CV/Resume Writing Academic & Industry

Presented by

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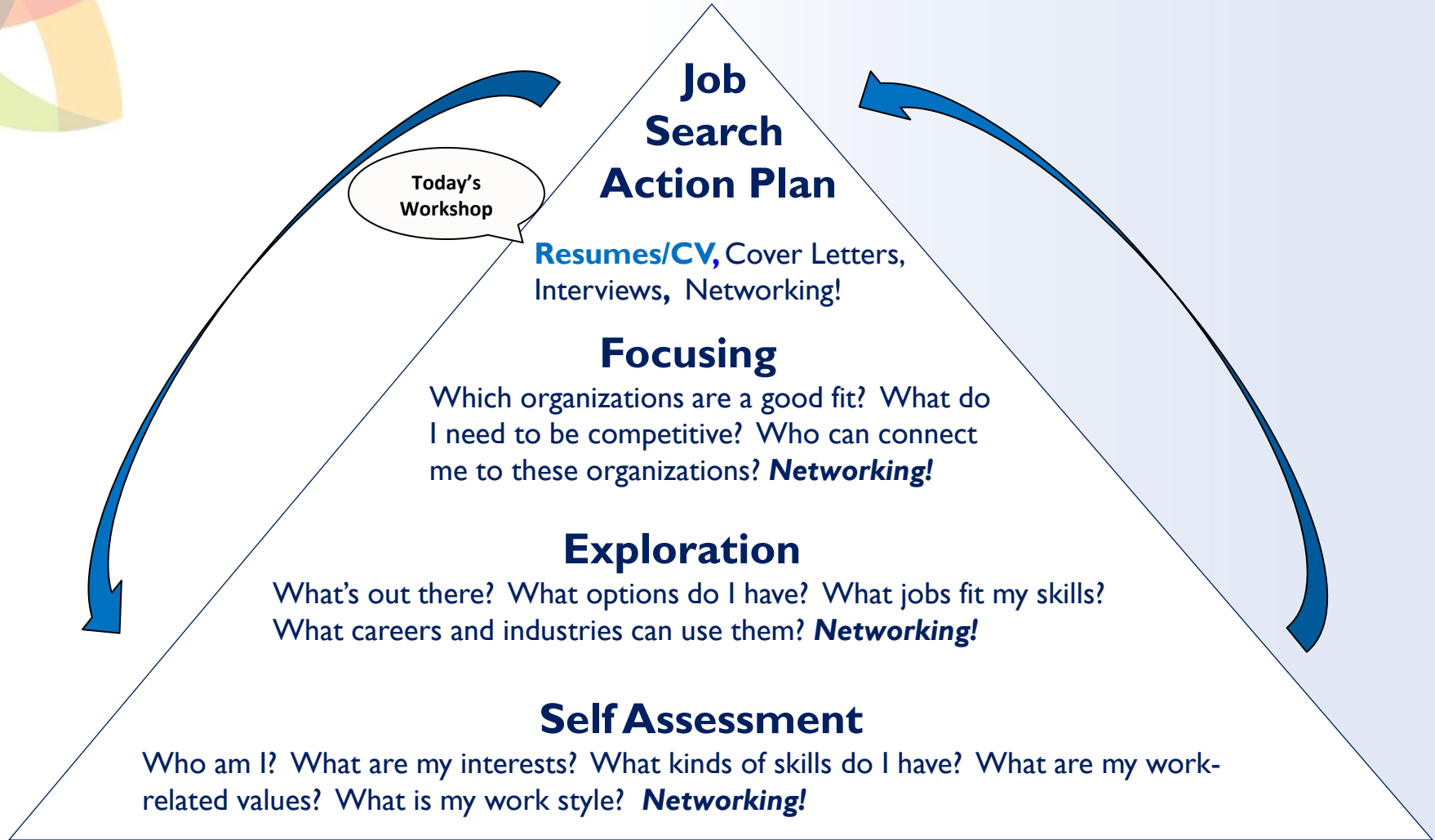MIT POSTDOCTORAL ASSOCIATION

Intended Outcomes from Today's Program

- Academic and Industry Paths
  - Things to Consider
- Constructing Your CV and Resume
  - Headings, Content, Format, Organization
  - Summary (Resumes)
  - PAR Statements – Driving Impact
- Reference Etiquette
  - Who to ask, when, what info to give them

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Career Planning - A Lifelong Process

Today's Workshop

Job Search Action Plan

Resumes/CV, Cover Letters, Interviews, Networking!

