Making Career-spanning Learning in the Life Sciences Inclusive and Effective for All

Late 2021

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Overview

The rapidly-increasing interdisciplinarity of the life sciences makes career-spanning learning critical. Scientists who are able to recognize and traverse skills gaps are better positioned to pursue impactful science and achieve their personal career goals. To bolster their skills life scientists often turn to short-format training (e.g., workshops, bootcamps, and short courses). While it provides point-of-need help, and is often low in time commitment and costs, this approach can be less successful than typically assumed.

Short-format training has the potential to accelerate innovation; unfortunately, it is generally not grounded in effective pedagogy. Effort has been expended to incorporate some principles of educational sciences, but much of what we know works is not implemented including promotion of self-directed learning and learning opportunities that encourage continuing growth. In addition, structural obstacles must be addressed to promote scalable solutions that equitably benefit all members of the life science community.

To address these challenges, a small think tank-style conference, sponsored by NSF (DRL#2027025), will work toward implementable solutions to improve short-format training, making it more effective and inclusive for all. We hope to attract a diverse group of experts with experience relevant to instruction (short-format and otherwise) to ensure that solutions draw on

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educational research, the experience and needs of the global community, and variability in disciplinary training, career stage, and career path.

The work of the conference is to use a structured process to draft pragmatic recommendations to strengthen short-format training. These contributions will progress toward a community-accepted framework that addresses how strategies can be made effective, inclusive, scalable, and work for the benefit of underserved learners.

How to Participate

Attend the conference (~30 attendees); Nominations open April 14 - Close May 31
Self-nomination form: https://survey.zohopublic.com/zs/SAChZY
[A preview of the self-nomination form can be found at the end of this announcement]
To drive meaningful discussion, ~30 attendees will be invited to attend the conference in early December 2021 (in-person, Cold Spring Harbor, NY; virtual participation options available). We seek to attract a diverse group of attendees. We anticipate the group convened will include expertise in the sciences, education, policy, and funding. Potential attendees should self-nominate via the form/link above.

Contribute Vignettes (anyone and everyone); Submissions open May 10 - Close June 30
Vignette submission form: https://survey.zohopublic.com/zs/GcbEDR
[A preview of the vignette submission form can be found at the end of this announcement]
The work of the conference is focused on solving challenges encountered in teaching short-format courses. Conference attendees will be considering vignettes that describe specific instructional challenges or barriers. We want to ensure that the barriers that are considered in the meeting are representative of actual experiences with short form teaching and learning. We invite submissions of challenges (e.g., "How do I ensure that my course content is up to date in such a fast-changing disciplinary context?", "How do I ensure that my training course is accessible?" or "How can I integrate ethical content into my course?") for consideration and solutions, from a variety of instructional contexts and as wide a range of life sciences training as possible.

Comment on the white paper (anyone and everyone); Available in early 2022
Following the conference, a white paper will be available for community comment, prior to formal publication. Through this feedback we hope to develop the broadest consensus possible on recommendations the community should strive to implement and research questions that merit additional study.

Join the mailing list
If you would like to be reminded of submission deadlines, outputs of the conference, or other conference-related notifications please join our mailing list using the following link: https://survey.zohopublic.com/zs/iTCs9U

(Continue to next page for a preview of the self-nomination form)

Contact Banbury with any questions, or if you are having trouble with the self-nomination form: Banbury@cshl.edu

PREVIEW: SELF-NOMINATION FORM

For preview purposes only; only nominations submitted online will be considered.
Self-nomination form: https://survey.zohopublic.com/zs/SAChZY

MAKING CAREER-SPANNING LEARNING IN THE LIFE SCIENCES
INCLUSIVE AND EFFECTIVE FOR ALL

December 2021*, Banbury Center, New York, USA

[*By July 2021, those selected will receive official invitations including details about the meeting date/time, accommodations, and travel]

We are planning for an in-person conference; those selected for the meeting will receive an official invitation from the Banbury Center by July 2021. This invitation will include conference dates as well as full travel and accommodation details. We recognize that decisions may be contingent upon evolving pandemic-related circumstances.

The meeting will span four days/three nights: beginning at 6.00pm EST on Day 1, and concluding around 2.00pm EST on Day 4. Lodging and meals will be provided for all invited participants, and the Center will work directly with invitees on any non-standard accommodation/conference facility requests. A travel allowance will be provided for participants from academic and other not-for-profit organizations; this allowance typically covers all associated travel expenses.

