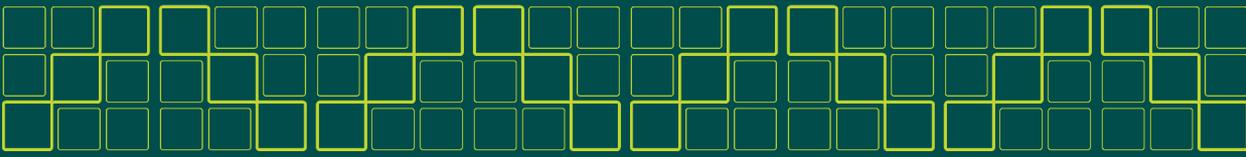


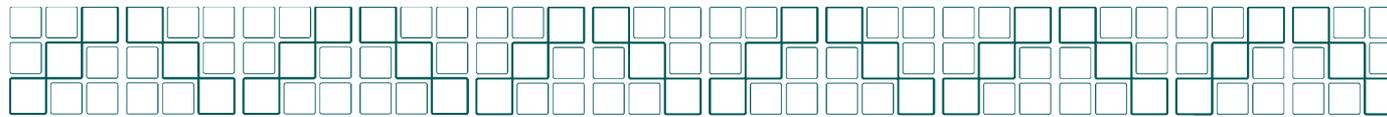
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# The Academic Job Search: Preparing Your Job Package

Sharon L. Milgram, Director NIH OITE

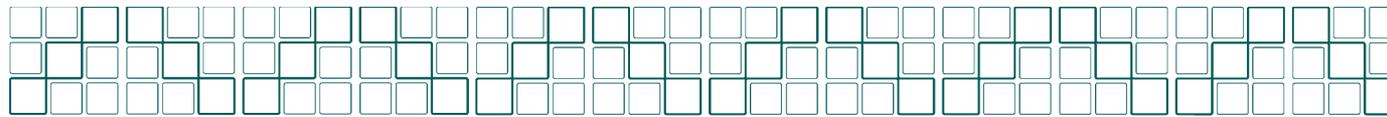


NATIONAL INSTITUTES OF HEALTH



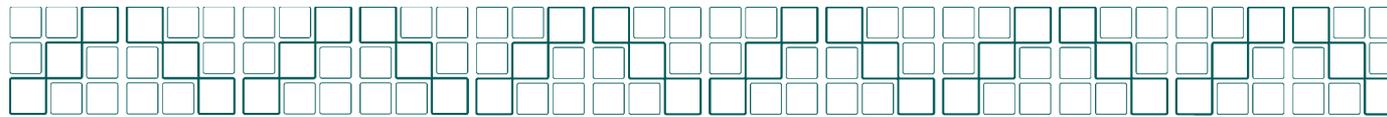
# The Standard Timeline

- Early fall:
  - Decide what you are looking for
  - Seek advice and support from mentors and advocates
  - Put together job packets
  - Request letters of recommendation
  - Search and apply
  
- Late fall - winter:
  - Continue applying
  - Prepare for interviews
  - Prepare for job talk
  
- Winter - spring:
  - Campus interviews
  - Negotiate offer(s)



# Making the Process Easier

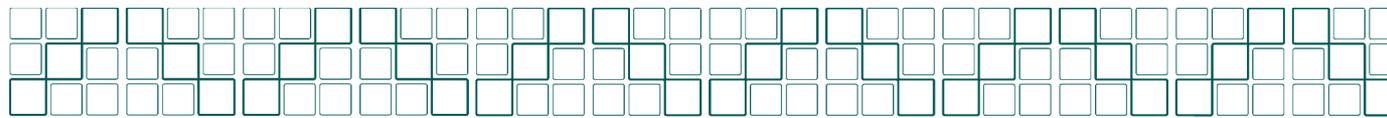
- Understand types of US academic institutions and learn the jargon



# Carnegie Classifications

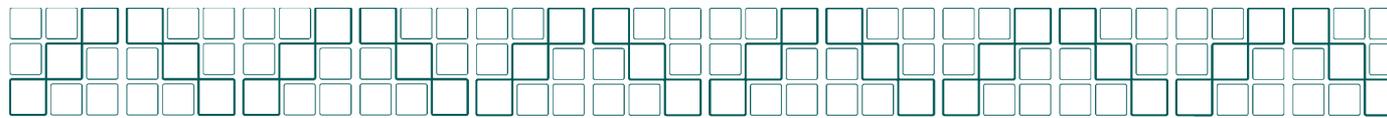
- Associate's Colleges
- Baccalaureate
- Master's Colleges and Universities
- Doctorate-granting Universities (VH, H, D/RU)
- Special Focus Institutions
- Tribal Colleges

<http://classifications.carnegiefoundation.org/>



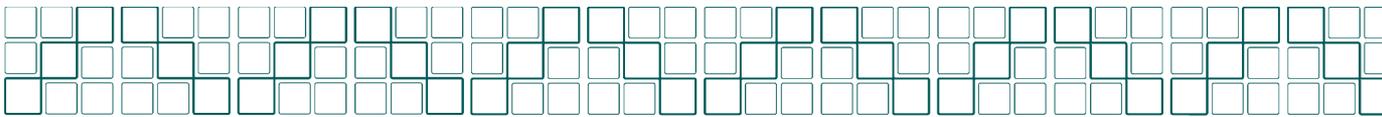
# Understanding Jargon

- Related to the type of appointment:
  - Tenure-track: Conveys a mutual investment between the institution and the employee. Generally providing more resources, enhanced job security and greater academic freedom.
  - Non-tenure track/fixed-term/research faculty/adjunct faculty: Conveys a non-binding agreement between the institution and the employee for specific 'services'.
- Related to how your salary is paid:
  - Hard Money: Your salary (or a %) is paid by the University
  - Soft money: You pay your salary (or a %) by writing grants or raising funds other ways



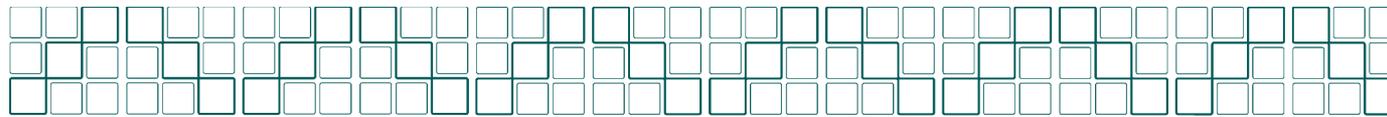
# Making the Process Easier

- Understand types of US academic institutions and learn the jargon
- Begin networking now - on campus and beyond
- Avoid “in preparation” by focusing on publications now
- Consider key reagents or results that “sell” your story and prioritize obtaining these
- Talk with your PI about projects and reagents for the long-term
- Address thin teaching and mentoring credentials
- Reconnect with prior mentors and confirm their support
- Address lack of letter from graduate or postdoc mentor



