

HISTORY AND RATIONALE FOR INDUSTRY NEEDS ASSESSMENT

North Carolina Biotechnology Center staff have surveyed workforce training needs periodically since 2000 to gain statewide funding necessary to enhance workforce development investments in the state. In addition, NCBioImpact educational institutions are now assessing the success and value of their own industry-specific course offerings. Your assistance in completing this survey is beneficial to your company and others across the state as data enables us to:

- 1) Identify emerging technologies and critical training gaps
- 2) Develop new short courses and degree programs
- 3) Update educators on industry hiring practices/challenges
- 4) Gain continued state funding of NCBioImpact
- 5) Forge new partnerships with companies across the state

INSTRUCTIONS

Please complete this survey by entering data directly into the Word document. The survey will require input from different sources (human resources, plant manager, and/or training and technical managers) and you may wish to appoint a key liaison to coordinate input. If you have questions about the survey or would like additional information about NCBioImpact, do not hesitate to contact John Balchunas at john_balchunas@ncbiotech.org or 919.549.8874.

STATEMENT OF CONFIDENTIALITY

NCBioImpact will regard all data you provide in this survey as confidential. Data from your company will be reported only anonymously or compiled with data from other companies in aggregate form.

COMPANY INFORMATION

Name of Company:

Location (City/State):

Note: If your company has multiple sites in North Carolina, each site will receive a separate survey.

Primary Survey Contact:

Title:

Phone:

Email:

CURRENT EMPLOYMENT

Enter the **total number of full-time and temporary employees of all types at this NC site** as of January 1st, 2011. If your company has multiple sites in North Carolina, each site will receive a separate survey. Then enter the current number of full-time and temporary SCIENTIFIC AND TECHNICAL employees **in each functional area** of your company as of January 1st, 2011. These are employees who require some level of industry-specific knowledge or skill (technical or regulatory).

# Employees Total Headcount	
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Functional Area	# Sci/Tech Employees
Discovery Research - Basic discovery research (developing new products).	
Process/Product Development – Developing and optimizing products, product formulation, and production processes.	
Quality Control – Monitoring (chemistry, microbiology, environmental monitoring) all raw materials, intermediate, and final products associated with a production process.	
Quality Assurance and Regulatory Affairs –Ensuring compliance.	
Manufacturing / Production Ops – Production processes, including process engineering, product synthesis, formulation, filling, packaging, and warehouse/material handling.	
Facilities Engineering / Maintenance – Engineering, maintenance, installation, design, troubleshooting, and supervision of plant utilities, instrumentation, equipment, waste treatment, and safety.	
Customer Service / Technical Support – Provide guidance, troubleshooting, sales support, and consulting services to customers.	
Validation	
Other – Please Describe:	

Total Scientific & Technical Employees: _____

EDUCATIONAL PROFILE OF SCIENTIFIC & TECHNICAL EMPLOYEES

For each functional area, indicate the number of current scientific and technical employees at each educational level. Indicate whether you're targeting any increase or decrease in these education levels in coming years (e.g. through change in hiring requirements or other strategy).

Functional Area / Education	HS	HS + Certification	AS/AAS	BS / BS	MA / MS	PhD	TOTAL
Discovery Research							
Process/Product Development							
Quality Control							
Quality Assurance and Regulatory Affairs							
Manufacturing / Production Ops							
Facilities Engineering / Maintenance							
Customer Service / Technical Support							
Validation							
Other							
Total Scientific & Technical Employees:							

Note: HS + Certification refers to those individuals who do not possess a college-level degree but who have completed certification or other job-specific training programs.

HIRING

Of all scientific and technical employees hired in the last 12 months, how many were hired for NEW positions? EXISTING positions?

Company's average turnover rate in the past 12 months?
_____ %

NEW Positions	<input type="text"/>
EXISTING Positions	<input type="text"/>
TOTAL	<input type="text"/>




WHERE DO YOUR EMPLOYEES COME FROM?

Of the total employees hired last year (above), estimate the number of these new employees hired from each of the sources indicated below.

For positions that DO NOT require Experience in Your Industry:

WITHIN NORTH CAROLINA 	<input type="text"/>	# With Experience
	<input type="text"/>	# Without Experience
OUTSIDE NORTH CAROLINA 	<input type="text"/>	# With Experience
	<input type="text"/>	# Without Experience
OUTSIDE UNITED STATES 	<input type="text"/>	# With Experience
	<input type="text"/>	# Without Experience

For positions REQUIRING Experience in Your Industry:

WITHIN NORTH CAROLINA 	<input type="text"/>	# With Experience
	<input type="text"/>	# Without Experience
OUTSIDE NORTH CAROLINA 	<input type="text"/>	# With Experience
	<input type="text"/>	# Without Experience
OUTSIDE UNITED STATES 	<input type="text"/>	# With Experience
	<input type="text"/>	# Without Experience

What positions are typically the hardest to fill, especially from within North Carolina, and why?

