Interactive Simulation Exercises for Career Transitions
What is Inter-SECT?

Inter-SECT stands for Interactive Simulation Exercises for Career Transitions.

The purpose of the INTER-SECT job simulation library is to help graduate students and postdoctoral fellows learn about a career path by trying real job experiences via job simulations. By completing a job simulation, we hope that graduate students and post-doctoral fellows will understand the skills and tasks involved in a career of interest. This workbook may help them narrow their focus, and determine if they’d like to further pursue a career field before committing energy and time to additional training, like internships or courses. Our aim is to provide true-to-life, career-specific exercises to help graduate students and post-doctoral fellows explore careers beyond the bench.
1. JOB SIMULATIONS

We designed the job simulations to be self-guided. Each simulation contains background and directions for the graduate student or post-doctoral fellow to complete a task that is related to the career of interest (aka the deliverable).

You can browse through job simulations we’ve created on Inter-SECT website at:  
https://gradcareers.wustl.edu/intersect

2. PROJECT SMART GOALS

The Project SMART Goals is a checklist to help graduate students and post-doctoral fellows keep track of the different components of this project. This checklist can be filled out by entering the date they started the job simulation, and then filling out the remaining dates based on the suggested time interval from the start date. These will provide suggested guidelines for completing the elements of the simulation.

The checklist is also available online as a self-calculating Excel worksheet from the Inter-SECT webpage: https://gradcareers.wustl.edu/intersect

3. SELF-REFLECTION GUIDE

The Self-Reflection Guide is composed of questions that will prompt the graduate student or post-doctoral fellow to (1) consider their experience of the exercise and (2) help them articulate the impact in their career exploration. To successfully complete the self-reflection, they will broadly identify how the job simulation fits their skills and interests.
Ultimately, the Self-Reflection Guide will help graduate students and post-doctoral fellows determine if they want to spend more time exploring this career. For example, did this job simulation spark curiosities they would like to follow up on, or are they no longer interested in this career field?

4. INFORMATIONAL INTERVIEW GUIDE

For a richer understanding of the job task(s), we encourage graduate students and post-doctoral fellows to share this product with a professional in the field, ask for feedback, and discuss questions that arose over the course of completing the exercise. This document provides guidance for reaching out and meeting with such a professional and also includes sample e-mails, questions to prompt the discussion, and information about the benefits of getting feedback from a professional. This guide will also help them understand what to expect, how to set up and close an informational interview, and of course, the Thank You note.

We highly encourage all graduate students and post-doctoral fellows to contact a professional to interview for their specific career field. In other words, if they chose to do the Medical Writing job simulation they would reach out to a Medical Writer to conduct the informational interview.

Benefits to your students and postdocs:

These simulations are real life job tasks that have been vetted and approved by PhD professionals for accuracy as simulations of a subset of daily tasks that PhD professionals say they perform in their field. Because they simulate daily tasks
and are designed to be completed in less than 8 hours, they are ideal for career exploration.

The job simulation experience is intended to help the student or postdoc test a working identity and assess their interest and potential career fit. After completing a job simulation, if they are still interested in a career field, they are encouraged to pursue additional experiential opportunities and skill building activities.

Please note that this experience is not intended to indicate the individual’s ability to perform a task well. It is designed for career exploration.

**Versatility of Inter-SECT-based activities:**

Here are a few examples of how you could use Inter-SECT job simulations.

**Career advising:**

When discussing career options with graduate students or postdocs as a faculty member or career advisor, suggest performing a job simulation to help explore a specific career pathway.

**In-class activity:**

A faculty member at Duke University incorporated a Medical Writing job simulation in his career exploration workshop series. Students were given time to read the simulation exercise and start the process in class. Students were then encouraged to send in their completed deliverables.
Engage alumni:

Modeled after Georgia Tech and Emory’s NIH Best Program, Inter-SECT could be used in a flipped learning activity coupled with alumni conversation on their career:

- Participants complete a job simulation in a specific field prior to the workshop
- An alum gives a brief career field overview, discusses skills needed to succeed, and experiences that helped them get hired
- Participants get into groups and discuss their deliverables and experience performing the job simulation
- Groups share their summaries and discuss the challenges of completing the task
- The alum holds a Q&A about their career field

Inter-SECT job simulations can be paired with panel discussions:

- Participants complete a job simulation in a career field prior to the seminar; select one to four different career fields depending on the panelists you can secure for the event.
- A panel of alumni discusses their career fields, skills needed to succeed, and experiences that helped them get hired
- Participants use the Q&A period to ask alumni about their job simulation experience
QUICK GUIDE TO INTRODUCING INTER-SECT TO YOUR INSTITUTION

Use the following slides to introduce Inter-SECT to your colleagues.