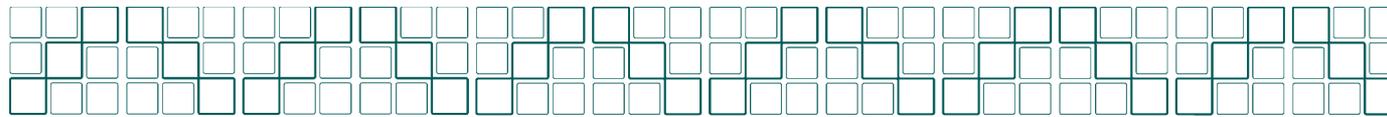
# Finding Positions

- From your mentor and scientific network
- From relevant professional societies
- Posted in journals
- On-line, including:
  - <http://sciencecareers.sciencemag.org/>
  - [www.newscientistjobs.com](http://www.newscientistjobs.com)
  - <http://www.academic360.com>
  - <https://www.aamc.org/services/careerconnect/>
  - <http://www.nature.com/naturejobs/science/>
  - <http://careers.cell.com/>
  - <http://www.hercjobs.org>
  - <http://chronicle.com>



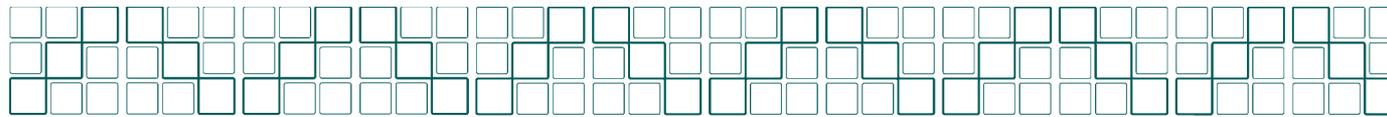
# To Apply or Not To Apply...

- Is it the right balance of research, clinic, and/or teaching?
- Is it the type of institution you want?
  - Level of competition and expectations you are looking for
  - Resources you need to do your work
- Location/fit for you and your family
- Factor in the timing of your search and your ability/willingness to search another round



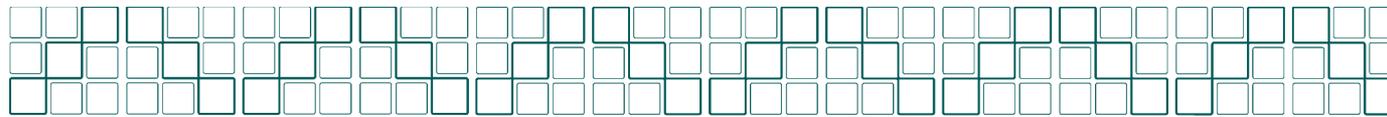
# What Search Committees Look For

- A track record of excellence -- in research, teaching, and/or patient care
- A strong skill set -- relevant to your goals
- A good “fit” with the needs of the department
- Excellent communication skills
- Evidence of strong teaching and mentoring skills
- Evidence of leadership
- Evidence that you will be a good colleague



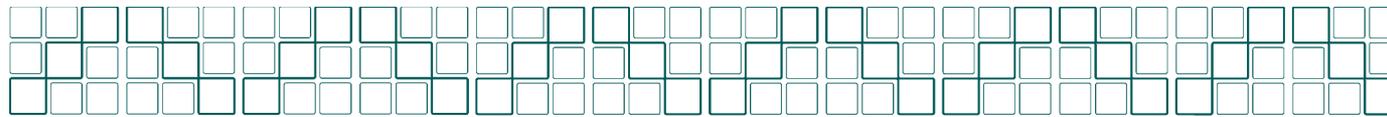
# Application Materials

- Almost always requested:
  - Cover letter
  - Curriculum Vitae
  - Research and/or teaching plan/statement
  - Letters of reference/list of referees
  
- Sometimes requested:
  - Representative reprints
  - Transcripts
  - Teaching evaluations, sample syllabi (teaching portfolio)
  - Diversity statement
  
- Follow instructions for electronic submission of application materials



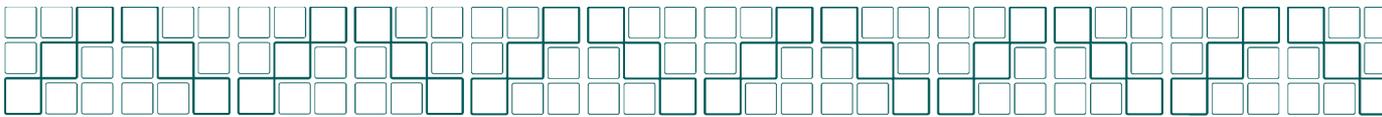
# The Average Search Committee

- Tenured and tenure-track faculty - in and outside of the hiring department
- Varies in size and power
- Members are often over-committed and very busy
- Inherently skeptical and critical
- May only be peripherally interested in your work
- Trying to get a quick picture of you and your research
- Looking for YOU to make their job easier



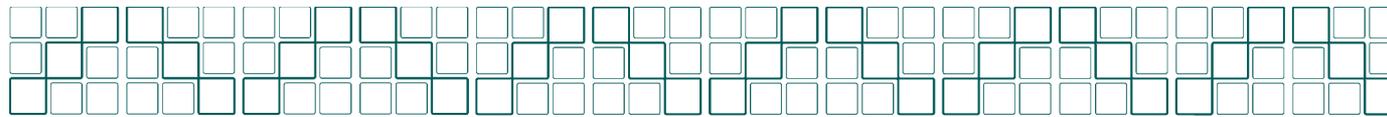
# The Cover Letter

- **Goals:**
  - introduce yourself and highlight your accomplishments
  - state your broad research goals
  - state why you are a good “fit”
  - provide easy to find contact information
- <2 pages; longer if it replaces the teaching or research statement
- Can be tailored to the position
- Well written - no bullets or other organizational formatting
- Not the time to bring up two-body or other personal issues



# Your CV

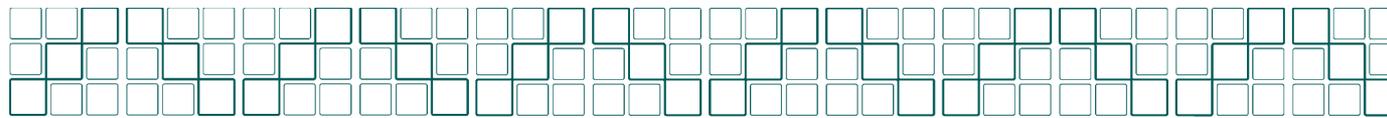
- Typical Sections:
  - Contact Information (professional; centered at top of page)
  - Education (can include postdoc here)
  - Clinical Experience, Certifications and Licensures
  - Professional Experience (Avoid NIH jargon)
  - Honors and Awards (pre- and postdoctoral)
  - Grant funding (An IRTA is not a grant)
  - Leadership and Service
  - Teaching and Mentoring
  - Invited Presentations
  - Publications
- Order based on the position
- Clean and easy to read!



