

Unleashing the Entrepreneurial Forces for Job Creation

INNOVATIVE TECHNOLOGY AND RESEARCH AT WORK



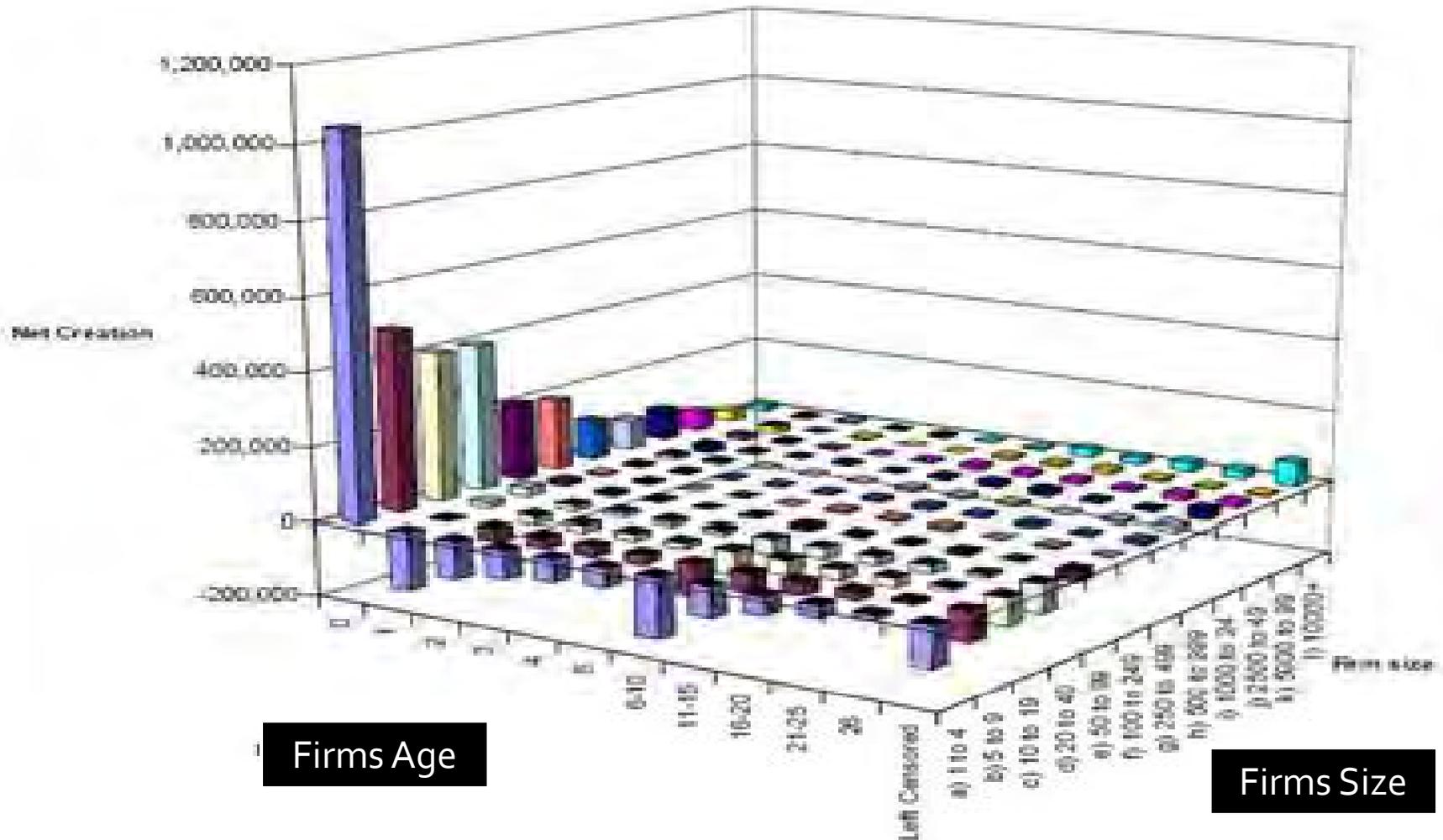
22nd National NSF EPSCoR Conference
Couer d'Alene, Idaho 10/24-27 2011

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Director AIME



Small Company Job Creation

Net Job Creation (number of jobs), by firm age and size, 1987-2005



US News The 50 Best Careers of 2011

Sales manager makes the highest median annual salary on our list, nearly \$97,000. Computer software engineer, physician assistant, meteorologist and education administrator all bring in median average salaries in the mid-\$80,000 range.