Inter-SECT is adaptable

The Inter-SECT job simulation experience is meant to be adaptable. We recommend having a discussion after the presentation on how best to adapt Inter-SECT to meet the needs of your graduate students, post-doctoral fellows, and campus.
THESE SIMULATIONS ARE REAL LIFE JOB TASKS

SIMULATE A SUBSET OF DAILY TASKS THAT PHD PROFESSIONALS SAY THEY PERFORM

IDEAL FOR CAREER EXPLORATION

ARE DESIGNED TO BE COMPLETED IN LESS THAN 8 HRS

USE IT IN CAREER ADVISING APPOINTMENTS

FOR A STUDENT OR SCHOLAR WHO:

1. Has read about journal editing, but still doesn’t know what’s involved in journal editing...

2. Isn’t sure they want to spend a semester taking a course on intellectual property...

3. Has selected a career field of interest...

...a job sim could be a next step to understand what’s really involved in a career pathway. Then schedule a follow-up appointment to discuss their self-reflection sheet.

...a job sim could help individuals identify tasks of interest and the skills they like to use, so they decide to pursue more time intensive experiential opportunities.

...a job sim could be used to build a skill set or prepare for an interview.
USE IT TO ENHANCE
PEER GROUP INTERACTIONS

These are the steps that show how the job simulations were used in a group activity from UCSF.

Each group met over 2-3 weeks, and there were 3-7 participants per peer group.

1. Graduate students and postdocs interested in trying a career-specific task were invited to attend an info session about job sims.

2. Following the presentation, sign up sheets organized by career field were passed around, and individuals opted in.

3. A staff member from the career center introduced the peer groups via email to any sign-up that had more than 3 individuals.

4. A staff member facilitated the group interactions and answered difficult questions.

USE IT FOR IN-CLASS ACTIVITIES

This is an example of how a simulation was incorporated into a career skills exploration series run by a faculty member at Duke.

This series was comprised of 6 sessions with 12 participants each week.

A faculty member incorporated a Medical Writing job simulation in his career exploration workshop series. Students were given time to read the simulation exercise and start the process in class.

Students were encouraged to send in their completed deliverables.
USE IT TO ENGAGE ALUMNI

THESE ARE THE STEPS THAT SHOW HOW JOB SIMULATIONS CAN BE USED IN AN ALUMNI-LED WORKSHOP. THIS IS AN EXAMPLE OF A “CAREER LAB”, CREATED BY EMORY & GEORGIA TECH’S NIH BEST PROGRAM.

EACH PROGRAM WAS 2 HRS. AND HAD 20-30 PARTICIPANTS PER PROGRAM.

THE INTERSECT JOB SIMS COULD BE UTILIZED IN A SIMILAR WAY, AS A FLIPPED LEARNING OPPORTUNITY.

1. An alum, who is a medical science liaison (MSL), was invited to give a brief overview on the MSL field, skills needed to succeed, and the types of experiences to get you hired.

2. Participants got into groups and perform a task designed by the MSL. In this case, individuals looked up clinical abstracts and prepare a summary for a clinical or lay audience.

3. Group shared their summaries, and discussed the experiences and challenges of completing the task.

4. After the activity, the alum held a Q&A about the career field. This was the most engaging part of the session.

JOB SIM EXPERIENCE IN 4 STEPS

A job simulation is a brief exercise that simulates a subset of tasks involved in a career of interest. The sims in this workbook can be completed in approximately 3-8 hours.

View simulations at: https://gradcareers.wustl.edu/intersect/
The experience is intended to help the student or postdoc test a working identity and assess their interest and potential career fit.

After completing a job simulations, if they are still interested in a career field, they are encouraged to pursue additional experiential opportunities and skill building activities.

This experience is not intended to indicate the individual’s ability to perform a task well. The exercise is designed for career exploration. We included sample deliverables as comparisons for format and level of detail; samples were not assessed by professionals.
TIPS & GUIDELINES
FOR A SUCCESSFUL ADOPTION AT YOUR INSTITUTION

**Encourage your simulation participants to conduct informational interviews. Students and postdocs stated in evaluations that talking with a professional organizational- or position-specific details.