# Education

## **EDUCATION:**

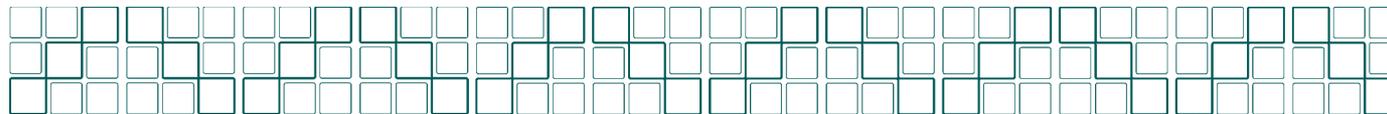
- 2003-2010 Postdoctoral Fellowship, National Human Genome Research Institute**  
Postdoctoral advisor: William J. Pavan, Ph.D.
- 1997-2003 Ph.D., Biological Chemistry, Johns Hopkins University School of Medicine**  
Dissertation advisor: Denise J. Montell, Ph.D.
- 1989-1993 B.S., Biology, Tufts University**



# Research-Intensive Position

## **TEACHING and PROFESSIONAL EXPERIENCE:**

- |           |   |
|-----------|---|
| 2008-2009 | Lead Instructor, Molecular Biology and Genetics, FAES NIH Graduate School               |
| 2007-2009 | Instructor, Molecular Biology and Genetics, FAES NIH Graduate School                    |
| 2007-2009 | Mentor for summer students  |
| 2002-2003 | NSF Teaching Fellow, Dunbar High School, Baltimore, MD                                  |
| 2000-2001 | Teaching assistant, Johns Hopkins Medical Students, Metabolism and Embryology           |
| 2000      | Teaching assistant, Johns Hopkins Graduate Students, Genetics                           |
| 1999-2001 | Mentor for undergraduate students   |
| 1993-1997 | Biologist, National Heart Lung and Blood Institute, Laboratory: James R. Sellers, Ph.D. |



# Liberal Arts Position

## Teaching Experience

**General Chemistry Adjunct Faculty Member, 8/2008–5/2009**  
Hood College, Frederick, MD

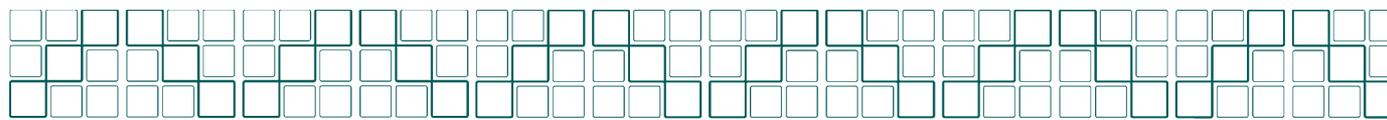
- Taught freshman and sophomore students through active participation and “discovery” exercises; class size 14–28 students
- Prepared and graded quizzes, examinations, and laboratory activity datasheets
- Prepared lesson plans and handouts to highlight important principles in General Chemistry
- Advised students within the classroom, lab, and office hours to reinforce concepts

**General Chemistry I Laboratory Instructor, 9/2005–12/2005**  
Mount Holyoke College, South Hadley, MA

- Taught chemistry principles, lab safety, and basic experimentation for freshman students
- Prepared brief chalk talks covering the background for the day’s experiments
- Worked directly with students to answer questions and provide scientific guidance

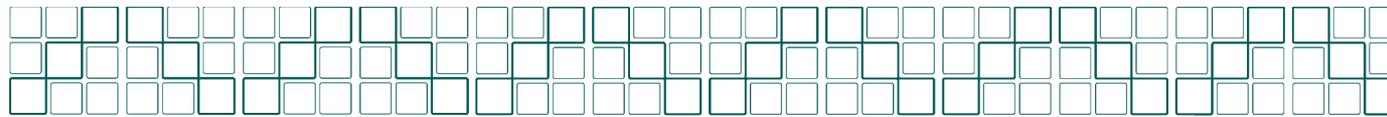
**ASPIRE Co-coordinator, 9/2003–1/2005**  
University of Massachusetts, Amherst, MA

- Designed brief lectures on diverse areas of polymer science for high school students
- Designed and implemented fun new experiments to explore polymer synthesis, properties, and characterization
- Modified, expanded and created new handouts containing experimental procedures and relevant background material with real-life examples
- Created a new website for the Outreach and ASPIRE programs



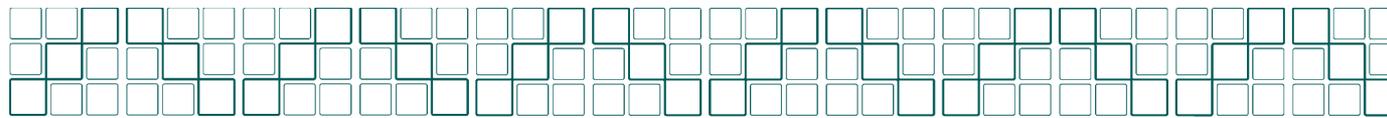
# Letters of Recommendation

- 3 or 4; typically your PhD advisor, postdoc advisor and collaborator(s)
- Ask far in advance - be sure the letter will be VERY strong
- Provide your CV and other helpful information
- Provide information on the positions
- Follow-up after 1 month
- Educate your letter writers about unconscious bias in letter writing: <http://www.ncwit.org/sites/default/files/legacy/images/practicefiles/AvoidingUnintendedGenderBiasLettersRecommendation.pdf>



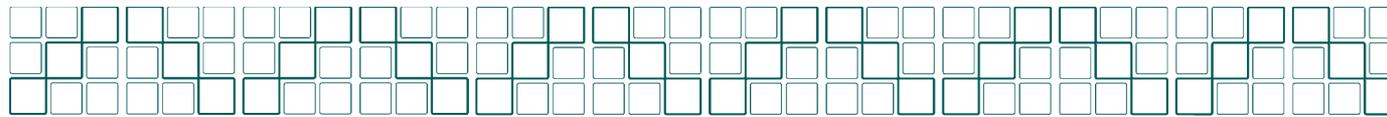
# The Research Plan

- A summary of your research achievements and a proposal for up-coming research
  - Looks backward AND forward
- Your goal is to highlight your successes and convince them there are many more to come



