

Lori C. Adams

Curriculum Vitae as of August 23, 2017

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EDUCATION AND PROFESSIONAL HISTORY

Higher Education

2003 **PhD**, Genetics, Texas A&M University
Thesis: Molecular Analysis of Ethylene Signal Transduction in Tomato
1998 **BS**, Crop Science, High Honors, University of Illinois
Supporting Areas / Minor: Plant Biotechnology and Molecular Biology

Professional and Academic Positions

2016 - Present **Executive Director**, Latham Science Engagement Initiative
2015 - Present **Co-Director**, University of Iowa, The Iowa Illinois Nebraska STEM Partnership for Innovation in Research and Education (IINSPIRE) NSF LSAMP Alliance
2012 - Present **Program Director and Co-PI**, University of Iowa, National Institutes of Health Iowa Biosciences Academy Program
2010 - Present **Biology Honors Program Advisor**, Biology, University of Iowa
2010 - Present **Lecturer**, Biology, University of Iowa

Honors and Awards

2014 - Present **Master Facilitator**, National Research Mentoring Network, National Institutes of Health, <https://nrmnet.net/nrmn-master-facilitators-meet-growing-national-demand-for-mentorship-training/> [1]

TEACHING

Courses Taught at the University of Iowa

Term	Course#	Title	Enrollment
Spring 2017	BIOL:4898:0001	Communicating Research	7
Spring 2017	BIOL:4898:0002	Communicating Research	6
Spring 2017	BIOL:4998:0001	Honors Seminar in Biology	13
Spring 2017	HONR:3100:5779	Honors Teaching Practicum	1
Spring 2017	IBA:1041:0004	IBA Student Development Seminar	9
Spring 2017	BIOL:3994:4205	Introduction to Research	3
Spring 2017	LATH:3001:0001	Latham Fellows: Science Outreach Project	11
Spring 2017	LATH:4990:5220	Science Communication and Engagement	1

Innovations in Teaching (Other Teaching Contributions)

Revisions in Existing Courses

2012 - Present **IBA:1401 IBA Seminar Series**, Continued updating of course curriculum related to student development, multiculturalism, research mentee training, career exploration and specification, and applying to graduate school. [2]

Textbooks & Educational Software Development

2015 - Present **Entering Research: A Facilitator's Manual, Second Edition.**, I am currently on a team of editors and authors who will be updating version 2 of "Entering Research: A Facilitator's Manual" by Branchaw, Pfund and Rediske. My role is to author some new chapters and

Blue numbers refer to an annotation listed at the end of this document.

review additional chapters. [3]

Undergraduate Information Sessions

2011 - Present Give seminars on "Experiential Learning: Opportunities to extend learning beyond the Classroom" and "Success in the Biosciences" for various groups such as Iowa Edge, Biology classes, Department of Biology events, etc. [4]

Workshop/Clinic

2013 - Present **Entering Mentoring 8-week Summer Workshop Series**, I lead an 8-week summer workshop series each summer on mentoring undergraduates. The curriculum used for this workshop is based on the "Entering Mentoring" facilitation guide published in 2005 by Jo Handelsman, Christine Pfund, Sarah Miller, and Christine Maidl Pribbenow. 63 graduate students, post-docs and faculty have completed training with me at the University of Iowa as of Summer 2017. [5]

Student Mentoring (* indicates chair of the committee)

PHD

Thesis/Dissertation Committee

2017 - Present Osadchuk, Krista; *In Process*

2015 - Present Brown, Samantha; *In Process*

SCHOLARSHIP

Publications

CLAS * System * = Senior Author, Major Contribution, ** = Secondary Contribution *** = Equal Contribution, **** = Minor Contribution

Publications In Progress

Journal Article

January 1, 2017 *Evaluation of the Iowa Biosciences Academy's programming in increasing student research self-efficacy/outcome expectations, and science communication self-efficacy and outcome expectations*

September 1, 2017 *Participating in science outreach as an authentic way for students to develop fluency in communicating science.*

Research Report

August 18, 2017 *A transcriptomics approach uncovers novel roles for poly(ADP-ribosyl)ation in the basal defense response in Arabidopsis thaliana*

Creative Works/Projects

Digital Media

2016 - Present *Synthesis: A Student Journal of Science Communication* - Co-Editor
In collaboration with Matt Gilchrist (Co-Editor), Brinda Shetty (Co-Editor). Further details can be found at <http://ir.uiowa.edu/synthesis/> [6]

Creative Works/Projects In Progress

Digital Media

2016 - Present *Stem-o-sphere blog* - Supervisor
Further details can be found at stem-o-sphere.org [7]

Areas of Research Interest

Research Mentor Development
Science Communication and Outreach
Undergraduate student development [8]

Grants and Contracts

Funded

Aug 2016 - Jul 2021 *Iowa-Illinois-Nebraska LSAMP: IINSPIRE: A STEM Partnership for Innovation in*

Research and Education 1 5163300

Funded by National Science Foundation. Award amount: (\$565,494.00).