While the majority of participants will be in-person, a limited number of VIRTUAL attendees will be accommodated. Though we are making virtual participation possible, we do not intend for it to be a substitute for in-person participation. At the time of invitations, the Banbury Center will work with each virtual attendee to ensure, on a case-by-case basis, that meaningful participation is possible. [Note: The meeting will be held in the US Eastern time zone].

Participants from policy-making and funding organizations may apply to attend as observers.

We expect all in-person attendees to be present for the entire duration of the meeting. Virtual attendees (and observers) will not be required to attend sessions during hours considered unsocial in your time zone, nor informal discussion periods.

This self-nomination form includes three sections:
  I.   Career & Education (selection or short answer)
  II. Related Experience (short answer - 300 words maximum)
  III. Demographic Information (selection)

In Section II you will have the option to upload a two-page CV or a two-page statement of related professional experience (*both are optional, neither are required*). The CV or statement should be a PDF, and the file named using the format: LASTNAME_FIRSTNAME

For section II (Related Experience), we strongly recommend composing your answers in a separate document to track character count, then pasting the response into the field.

The deadline for submission is MAY 31, 2021

Contact Banbury with any questions, or if you are having trouble with the self-nomination form: Banbury@cshl.edu

First Name / Given Name

Last Name / Surname

Email address [*This address will be used to contact you if you are selected for an invitation AND this address will receive a copy of your application upon submitting. Please 'whitelist' our address (Banbury@cshl.edu) to ensure you are able to receive our messages.*]

If invited, how do you intend to participate?
    I intend to participate IN-PERSON
    I intend to participate VIRTUALLY
    I intend to participate as an IN-PERSON OBSERVER (e.g., representing a funding or policy-making body)
    I intend to participate as a VIRTUAL OBSERVER (e.g., representing a funding or policy-making body)

I. Career & Education

Current employer

Current position (job title)

Career stage
    Early-career (typically within 10 years of terminal degree)
    Mid-career (more than 10 years after terminal degree)
    Late-career or beyond (within 5 years of retirement, emeritus, or retired status)

Career status
    Non-tenure track
    Tenure track
    Tenured
    Non-academic
    Other (please specify)

Education: Highest degree(s) obtained

Please list up to five products of your work/experience relevant to the conference (e.g., publications, courses taught)

II. Relevant Experience

How does your professional work relate to the topic of short-format training? (1800 characters maximum, approximately 300 words)

Are there additional areas of expertise or personal experience relevant to short-format training that you would bring to this conference?
If nothing additional, please enter "NA." (1800 characters max., approx. 300 words)

What community(-ies) would you represent at this meeting, and how would you bring the work done at the meeting back to a community(-ies)? (1800 characters max., approx. 300 words)

Why do you want to participate in this conference? What would this conference have to achieve to make it worth your time? How would you contribute to achieving this? (1800 characters max., approx. 300 words)

[Optional] CV or statement of related professional experience: Two pages maximum (any text beyond a second page will be deleted); PDF format only; File named using the format: LASTNAME_FIRSTNAME

III. Demographic Information

The Banbury Center and conference organizers are committed to the values of diversity, equity, and inclusion. We believe this meeting's effectiveness will rely on convening a group of participants that reflects the diversity of those we expect our work/outputs to serve. Therefore, demographic information will be one of the factors used in selecting participants.

Please indicate your gender
    Woman
    Man
    Nonbinary
    Prefer not to disclose
    Prefer to self-describe (please specify)

Which category(-ies) describe your race/ethnicity?
Select all boxes that apply; you may select more than one category.
    White (e.g., German, Irish, English, Italian, Polish, French)
    Hispanic, Latino, or Spanish origin (e.g., Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Colombian)
    Black (e.g., African American, Jamaican, Haitian, Nigerian, Ethiopian, Somalian)
    Asian (e.g., Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese)
    Indigenous, First Nations, American Indian, or Alaska Native (e.g., Aboriginal, Navajo Nation, Blackfeet tribe, Mayan, Nahua, Native Village or Barrow Inupiat Traditional Government, Nome Eskimo Community)
    Middle Eastern or North African (e.g., Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian)
    Native Hawaiian or other Pacific Islander (e.g. Samoan, Chamorro, Tongan, Fijian)
    I prefer not to say
    Other (please specify)

In what country are you primarily employed?