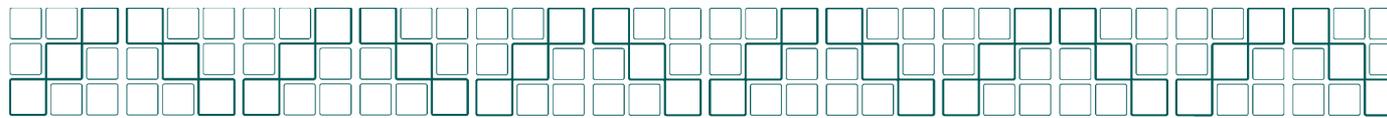
# What We Expect To See

- Background
  - Focused on the research field, not on you
- Past and current research
  - Key results, importance, promising directions, promising outcomes
  - Focus on your most relevant work
- Research agenda (~5 years)
  - Short and long-term goals
  - Discussion of model systems, major strategies and approaches
  - Not a grant application, but takes funding into account
- Relevance
  - Not just scientific, also fit for the specific department



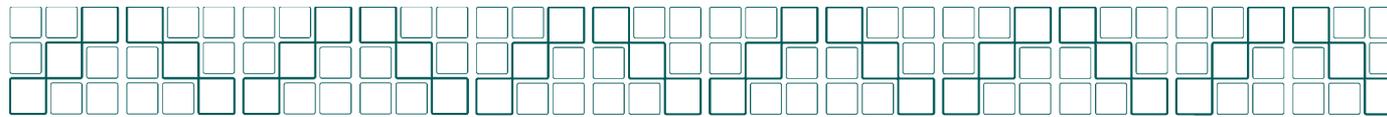
# Research Plan - Formatting

- Average length is 2 - 4 pages, varies by discipline
- Two major styles
  - Chronological
  - Thematic
- Helpful to:
  - Use section headings to guide the reader
  - Include one or two figures
  - Personalize to the position
  - Include a short executive summary or introduction
- Make it easy to read - wide margins with 1 1/12pt font
- Carefully edit and get significant input from others



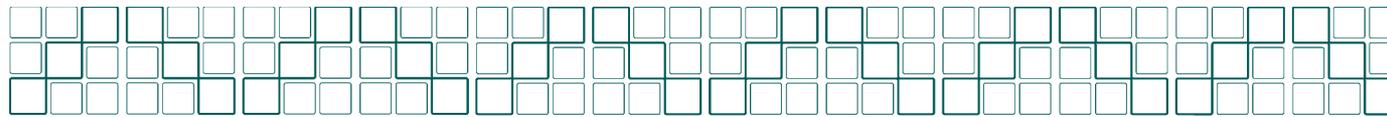
# Strategies For Writing Your Research Plan

- Consider major accomplishments that you want everyone to know about
- Think how you will develop your work over the next 5 years
- Then think bigger to help refine your long-term direction
- Look hard for flaws and technical challenges; consider alternatives
- Consider how your ideas “fit” grant applications; if you have funding point out what is in the grant
- Write an “executive summary” that pulls it all together



# What You Are Trying To Convey in Your Research Plan

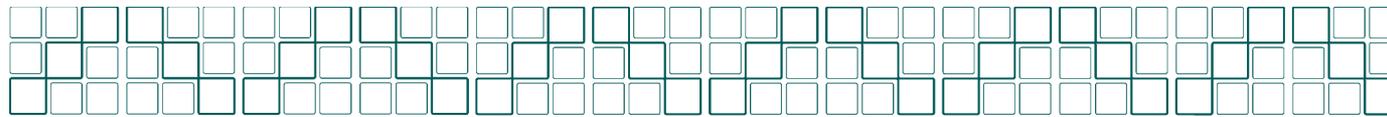
- Importance of your research
- Focus
- Independence
- Creativity
- Sophistication
- Realism
- Clarity
- Fundability



# Common Criticisms of Research Plans

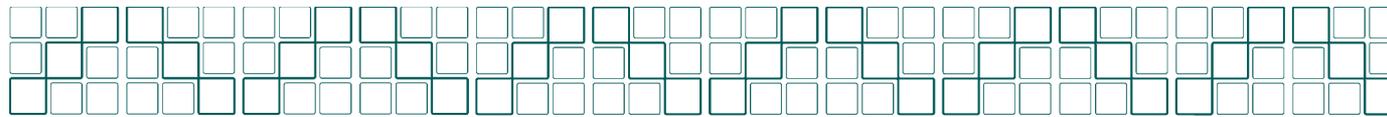
- Overly ambitious
- No clear direction
- Work not placed in a broader context
- Poorly written
- Doesn't address fit with the department
- Requires facilities/equipment not easily available

See: [http://sciencecareers.sciencemag.org/career\\_development/previous\\_issues/articles/1820/writing\\_a\\_research\\_plan/](http://sciencecareers.sciencemag.org/career_development/previous_issues/articles/1820/writing_a_research_plan/)



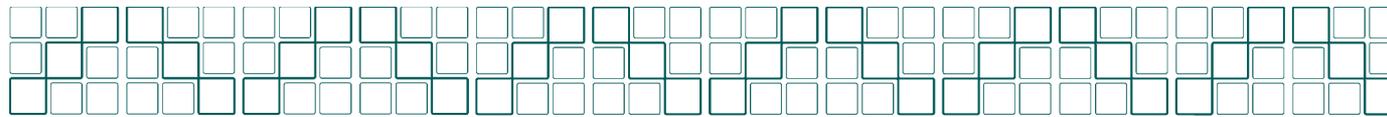
# Teaching Statements

- A narrative that includes:
  - your personal beliefs of teaching and learning
  - a description of how you teach
  - a justification for why you teach that way
  
- May be part of a larger teaching portfolio
  - Class syllabi
  - Student reviews
  - Details of mentorship and non-classroom teaching



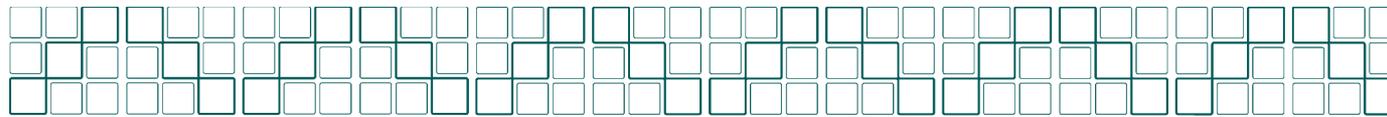
# Successful Teaching Statements:

- Show clear evidence that you “walk the walk” (examples)
- Are student-centered
- Are attuned to differences in learning styles and abilities
- Demonstrate your ability to reflect about your role as a teacher
- Convey your enthusiasm for teaching
- Are well-written, clear and jargon-free



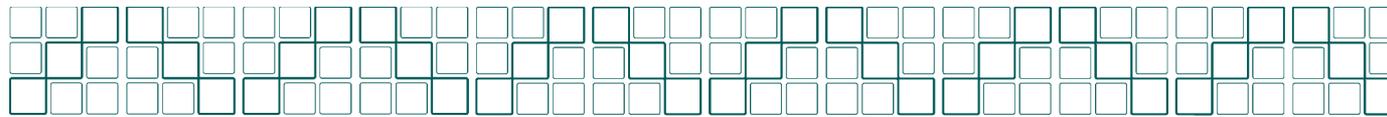
# Questions To Consider: Classroom Teaching

- What types of assignments and classroom activities do I use to help students learn?
- How do I evaluate if students are making progress?
- How do I accommodate different learning styles in my classroom?
- How do I help students understand the implications and significance of what they are learning?
- How do I make students feel welcome in my class?
- How do I address cultural, social, and/or gender issues in the classroom?
- What have I learned from prior teaching experiences?