Investigator/s Lori Adams (Co-Director), Vincent Rodgers (Co-Director), David Holger (Principal).

Sep 2012 - Jun 2017 *The University of Iowa IMSD: Iowa Biosciences Academy 5 R25 GM058939*

Funded by US Department of Health & Human Services, National Institutes of Health. Award amount: (\$2,005,905.00) Percent effort: 12.5. Investigator/s Lori Adams (Co-Principal), Vincent Rodgers (Co-Principal).

Currently Under ReviewDec 2017 - Jul 2022 *Iowa Biosciences Academy 5 R25 GM058939*

Funded by National Institutes of Health. Percent effort: 12.5. Investigator/s Lori Adams (Co-Principal), Vincent Rodgers (Co-Principal).

Not FundedJan 2014 - Dec 2019 *HHMI Undergraduate Science Education Program*

Funded by Howard Hughes Medical Institute. Investigator/s Bryant McAllister (Principal), Lori Adams (Investigator), Saba Ali (Investigator).

Jan 2013 - Dec 2018 *Iowa Bridges to Baccalaureate (I-B2B)*

Funded by US Department of Health & Human Services, National Institutes of Health. Investigator/s Saba Ali (Multi-PI), Lori Adams (Multi-PI), Vincent Rodgers (Multi-PI).

Invited Lectures and Conference Presentations**Invited Lecture****College**

2017

Careers Symposium, *Navigating Non-traditional Careers in the Academy*, Boyce Thompson Institute, Ithaca, New York, United States Presenters/Authors: Adams, Lori
Invited to site on a career panel and gave career talk to approximately 60 graduate students and post-docs at the Boyce Thompson Institute and Cornell University. [9]**Department**

2017

Value of Mentoring and Being Mentored, Summer Health Professions Education Program, Iowa City, Iowa Presenters/Authors: Adams, Lori**University**

2017

UI CIRTLL Summer Seminar Series, *Mentoring Undergraduates*, UI Center for the Integration of Research Teaching and Learning (CIRTLL) Network, Iowa City, Iowa Presenters/Authors: Adams, Lori

2017

Iowa Center for Research by Undergraduates Annual Conference, *Go National: Making Your Conference Dreams a Reality*, University of Iowa, Iowa City, Iowa, United States**Workshop****Department**

2017

Mentoring Workshop for Behavioral-Biomedical Interface Program Mentors, Behavioral-Biomedical Interface Program University of Iowa, Iowa City, Iowa Workshop for approximately 15 UI faculty. [10]**Regional**

2017

IINSIPRE LSAMP Annual Conference, *Making the Most of Your Research Experience*, LSAMP, Ames, Iowa, United States**University**

2017

Mentor Training for Clinical and Translational Science Faculty, Iowa Institution for Clinical and Translational Science, Iowa City, Iowa

SERVICE**Profession**

2016 - Present

Synthesis: A Digital Journal of Student Science Communication, Editor, Assistant/Co-Editor [11]

Department

- 2011 - Present Department of Biology Undergraduate Curriculum Committee, Member
- 2010 - Present Biology Honors Program, Director [\[12\]](#)
- 2010 - Present Department of Biology Undergraduate Awards Committee, Chair

College

- 2014 - Present Latham Science Engagement Initiative, Director [\[13\]](#)

University

- 2017 - Present Faculty Advisory Council on Student Retention, Board of Advisors
- 2016 - Present Graduate Diversity Task Force, Member
- 2016 - Present University of Iowa Center for the Integration of Research, Teaching and Learning (CIRTL), Steering Committee
- 2016 - Present University of Iowa STEM Collaborative for Outreach and Research in Education (UI STEM CORE), Member
- 2014 - Present University of Iowa STEM Outreach Group, Member