Focusing

Which organizations are a good fit? What do I need to be competitive? Who can connect me to these organizations? *Networking!*

Exploration

What's out there? What options do I have? What jobs fit my skills? What careers and industries can use them? *Networking!*

Self Assessment

Who am I? What are my interests? What kinds of skills do I have? What are my work-related values? What is my work style? *Networking!*

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CV-Resume Writing

Control Your Social Media

CV-Resume Writing Things to Consider

Before you can write…think about what's next in your career

- Do I need a job NOW, or do I have time to look?
- Do I want the Academic track, or should I consider Industry?
- If a non-US citizen, will my visa status impact my search?
- Is another Postdoc or continued education an option?
    - What are the financial implications of this option?
    - Will the economic climate be the same in the next few years?
- Are there other jobs I can perform until I find what I'm looking for?
    - Sometimes job search is two-step process to land the job you want
- Is a different profession/industry an option?

CV-Resume Writing Things to Consider

If targeting industry…Is the culture in line with my work and life styles?

- What type of company structure would I be comfortable in?
- Am I compatible with the work environment and could I continue to pursue my passion?
- Do my philosophies and life values align with the company core values and guiding principles?

If Targeting Academia

What kind of Academic Institution do you want to work in; what role do you want?

- **How big?**
- **Public, private, something else?**
- **Research (how much)?**
- **Teaching (how much)?**
- **Students (what level)?**
- **Funding?**
- **Other roles within the institution?**
- **U.S. or International?**

If Targeting Industry

What Industry do you want; what role do you want to have?

- **What Industry?**
- **Public, private, non-profit?**
- **Start-up?**
- **Research or technical roles?**
- **What size organization is right for you?**
- **Leadership or support roles?**
- **Other roles within the company?**
- **U.S. or International?**

What are Your Strongest Selling Points?

What are the top 4-5 things you want potential employers to know about you? Consider:

- **Skills (Technical and Behavioral)**
- **Achievements**
- **Knowledge Areas**
- **Professional qualities**
- **Other**

Take a minute now to jot them down

Who Can Give You Targeted Feedback on Your Document?

You'll need people who could review your document and provide helpful feedback

- **Mentors**
- **Career Counselors**
- **P.I.'s**
- **Other Postdocs or Students**
- **Friends**
- **Others in Your Network (Alumni)**

Curriculum Vitae means ...

The term **Curriculum Vitae** comes from the Latin **Curriculum** - **"course"** and **Vitae** - **"life"**

"The course of one's life."

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What is a Resume?

ré·su·mé *noun* \ˈre-zə-ˌmā,

- A short document describing your education, work history, etc., that you give an employer when you are applying for a job
- A list of achievements
- A short description of things that have happened

Your Resume is not your Autobiography

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CV vs. Resume

Curriculum Vitae

- A full list of your professional and educational history
- Length is not important, usually several pages
- Mostly used for academic and research positions
- Full list of publications
- Content is more important than Style
- Less tailoring to fit job
- References are included

Resume

- List of relevant skills pertinent to the targeted job/company
- Usually one page, two is OK
- Used for non-academic or some research positions
- Business focused, no personal information
- Content and Style are both important
- Adapted to fit each specific job
- References not included

What is a CV Used For?

Applying for:

- Teaching or research opportunities
- Fellowships or further academic training
- A grant or contract funding proposal
- Tenure or promotion
- Membership in a professional society or organization
- Submitted as background bio for an introduction to a lecture or presentation

Are Your Strongest Assets Apparent?

