Postdoc Job Application Workshop:

The Research Statement

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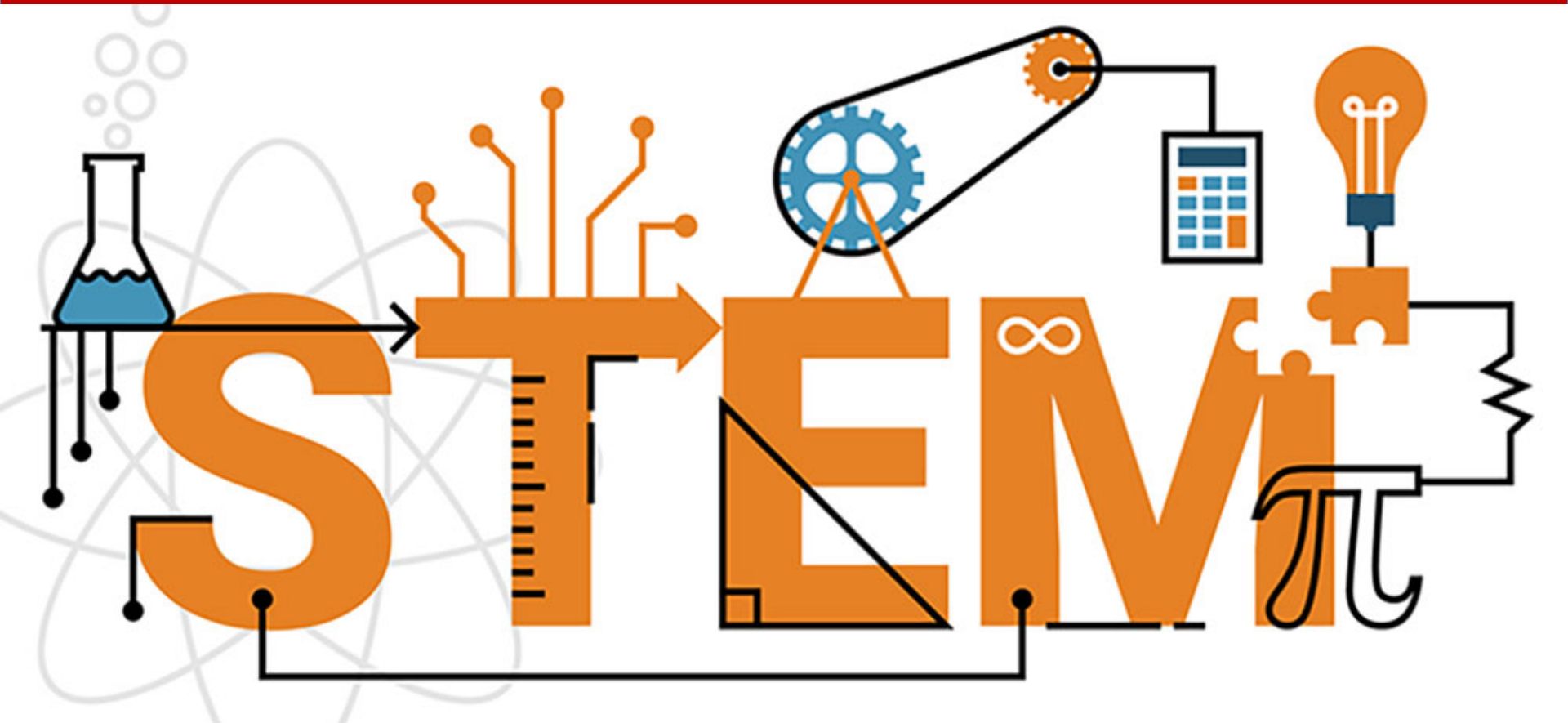
Department of Biology



