NCBIOIMPACT HISTORY AND BACKGROUND

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Biomanufacturing is the production of useful products using living organisms.

In 2002, Biogen’s needs experienced workers for its new biomanufacturing plant. They find them at existing companies.

2002:

- Wyeth, Sanford
- Novozymes, Franklinton
- Bayer LifeScience, Clayton
- Corning BioPro

New Entrant:

- Biogen, RTP
The labor shortage is clear. Community college and university graduates with hands on experience on commercial scale equipment are needed. Incumbent workers can learn new skills needed to fill higher level jobs.

- Workforce Development
  - Ease Labor Shortage
  - Entry Level Workers with Commercial Scale Experience
  - New and Incumbent Workers

- Business Recruitment
  - Support Expansions
  - Recruit New Companies
BUILDING AN ALLIANCE

Highlighting the Need
- Leaders at UNC & NCCCS
- Legislative Leadership
- Golden LEAF

Aligning the Resources
- NCCCS – Basic Skills
- NCSU – Biomanufacturing Engineers
- NCCU – Analytical Chemistry

Biomanufacturing managers meet with state leaders to discuss work force needs and economic development opportunities.

The legislature commissions a study of biomanufacturing work force needs

NCCCS, NCCU and NCSU are identified as lead institutions.
FUNDING FACILITIES & OPERATIONS

► Golden LEAF – Capital
  ► $8M – NCCCS – Equipment Purchases and Curriculum Development
  ► $21M – NCCU/BRITE – Drug Discovery
  ► $40M – NCSU/BTEC + $4.5M In-Kind Industry Match

► Legislature – Operating (2006-07)
  ► NCCCS – $5.1M
  ► BTEC – $5.5M
  ► BRITE – $6.5M

Recognizing the biomanufacturing sector’s potential job creation impact outside the State’s urban cores, The Golden LEAF agrees to fund the BTEC and BRITE facilities and provide NCCCS with funds for initial operations and equipment upgrades.

Legislative leaders agree to provide operating funds for the initiative as the new facilities came on line.
RESULTS OF NCBIOIMPACT

Total Impacts
- $3.7B in New Facilities
- 8,500 New Jobs

Major Announcements
- Merck (Durham): $1B, 1000+ jobs
- Seqirus (Novartis) (Holly Springs): $1B
- Novo Nordisk (Clayton-Insulin): $2B, 700 jobs

The biomanufacturing work force trained by NCBioImpact since its creation in 2002 one of the largest and most robust in the nation.

This work force has prepared North Carolina to support not only future investments and job creation, but the deployment of new biomanufacturing technologies.
THE FUTURE OF NCBIOIMPACT

Challenges

- 1,500 new high-paying biomanufacturing jobs expected between 2017-2020
- Rapidly advancing technologies

Next Steps

- Reinvest in BioNetwork, BRITE & BTEC
- Establish leadership in new national biomanufacturing R&D consortium (NIIMBL)

A 2016 survey by NCBIO found biomanufacturing companies will add 1,500 new technical employees in the next two to three years.

New technologies, including tissue engineering, will keep biomanufacturing at the forefront of economic growth and job creation.

Reinvestment in NCBioImpact will create the skilled work force that can attract jobs and investments for years to come.