As you develop your CV & Resume

- You want to make your 4-5 most notable skills, achievements, knowledge areas leap off the page for readers
- Deliver what is most relevant to this audience
- You want to survive the 10 second scan and get into the *YES* pile

Are You Presenting All Of Your Assets?

Don't forget your Behavioral Assets

- Ability to work in a collaborative environment
- Ability to work in a multi-disciplinary environment
- Ability to lead a project
- Strong verbal and written communication skills
- Team...etc.

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What Employers Seek In Job Candidates

- Ability to work in a team structure   4.60
- Ability to communicate verbally (internally and externally)   4.59
- Ability to make decisions and solve problems   4.49
- Ability to obtain and process information   4.46
- Ability to plan, organize and prioritize work   4.45
- Ability to analyze quantitative data   4.23
- Technical knowledge related to job   4.23
- Proficiency with computer software programs   4.04
- Ability to communicate in written form   3.65
- Ability to influence others   3.51

Have you included some of these in your resume/cv content?

How many of these skills do you have?

5-point scale, where **1** = Not Important and **5** = Extremely Important

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Vice President for Research Office
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Job Outlook Survey - NACE

Develop Your CV Strategically

- Who is your audience?
- How technically savvy are they?
- What will they find interesting about you?
- Material you present early in your CV is likely to stand out more than material placed later
  - An exception – publications, often towards the end
- Headings can be titled strategically, and moved around based on <u>information needs of the reader</u>

It's About Them

CV Format Basics

- No standard format or style for writing a CV
- Consult with people in your discipline about particularities of CV's in your field
- CV's are often longer than resumes - completeness is more important than brevity
    - **2 to 4 pages for a young professional**
    - **4 to 7 pages for a person with more experience, etc.**

Resume Format Basics

- Resumes for PhD's and Postdocs can be 2 pages, with an occasional 3rd page for other achievements , i.e.: Pubs, Patents, Talks, etc.

- Consult with people in your discipline about formats/content of Resume's in your field

- Be succinct and communicate:

  - Your Skills

  - Your Value Proposition

  - Impact/Results

Resume Summary

- It's not uncommon to have a professional summary at the top of your resume
- It helps you drive value quickly and can align you with the needs of the reader
- The content emphasis changes with each position
- The content of your summary mirrors the content of your elevator pitch (your response to "tell me about yourself")

Sample Resume Summaries

- An experienced <u>PhD in Geophysics</u> with <u>expertise in cloud physics</u>. Success <u>leading lab teams</u> in studying the efficiency of various aerosols which can serve as ice nuclei. <u>Collaborated</u> with Frankfurt University to <u>sample aerosol for different meteorological conditions</u>

- <u>PhD in Oceanography</u> with expertise using <u>passive samplers</u> to measure the <u>bioavailability and transport of sedimentary organic contaminants</u>. Worked in several labs and <u>led teams</u> evaluating the use of <u>passive samplers as biomimetic tools</u> in sedimentary <u>bioaccumulation tests</u>. Green Card holder

- A <u>Biological Engineering Ph.D</u>. with a <u>solid background in PK/PD and ADME</u> models. Highly <u>capable of performing in silico PK/PD analysis</u> and drug ADME-Tox studies. Proven track <u>record of publishing significant research papers</u> in the area of drug development and bioengineering. Strong ability to collaborate and work on interdisciplinary research projects

Content underlined appeared in job description

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CV-Resume Strategy

Review the job description and highlight both the technical and behavioral attributes...and make sure you have included them in your communication

Actual Job Description – Broad Institute

Software Engineer Area of Interest: Software Engineering
Job Description - Will **design and implement** new algorithms, applications, and infrastructure to engineer the **computational infrastructure** underlying the diabetes genetics portal

RESPONSIBILITIES:
- **Collaborates with peers** with biological, computational, and outreach domain knowledge to **design and implement applications and visualization infrastructure** for a large scale human genetics data portal
- Will **rapidly prototype and validate using novel data sets, tools and infrastructure and instantiate into software** for **use by the broader community**
- **Maintains, upgrades, fixes, and reviews** product source codes
- **Prepare written reports and presentations** for internal use and publication Requirements: Bachelor's degree in computer science or a related field.