Actuary

- Financial adviser
- Financial analyst
- Logistician
- Meeting planner
- Public relations specialist
- Sales manager
- Training specialist

• Commercial pilot

- Curator
- Film and video editor
- Gaming manager
- Heating, air conditioning technician
- Interpreter/Translator
- Multimedia artist
- Technical writer

- Athletic trainer
- Dental hygienist
- Lab technician
- Massage therapist
- Occupational therapist
- Optometrist

Physician assistant

- Physical therapist
- Physical therapist assistant
- Radiologic technologist
- Registered nurse

US News The 50 Best Careers of 2011

Technology Jobs:

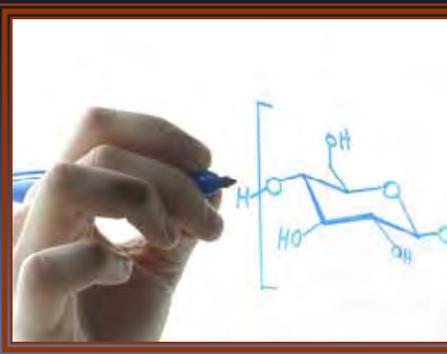
- Biomedical engineer
- Civil engineer
- Computer software engineer
- Computer support specialist
- Computer systems analyst
- Environmental engineering technician
- Environmental science technician
- Hydrologist
- Meteorologist
- Network architect
- School psychologist
- Veterinarian

Social Service Jobs:

- Clergy
- Court reporter
- Education administrator
- Emergency management specialist
- Firefighter
- Marriage and family therapist
- Mediator
- Medical and public health social worker
- Special-education teacher
- Urban planner

Chemist Employment

Since 2008, nearly 25,000 jobs, including thousands in research and development (R&D), have been lost in chemical manufacturing companies in the United States, and layoffs continue. For the past 20 years, a clear job loss trend is evident in Bureau of Labor Statistics data that suggests the loss of approximately 300,000 full-time chemist jobs in the U.S.



Future Projections

The 2018 projections for job growth in the professional, scientific, and technical services area will be approximately 21%.

The chemical manufacturing industry is expected to employ fewer chemists as companies divest their R&D operations

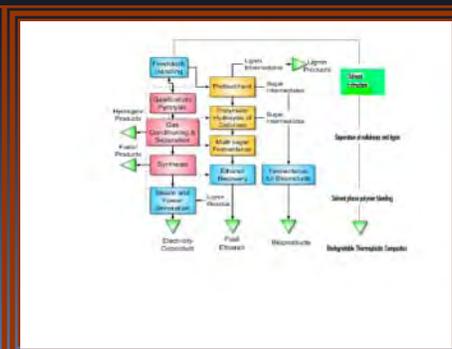
Chemists positions will see a 2 percent growth from now till 2018 as increases in biotechnology-related fields will be tempered by declines in other chemical manufacturing.

Demand for chemists is expected to be driven by biotechnology firms.



ACS Presidential Task Force

For the American Chemical Society (ACS) it is unlike any time in its storied 135 year history, the ACS has an opportunity to help its members , to create U.S.-based chemist jobs by creating, launching, and/or growing chemical start-ups. Leveraging its brand, authoritative scientific resources, 163,000+ membership base, industry networks, and vendor relationships, the Society is uniquely positioned to provide chemical entrepreneurs with the tools and important introductions necessary for success.



ACS Presidential Task Force

The Task Force's recommendations to ACS fall into four major thrusts:

1. ACS should **develop a single organizational unit—a kind of “technological farmers’ market”—offering affordable (or free) help to entrepreneurs. This unit would support entrepreneurs by facilitating more affordable access to resources that should foster the creation of small companies from startups. Relevant resources might include information, management expertise, key services, and mentors. The unit could also support entrepreneurs in making introductions to much-needed capital and fostering partnerships with large companies.**



ACS Presidential Task Force

2. ACS should **increase its advocacy of policies at the federal and state level to improve the business environment for entrepreneurs and startup companies.**

Urge reforms within the U.S. Patent and Trademark Office

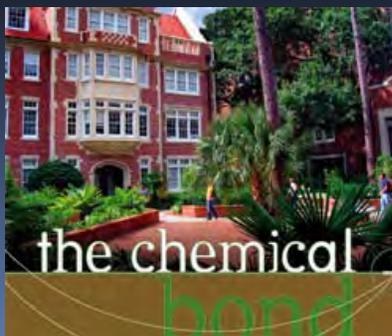
Advocate financial policies in government that encourage large companies to partner with small ones.



ACS Presidential Task Force

3 Work with academic institutions and other relevant organizations to promote awareness of career pathways and educational opportunities that involve or include entrepreneurship.