Goals of this Postdoc Workshop

- Learn what to include (and not include) in a typical job application packet
- Best practices for creating a CV
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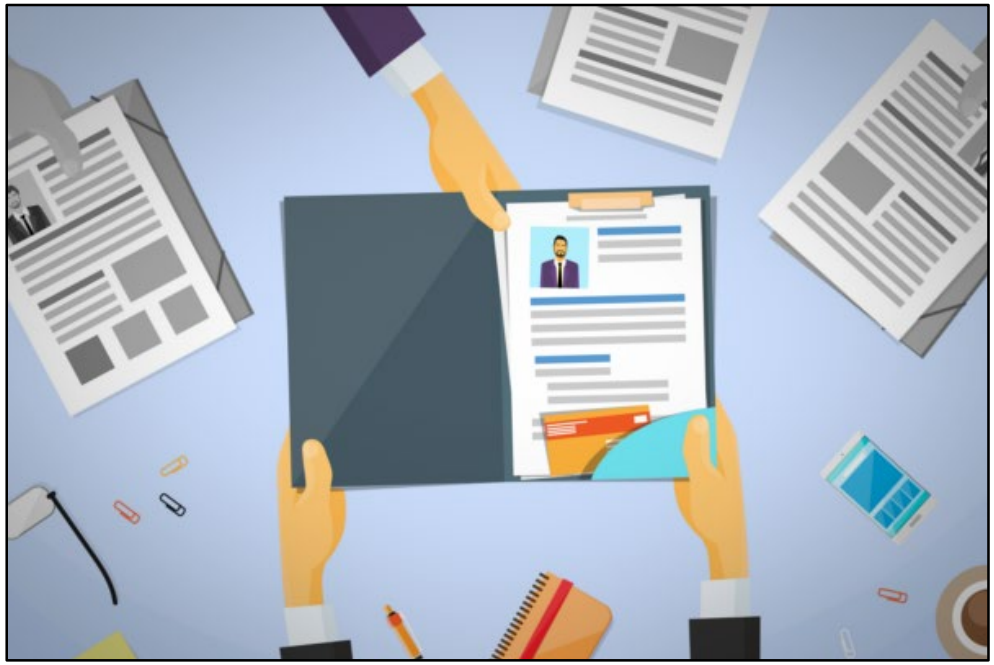
“Typical” STEM Application Packet

- Cover letter
  - Brief introduction
  - Teaching interests
  - Research interests
  - Diversity statement



- Curriculum vitae
- Sample publications (typically 3–5)
- Letters of recommendation (sent independently)

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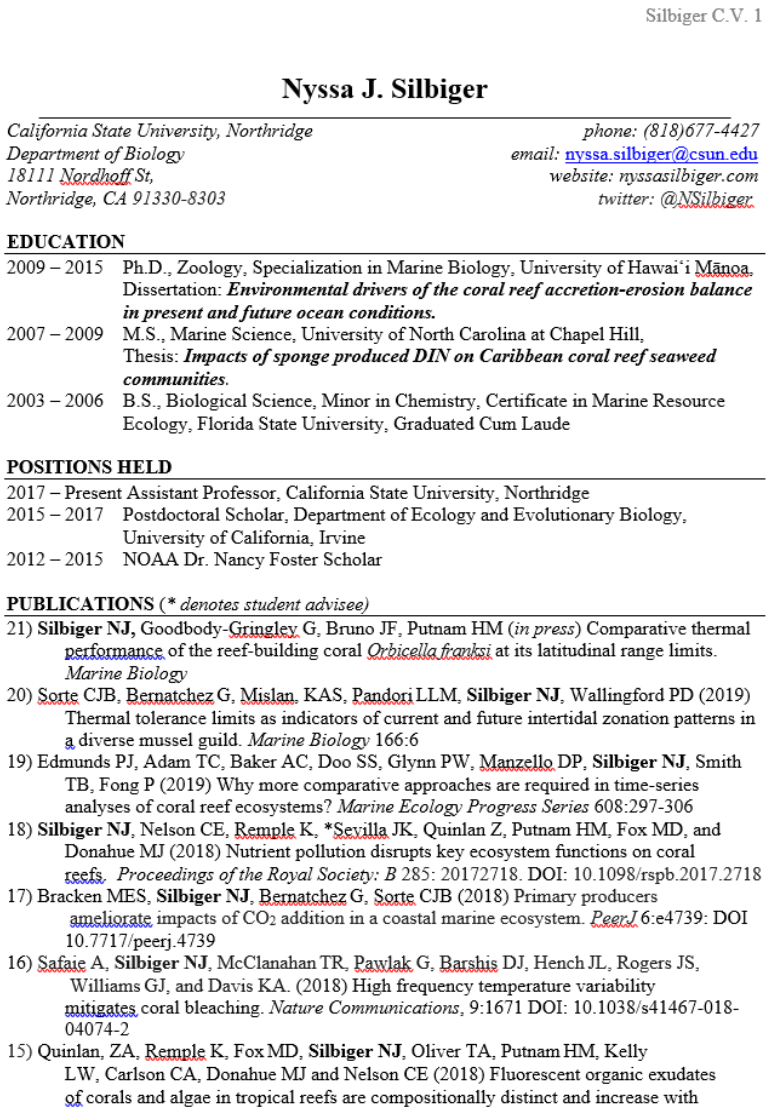
CV Formatting Basics

