

Gwinnett Technical College

Bioscience and the New Georgia

Gwinnett Technical College

Robert E. Powers, M.Div., Ph.D.

- Population of GTC service area: 757,104
- Students enrolled in Gwinnett County schools: 58,200 private and 156,000+ public
- Approximate number of bioscience companies in GTC service area: 275
- Students presently enrolled at GTC: 4,815

Georgia Technical College System

1917 - Smith-Hughes Act
by Georgia Senator
Hoke Smith, prompted
by decline in cotton
economy



Technical College Partnership

Gwinnett Technical College and Athens Technical College have consortial arrangement:

- Curriculum
- Dept. of Labor Community Community Based Job Training Grant
- Regional economic development

Factors for GA to flourish

- Healthy bioscience industry
- Sufficient developmental capital
- Trained and experienced workforce
- Affordable and accessible educational opportunities for the people
- Widespread public understanding of what bioscience is and what careers are available to them

Clinical Research Coordinator Program

- Unique in the region
- Preparing to graduate its third cohort
- Graduates are performing clinical studies throughout the Metro area
- Half of the students in the present cohort have already found jobs in the field, and they have not graduated yet!

Education is not a
substitute for
workplace experience,
but education
accelerates workers
gaining meaningful
experience.

Features of Bioscience

- More multi-faceted than most other workplaces in Georgia
- Strict one-to-one correspondence of training to career doesn't exist in bioscience
- Training is broad, and that is a benefit because the range of opportunities for employment is also broad

Requirements for Bioscience Workers

- State-of-the-art, cutting-edge science knowledge
- Sophisticated technological skills
- Vision for innovation
- Passion for improving the condition of the world and humankind

Examples of Technical Careers

- Technical lab workers
- Quality management technicians
- Environmental specialists
- Manufacturing specialists
 - well-skilled in aseptic techniques
 - federal regulatory guidelines

Not Just Scientists...

- Business and finance specialists with knowledge of the intricacies of bioscience
- Tradespeople to build and maintain sophisticated facilities
- Marketing and auditing specialists

Georgia's Training Assets

- K-12
- Technical colleges
- Four-year colleges
- Research universities
- Bioscience incubators

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Philip Gibson, Ph.D.

- Bioscience Technology A.A.S. degree
- Clinical Research Professional certificate
- Validation and Quality Assurance Technologist certificate
- Environmental Technologist certificate

Bioscience Technology A.A.S. degree

- Spring 2007 - 7 students to graduate in June 2008
- Summer, Fall, Winter - accepted 20 out of 28 applicants
- Entrance Requirements - ENG 191, BIO 191, BIO 200, MAT 191, CHM 191
- Well-established developmental studies program mitigates student deficiencies

Georgia's Investment in Students

- Linking students with meaningful careers in ---

GEORGIA

- This is our mission at Gwinnett Tech

Work Ready

- New demand for employees - begin immediately
- On the job training a necessity
- Hands-on, real-world laboratory experience
 - 20 hours per week in the lab during the last two quarters

Bioeconomy Jobs

- Laboratory Assistant - \$28-38K
- Laboratory Analyst - \$30-40K
- Equipment Calibrator - \$28-30K
- Regulatory Compliance Specialist - \$35-60K

Quality Assurance (QA) and Quality Control (QC)

- 30% of total bioeconomy expenditures
- Cannot afford wasted lab time
- Good Laboratory Practices (GLP)
- Current Good Manufacturing Practices (cGMP)
- A.A.S plus Regulatory Compliance certificate

Challenges

- Establish a “Pipeline”
- Articulation - seamless transitions
- Attract students to the field
- DOL funds to establish GBTI
 - Move into high schools
 - Establish labs
 - Create career awareness

What the State Can Do

- Aggressive funding of education
- Marketing an understanding of bioscience to the public sector
- The State needs to “Put its mouth where its money is.”

Gwinnett Technical College
5150 Sugarloaf Parkway, N.E.
Lawrenceville, GA 30043

Robert E. Powers, M.Div., Ph.D.

Program Director for Clinical Research

rpowers@gwinnetttech.edu

Philip Gibson, Ph.D.

Program Director for Bioscience

pgibson@gwinnetttech.edu