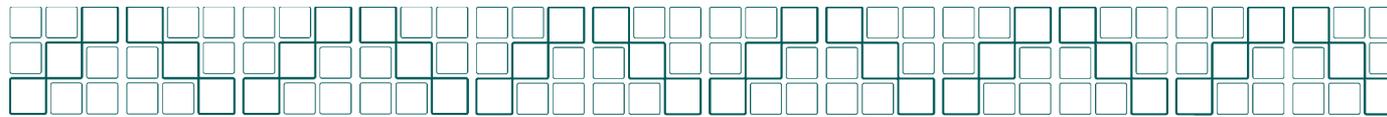
# Questions To Consider: Lab-based

- How do I organize interactions with my students?
- How do I select and shape student projects?
- How do I evaluate students progress?
- How do I address the range of learning styles among students in my research group?
- How do I help students understand the implications or significance of what they're learning?
- How do I address ethical issues and help students appreciate the role of research in society?
- How do I help students feel welcome in my research group?
- What have I learned from prior experiences?



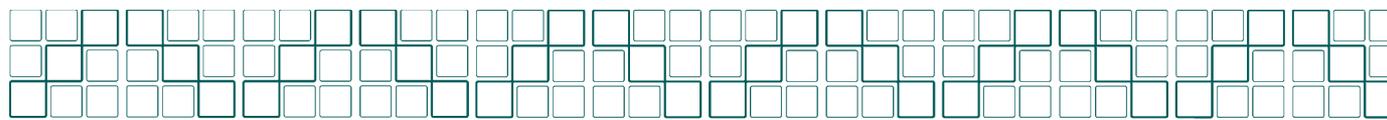
# Some Details About Teaching Statements

- Generally 1 - 2 pages in length
- No standard formatting or required content
- Should reflect your teaching style and personality - write in the first-person, present tense
- Should show that you have considered the student body at the institution
- Important to give examples throughout



# Common Criticisms of Teaching Statements

- Lacks experience to back-up ideas
- Assumes all students learn the same way
- Does not reflect the needs of the students/department
- Demonstrates rigid views of learning
- Does not show ability to self-reflect and learn
- Research goals are inconsistent with student needs
- Poorly written



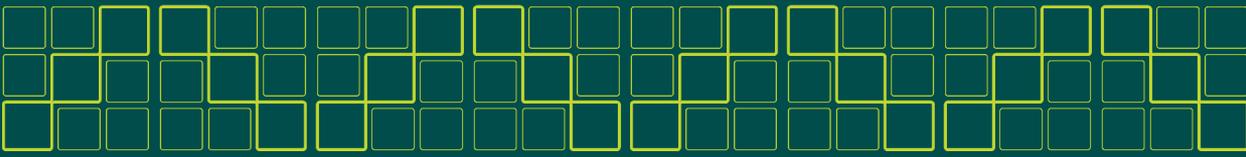
# Diversity Statements

- A discussion of your views of diversity and difference and specifically how you feel issues of diversity and inclusion impact educational institutions
- Can address all of some of these topics:
  - How your personal experiences have equipped you to deal with diverse students
  - How you have learned about diversity beyond your own personal experience
  - How you deal with a diverse range of students in the classroom
  - How you view your role in promoting an inclusive environment on your campus and in your classroom, research group, etc
  - How you address diversity in your own research

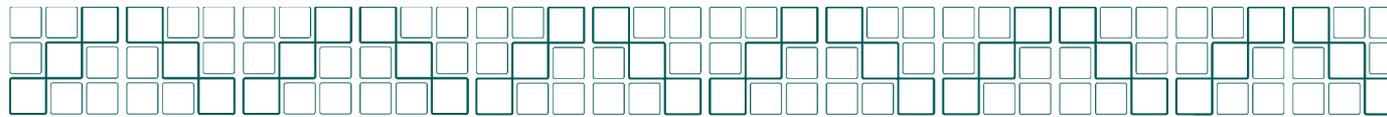
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# Interviewing For Academic Positions

**Dr. Sharon L. Milgram**  
**[milgrams@od.nih.gov](mailto:milgrams@od.nih.gov)**

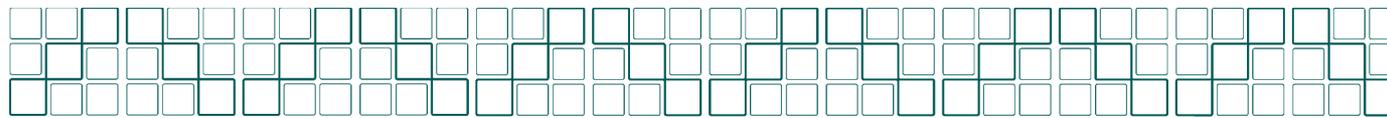


NATIONAL INSTITUTES OF HEALTH



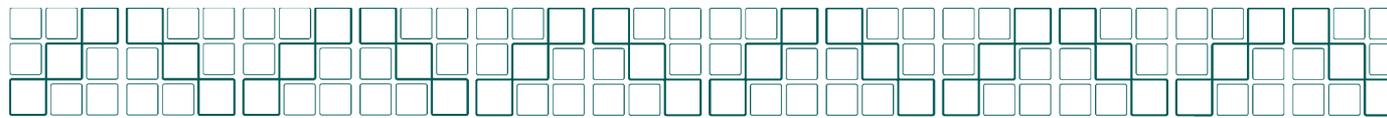
# Your Goals for an Interview

- Convince members of the department that:
  - Your work is exciting, innovative, and fundable
  - You can do build a research group and successfully compete in your field
  - You will be a great colleague, teacher and mentor
- Learn about the institution and department
  - In general and more specifically in your discipline
- Learn about the area



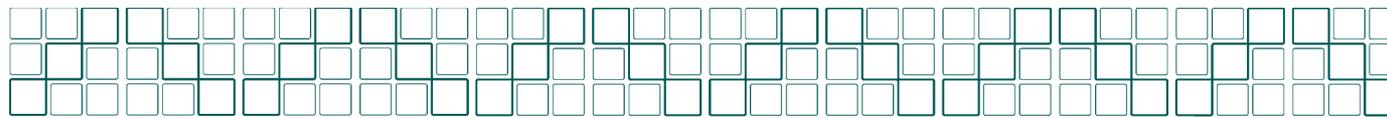
# Interviewing by Phone or Videoconferencing