- Search committees will skim most of CV
- Include most important information up front
- Keep text simple, clear, and formatting consistent
- See HO and blog on academic CVs (https://theprofessorisin.com/2016/08/19/dr-karens-rules-of-the-academic-cv/)



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EDUCATION

2009 – 2015 Ph.D., Zoology, Specialization in Marine Biology, University of Hawai'i Mānoa, Dissertation: ***Environmental drivers of the coral reef accretion-erosion balance in present and future ocean conditions.***

2007 – 2009 M.S., Marine Science, University of North Carolina at Chapel Hill, Thesis: ***Impacts of sponge produced DIN on Caribbean coral reef seaweed communities.***

2003 – 2006 B.S., Biological Science, Minor in Chemistry, Certificate in Marine Resource Ecology, Florida State University, Graduated Cum Laude

POSITIONS HELD

2017 – Present Assistant Professor, California State University, Northridge

2015 – 2017 Postdoctoral Scholar, Department of Ecology and Evolutionary Biology, University of California, Irvine

2012 – 2015 NOAA Dr. Nancy Foster Scholar

PUBLICATIONS (* *denotes student advisee)*

21) **Silbiger NJ,** Goodbody-Gringley G, Bruno JF, Putnam HM (*in press*) Comparative thermal performance of the reef-building coral *Orbicella franksi* at its latitudinal range limits. *Marine Biology*

20) Sorte CJB, Bernatchez G, Mislan, KAS, Pandori LLM, **Silbiger NJ**, Wallingford PD (2019) Thermal tolerance limits as indicators of current and future intertidal zonation patterns in a diverse mussel guild. *Marine Biology* 166:6

19) Edmunds PJ, Adam TC, Baker AC, Doo SS, Glynn PW, Manzello DP, **Silbiger NJ**, Smith TB, Fong P (2019) Why more comparative approaches are required in time-series analyses of coral reef ecosystems? *Marine Ecology Progress Series* 608:297-306

18) **Silbiger NJ**, Nelson CE, Remple K, *Sevilla JK, Quinlan Z, Putnam HM, Fox MD, and Donahue MJ (2018) Nutrient pollution disrupts key ecosystem functions on coral reefs. *Proceedings of the Royal Society: B* 285: 20172718. DOI: 10.1098/rspb.2017.2718

17) Bracken MES, **Silbiger NJ**, Bernatchez G, Sorte CJB (2018) Primary producers ameliorate impacts of CO_2 addition in a coastal marine ecosystem. *PeerJ* 6:e4739: DOI 10.7717/peerj.4739

16) Safaie A, **Silbiger NJ**, McClanahan TR, Pawlak G, Barshis DJ, Hench JL, Rogers JS, Williams GJ, and Davis KA. (2018) High frequency temperature variability mitigates coral bleaching. *Nature Communications*, 9:1671 DOI: 10.1038/s41467-018-04074-2

15) Quinlan, ZA, Remple K, Fox MD, **Silbiger NJ**, Oliver TA, Putnam HM, Kelly LW, Carlson CA, Donahue MJ and Nelson CE (2018) Fluorescent organic exudates of corals and algae in tropical reefs are compositionally distinct and increase with

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Deconstructing the Job Advertisement

- Identify what the search committee wants
- List required and preferred qualifications and skills
- Use mirroring to align requirements and preferences with your skill sets

- Questions? Contact chair of search committee

Example from Department of Biology, CSUN

Qualifications:
California State University, Northridge, seeks two Marine Biologists/Ecologists for tenure-track positions as research-focused Assistant and/or Associate Professors of Biology. Candidates must hold Ph.D. and have postdoctoral experience. We seek candidates to complement existing skills in a program focused on organismal biology population/community ecology with a strong emphasis on fieldwork in temperate and tropical locations. We are particularly interested in buildi strengths in ecological modeling, conservation biology, understanding th capacities of organisms and systems to respond to multiple stressors associated with climate change in the Anthropocene. The successful candidates will have a proven capacity to develop an externally-funded, research program that actively involves graduate and undergraduate students. Teaching requires effective instruction to students of diverse backgrounds in a multicultural setting, and options include a course in t candidates' specialty, experimental design and analysis, marine biology/ecology, analyses of big ecological data, and introductory biolog Candidate must demonstrate ability to work effectively with a diverse

