# Exploring and Preparing for Faculty Careers

What are the expectations for graduate and postdoctoral training? What skills do you need to get a faculty position ?

Laurence Clement, PhD Director, Research in Career Education Program Director, Academic Career Development University of California, San Francisco Office of Career and Professional Development

Office of Career & Professional Development Student Academic Affairs Developed by: Laurence Clement, Jennie Dorman, career.ucsf.edu Funded by: Burroughs Wellcome Fund

Start our in-class survey activity: bit.ly/exploring 2020



#### **Questions we often get**

Since I passed my quals, I have felt lost. I am not sure that I am spending my time on the right things, or that I am making enough progress in the lab.

I rarely meet with my PI, so I am not sure if I am on the track to success.

I want to get teaching experience, but my PI doesn't want me to. What should I do?

Do I really need to apply to a K99 award to get a faculty position?

What should I be spending my time doing in the next 6 months?



Start our in-class survey activity: bit.ly/exploring 2020



# The reason?

Graduate and postdoctoral trainees should have clear objectives that are tailored to their career interests: Career-Based Training Goals

Without these goals, trainees will be struggling to prepare adequately for the careers of their choice.



backward design your training



What learning experiences do you need to achieve these goals?

What activities should you prioritize to better prepare?

How will you know you are ready to start applying for this career? What evidence of readiness do hiring committees look at?

What is your career goal?



What learning experiences do you need to achieve these goals?

What activities should you prioritize to better prepare?

How will you know you are ready to start applying for this career? What evidence of readiness do hiring committees look at?

What is your career goal?

It's more complicated!



goals for today's session



Be able to use the Academic Career Readiness Assessment (ACRA) tool to determine what skills and experiences you will need to further develop to be competitive for a faculty position Be able to list the qualifications hiring committees really look at when making their hiring decisions

Be able to differentiate between different types of institutions in the US, based on their Carnegie category Complete "Course activity page 1"

What is your career goal?

Do you have what you need to achieve your career goal?

What learning experiences do you need to achieve these goals? What activities should you prioritize to better prepare?

How will you know you are ready to start applying for this career? What evidence of readiness do hiring committees look at? What is your career goal?



Complete "Course activity page 1"

What is your career goal?

Do you have what you need to achieve your career goal?

In pairs, discuss your responses What learning experiences do you need to achieve these goals? What activities should you prioritize to better prepare? How will you know you are ready to start applying for this career? What evidence of readiness do hiring committees look at?

What is your career goal?



Rules of group work

1. Provide constructive feedback

2. Provide supportive feedback (no judgement on career choices)

3. Keep everything you hear and see today confidential

4. Listen (if you are a talker), Talk (if you are listener) What learning experiences do you need to achieve these goals? What activities should you prioritize to better prepare? How will you know you are ready to start applying for this career? What evidence of readiness do hiring committees look at?

What is your career goal?



# Types of Institutions Where You Could Be a Faculty In the US

What it takes to get <u>tenure</u> there

And what environment it provides for research and teaching



# Research-Intensive Institutions

ALL STATE MILLION





## **RESEARCH-INTENSIVE INSTITUTIONS (R1s\*)**

#### **ENVIRONMENT:**

- Access to graduate students and postdoctoral scholars
- Access to high research budget, state-of-the-art facilities & equipment
- Peers are often renowned scientists, Institutional prestige
- Low teaching load



## **RESEARCH-INTENSIVE INSTITUTIONS (R1s\*)**

# TO GET *TENURE* AT THIS TYPE OF INSTITUTION:

- Large grants
- Regular publications in high-impact journals
- National & international recognition and collaborations



\*The Carnegie Classification of Institutions of Higher Education ™

## **Question**:

# What proportion of U.S. institutions are R1 institutions?



# What proportion of U.S. institutions are R1 institutions?

A. 2.5%
B. 22.5%
C. 42.5%
D. 62.5%





Answer: 2.5% Source: The Carnegie Classification of Institutions of Higher Education ™ http://carnegieclassifications.iu.edu/index.php

4,665 higher education institutions in the U.S.



Source: The Carnegie Classification of Institutions of Higher Education ™ http://carnegieclassifications.iu.edu/index.php

4,665 higher education institutions in the U.S.

