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POINT OF VIEW

Legislators aid N.C. life sciences
By Arthur M. Pappas

Amid depressing financial news and sluggish growth projections for North Carolina, there is an encouraging bright spot: the vitality of our life sciences sector.

This sector took on new luster even for long-time industry experts during a recent visit to Raleigh by Richard Gephardt, former majority leader of the U.S. House and now chairman of the Council for American Medical Innovation.

Gephardt left behind a new appreciation for how well North Carolina is positioned relative to other states. Research expertise? A robust commercialization cluster? Manufacturing capacity? North Carolina is using these resources and more to build impressive life science capabilities.

We also enjoy a favorable economic climate, which is a credit to both business-people and forward-thinking public officials who understand the role of life sciences in transitioning to an innovation economy. Gov. Bev. Perdue gets it. Mayors from across the state who understand what is at stake do too. State legislators are on board as well.

Legislators made that clear in the latest budget. Amid the toughest budget-writing challenge in a generation, they found ways to invest in life sciences: increased support for the N.C. Biotechnology Center, funding for the Biofuels Center of N.C. and backing for the Wake Forest Institute for Regenerative Medicine. Legislators also restored the Small Business Innovation Research grants, a matching fund that benefits a variety of innovators.

And although they didn't advance the issue in the short session, legislators should revisit creation of the proposed Life Science Development Corporation in 2011. This is a state-backed loan fund that would help build pharmaceutical and biotech manufacturing facilities, keeping tax revenue and new jobs here.

The budget also includes what looks like just another study of life sciences. But the mandate that the Biotechnology Center prepare a strategic plan for commercializing promising technologies may pave the way for hundreds of millions of dollars in additional private capital for early research, translational medicine and clinical development. The center will consider leveraging private capital through tax credits, funding mechanisms and other vehicles.

State support is no gift to the private sector, because the life sciences are an engine of job creation with a high "multiplier" rate – they create a lot of jobs indirectly. In addition to elite, Ph.D.-level positions, the life sciences create a range of jobs, including support and manufacturing roles ideal for workers transitioning from declining industries such as furniture or textiles. If North Carolina is to climb out of the recession permanently, it will do so on the shoulders of good-paying, sustainable jobs like these.

According to the Battelle Institute, the state's life sciences sector supported 180,000 jobs here in 2008, including 53,000 direct positions and 127,000 jobs created indirectly. Total state employment in life sciences grew by 29 percent between 2001 and 2008, well above the already impressive national rate of 16 percent during the same period. (As Gephardt noted, even in states with overwhelming financial problems such as Michigan, the life sciences are generating jobs at a double-digit rate.)

The life sciences sector attracted more than \$1.7 billion in venture capital to our state between 2004 and 2009. Much of this money built upon the impressive research coming out of North Carolina's academic centers, where 2008 research and development spending totaled \$1.5 billion.

Public-private partnerships are important to bridging the so-called "valley of death" in medical innovation – the chasm between laboratory discoveries and the late-stage commercial investments that make the resulting medicines and devices available to patients. Without these partnerships, companies don't launch, jobs aren't created and promising treatments don't reach the patients whose lives they can improve – or even save.

North Carolina is on the right path. That's good financial news for everyone – because even though there's much work left to be done, it's productive work that will help fuel our shared future. It also means a better, longer life for the thousands of patients who will one day benefit from the vitality of North Carolina's life science innovators.

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