Do you consider yourself any of the following?
You may select more than one category.
    A race/ethnicity underrepresented in the life sciences (e.g., Indigenous, Black, person of color)?
    A disabled person
    A member of the Deaf community
    Not applicable
    Prefer not to respond
    Another category with which you wish to identify
If "Another category with which you wish to identify," please specify

— END OF NOMINATION FORM PREVIEW —

Contact Banbury with any questions, or if you are having trouble with the self-nomination form: Banbury@cshl.edu

PREVIEW: VIGNETTE SUBMISSION FORM
For preview purposes only; only vignettes submitted online will be considered.
Vignette Submission form: https://survey.zohopublic.com/zs/GcbEDR

Please use this form to submit a challenge vignette for discussion at the meeting:

MAKING CAREER-SPANNING LEARNING IN THE LIFE SCIENCES
INCLUSIVE AND EFFECTIVE FOR ALL

The deadline for submission is **JUNE 30, 2021**

Please review the following information before beginning your challenge vignette.

During the conference, *Making Career-spanning Learning in the Life Sciences Inclusive and Effective for All **, we will be working toward implementable solutions to improve short-format training (e.g., workshops, bootcamps, short courses) int eh life sciences. We are inviting anyone who delivers short-format training to life scientists - on any subject - to share challenges faced in making training effective and inclusive.

Challenges may arise from different dimensions of teaching or preparing to teach, for example:
- Pedagogical: "What is the best way to help attendees achieve their learning objectives?"
- Contextual: "How can I best deliver training to remote learners?"
- Temporal: "I only have two weeks to prepare materials, what should I focus on?"
- Topical: "I don't have expertise in a subject I need to include, how do I check my work?"
- Resource-driven: "Can I / how do I teach [insert topic] when I don't have access to the lab equipment?"
- Expectations: "How can I overcome unrealistic expectations for what a given training / course can achieve?"

We invite you to share your challenge with us using the following form (approx. 10min to complete). We welcome your submission on any challenge, no matter how common you may think it is; the same challenge may be solved differently in different contexts. We will draw on community-submitted challenges to help identify gaps, potential solutions, and areas for further research or community action.

Thank you for your contribution.

Contact Banbury with any questions, or if you are having trouble with the self-nomination form: Banbury@cshl.edu

Consent, Acknowledgement, Anonymity

Please complete the entire form; we will be unable to use vignettes that are incomplete. You will be able to save a partial submission and return later to complete.

Submission of this form is entirely voluntary.

If you are applying to attend the conference, this submission will have no bearing on your application.

Your submission will be anonymized, but we will ask for some information to help us, and others, understand the submissions and their impacts (e.g., your career stage, other demographics). An intermediary will review all submissions and remove all identifying information before forwarding them to the investigators.

We may use some, all, or none of the vignettes submitted as example challenges and themes discussed at the conferences. We may also summarize or generalize vignettes.

Please do not self-censor: if multiple submissions depict the same kind of challenge, that can help us with organization and identification of themes.

Submissions will be collected under Georgetown University's Institutional Review Board (IRB; study number 00003859; status = pending). Questions about the IRB/study may be directed to Dr. Rochelle E. Tractenberg, Rochelle.Tractenberg@gmail.com.

Additional consent information may be viewed by pasting the following link into your browser: https://drive.google.com/file/d/1oHndS6mx5GDzniN7BYJrZD5ZZsyJk-s5/view?usp=sharing

Definitions

For all submitted challenges, please remember the training should be <u>short-format training</u> for the benefit of <u>life scientists</u> as defined below:

Short-format Training: For this survey, we define short-format training to be courses taught in a few hours, days, or weeks. The training is typically, but not always, less than 20 hours in total. Common examples are: workshops, boot camps, and short courses. Short-format training is usually taught to groups of people. Short-format training DOES NOT include one-on-one teaching, tutoring, or review/remedial instruction. Typically, courses that are part of degree-granting programs are not considered short-format training.

Life Scientists: For this survey, we define life scientists as anyone employed in the life sciences (e.g., genetics, ecology, biochemistry, biophysics, health sciences and medicine, pharma, biotechnology) OR anyone studying these subjects at the post-baccalaureate level with the intent of a career in these subjects. Training for those who collaborate with (or hope to collaborate with) the aforementioned groups would also be included.

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If you are unsure whether your training meets these definitions, please submit your challenge, providing enough detail about the teaching context for the investigators to evaluate relevance.