# **Research- and Teaching-Focused Institutions**

Rhodes College, Memphis, Tennessee Liberal Arts College (or Baccalaureate<sup>\*</sup> College) Private, Non-Profit

(RT)

# **Research- and Teaching-Focused Institutions**

# (RT)

San Francisco State University M1 institution: Master's Colleges & Universities: Larger Programs





#### **ENVIRONMENT**

- Focus on Students' Learning Experience
- Access primarily to undergraduates
- Research projects seen as learning experiences for students
- Significant teaching load and emphasis on teaching quality
- Diversity of the student body varies widely across RT institutions

# Research- and Teaching-Focused Institutions (RT)

#### TO GET TENURE AT THIS TYPE OF INSTITUTION:

- Balancing research with a significant teaching load
- Publication and funding expectations vary widely across institutions (from R1-level to very low requirements)
- Startup budget vary
- High teaching and mentoring expectations



# Teaching-Only Institutions

Community College (or Associate's College) Public

## Kingsborough Community College, New York, NY

#### **ENVIRONMENT:**

- No research at all, except for students, through internship experiences
- Very high teaching load for the faculty
- Student body is extremely diverse



# **Teaching-Only Institutions (T)**

# TO GET TENURE AT THIS TYPE OF INSTITUTION:

- Teaching effectiveness, support of diverse student needs, and collegiality are important
- Tenure is usually more of a formality: selection happens at the hiring level

#### Research-Intensive Institutions (R)

Research & Teaching Focused (RT)

#### Teaching-Only Institutions (T)



#### How to get tenure at these institutions



Course activity page 2

What type(s) of faculty career are more appealing to you? Why



What learning experiences do you need to achieve these goals?

What activities should you prioritize to better prepare?

How will you know you are ready to start applying for this career? What evidence of readiness do hiring committees look at? What is your career goal?

## Next step



What learning experiences do you need to achieve these goals?

What activities should you prioritize to better prepare?

How will you know you are ready to start applying for this career? What evidence of readiness do hiring committees look at?

What is your career goal?

# What does it take to get hired at these institutions?

#### Research-Intensive Institutions (R)

Research & Teaching Focused (RT)

Teaching-Only Institutions (T)

How to get hired at these institutions: The Academic Career Readiness Assessment (ACRA) "What are the significant contributors to hiring decisions?"

n=4 faculty

(5 institutions)

n=9 faculty (10 institutions)

n=4 faculty (4 institutions) Course activity page 3

1. Self-assess using the ACRA survey



What learning experiences do you need to achieve these goals?

What activities should you prioritize to better prepare?

How will you know you are ready to start applying for this career? What evidence of readiness do hiring committees look at?

What is your career goal?

# Hiring profiles



RT institutions (n=22)

R institutions (n=38)

career.ucsf.edu/ACR A





#### Different institutions have different hiring priorities

# Hiring profiles

**Teaching- and** 

qualifications

diversity

related

T institutions (n=11)

RT institutions (n=22)

R institutions (n=38)

career.ucsf.edu/ACR A



#### The Academic Career Readiness Assessment (ACRA)

	Qualification		Level 1	Level 2	Level 3	Level 4
	Teaching Practic	ces	Candidate shows awareness of their limited teaching abilities and is interested in developing teaching skills.	Level 1 & Candidate is familiar with the evidence supporting the use of active learning strategies in the classroom.	Level 2 & Candidate demonstrates that they can use active learning strategies effectively in the classroom.	Level 3 & Candidate reflects on own teaching effectiveness and uses an iterative process to teaching to improve curriculum (1).
T institutions	т	91% Required	18%	27%	27%	18%
(n=11)	RT	91% Required	14%	36%	32%	9%
т	R	42%	32%	11%		
RT institutions (n=22)	Teaching Experi	ence	Candidate has had significant responsibilities (2) as a teaching assistant.	Candidate has been fully responsible for organizing (3) and teaching a course.	Candidate has been fully responsible for organizing (3) and teaching a course with a comparable student population (4).	Candidate has been fully responsible for organizing (3) and teaching a variety of courses (5) with a comparable student population (4).
	т	100% Required	18%	18%	55%	9%
	RT	86% Required	27%	36%	14%	9%
R institutions (n=38)	R	21%	21%			
	Serve a Diverse	Commitment and Ability to Serve a Diverse Student Population			Level 2 & Candidate has used strategies to support learning of diverse populations of students.	Level 3 & Candidate can articulate a personal experience with equity or social justice that inspires them to improve learning experiences of diverse populations of students. (6)
	т	82% Required	27%		45%	9%
career.ucsf.edu/ACR	RT	82% Required	59%	9%	3%	9%
A	R	34%	32%			3%

