

Laboratory Science Program Review

Spring 2014

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Program Review Committee

- M. White-Jeanneau Laboratory Science Program Coordinator
- Kevin Mitchell Natural Sciences Department/
Laboratory Science Program
- Jennifer Jackson-Stevens Respiratory Care Program
- Liliana Brand Mathematics Department
- Arlee Dulak UMass Lowell
Clinical Laboratory Sciences
- David Legg Charm Sciences, Inc.

Program Mission:

1. To prepare students to be laboratory technicians in the biotechnology, analytical chemistry and environmental sciences industries
2. To ensure that as many courses as possible in the Lab Science Program will transfer for those students that wish to eventually pursue a Baccalaureate degree.

Program Strength: Curriculum

- Developed with Industry and Transfer Institution Input

Core Program Courses

1st year

- SCI 100 Basic Lab Calculations
- SCI 103 Success In Science
- SCI 104 Topics in Lab Science
- SCI 105 Integrated Science I
- SCI 106 Integrated Science II
- CHM121 General Chemistry I

2nd year

- CHM 201 Org. and Biochemistry
- CHM203 Instrumental Analysis
- BIO280 or CHM 280 or ERS 280:
Seminars in Biotech or Analytical
Chemistry or Environmental. Sci.
- SCI 281 Research Experience
- SCI 291 or 292 Externship

Additional Courses: ENG 101, CIS 110, MAT 125, MAT 130 or higher, 3 Gen. Ed. Electives, 1 Science Elective

Program Strength: Curriculum

Earned
MLSEC
Endorsement
as a Gold
Level
Biotechnology
Program in
2011



Industry
Recognition!

Second
Endorsement
Cycle Begins
This Spring



Program Strength: Externships



Northeastern University



Massachusetts
Department of
Public Health



Optimum
Analytical and Consulting



Program Strength: Externships

Summary of Results of Externship Supervisor Survey 2011-2013

Criteria Evaluated	Average 2011	Average 2012	Average 2013
Maintaining a Lab Notebook	4.3	4.3	4.4
Following SOP	4.3	4.3	4.5
Preparing solutions	4.1	4.7	4.6
Teamwork and interpersonal skills	4.3	4.7	4.4
Analytical Skills in the Lab	4.0	4.2	4.6
Oral and Written Communication Skills	3.9	4.5	4.4
Time Management	4.3	5.0	4.4
Attitude	4.8	5.0	4.5
Focus on the Task	4.0	4.6	4.5
Receptiveness	4.4	4.8	4.5

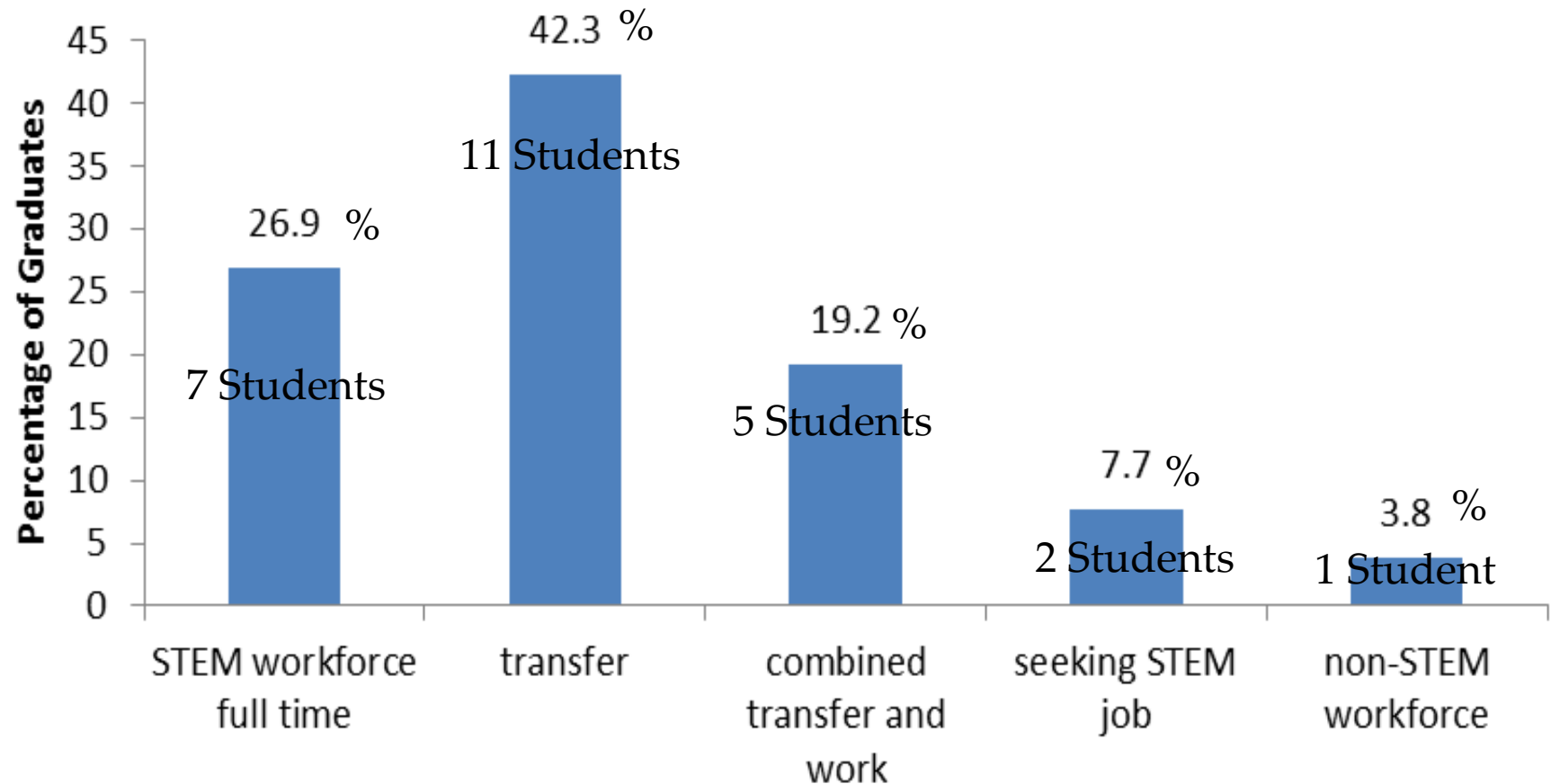
Program Strength: Externships

Externship Supervisor Comments:

- The student “would be an excellent lab technician in any lab.”
- The student “would be an asset to any facility that hires her.”
- The student “met all our expectations. He’d certainly be welcome back in the future!”
- The student “would make a great member of [the company family] as he has been a joy to have as a member of our laboratory for the summer.”

Program Strength: Graduates

Career Path for LSP Graduates 2011-2013



Challenge:

More Effective and Focused Recruitment

Recommendation:

Reach Out to Program Majors in
Developmental Classes

Recommendation:

Better Utilize Our Resources and
Strengths to Promote the Program

Challenge:

Setting Up and Coordinating Externships

Recommendation:

More Collaboration with NECC
Career Services

Challenges:

Space in E261 and the Haverhill Autoclave

Recommendation:

Hold SCI105/106 and BIO230 labs in E262 which will be renovated as a general lab space under the MLSC Capital grant

Recommendation:

Replace or completely overhaul the autoclave on the Haverhill Campus for

Our Hope: More
Time and
Resources for
Faculty to
Continue
Training Our
Students Well for
Laboratory Work



Thank you!

- Lab Science faculty
- Our program administrators past and present
- Lab Science Advisory Board