Regional

- 2015 - Present The Iowa Illinois Nebraska STEM Partnership for Innovation in Research and Education (IINSPIRE) NSF LSAMP, Steering Committee

Community

- 2013 - Present Hawkeyes at the Microscope, Developer and Co-Director [\[14\]](#)
- 2013 - Present Project Hope, Guest Speaker [\[15\]](#)

Professional Development Activities

- 2016 - Present Training/Development Program, BUILD (Building University of Iowa Leadership for Diversity) Certificate, University of Iowa

Annotations

- [1] <https://nrmnet.net/nrmn-master-facilitators-meet-growing-national-demand-for-mentorship-training/>
- [2] Continued updating of course curriculum related to student development, multiculturalism, research mentee training, career exploration and specification, and applying to graduate school.
- [3] I am currently on a team of editors and authors who will be updating version 2 of "Entering Research: A Facilitator's Manual" by Branchaw, Pfund and Rediske. My role is to author some new chapters and review additional chapters.
- [4] Give seminars on "Experiential Learning: Opportunities to extend learning beyond the Classroom" and "Success in the Biosciences" for various groups such as Iowa Edge, Biology classes, Department of Biology events, etc.
- [5] I lead an 8-week summer workshop series each summer on mentoring undergraduates. The curriculum used for this workshop is based on the "Entering Mentoring" facilitation guide published in 2005 by Jo Handelsman, Christine Pfund, Sarah Miller, and Christine Maidl Pribbenow. 63 graduate students, post-docs and faculty have completed training with me at the University of Iowa as of Summer 2017.
- [6] co-creator and editor of this journal for undergraduate and graduate student science communication submissions.
<http://ir.uiowa.edu/synthesis/>
- [7] Stemosphere is a student run science publication that hosts blogs and videos.
- [8] Emphasis on student development through experiential learning opportunities (eg. research, teaching, service).
- [9] Invited to site on a career panel and gave career talk to approximately 60 graduate students and post-docs at the Boyce Thompson Institute and Cornell University.
- [10] Workshop for approximately 15 UI faculty.
- [11] <http://ir.uiowa.edu/synthesis/>
- [12] Advise approximately 40 students per year. Recruit prospective students, match students with mentors, track students post-graduation.
<https://biology.uiowa.edu/undergraduate-program/biology-honors-program>
- [13] Outreach to donors, program reporting, website creation and curation. Represent Latham program at outreach and recruiting events.
<http://latham.uiowa.edu/>
- [14] Hawkeyes at the Microscope is a traveling outreach exhibit that engages community members in hands on science activities. We go to science festivals and fairs all across Iowa.
- 8/20/2017 Iowa State Fair
 - 8/17/2017 CLAS OnIowa Open House event
 - 4/23/2017 Iowa City STEAM Festival
 - 3/3/2017 Penn Elementary Science Night
 - 8/21/2016 Iowa State Fair
 - 3/11/2016 UI Physics & Astronomy Demonstration
 - 2/26/2016 Penn Elementary Science Night
 - 2/23/2016 Cedar Rapids STEM Festival
 - 1/23/2016 Lincoln Elementary STEAM Day
 - 08/23/15 Iowa State Fair
 - 03/31/15 Hawkeye Caucus Day Iowa State Capitol (Des Moines)
 - 02/27/15 Penn Elementary Science Night
 - 08/30/14 Iowa City Fall Festival at Regina - STEM Discovery Zone
 - 07/21/14 Johnson County Fair
 - 04/08/14 Van Allen Elementary School
 - 02/25/14 Cedar Rapids STEM Festival
 - 02/21/14 Penn Elementary in North Liberty
 - 08/31/13 Regina Fall Fun Festival - STEM Discovery Zone
 - 8/12/2013 Iowa State Fair

04/09/13 Van Allen Elementary School

04/02/13 Hawkeye Caucus Day Iowa State Capitol (Des Moines)

[15] I work with Prof. Saba Ali in the UI College of Education (Director of Project Hope) to provide career simulations to area 8th students. Students are given the opportunity to do hands-on experiments such as DNA extraction or microscopy work. 45-60 minute sessions for approximately sixteen 8th grade students are lead by myself or students under my supervision. Session dates are listed below:

01/10/2013

03/01/2013

04/11/2013

01/10/2014

04/10/2014

05/18/2015

05/05/2016

05/13/2016

05/04/2017

05/12/2017