Course activity page 4: ACRA 1. Results qu

1. Identify the qualifications where you need to grow.

Qualification	Your level	ACRA target level
Teaching Experience	4	3
Teaching Practices	1	3
Publications	2	2
## DOWNLOAD the ACRA Academic Career Readiness Assessment

GO TO

## bit.ly/ACRA2020

Academic Career Readiness Assessment UCSF OCPD 2020.pdf

😑 Open with Google Docs 👻



Ł

Ð

## The Academic Career Readiness Assessment (ACRA)

	Qualification		Level 1	Level 2	Level 3	Level 4
	Teaching Practic	ces	Candidate shows awareness of their limited teaching abilities and is interested in developing teaching skills.	Level 1 & Candidate is familiar with the evidence supporting the use of active learning strategies in the classroom.	Level 2 & Candidate demonstrates that they can use active learning strategies effectively in the classroom.	Level 3 & Candidate reflects on own teaching effectiveness and uses an iterative process to teaching to improve curriculum (1).
T institutions	т	91% Required	18%	27%	27%	18%
(n=11)	RT	91% Required	14%	36%	32%	9%
т	R	42%	32%	11%		
RT institutions (n=22)	Teaching Experi	ence	Candidate has had significant responsibilities (2) as a teaching assistant.	Candidate has been fully responsible for organizing (3) and teaching a course.	Candidate has been fully responsible for organizing (3) and teaching a course with a comparable student population (4).	Candidate has been fully responsible for organizing (3) and teaching a variety of courses (5) with a comparable student population (4).
	т	100% Required	18%	18%	55%	9%
	RT	86% Required	27%	36%	14%	9%
R institutions (n=38)	R	21%	21%			
	Commitment ar Serve a Diverse Student Populat	_	Candidate demonstrates the sensitivity, respect for individuals of all backgrounds, and the interpersonal skills to interact with them.		Level 2 & Candidate has used strategies to support learning of diverse populations of students.	Level 3 & Candidate can articulate a personal experience with equity or social justice that inspires them to improve learning experiences of diverse populations of students. (6)
	т	82% Required	27%		45%	9%
career.ucsf.edu/ACR	RT	82% Required	59%	9%	3%	9%
A	R	34%	32%			3%

		Inclusion of Ur Research Expe in Research Pla	eriences	Candidate demonstrates a clear understanding that they will be working with undergraduate and/or Master's students.	Level 1 & Candidate understands the implications of doing research with non-PhD students on scope of project.	Level 2 & Research plan is specifically tailored to the institution's undergraduate and/or Master's population.	Level 3 & Candidate is able to propose projects of different calibers for different student populations. (7)
		Т	9%	9%			
Tinetitutiene		RT	91% Required	18%	9%	55%	9%
T institutions		R	5%	5%			
(n=11) RT institutions (n=22)	RT	Experience Co Research with		Candidate can articulate a scientific mentoring philosophy that meets the needs of the non- PhD student population served by this institution.	Level 1 & Candidate has experience conducting research with non-PhD students	Level 2 & Research conducted with non-PhD students produced preliminary data.	Level 3 & Data produced by non-PhD students was included in a scientific poster or paper.
		Т	27%	18%	9%		
		RT	82% Required	45%	36%		
R institutions		R	16%	13%	3%		
(n=38)							