PREFERRED QUALIFICATIONS: 2 to 5 years software development experience.
SKILLS / TECHNICAL KNOWLEDGE / CERTIFICATION REQUIREMENTS:
- **Must have extensive** experience with **Java (or C/C++), web development (php, json, javascript)**
- Experience **developing** distributed software infrastructure
- Prior biological experience **a plus** but not required
- **Capable of understanding and translating high-level scientific goals into concrete computational approaches**
- **Excellen**t **oral and written communication** skills required.
- Must be able to **work collaboratively with other scientists** on **computational research** in a **fast-paced environment**.
- Must **enable the research of other program scientists** through **excellent communication, teamwork**, and a focus on **creating usable and accessible research software tools**.
- Must be capable of working in **an interactive team environment** while conducting **self-directed research** within broader goals set by group.

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Behavioral Attributes required in this job

Actual Job Description – Pfizer

Qualifications

- PhD or PharmD in Pharmacology, Pharmaceutical Sciences, Biochemistry, Biology, or equivalent with track record of sound scientific achievement, 2-4 years industrial and relevant experience
- **Collaborate with multidisciplinary teams** to develop strategies and tools
- Excellent understanding of ADME and PK principles
- Demonstrated in depth and hands on PK/tissue distribution/PD study design. Experience in bioimaging studies are **preferred**
- PK software experience such as WINNONLIN is **required**
- Experience with hands on biochemical and cell-based assay is **a plus**
- **Work effectively across scientific disciplines** and summarize concisely, developing recommendations
- **Knowledge of** IACUC, animal use protocols, animal model use
- **Strong interpersonal skills, communication (verbal and written)**
- **Demonstrated** evidence of **strong problem-solving skills** and the ability to thrive in a **matrixed environment by influencing and networking efficiently** to leverage internal capabilities to increase overall efficiency and productivity
- **Excellent organizational, communication and presentation skills**
- High level of **initiative** in performing experiments, **multi-tasking** and troubleshooting
- Proven effective skill and expertise in **cross discipline interactions, influence and collaborations**
- Proven scientific **writing and oral** summarization, publication and **presentation skills**
- Works well **independently and as a member of a team**

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Make Your Documents Easy to Read

- Good balance of white space to text
- Too large a font is hard to scan visually
  - 10-12 points is recommended, but varies with typeface
- Make it easy to navigate
  - Clear headings
  - Not too many formatting features – bold, italics are okay; minimize underlining
  - See our Handbook for ideas, formats, various styles: **http://gecd.mit.edu/sites/default/files/handbook.pdf**

Typical Sections on a CV

Most Common:

- **Name & Contact Information**
- **Education**
- **Dissertation Title or Topic**
- **Research Experience**
- **Teaching Experience**
- **Fellowships/Awards/Honors**
- **Other Professional Experience,** e.g., **Industry Experience, Government Experience**
- **Presentations/Invited Talks**
- **Publications**

Other Common Headings:

- **Skills –** may include subcategories such as **Computer, Languages, Lab Instrumentation**
- **Professional Associations**
- **Leadership & Activities** – or **University Service**
- **Research Interests**
- **Areas of Expertise**
- **Field Work**
- **References**

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Your Name & Pagination

- Make name larger than the basic font size
  - If your text is a 12 font, make your name 14-16
- Put your name on every page
- Number pages in header or footer:
  - Page one of five or Page 1 of 5
- Consider including your name:
  i.e.: "Research Slave - Page 1 of 5"

