

Implementation Guide-Industry Course

Broader Impacts: Public Outreach, Education, and Engagement for Animal Research

1 Introduction

This implementation guide is meant to assist you in implementing the Broader Impacts seminar in an industry setting for staff researchers and other members of your company.

IMPORTANT: Context is key. The course organizers should modify and implement the course as they see fit. Not all materials may be suitable to your setting- you may want to remove certain topics or add others that address your situation and environment. The provided materials and syllabi are guidelines and are all able to be modified.

1.1 Purpose

The aims for this implementation guide is to provide step-by-step implementation instructions for anyone interested in using these course materials for their own setting.

1.2 Overview of Broader Impacts Seminar Certificate

Broader Impacts: Public Outreach, Education and Engagement for Animal Research was a course initially taught at the University of Wisconsin-Madison in Spring 2016. This course was taught as a one-credit seminar for PhD students working in animal research and related fields. The course aimed to educate graduate students about a range of information and issues surrounding animal research, and to provide them with the knowledge, skills, and tools to conduct effective outreach with the public. This course has now been modified to suit a wider audience- in this case, employees at a pharmaceutical company.

1.2.1 Broader Impacts Description

This course has been modified from its original form to be five half-days long and organized into two broad phases. Phase one consists of education about a wide variety of fields relating to animal research: philosophy and ethics of animal research, policy, regulation, principles of science, public opinion surrounding animal research, and the wide range of views shared by individuals and organizations. Phase two focuses more on the outreach component, with an emphasis on what has been done previously in the scope of animal research outreach and how you can become personally involved.

1.2.2 Assumptions and Constraints

The course was originally taught in a flipped-classroom style of teaching, in which students watched lecture videos and completed readings prior to attending weekly discussions. This may not be the case in the industry setting, thus the readings have been made optional (though encouraged) and the videos can be watched during the seminar. However, this may limit the scope of the discussions, as members will not have time to prepare questions or comments for discussion. If possible, it would be useful for those taking part in the seminar to complete the readings prior to each day. In the syllabus, the readings for each week are ranked in terms of usefulness and importance for that topic.

1.2.3 Seminar Organization

The original Broader Impact seminar was 15 weeks (1x/week for a full semester) long and has been shortened for this industry course. The five half-days (or 2.5 full days) could be further shortened or modified if some topics are irrelevant for your setting.

2 Management Overview

2.1 Points-of-Contact

If you have questions or concerns about any aspect of Broader Impacts and its implementation in your setting, contact the Americans for Medical Progress via their contact form online and reference “Broader Impacts seminar” in the first line:

<https://www.amprogress.org/about/contact-us/>

2.2 Major Tasks

2.2.1 Material Review and Preparation

The course organizer will be primarily responsible for ensuring the short course runs smoothly. This includes watching/reading course material beforehand, preparing discussion questions and activities (if modified from template materials provided). Much of this work can (and potentially should) be completed prior to commencement of the seminar to pre-empt any problems before they occur. The Gantt chart below details a suggested timeline of the major tasks to be undertaken prior to the start of the course.

2.2.2 Guest Lecturers

In the initial course, several guest lecturers provided their expertise in subjects relating to animal research and outreach. Guest lecturers can provide a refreshing change of pace and new perspective. The following weeks had guest lecturers in the original seminar:

- Week 4: IACUC and Animal Research Regulation (member of IACUC guest lecture)
- Week 5: Alternatives and the 3Rs (expert in animal research alternatives and the 3R's of reducing animal use in research)
- Week 6: Philosophy and the Spectrum of Voices in Animal Research (expert in animal research and animal rights outreach and academic opposition to animal research)
- Week 10: Past and Present Pro-Animal Research Campaigns and Tactics Used (expert in animal research outreach and animal rights campaigns)
- Week 11: Science Communication (expert in science communication)
- Week 12: Methods of Outreach (expert in social marketing and psychology of attitude change)

It may be useful to see if there are faculty in your company or a nearby facility/university with related expertise who be interested in guest-speaking. Skype-lectures were also used several times in the original course for experts to speak from afar and are easy to use in a room with a projector screen. If you decide not to, or are otherwise unable, to have guest-lecturers, audio-recordings of the original guest-lecture and/or substitute activities for these weeks are available.