## QualificationLevel 1Level 2Level 3Level 4

	Research Feasib with Available R	-	Candidate demonstrates ability to develop a research program within the limitations of the start-up funds. (8)	Level 1 & Candidate demonstrates the ability to independently manage and run the equipment required for their research program. (9)		Level 3 & Research plan is tailored to the non-R1 institution's highly limited resources. (11)
T institutions	Т	9%	9%			
	RT	82% Required	14%	9%	36%	23%
(n=11)	R	66% Required	16%	26%	24%	
RT institutions (n=22)	Verbal Commur of Research	nication	Can present research clearly and effectively to labmates.	Can present science clearly to scientists in the same sub-discipline (for example, to other microbiologists).	Can present science clearly and effectively to scientists outside of subfield.	Can present science clearly and effectively and can spark the interest of scientists outside of subfield and non-PhD students.
	т	27%	9%		9%	9%
	RT	73% Required			14%	59%
R institutions	R	87% Required		3%	61%	24%
(n=38) <b>RT</b>						
	Publications		Candidate has produced a few papers, regardless of authorship or impact.	Candidate has produced first author papers during postdoc and (12) PhD (regardless of impact) (13).	Candidate has produced first author papers during postdoc and (12) PhD, with at least one paper contributing significantly to the field (14).	Candidate has produced first author papers during postdoc and (12) PhD, at least one of which was published in Cell, Nature, or Science (15).
	New T	18%		18%		
	RT	77% Required	9%	64%	5%	
career.ucsf.edu/ACR	R	100% Required		3%	95%	3%
A	1					

		Research Vision	& Strategy	Research program is exciting (16) with a clear direction and includes explicit, feasible steps to attain this direction over the first couple of years.	Level 1 & There is an interesting, broad, research question that fills important gaps in the field and provides direction for the next 5 to 10 years.	Level 2 & The research question is broken down into smaller, feasible projects that use appropriate methods to answer the question.	Level 3 & The candidate has demonstrated experience successfully implementing this or a similar vision independently. (17)
T institutions		Τ	9%	9%			
		RT	77% Required	41%	18%	18%	
(n=11)	R	R	87% Required	13%	29%	34%	11%
RT institutions (n=22)		Funding Plan		Candidate can suggest specific funding agencies and program names to fund proposed research program. (18)	Level 1 & Proposed research program is ambitious and impactful enough to be funded by an R01 grant. (19)	Level 2 & Candidate has developed specific aims that can be realistically achieved with a first R01 grant. (20)	Level 3 & Candidate has developed a funding plar beyond the first R01 grant. (21)
		Т	9%	9%		li -	
		RT	45%	45%			
R institutions		R	68% Required	8%	24%	34%	3%
(n=38)		Research Indepe	endence	Candidate has the technical expertise to run their proposed research program independently. (22)	Level 1 & Candidate shows ability to lead a research program, by developing own ideas and new collaborations independently. (23)	Level 2 & Candidate's proposed research program does not appear to be in competition with their current advisor's. (24)	Level 3 & Candidate can provide evidence of independence through advisor's recommendation letter.
		Τ	0%				
		RT	59% Required	27%	23%	5%	5%
		R	82% Required	11%	32%	24%	16%



CSH & H		<b>bior</b> THE PREPRINT SERV		HOM   C Sear	CHANNE		RSS Q ted Search	
expectat Laurence Cl doi: https:// This article is Abstract ARTICLE U	demic Car ions for fu ement, Jennie doi.org/10.11 a preprint and Full Text	<b>ture life scien</b> B. Dorman, 💿 Rid 01/829200	chard McGee ied by peer review [what Metrics	, , , , ,	g	Download PDF     Supplementary	Email Share Citation Tools	ext 🧲
	-	er 2019 to Decer		2005		Subject Areas		
Total	y month	Abstract 1,719 Blogged by 1 Tweeted by 62	Full-text HTML	453		Animal Behavior and C Biochemistry Bioengineering Bioinformatics	ognition	

# **R** institutions

Significant contributors to hiring decisions



#### **Research program:** Clear vision and strategy Fundable research plan Independence



Publications: Impact is what matters (not necessarily impact factor)



**Recommendations:** From advisors and PIs Need to be stellar



Grants and fellowships:

Not required BUT may help indirectly because a **Funding Plan is important** 



### Fit for position

This is less essential, but in some instances, the research field will matter for the position Possible synergy with colleagues may matter

# **RT** institutions

Significant contributors to hiring decisions



Verbal communication: Spikes interest of non-experts and undergraduates



### Fit for position

<u>Disciplinary</u> fit in teaching, No overlap with other faculty in research <u>Don't want to be your backup plan</u>



#### Teaching:

Experience - involvement matters Teaching Potential matters



#### Research program:

Feasibility with limited resources Undergraduates must be included



#### **Publications:**

Variable - depends on the teaching/research balance



#### **Collegiality:** Are you a good colleague? Can you share?

# **T** institutions

Significant contributors to hiring decisions



### Fit for position

Disciplinary fit in teaching matters: can you teach what we need you to teach?