Page 2:

Instructions

Challenges submitted should be those you've actually faced, not hypothetical.

You may submit up to three challenges; please use a separate "challenge description box" for each challenge. To the extent possible, please focus each challenge description box on a single, or closely related, set of challenges.

Please consider driving features of the challenge, e.g., pedagogy, context, time/timing, topic/content, resource/lack of resources, expectations of institution or learners.

You may pause your entry and return later to complete ONLY from this page (Challenge Description Entry). Please click the "Save and Continue Later" link at the top, right of the page (within a gray bar).

REMINDER: Please avoid potential identifiable information (e.g., your name, the name of your institution); we will remove information we consider identifiable.

Challenge Description #1 (required)

1a. (Required) Briefly describe a challenge you face in delivering short-format training to life scientists. (maximum 1200 characters, approximately 200 words)

1b. (Required) How would you summarize / title this challenge in one sentence? (maximum 300 characters, approximately 50 words)

1c. (Required) What (if anything) made this a particular challenge for you or your circumstances? For example, was this particularly challenging because:
- You didn't have a lot of time to prepare to teach?
- Your course has to be delivered in much less time than would be needed for "real learning"?
- You were marginalized or excluded in some way?
- You didn't have a particular resource?
- You had limited information on students' prior knowledge?

(maximum 1200 characters, approximately 200 words)

1d. (Optional) If you attempted to solve (or solved) your challenge, how? Could this solution work for others? (maximum 1200 characters, approximately 200 words)

Contact Banbury with any questions, or if you are having trouble with the self-nomination form: Banbury@cshl.edu

1e. (Optional) Was there anything particular to you or your circumstances that helped you to address (or solve) this challenge? Would these circumstances be relevant for others? (maximum 1200 characters, approximately 200 words)

[Two additional Challenge Description entries are optional.]

Page 3:
About You

Career stage
- Early-career (typically within 10 years of terminal degree)
- Mid-career (more than 10 years after terminal degree)
- Late-career or beyond (within 5 years of retirement, emeritus, or retired status)

Career status
- Non-tenure track
- Tenure track
- Tenured
- Non-academic
- Other (please specify)

Education: Highest degree(s) obtained
Date(s) highest degrees obtained

Please indicate your gender
- Woman
- Man
- Nonbinary
- Prefer not to disclose
- Prefer to self-describe (please specify)

Which category(-ies) describe your race/ethnicity?
Select all boxes that apply; you may select more than one category.
- White (e.g., German, Irish, English, Italian, Polish, French)
- Hispanic, Latino, or Spanish origin (e.g., Mexican or Mexican American, Puerto Rican, Cuban, Salvadoran, Dominican, Colombian)
- Black (e.g., African American, Jamaican, Haitian, Nigerian, Ethiopian, Somalian)
- Asian (e.g., Chinese, Filipino, Asian Indian, Vietnamese, Korean, Japanese)
- Indigenous, First Nations, American Indian, or Alaska Native (e.g., Aboriginal, Navajo Nation, Blackfeet tribe, Mayan, Nahua, Native Village or Barrow Inupiat Traditional Government, Nome Eskimo Community)

Contact Banbury with any questions, or if you are having trouble with the self-nomination form: Banbury@cshl.edu

Middle Eastern or North African (e.g., Lebanese, Iranian, Egyptian, Syrian, Moroccan, Algerian)
Native Hawaiian or other Pacific Islander (e.g. Samoan, Chamorro, Tongan, Fijian)
I prefer not to say
Other (please specify)

In what country are you primarily employed?

Do you consider yourself any of the following?
You may select more than one category.
A race/ethnicity underrepresented in the life sciences (e.g., Indigenous, Black, person of color)?
A disabled person
A member of the Deaf community
Not applicable
Prefer not to respond
Another category with which you wish to identify
If "Another category with which you wish to identify," please specify

Please provide a valid email address. By default, this address will only be used to auto-send a copy of your submission; it will be removed from your entry by an intermediary during the anonymization process, and will NOT be shared with the investigators.

Upon reviewing the anonymized submissions, the investigators may have follow-up or clarifying questions. If you would like to opt-in to allowing an intermediary to relay any investigator questions to you via the email address provided, please indicate your consent below.
(By default, we will NOT contact you with follow-up or clarifying questions.)

— END OF VIGNETTE SUBMISSION FORM PREVIEW —