



Biotechnology Discussion Forum: Plant Science Summary

- ✘ Identify emerging employment opportunities which require Biotechnology concepts: While many of the career opportunities identified required a minimum of a baccalaureate or advanced degree, employment opportunities for entry-level, **two-year degree graduates** exist in the areas of:
 - Ag manufacturing: seed operations, logistics
 - Agronomist
 - Environmental safety and health inspector
 - Equipment operators
 - GIS technicians
 - Inventory control and management technician
 - Logistics (*containment*) security technicians
 - Department manager
 - Marketing associate
 - Plant breeding technician
 - Plant engineering technician
 - Research technicians (*such as crop team member*)
 - Sales associate
 - Seed operations supervisor
 - Transportation coordinator (*rail*)

- ✘ **Outline Core Skills Competencies necessary for students interested in pursuing Bioscience/Biotechnology careers (*Specifically: Plant-related focus*).**
 - Ability to test for GMO and non-GMO grains
 - Detailed recordkeeping skills (*spreadsheets*)
 - General knowledge of business practices
 - Map reading
 - Track and update field records (*maintain identify preservation*)
 - Understand and comply with governmental regulations (*implement and/or utilize tracking systems, both manual and computer-based*)

Courses:

- Computer skills (*Excel and PowerPoint*)
- Math skills (*Geometry, Algebra, use formulas and conversions*)
- Science

General Skills:

- Budget management
- Leadership skills
- Problem solving skills (*sequencing, outcome assessment*)
- Time management skills (*self-starter, motivated*)
- Understand team dynamics
- Verbal communicator (*presentation skills*)
- Written skills

- ✘ Identify marketing tools/recruitment activities to encourage enrollment in *Biotechnology* career path
 - “Fill the Gaps” recruiting strategies
 - Ag shows
 - Assume active role in career planning through partnerships with high school guidance counselors (*eighth grade transition/course planning for high school*).
 - Career fairs
 - Continue to participate (*or increase*) connection with FFA organization. Grow the flame...for agronomy. Students already have an interest in agriculture.
 - Develop marketing pieces focused on industry employment figures and replacement processes
 - Educate parents on opportunities in agronomy and related plant science careers.
 - Faculty internships
 - Improve community college and university articulations (*or perception*)
 - Improve ILCC and industry connections
 - Industry professional “Visitation” business tour
 - Investigate marketing strategies focused on Hands-on Agronomy
 - Partner with industry to visit high schools
 - Print materials from industry
 - Student internships (*“Ladder model” in which students meet specified qualifications*)
 - Target guidance counselors and parents. Provide relevant information to these groups in addition to the students (*salaries, job opportunities, education requirements*)
 - Tours
 - Utilize local dealers to provide mentor or meaningful job shadow experience