NORTH CAROLINA'S TRAINING ASSETS

As described on page 1, NCBioImpact is North Carolina's education and training consortium for the biomanufacturing and pharmaceutical manufacturing industry. Please check all that apply to you or your company to indicate your awareness, involvement in, and utilization of NCBioImpact offerings:



- Information accompanying this survey is my first exposure to these initiatives.
- My company is involved in an advisory capacity to NC universities or community colleges.
- Employees from my company have attended professional development coursework through the university or community college offerings.
- My company has partnered with an educational institution to develop customized curriculum.
- My company has hired new employees who have received training or degrees from NCBioImpact-related programs.
- My company would like to send employees for training but have not found coursework that matches our needs.
- I would like more information on how to gain access to training.
- I would like more information on how to get involved in an advisory capacity.



PROFESSIONAL DEVELOPMENT

If your company has hired or sent employees for training/degrees at NCBioImpact member institutions, please comment on which courses, programs, universities, and/or community colleges stand out in your eyes as offering substantial value from a recruitment, training, or professional development perspective.

	What programs were perceived as most valuable from a recruitment, training, or professional development perspective?
Scientists	
Engineers	
Technicians (Laboratory or Process Development)	
Technicians (Manufacturing)	
Technicians (Maintenance & Instrumentation)	
Supervisors / Managers	
Other	

How many employees do you estimate sending to NC BioImpact programs next year?

QUALITY CHECK: Incumbent employees who received instruction through NCBIOIMPACT

Are these new employees more knowledgeable of industry and their role/position within the company compared to any new employees hired directly from academia?

No / Unsure / Yes
 / /

Comments (Optional)

Are these new employees more knowledgeable of cGxP compliance compared to those without training?

No / Unsure / Yes
 / /

Comments (Optional)

Do these new employees demonstrate a faster time to competency than other new hires without this training?

No / Unsure / Yes
 / /

Comments (Optional)

QUALITY CHECK: Incumbent employees who received instruction through NCBIOIMPACT

Are incumbent employees able to implement the skills they received upon returning to work?

No / Unsure / Yes
 / /

Comments (Optional)

Did incumbent employees exhibit enhanced understanding of processes? Better compliance with GMP or safety regulations?

No / Unsure / Yes
 / /

Comments (Optional)

Did training content reflect your expectations and/or specifications?

No / Unsure / Yes
 / /

Comments (Optional)

VALUE OF NORTH CAROLINA'S TRAINING PROGRAMS TO YOUR COMPANY

The ultimate goal of any training program is to improve employee performance in ways that will add to effectiveness and profitability for the organization involved. If your organization has benefited from NCBIOIMPACT's education and training programs, **please use the form on this page (continued on page 10) to estimate (in dollars) the value to your company.**

We recognize that there are many different ways in which your company may have benefited. Please use the examples provided as guidance only, and provide any situational notes (such as the number of employees, type of employees, specific training program utilized, or source institution) that you are able to share.

Onboarding Processes / Cost per Hire Savings		
Examples: <ul style="list-style-type: none"> • Reduced costs associated with screening/identifying candidates • Reduced interviewing costs (fewer interviews, lower travel costs for candidates) 	Situational Notes/Explanation:	2010 Savings (\$):
Training Process Savings		
Examples: <ul style="list-style-type: none"> • Reduced overall site training time to achieve technical or hands-on competency • Reduced shop floor OJT training to achieve "independent performance" requirements • Reduced time spent supervising/monitoring newly qualified employees 	Situational Notes/Explanation:	2010 Savings (\$):
Business/Production Processes Savings		
Examples: <ul style="list-style-type: none"> • Reductions in time/cost related to technology transfer and launch of new products • Reduction of time/cost related to shorter product cycle times and/or reduced product loss 	Situational Notes/Explanation:	2010 Savings (\$):

Other:	
Situational Notes/Explanation:	2010 Savings (\$):
Other:	
Situational Notes/Explanation:	2010 Savings (\$):
Other:	
Situational Notes/Explanation:	2010 Savings (\$):
Other:	
Situational Notes/Explanation:	2010 Savings (\$):

Estimated Total
2010 Savings (\$):

MEETING YOUR FUTURE NEEDS

In the next few years, what new or different technologies do you anticipate your company implementing and how will this impact your training or professional development needs?

Comments:

Do you anticipate your company's headcount (full time and temporary) changing in the next few years? *If forecasting a decrease in headcount, please list figure as a negative number.*

Net Change in Headcount (2011)	Net Change in Headcount (2012)	Net Change in Headcount (2013)

Please describe any currently unmet training or professional development needs.

Comments:

How can NCBioImpact member institutions better meet your needs in the future?

Comments:

In order to assist in identifying a solution, may we share your concerns with the appropriate NCBioImpact partner institutions?

- Yes, please do.
- No, I prefer this remain confidential.