What Not to Include

- Omit references to:
  - Age, Marital status, Children, Health, Spouse's work, Religious affiliation, citizenship
- No photos in the U.S., but know your audience
- Not necessary to title the document "Curriculum Vitae" or "Resume" - it's understood
- Do not need to write these words:
  - "Personal Information," "Contact Information," "Email," they are understood, and no multiple addresses

Don't put anything on your document that isn't adding value to your message

Education Section

- Start with Institution name in bold
  - Include locations
- Do not have to include every institution that you have attended – only those where you received a degree

Thesis Research Often Noted in Several Places on CV

- Include thesis title under Education
  - May include a brief summary
  - List your advisor
- Include thesis research content within your Research Experience
- May attach an abstract of your research to your CV

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Dissertation Abstract as Appendix to CV

- A separate page or two at end of CV
- Briefly summarize your research -
  - Make it scholarly to interest people in your field
  - Note its contribution to the field
  - Make it comprehensible to people outside field
- Write *"See Abstract Attached"* in the Education Section after thesis title

Experience Sections Research & Teaching

- Describe both ***teaching*** **and** ***research*** experience in detail…not just what you did, but how you did it
  - Teaching can include evaluation scores, size of class, etc.
- For positions that primarily involve research, put *research* experience first
- For primarily teaching positions, put *teaching* experience first
- Under Research Experience, most current research will probably be listed first

Fellowships and Awards

- Clarify awards and other information if readers are not likely to grasp their significance
- Don't have to include every award; not everyone includes this section
- This section can go later in your document
- Other Work Experience – include if relevant to your academic/industry interests
  - Identify skills learned if applicable

Use PAR Acronym to Describe Experiences

P = Project   **- Setting**

A = Action/Activity   **Tell a Story**   **- Plot**

R = Results   **- Ending**

PAR statements feature skills and accomplishments

- Projects you were involved with
- Activity/Actions you took (verbs = skills)
- Results – impact of your work, usefulness of the project, value proposition

Used for both CV's and Resume

P = Project

Establish the "setting"

- What problems are you trying to solve?
- What knowledge area are you working in?
- What impact, in the "real world" might your work ultimately lead to?
- Write this so nontechnical people, as well as technical people, can get some idea of what you are/were working on

A = Activity

Develop the plot

- Use verbs to reflect your skills
- Page 25 in Handbook: list of great action verbs
- Include transferable activities/skills such as:
  - ***developed, researched, collaborated, wrote, presented, lead a team, built, supervised, etc.***
- Consider the 4-5 great points that you want people to know about you

R = Results

What result/impact did you have?

- Doesn't always have to be a research finding: E.g.,
  - Created a methodology that has now been adopted for ongoing use
  - Developed a method to be used for…
  - Research is ongoing
  - Work is being written up for publication
  - Finished project ahead of schedule and under budget

Content – Message
Actual Examples – Relevant for CV's and Resumes

- **Before** – Worked on the use of passive samplers
- **After** - Collaborated with lab teams to evaluate the use of passive samplers to measure the bioavailability of polychlorinated dibenzo-*p*-dioxins in air, water, and sediment

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- **Before** – Worked on 3-D global atmospheric models
- **After** – Led project team that developed 3-D global atmospheric model to investigate the behavior and transport of persistent organic pollutants

List what you did and how you did it!

Content – Message

Actual Examples – Relevant for CV's and Resumes

- **Before** – Work included research on interface sensitive behavior of materials

- **After** - Collaborated with lab teams to develop experimental and theoretical research on interface sensitive behavior of materials by using innovative triborheometry fixture/design

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- **Before** – Worked on diffusion coefficients and Brownian dynamics of DNA origami structures

- **After** – Led project team to create a model to calculate the diffusion coefficients and Brownian dynamics of DNA origami structures in collaboration with researches from MIT and Harvard

List what you did and how you did it!