### **Teaching:** Experience - involvement matters Teaching Potential matters



#### **Collegiality:** Are you a good colleague? Can you share?



### Commitment to Diversity:

Respect, Authenticity Reflectiveness, Experience

## To summarize

Significant contributors to hiring decisions

### R

# Productivity & Long-term fundability

## RT

Learning needs of students (research and classroom)

## Т

Learning needs of students from all backgrounds















What activities do you need to engage in to attain your career goals? Based on the ACRA framework, what is your level of mastery for each skill?

What is your career goal?

What should be the outcome of your time in graduate/postdoctoral training?

Course activity page 5:

1. Identify the qualifications where you need to grow.

Qualification	Your level	ACRA target level
Teaching Experience	4	3
Teaching Practices	1	3
Publications	2	2

Course act	Course activity		Your level	ACRA target level		
page 5:		Teaching Experience	4	3		
		Teaching Practices	1	3		
		Publications	2	2		
Training	Plan					
	Top 4 qualifications	Activity	2. Use the next			
	Teaching Practices	Register to STEP-UP course in May part of t				
Recommendations		<ol> <li>Set up a meeting with Laurence to discuss relationship with my PI</li> <li>Reach out to faculty I met at the conference last September and ask them to provide feedback on my research plans</li> </ol>			the activities you will need to engage in	

Office of Career and Professional Development Student Academic Affairs

### Academic Program Roadmap

Positions		Teaching Focused Faculty Positions									
			Research & Teaching	Focused Faculty Positions	:						
Compe- tency	Teaching Experience	Pedagogical Practices         Ability to Serve a Diverse Student Population         Recommen- dations         Undergr Rese		Pedagogical Ability to Recommen-Undergraduate C Practices Student Population dations Experiences in Res				Experience Conducting Research with Students			
		Introduction to Pedagos reer.ucsf.edu/step-up-cou (GRAD 302)			Introduction to	IN-UP Mentoring Course ucsf.edu/					
USF-UCS Teaching Res career.ucsf.edu	STEP-UP USF-UCSF Teaching Residency career.ucsf.edu/step-u p-teaching-residencies	STEP-UP CCSF-UCSF Teaching Residency career.ucsf.edu/step-u p-teaching-residencies	TRAIN-UP UCSF-CCSF Inclusive Mentoring Fellows career.ucsf.edu//inclusi	MANAGE-UP career.ucsf.edu/ ManageUp	TRAIN-UP-course TRAIN-UP UCSF-CCSF Inclusive Mentoring Fello						
		p todorning roondonoroo			aive mentaring follows						
Positions	-usf	-usf	ve-mentoring-fellows	Focused Faculty Positions	career.ucsf.edu/inclu	sive-mentoning-renows					
Positions	-ust		ve-mentoring-fellows Research & Teaching Research Focuse			sive-mentoning-tenows					
Positions Compe- tency	Publications, Scholarship		Research & Teaching			Verbal Communication of Research					
Compe-	Publications,	Research Vision & Strategy	Research & Teaching Research Focuse	ed Faculty Positions Research Independence -UP demic Career Course dent research program	Research Feasibility with Available Resources	Verbal Communication					

