



United States
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Agriculture

National Institute
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and Agriculture



BIOENERGY, CLIMATE,
AND ENVIRONMENT



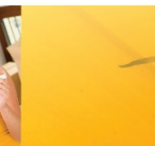
FOOD PRODUCTION
AND SUSTAINABILITY



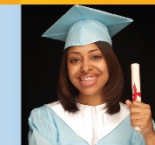
YOUTH, FAMILY,
AND COMMUNITY



FOOD SAFETY
AND NUTRITION



INTERNATIONAL
PROGRAMS



USDA NIFA

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Education and Training: New Approaches

USDA Agricultural Outlook Forum

Ray A. Ali, Ed.D.

National Program Leader, NIFA

21 February 2019



- Synopsis
- Overall Current Status, Trends, Observations, and Data
 - Bureau of Labor Statistics, 2016-2026
 - Purdue University Employment Opportunities Report, 2015-2020
 - America's Strategy for STEM Education, NSTC



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Snapshot of USDA-NIFA Responses

K-14

- Trends / Observations / Feedback
- NIFA opportunities



Snapshot of USDA-NIFA Responses

Undergraduate

- Trends / Observations / Feedback
- NIFA opportunities
- Novel projects



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Snapshot of USDA-NIFA Responses

Graduate and Postgraduate

- Trends / Observations / Feedback
- NIFA opportunities
- Innovative projects



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Summary

- Stakeholder feedback, Project Director Meetings, Peer Panels, etc.



Selected References

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Agricultural and Food Scientists, on the Internet at <https://www.bls.gov/ooh/life-physical-and-social-science/agricultural-and-food-scientists.htm>.

CHARTING A COURSE FOR SUCCESS: AMERICA'S STRATEGY FOR STEM EDUCATION. A Report by the COMMITTEE ON STEM EDUCATION of the NATIONAL SCIENCE & TECHNOLOGY COUNCIL. December 2018. Available from <https://www.whitehouse.gov/wp-content/uploads/2018/12/STEM-Education-Strategic-Plan-2018.pdf>.



Selected References

Goecker, A., Smith, E., Fernandez, J., Ali, R., Theller, R. (2015, May). Employment Opportunities for College Graduates in Food, Agriculture, Renewable Natural Resources, and the Environment: United States, 2015-2020. Available from <https://www.purdue.edu/usda/employment/>.

National Academies of Sciences, Engineering, and Medicine. 2018. Graduate STEM Education in the 21st Century. Washington, DC: The National Academies Press. doi: <https://doi.org/10.17226/25038>.



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Thank You

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