Example from Department of Biology, CSUN

Applicants also will be screened on their ability to complement existing strengths in the marine biology area and the Biology department, and for their ability to grow existing strengths of the CSUN marine biology area. Existing faculty in this area have a strong commitment to teaching courses that emphasize organismic biology, fieldwork, and hypothesis-driven investigations. The undergraduate curriculum includes the potential for a capstone experience involving a semester-long residential program at Santa Catalina Island, and the successful candidates are expected to participate in this program. The ability to scuba dive within the AAUS framework is preferred.

The Harsh Realities

- First cut is usually # pubs; ~10 is magic number (except at some LACs)
- Most of what you submit will be skimmed (at least initially)

- You probably won't hear back about your application
- Be prepared to apply for many jobs; don't get discouraged

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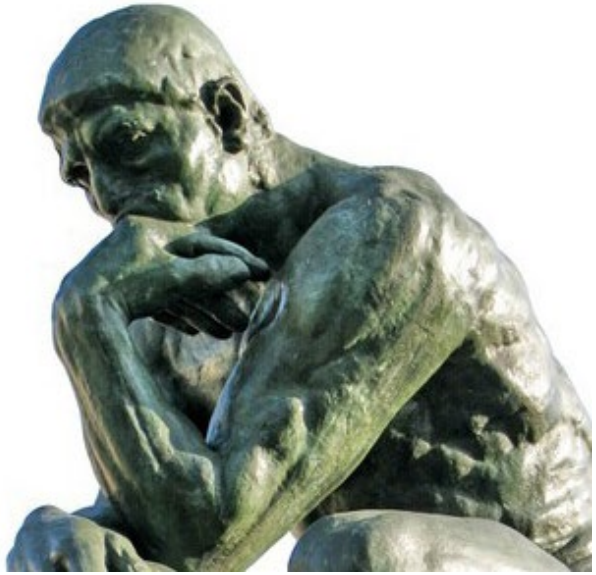
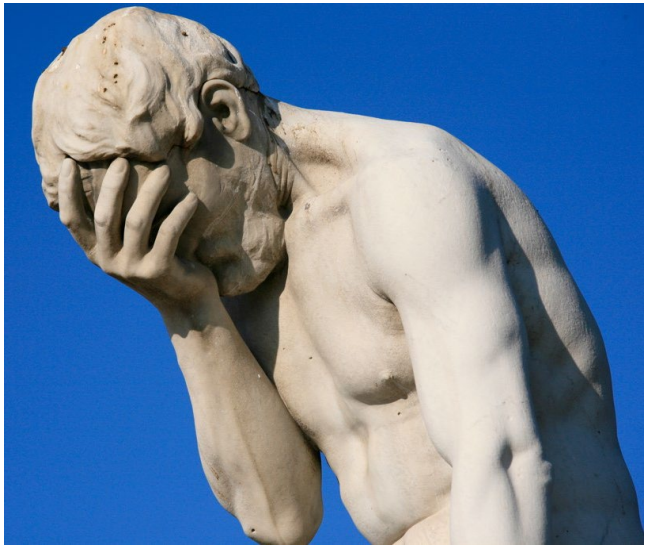
Research Statements (Dos)

- Follow directions: some impose page limits, but typically 1 page per element (short intro, + teaching, research, diversity statements)
- Describe your research themes as an integrated whole
- Describe your grant history and and specific future funding sources (programs within NSF, NIH, etc.)
- Mirroring: connect your research to the job ad
- Describe future research; some jobs expect working locally
- Emphasize how your research complements existing strengths; note potential departmental and regional collaborators