2.3 Implementation Schedule

Below is a suggested implementation schedule. It is highly recommended that you review all of the materials alone and with the teaching assistants/seminar leaders prior to the seminar beginning.

<u>Steps</u>	<u>6 months to start</u>	<u>5 months to start</u>	<u>4 months to start</u>	<u>3 months to start</u>	<u>2 months to start</u>	<u>1 month to start</u>
Course adaptation to context	*	*	*			
Recruit guest lecturers			*	*	*	
Advertise course						
Recruit seminar leaders						
Review materials with seminar leaders; adjust as desired						
Determine location of course (based on attendance)						
*Optional						

3 Implementation Support

3.1 Equipment

3.1.1 Materials

All materials necessary for the course are available on the Americans for Medical Progress website. Again, they should be modified as necessary to make them more relevant to your setting. For example, in Week 2: A History of Animal Research lecture video, it may be useful to change some of the examples to discoveries more specific to your company's history and achievements. As the original course was taught at the University of Wisconsin-Madison, much of the research discoveries discussed originated from there (e.g. Harry Harlow's work).

3.1.2 Facilities

Holding the course in a room with a projector or a large monitor would be best, as on occasion you may need to display a PowerPoint presentation, or watch a video online. It is recommended that a round-table setting is used, to encourage everyone to interact comfortably. Small group discussions may also prove useful if there are a large number of attendees.

3.1.3 Software

The students taking the course will need Adobe Acrobat DC and the Adobe Reader-specific Flash Player to download the lecture videos. Both are freely available to download. Refer to the "Instructions for Playing PDF Lectures" for information on how to view the lectures.

3.2 Personnel

3.2.1 Staffing Requirements

It is suggested that one or two people oversee the short course. They will be responsible for facilitating discussions and keeping the class on-track. It is recommended that these are staff members in similar positions as the attendees, to maintain the informal, relaxed atmosphere and to encourage open dialogue.

A senior staff member is also suggested to oversee the course for its duration. They will provide troubleshooting and modification, as well as serve as the point of contact for any contact needed with Americans for Medical Progress.

3.2.2 Training of Staff

Again, it is recommended that the discussion facilitators and course organizers read and watch all materials prior to the onset of the course. Carefully consider whether the materials available suit the context that the seminar will be taught in, and edit the materials and readings as necessary. Additionally, refer to the “Tips for Leading a Discussion” PowerPoint slide set for advice in facilitating discussions in an egalitarian and open manner.

4 Attracting Students: (4) P's of Marketing

The following are suggestions for advertising the course within your department and university.

4.1 Place

- Post flyers (see sample) around offices, bulletins, coffee rooms, meeting rooms, and in newsletters.
- Send emails to Human Resources, supervisors, senior staff, etc.

4.2 Product

- The course has been developed by an Americans for Medical Progress Michael D. Hayre Fellow for Public Outreach (Audrey Buelo). The course was designed in collaboration with faculty at animal research facilities and societies around the world.
- The seminar was successfully taught at the University of Wisconsin-Madison in Spring of 2016, and has been subsequently modified to fit the industry setting.
- See description in 1.2 above for more details.

4.3 Promotion: Benefits of taking the course

- Learn about animal research, outreach, and advocacy in a relaxed atmosphere
- Improve your marketability and build your CV.
 - Science communication is an essential skill for both academic and non-academic futures in the biomedical field.
 - Through this course, you will learn the knowledge and skills to effectively engage in animal research outreach with the broader public, as well as ways to become actively involved in pre-existing outreach programs.

4.4 “Price”

- The Broader Impacts short course is fairly intensive, and preparatory work may be necessary to engage fully with the course content.
- However, staff who attend the short course are awarded a certificate after the course is completed.