carolina will help them compete on a global scale.

Our students, the state's rising talent base, won't have to leave South Carolina to learn from the world's leading researchers and professors.

All citizens will benefit from the jobs that result when top-level scientists perform research here and then link with companies to transfer discoveries into the marketplace. History proves that when we attract R&D jobs to the state, we are also more likely to draw the advanced manufacturing jobs that are created as an outcome of that R&D work.

To fund this program, the S.C. General Assembly has wisely invested a portion of the revenue from the [S.C. Education Lottery](#). Meanwhile, the program is also set up to be a catalyst for private sector investment in South Carolina's research. Every state dollar must be matched dollar-for-dollar with non-state money. To date this program has attracted match funds from several notable South Carolina companies including [BMWV](#), [Timken](#) and [Michelin](#), along with individuals and foundations.

However, South Carolina's steady progress toward building this knowledge infrastructure will be severely – perhaps fatally – handicapped if the General Assembly cuts or discontinues funding for the CoEE Program. State revenues are not meeting projections, and a program like this, in which the benefits will not be fully realized for another 10 years or more, could be a target of budget cuts. That would be a catastrophe for our state and a shameful about-face considering that first-class companies have

invested millions in this program because they believe South Carolina can build and sustain a 21st century model of economic growth based on knowledge and innovation. If we as a state don't remain committed to this program, we very well could lose all the ground we've gained, and South Carolina will revert back to its reputation for cheap dirt and workers willing to accept a low paycheck. Are we really going to accept this fate for ourselves and our children?

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The CoEE Program is working. By all measures it has already served as a catalyst toward bringing in more than \$700 million to our state. By its nature, however, it is a long-term endeavor. We need to protect it, and we need

to rally around the CoEE Program if we want to make our state competitive for jobs and investment at the highest levels. When the world realizes what we're doing, the world will be at our door to join us. Educate our children, invest in research, and we can be a 21st century knowledge leader!

Samuel Tenenbaum is a retired Steel Executive, Community Leader and Father of The CoEE.

*The CoEE Endowed Chairs hired so far include:

- Dr. Robert Adams, MUSC (*research focus: stroke treatment and prevention*)
- Dr. Gary Aston-Jones, MUSC (*neuroscience*)
- Dr. Brian Benicewicz, USC (*polymer nanocomposites*)
- Dr. Todd Hubing, Clemson (*vehicular electronic systems integration*)
- Dr. Thomas Kurfess, Clemson (*precision systems and controls*)

- Dr. John Lemasters, MUSC (*microscopy*)
- Dr. Jay Moskowitz, USC (*clinical and translational research*)
- Dr. Miguel Pappolla, MUSC (*neuropathology*)
- Dr. Iain Sanderson, MUSC (*medical informatics*)
- Dr. John Schaefer, MUSC (*patient simulation and research*)
- Dr. Charles Smith, MUSC (*drug discovery*)
- Dr. Richard Swaja, MUSC (*regenerative medicine*)
- Dr. Kenneth Tew, MUSC (*cancer drug discovery*)
- Dr. Richard Webb, USC (*nanoelectronics*)
- Dr. John Ziegert, Clemson (*automotive design and development*)



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