CONSIDERATIONS & LIMITATIONS

So far, the tasks are just one example of many types of daily tasks performed by a professional. We aim to create more tasks in each career field.

The tasks may represent one certain type of organization. For example, the business development simulation was created from interviews of professionals in pharma companies. Start-up companies may have a different process.
WE AIM TO COVER THE MVIDP CATEGORIES
(THAT AREN'T RESEARCH-RELATED)

SO FAR WE HAVE DEVELOPED...

FREELANCE SCIENCE JOURNALISM
INTELLECTUAL PROPERTY
MEDICAL WRITING
SCIENCE POLICY & ADVOCACY
RESEARCH ADMINISTRATION
PROGRAM MANAGEMENT
SCIENCE JOURNAL EDITING
TECHNOLOGY TRANSFER
SCIENCE EDUCATION & OUTREACH
CLINICAL RESEARCH COORDINATION

Share your experiences with us.
Give us feedback on the project.

THANK YOU
FOR YOUR INTEREST

CONTACT THI NGUYEN AT:
THI.NGUYEN@WUSTL.EDU
MARKETING AND DISSEMINATION

Important steps to effectively introduce Inter-SECT on your campus include informing graduate students and postdocs that this resource is available, and engaging them to complete the job simulation tasks. We have included sample materials that have been used for marketing and communication.

Sample e-mail language

Sample Recruitment Email

Hi there!

Do you want to perform a job shadow without leaving the bench? Are you interested in getting a feel for what’s involved in a non-bench career? We are recruiting [TARGET POPULATION] for our job simulations project in the following fields:

- [LIST OF TOPICS IN JOB SIMULATIONS]

When you complete the simulation, you will have:

- Gained deeper insight into the daily tasks completed by a professional in your field of interest
- Performed a real task related to the career of interest
- Connected with a professional in the field of interest for an informational interview
- Have a better idea of whether the field of interest is a fit for you

Participation is on a volunteer basis and requires the following commitments:

- Complete the job simulation of choice (4-8 hours)
- Complete the associated reflection sheet, which will help you assess your experience of the job simulation (30-60 minutes)
- Conduct an informational interview with a professional working in the field (1 hour)
- Give feedback on the job simulation experience as a whole (30 minutes)

This is a great opportunity for PhD students or postdocs who are in the career exploration phase.

Please fill out this form if you are interested in participating: [LINK TO APPLY]
Sample Reminder Email for Registrants to Info Session

Greetings!

Thank you for your interest in performing a job simulation. As a reminder, the info sessions will be held at [LOCATION] on [DATE, TIME]

Please attend the session to get started with the job simulation experience and learn how completing a job simulation may give you insight into your career interests and skills.

When you complete the job simulation experience, you will have:

- Gained deeper insight into the daily tasks completed by a professional in your field of interest
- Performed a real task related to the job of interest
- Completed a self-reflection sheet about the career-related task
- Learned how to connect with a professional in the field of interest for an informational interview
- Have a better idea of whether the field of interest is a fit for you
Sample Reminder for Info Session

Hello!

A reminder for this week’s Information Session - the sessions will be held at [LOCATION] on [DATE, TIME].

When you complete the job simulation experience, you will have:

- Gained deeper insight into the daily tasks completed by a professional in your field of interest
- Performed a real task related to the job of interest
- Completed a self-reflection sheet about the career-related task
- Learned how to connect with a professional in the field of interest for an informational interview
- Have a better idea of whether the field of interest is a fit for you

The job simulation experience consists of:

- The job simulation of choice, estimated 4-8 hours to complete (quicker than a 6 week internship or short course!)
- The self-reflection sheet, which will help you assess your experience of the job simulation
- Conducting an informational interview with a professional working in the field
Printable Flyer

PERFORM A REAL JOB TASK. DISCOVER YOUR CAREER FIT.

gradcareers.wustl.edu/intersect

WEB-BASED JOB SIMULATIONS
A CAREER EXPLORATION TOOL FOR PHD-LEVEL LIFE SCIENTISTS

PERFORM REAL JOB TASKS
EXPLORE A CAREER FIELD
TAKE LESS THAN ONE WEEK

FREELANCE SCIENCE JOURNALISM
SCIENCE POLICY & ADVOCACY
INTELLECTUAL PROPERTY
MEDICAL WRITING
PROGRAM MANAGEMENT
RESEARCH ADMINISTRATION
BUSINESS DEVELOPMENT
SCIENCE EDUCATION & OUTREACH
CLINICAL RESEARCH COORDINATION