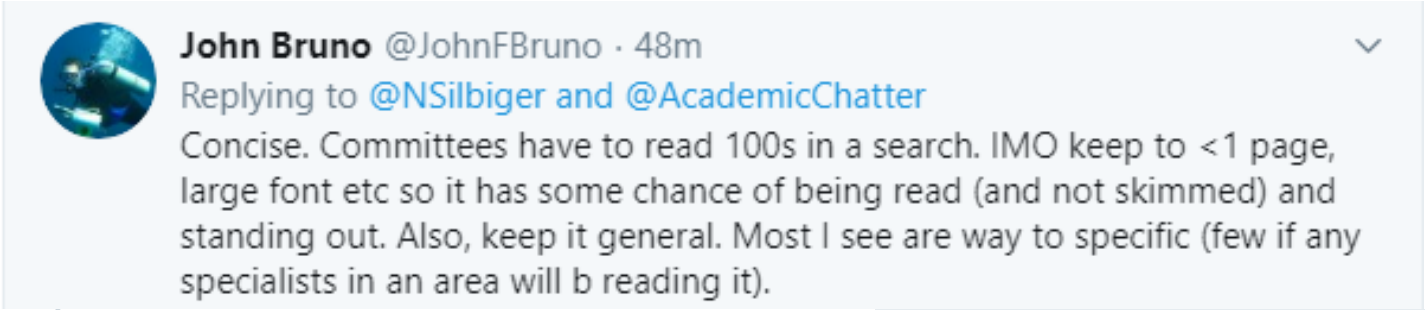
Research Statements (Don'ts)

- Don't describe your research in terms of dissertation chapters
- Don't relist all your papers (covered in CV); describe major themes of your research program
- Don't use passive voice. take ownership of your work; emphasize how awesome your research is!
- Don't forget to replace names of other universities (I… embarrassingly did this)





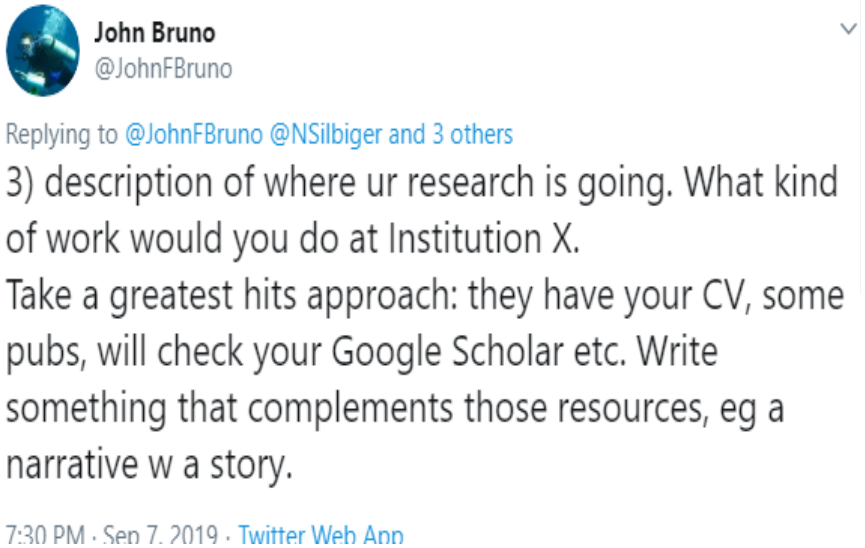
Advice from the Community



John Bruno @JohnFBruno · 48m

Replying to @NSilbiger and @AcademicChatter

Concise. Committees have to read 100s in a search. IMO keep to <1 page, large font etc so it has some chance of being read (and not skimmed) and standing out. Also, keep it general. Most I see are way to specific (few if any specialists in an area will b reading it).



John Bruno
@JohnFBruno

Replying to @JohnFBruno @NSilbiger and 3 others

3) description of where ur research is going. What kind of work would you do at Institution X.
Take a greatest hits approach: they have your CV, some pubs, will check your Google Scholar etc. Write something that complements those resources, eg a narrative w a story.

7:30 PM · Sep 7, 2019 · Twitter Web App

Matt Bracken
@BrackenLab

Replying to @NSilbiger and @AcademicChatter

A figure or 2 that summarize or highlight aspects of the applicant's research program can help an app stand out

1:52 PM · Sep 7, 2019 · Twitter for iPhone

Biology Job Ads and Resources:

https://docs.google.com/spreadsheets/d/1yLm9LhXNKL0YTV6M1lHsNRvypnWI0RRi613s6z494FE/edit#gid=1022369394

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Group Activity I: Reviewing Research Statements

- Review two job ads and research statements
  - Identify strengths and weaknesses
  - Provide specific directions for improvement
- Read and discuss with your group (30 min)
- Discuss strengths and weaknesses as a group
  - Examples: R1, R2, PUI with MS degrees (AKA: comprehensive university), and LACs

Group Activity II:
Review Your own Research Statements

- Review job ads and peer research statements
  - Identify strengths and weaknesses
  - Provide specific directions for improvement
- Read and discuss with your group (30 min)
- Discuss strengths and weaknesses as a group

Questions?