Avoid Gaps in Time

- In general it's not a good idea to leave a gap un-described
- Talk over with others how to handle complicated time periods

Publications Section

- List in reverse chronological order
- Put your name in **bold**
- Can use asterisk* on papers for which you made leading contribution
- Can create separate categories: "Publications," "Presentations"
- Can group Publications in sections, e.g: "Books," "Refereed Articles," "Abstracts"
- Can list "Works in Press," "Submitted Articles" or "Works in Progress"
- Relevant pubs can be included on pg.2 of your resume

Presentations Section

- Papers presented at conferences - include:
  - Title of paper
  - Name of conference
  - Dates
  - Location
- May indicate: "Invited Presentations," "Posters"

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References Section

- 3 - or more - individuals who can comment (positively) on your fit with institutions to which you are applying
- Provide:
  - Name and Title
  - University affiliation and address
  - Contact information- telephone/email, etc.

Choose Referees (Strategically) who ...

- Know you and your work well
- Have high external visibility
- Can speak well of you from various perspectives
- Can comment on your unique experiences, strengths, and address any weaknesses or issues that may be of concern
- If pursuing teaching, include a teaching reference

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Reference Etiquette

- Ask permission of your referees before submitting their names

Reference Letters - Prepare Your Referees

If **letters** of recommendation are required:

- Give 2-4 weeks advance notice to referees
- Meet, discuss with referees topics to cover - they can tailor letters to positions
- Provide clear information about deadlines, addresses, specifications if any
- In some cases may submit "draft" of a letter to your recommender to assist them

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Reference Letters - Follow-up with Referees

- Tactfully follow-up to be sure letters will be/have been mailed in time
  - "I'm checking in to see how things are going with my letter of recommendation, if you would like any more information from me, or if I can be helpful in any way, etc."

Even if Written Letters are NOT Required ...

- Meet with your referees, discuss what you are applying for, review your work with them
- Provide your CV
- May provide a list of projects, accomplishments, your referee can review
- May provide a list of highlighted talking points targeted to a particular position
- Can provide other material too – e.g., copy of a paper you have written

Inform Referees About New Applications

When you provide reference information to an institution:

- Advise referees that they may be getting a request
- Keep referees up-to-date on your professional activities

Interfolio Reference Service

Interfolio https://www.interfolio.com/index.cfm

- An Internet service that will hold letters of reference for you, send them out at your request.
- Costs you money but the fees are reasonable; free to recommenders
- Easy to use for you and for recommenders
- Helpful if your recommenders frequently travel or are very busy
- Gives you more control over getting letters out, but you lose some personalization of letters

When To Prepare Your CV for the Academic Job Search

Sep - Nov - Seek advice and support of your advisor and other mentors. Develop CV and begin to apply for jobs. Network!

Nov - Jan - Prepare for screening interviews at annual conferences. Ask advisors to help if they can; for example…by making calls on your behalf

Jan - Mar - Prepare for campus visits. Some may begin with telephone or Skype screening interview. Follow up with enthusiastic thank you letters following each interview

Mar - May - Negotiate offers. Be sure you are being offered the space and resources you need to be successful

Other Documents for Academic Job Applications

- **Research Statement**
  - Length can vary, generally 3-6 pages
  - Includes both your current and future research
    - And your future should align with their future
    - May include your ability to obtain funding
- **Teaching Statement**
  - Reflects your philosophy as a teacher, usually 1 page
  - Identifies what undergrad classes you would teach and what graduate courses you might develop
- **Cover Letter**
  - 1 page introduction that highlights your abilities to successfully work in their environment

Develop Your Target List of Academic Institutions

http://classifications.carnegiefoundation.org/

http://www.academiccareers.com/

http://www.academickeys.com

Academic journals (Science, Nature, etc.)

Society newsletters, journals and websites

BMES, SFB, MRS, TERMIS, AIChE, ACS

Departmental websites

Emails to your department head/advisor

Conference postings

Talking / networking with others in the field

Thank You
Final Q & A

"What lies behind us and what lies before us are tiny matters compared to what lies within us"

Oliver Wendell Holmes