- Find a quiet place free of distractions; use a land line if your signal is not strong
- OITE has a videoconferencing facility and skype waiver
- Typically 20 – 40 minutes, anywhere from 1 - 3 interviewers
- Jot down names of interviewers at start
- Loss of facial and body language cues can be difficult
  - In the absence of a clear signal, we tend to ramble on
  - Give an answer, then pause. If no follow up - ask if they would like you to expand on anything
- Conversation will end with a chance for you to ask questions
- Make technology-friendly slides (numbered, no/little animation)



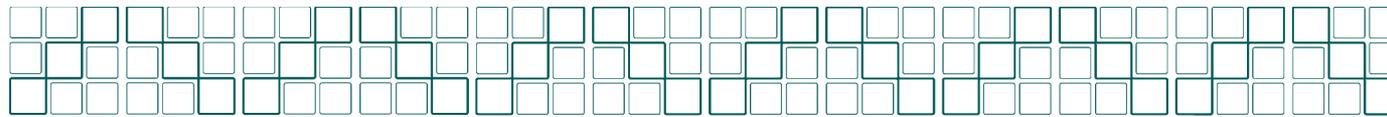
# Common Phone Questions

- Tell us a bit about yourself
- Why did you apply for this position?
- Where is your research heading in the next 5 - 10 years?
- What research resources will you need to be successful?
- What is the status of the grant you listed on your CV?
- What is the status of the publications you listed as ‘in preparation’ or ‘under review’ ?
- When are you available to start?
- What can you teach? What would you like to teach?
- Tell us how you deal with a classroom of students with different abilities and levels of motivation?
- How do you deal with developing a new course?



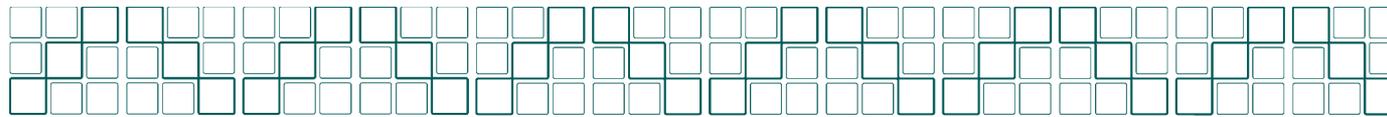
# What You Will Do During Campus Visits

- Eat all meals with potential colleagues
- Meet with:
  - The Chair of relevant Departments and Centers
  - Individual faculty - in and out of your field
  - Members of the search committee
  - Students and/or postdocs - often over lunch
  - [Deans or other University leaders]
- Present:
  - A seminar (50 minutes)
  - [A chalk talk]
  - [A class]
- Tour:
  - Facilities, potential lab space, classrooms, and cores
  - The town and surrounding areas



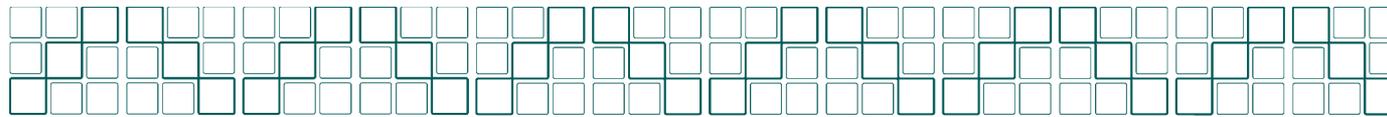
# Getting Ready

- Follow instructions; be clear regarding travel plans and other logistics
- Carefully read University & Department websites
- Learn about the people you will be meeting with
- Make lists of questions you need answered and resources you need to learn about
- Consider personal/professional issues that you would like to discuss with the Chair or head of the search committee
- Get clothes - comfortable, neat, and consistent with the science culture. Do NOT get new shoes!
- Practice your talk(s) **MANY TIMES**



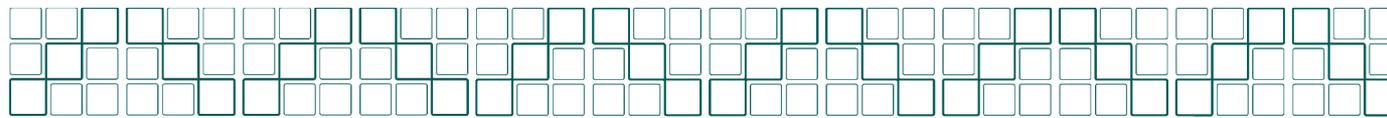
# Things You Might Be Asked About

- Any updates to your CV
  - Publications listed as in preparation or under review
  - Priority scores/outcomes on any submitted grants
- Specific aims for your first grant
- Major equipment needs
- CV for your spouse or partner (more on this later)



# Remember

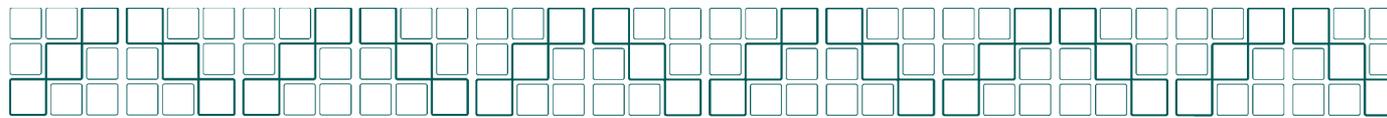
- Preparation pays off
- First impressions form quickly
- You are trying to connect professionally AND personally
- Even social activities are part of the interview
- You must have questions when asked
- Strong interview skills develop with practice



# What Interviewers Evaluate

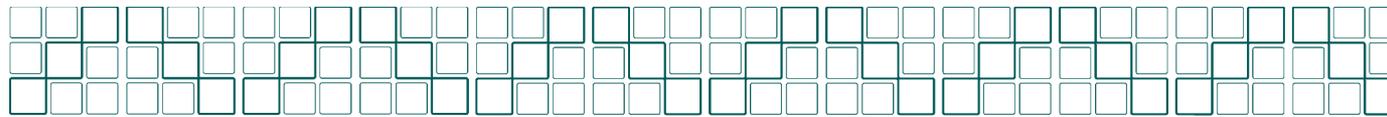
- Non-verbal communication\*
  - Appearance
  - Eye contact
  - Handshake
  - Facial expression
  - Gestures
  - Posture
  - Nervous mannerisms
  
- Verbal communication
  - Language, grammar, and sentence structure
  - Ability to organize and express ideas
  - Ability to listen and respond appropriately

