Promoting career awareness

Foster communication & engagement between employers & academia

- Alumni, alumni boards, local/regional employers
  - External speakers for talks, seminars, classes – real-world perspectives, applications, career opportunities
  - Short or mock interviews & discussion of current members of workforce their jobs - online or in person
  - Talks by returning interns about experiences, corporate culture, values
  - Take advantage of opportunities - some contractors for federal agencies must spend certain amount of their budget on engaging with institutions
Promoting career awareness

Collaboration and expectation setting

• Provide advice on skills needed for employment, assistance & resources
• Clear communication about work culture and expectations
  • What skills you are expected to have; which skills you will gain during employment
• Manage cultural/language issues of prospective employees
• Employers that target specific schools should be clear with departments & students on what they are looking for in new employees
• Companies/industry/agencies that support research at an academic institution should provide recommendations for training in certain areas or internships
Employer Roles

• **Internship Experiences**
  - Critical entry points for graduates into companies & agencies
  - Companies/agencies should partner with academic institutions
  - Need to raise awareness of opportunities & importance for employment
  - Need more mentoring during internships, final assessment & feedback to departments
  - Faculty should encourage students to do internships
  - Develop countermeasures for students doing internships – increases time to graduation
    - need release time to allow career development; role of online courses?

• **Other career experiences**
  - Externships (with/without academic credit), shadowing
  - Company, government agency/lab, site visits, field excursions
  - Participation in Career Fairs/Days
Employer Roles in Education

• **Employers provide course content**
  • Project ideas or datasets for real-world cost/benefit/risk projects
  • Employer evaluation & feedback, mentoring

• **Teaching**
  • Company employees & retirees teach classes
  • Joint courses using curriculum/internal training for interns & new employees or continuing education for employees; online or in person
  • Experiential learning opportunities – co-lead and co-teach field trips
  • Sponsor short-courses
  • Adjunct lecturers from private sector – co-taught courses, seminars, etc.
  • Online courses that can be connected across institutions for training purposes; online dissemination; continuing education

• **Financial support**
  • Direct contract to fund a student for advanced degree, partnerships, forming a research consortium
  • Financial aid and scholarships to universities – philanthropy
  • Funding field camps or trips – employees participate in the camps – gives experiential opportunities for both employer and students
Opportunities for Involvement

• Help students decide whether their career goals are better met with a Masters or Ph.D.
• Work with faculty to integrate professional skills into their teaching approach
  • Hire an education specialist to work directly with faculty to adapt their teaching style and approach
• Work with faculty to revise curricula to incorporate training in professional skills
• Assist with team-based cross-disciplinary, longer-term projects for student groups to work on together (e.g. Imperial Barrel)
• Provide career counselors/advisors with training to provide more uniform guidance on nontechnical, professional skills
• Provide funding for training programs in data analytics, machine learning, AI