4. increase public awareness of the value of early-stage entrepreneurship in the chemical enterprise with focused media coverage and information targeted to federal agencies that support chemistry. In addition, ACS should provide ways to recognize entrepreneurs publicly, to increase their visibility and enhance their opportunities for success.



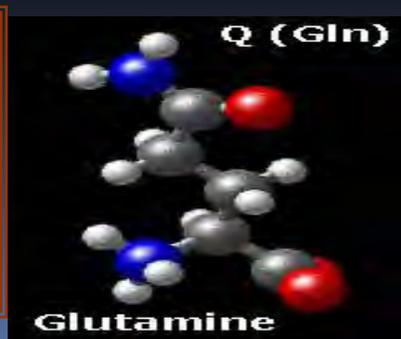
ACS Entrepreneur Resource Center

ACS Members would apply to the Center. ACS Member applicants would be asked to describe their plan to create U.S.-based chemist jobs, provide brief their idea for a business or provide a business plan if available.

Twice each year, the Director and the Center's Advisory Board will review applications and approve those with the best promise to become successful entrepreneurs or best opportunity to advance disruptive chemistry-based innovation to market.

Successful ACS Members applicants will gain access to the Center's ACS's resource modules for a six-month term.

ACS Member applicants who are unsuccessful in achieving access to the Center will be mentored by the Center's Director towards achieving a successful application in the future.



Chemical Entrepreneurship Council(CEC) Overview

Webinar Series

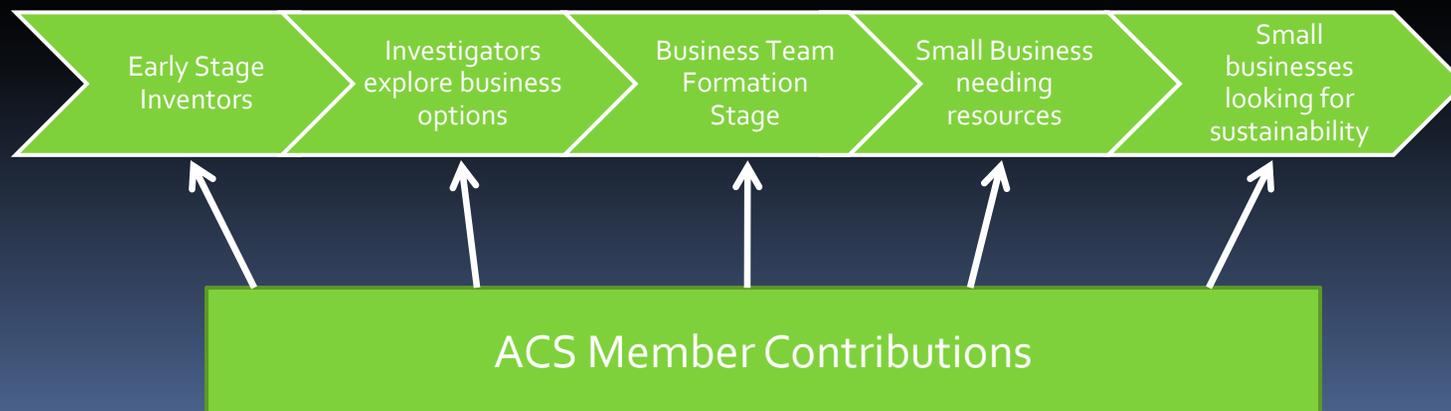
- Entrepreneur Training
- Developing Ideas
- Protecting Ideas
- Business Models Development

Business Training and Development

- NCIIA Training
- Outreach Development
- Elevator Pitches

Business & Venture Development

- Vetting process of companies
- Assigning mentors and coaches
- Business Plan Development



Bio-Technology Business Plan Competition

Schedule: Announcement September 16th

Phase 1 due October 28th

Results on Wednesday November 23rd

Phase II due Wednesday December 21st

Final Results of Top ten teams Announced Friday January 20th

First 80 entrants receive a license to Business Plan Pro

Details of the business plan may be found at www.bmgt.sites.acs.org.

How The Alabama Innovation and Mentoring of Entrepreneurs Works

INNOVATIVE TECHNOLOGY AND RESEARCH AT WORK



- Brings together a highly productive and creative multifunctional, multidisciplinary research development team
 - Forms a team of highly motivated students for market research and business model/plan development
- 1) Entrepreneurial training thru Triage Teams
 - 2) Patent Selection Committee
 - 3) Feasibility Analysis
 - 4) Idea selection Committee
 - 5) Prototype Development