\* Watch the Amy Cuddy video on the NIH Intramural Science Linked-In Group



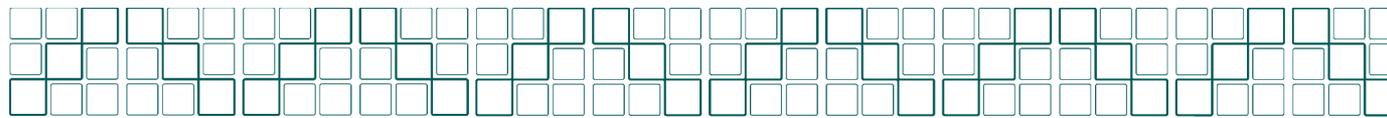
# Questions You Are Likely To Hear

- Where is your research going to be in 5/10/25 years?
- What new techniques/approaches will you be developing?
- What's going to be in your first RO1? Then what's next?
- Where else will you get money?
- What core facilities and equipment do you need?
- How will you distinguish yourself from your mentor?
- Do you like teaching? What do you want to teach?
- Do you currently supervise students?
- What is your approach to mentoring?
- Why are you excited about this position?
- Who here might you collaborate with?
- What department/school committee work interests you?



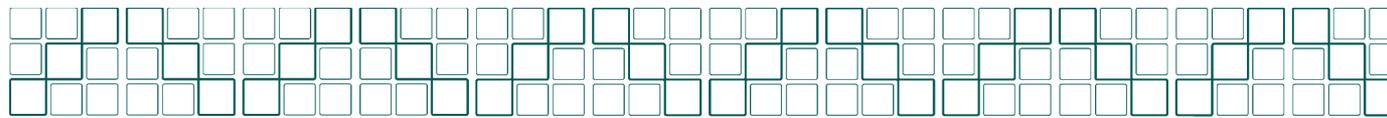
# Unique To PUIs

- How will you excite students about your research?
- What types of projects can they do in your group?
- Tell us about your teaching style
- What experiences do you have working with and teaching diverse students?
- How do you deal with disruptive students in the classroom?
- What are your thoughts on technology in the classroom?
- Tell us about your teaching philosophy
- Share some specific successes and failures in the classroom
- What have you learned about our student body that excites you/concerns you?



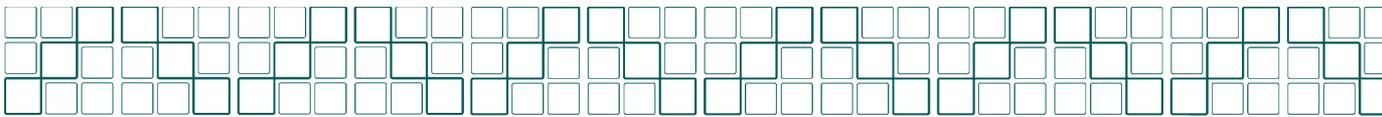
# Unique To Clinical Departments

- How will you integrate your research with your clinical responsibilities?
- What will be in your K grant?
- What types of patient samples, populations and/or clinical research resources will you need to be successful?
- How much protected research time do you need/want?
- Will you enthusiastically participate in our medical student and resident training programs?
- What experience do you have mentoring and teaching medical students, interns, residents?



# What You Should Be Asking About

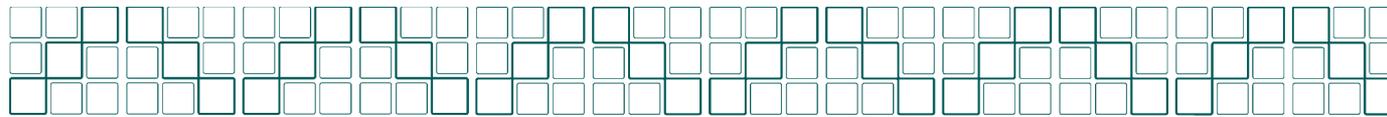
- The culture of the Department/Center/Institution
- Research themes and areas of focus
- Types and amount of teaching and/or clinical duties
- Quality and numbers of students and/or postdocs
- Training grants and other educational resources available
- Mentorship of junior faculty
- Shared resources and core facilities
- Grant and scholarship expectations
- Tenure and salary policies
- Personal views of the department, school, and area
- Anything important to you personally or professionally



# Three Types of Talks

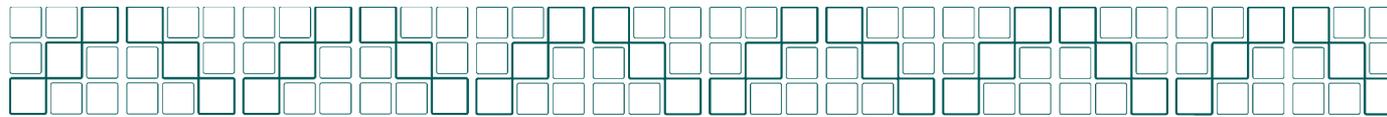
- Science seminar
  - Shows you are doing exciting science and that you can talk about it
- Chalk talk
  - Shows what you will do when you first arrive, that it is fundable and that you can defend your ideas effectively
- Teaching talk
  - Shows that you can teach and demonstrates your classroom style(s) and approach(es)

[https://www.training.nih.gov/events/view/2/110/How\\_to\\_Give\\_an\\_Effective\\_Job\\_Talk](https://www.training.nih.gov/events/view/2/110/How_to_Give_an_Effective_Job_Talk)



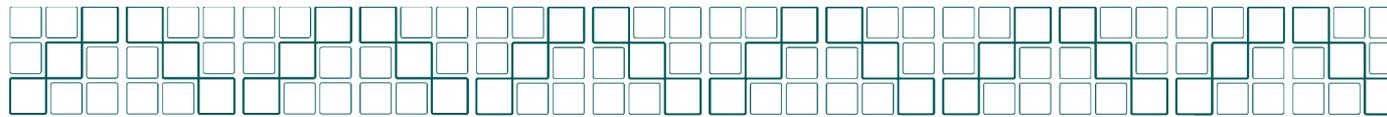
# Know the Rules

- General:
  - Time
  - IT resources
- Unique to chalk talks:
  - Slides
- Unique to teaching talks:
  - Topic
  - Audience



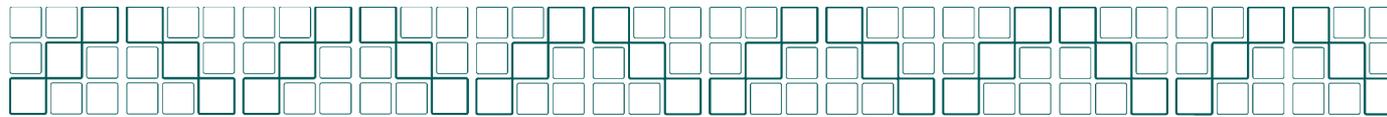
# How To Prepare For A Teaching Talk

- Prepare your exercises, activities and materials early
- Talk to undergraduate faculty at comparable institutions
- Start practicing with colleagues, but eventually you need to find a group of undergraduates or postbacs (we can help with that)



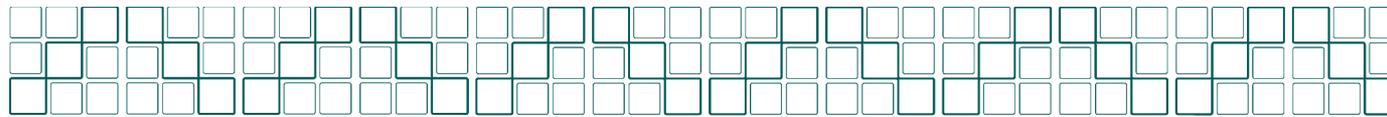
# The Job Seminar

- Know your audience
- Understand what the audience is evaluating
- Tell a story - less is often more
- Have crisp, clean data slides
- Be engaging and personable
- Carefully consider questions you might get and practice answering them



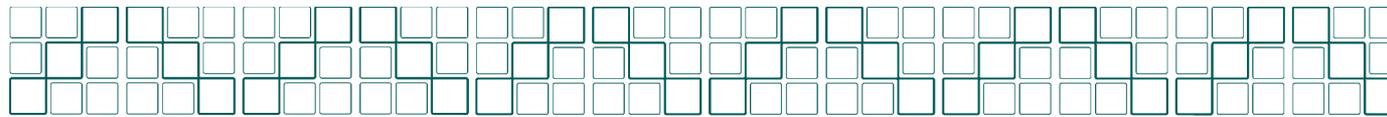
# The Chalk Talk

- An informal discussion about your first goals and grants
- Shows that you can think on your feet
- Expect and welcome interruptions
- Friendly but vigorous discussion is a good sign
- Everyone is watching how well you take criticism and when/how you back down
- Tells you a lot about the department



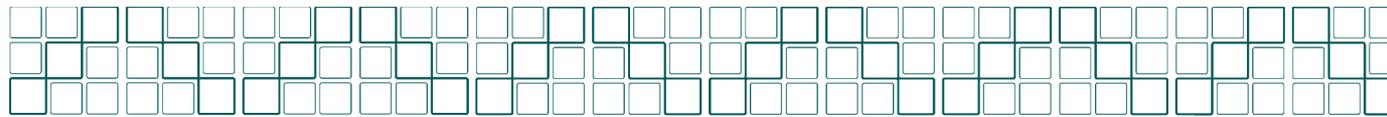
# Preparing For A Chalk Talk

- Preparation starts now
  - Begin talking about your future work far in advance
  - Begin mapping out grant proposals early
- Plan and practice how you will start
- Draw a model right away; use the model throughout the discussion
- List your first Aims; refer back to them throughout the discussion
- Practice with colleagues who will give you a hard time



# The Teaching Talk

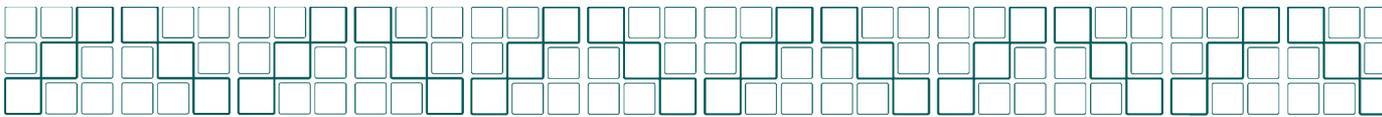
- May be given a specific topic or you may get to choose
- Learn about the students in advance
- Decide formal vs. informal
- Decide high tech vs. low tech
- Talk to the students and not the faculty or administrators sitting at the back
- Not just a lecture



# Need Two Jobs?

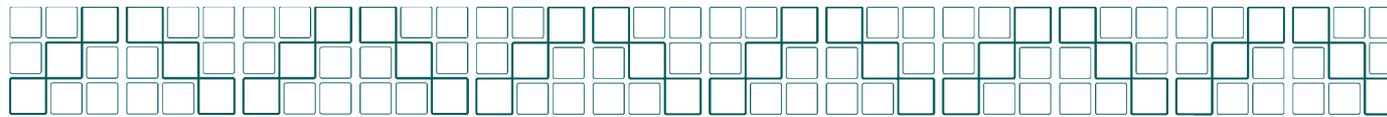
- Best discussed with dept chair or head of the search committee, but others may probe on their behalf
- Appropriate to bring this up during the first interview
  - Be positive
  - Ask about local consortia/agreements that might have useful resources (see <http://www.hercjobs.org>)
  - Be clear about types of positions your partner will accept, but try to be/appear as flexible as possible
  - Might be asked for a CV or resumé

**Recommendations on Partner Accommodation and Dual Career Appointments (2010), AAUP** at <http://www.aaup.org/AAUP/comm/rep/dual.htm#10>



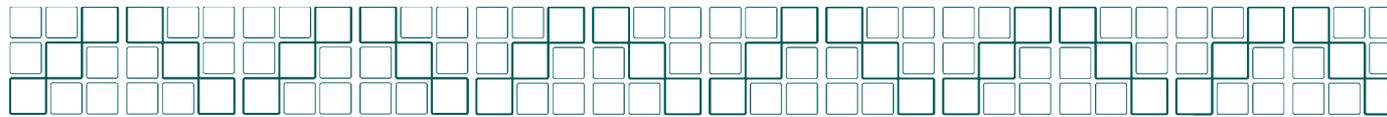
# Second Interviews

- Can be an interview or a recruiting trip
- Provide a list of core facilities/resources you need to see
- Bring a list of major equipment needs
- Will likely meet more faculty in your field
- Will tour facilities and possible lab space
- May include more formal discussion of salary, benefits, funding expectations, and tenure policies
- Your chance to clarify and express your needs [and wants]
- Typically not a full blown negotiation



# Contact Me

- For examples of successful job packets from NIH fellows:
  - Email [milgrams@od.nih.gov](mailto:milgrams@od.nih.gov)
  - Subject = SEND EXAMPLES
  - If you are registered for the workshop today, you will automatically receive these
  
- To make an appointment to discuss your job materials:
  - Email [milgrams@od.nih.gov](mailto:milgrams@od.nih.gov)
  - Use your last name in your file name (one file please!)
  - Subject = MATERIAL REVIEW



# NIH Resources

- Your Institute/Center/Branch/Lab may sponsor a postdoc seminar program
- NIH Special Interest Groups and retreats
- OITE Career Services Center for mock interviews
- OITE journal clubs for summer interns
- OITE teaching opportunities and mentor awards for SIP
- Local schools and FAES often has teaching opportunities
- Job talk videos and other resources at [www.training.nih.gov](http://www.training.nih.gov)