OCPD academic career programs are mapped to ACRA qualifications

Copyright 2019 Laurence Clement, Office of Career and Professional Development, University of California, San Francisco. career.ucsf.edu



academic-

### Academic Program Roadmap

	Positions		Teaching Focus				
OCPD				Research & Teaching	J Focused Faculty Positions		
programs for	Compe- tency	Teaching Experience	Pedagogical Practices	Ability to Serve a Diverse Student Population	Recommen- dations	Inclusion of Undergraduate Research Experiences in Research Plan	Experience Conducting Research with Students
cademic-bound			STEP-UP Introduction to Pedagogy Course career.ucsf.edu/step-up-course (GRAD 302)				IN-UP Mentoring Course ucsf.edu/
trainees are	Programs	STEP-UP USF-UCSF	STEP-UP CCSF-UCSF	TRAIN-UP UCSF-CCSF	MANAGE-UP	TRAIN-L	JP-course
called "UP"		Teaching Residency career.ucsf.edu/step-u p-teaching-residencies -usf	Teaching Residency career.ucsf.edu/step-u p-teaching-residencies -usf	Inclusive Mentoring Fellows career.ucsf.edu/inclusi ve-mentoring-fellows	ManageUp	TRAIN-UP UCSF-CCSF Inclusive Mentoring Fellows career.ucsf.edu/inclusive-mentoring-fellows	
		Research & Teaching Focused Facul					
for	Positions			Research & Teaching	Focused Faculty Positions		
for	Positions		-	Research & Teaching Research Focuse		-	
for Upcoming Professors	Positions Compe- tency	Publications, Scholarship	Research Vision & Strategy			Research Feasibility with Available Resources	Verbal Communication of Research
Upcoming	Compe-	,	Research Vision & Strategy	Research Focuse	Research Independence	Feasibility with Available Resources	Communication

Copyright 2019 Laurence Clement, Office of Career and Professional Development, University of California, San Francisco. career.ucsf.edu

## The Academic Career Readiness Assessment (ACRA)

	Qualification		Level 1	Level 2	Level 3	Level 4
	Teaching Practic	ces	Candidate shows awareness of their limited teaching abilities and is interested in developing teaching skills.	Level 1 & Candidate is familiar with the evidence supporting the use of active learning strategies in the classroom.	Level 2 & Candidate demonstrates that they can use active learning strategies effectively in the classroom.	Level 3 & Candidate reflects on own teaching effectiveness and uses an iterative process to teaching to improve curriculum (1).
T institutions	т	91% Required	18%	27%	27%	18%
(n=11)	RT	91% Required	14%	36%	32%	9%
т	R	42%	32%	11%		
RT institutions (n=22)	Teaching Experi	ence	Candidate has had significant responsibilities (2) as a teaching assistant.	Candidate has been fully responsible for organizing (3) and teaching a course.	Candidate has been fully responsible for organizing (3) and teaching a course with a comparable student population (4).	Candidate has been fully responsible for organizing (3) and teaching a variety of courses (5) with a comparable student population (4).
	т	100% Required	18%	18%	55%	9%
	RT	86% Required	27%	36%	14%	9%
R institutions (n=38)	R	21%	21%			
	Commitment ar Serve a Diverse Student Populat	_	Candidate demonstrates the sensitivity, respect for individuals of all backgrounds, and the interpersonal skills to interact with them.		Level 2 & Candidate has used strategies to support learning of diverse populations of students.	Level 3 & Candidate can articulate a personal experience with equity or social justice that inspires them to improve learning experiences of diverse populations of students. (6)
	т	82% Required	27%		45%	9%
career.ucsf.edu/ACR	RT	82% Required	59%	9%	3%	9%
A	R	34%	32%			3%

Compe- tency	Teaching Experience	Pedagogical Practices	Ability to Serve a Diverse Student Population
		Introduction to Pedagoo reer.ucsf.edu/step-up-cou (GRAD 302)	
Programs	STEP-UP USF-UCSF Teaching Residency career.ucsf.edu/step-u p-teaching-residencies -usf	STEP-UP CCSF-UCSF Teaching Residency career.ucsf.edu/step-u p-teaching-residencies -usf	

We teach trainees how to support diversity in the classroom through evidence-based practices.

"I cannot stress enough how going through STEP-UP has really made me so competitive in the academic job market. The types of conversations I am able to have with faculty and knowledge of so many active learning strategies has really served me well." **STEP-UP** Series

<u>Science Teaching</u> <u>Effectiveness Program</u>

Introduction to Pedagogy Course (GRAD 302, Spring quarter)

USF-UCSF Teaching Residency CCSF-UCSF Teaching Opportunity

Science Education Research Journal Club

		Inclusion of Ur Research Expe in Research Pla	eriences	Candidate demonstrates a clear understanding that they will be working with undergraduate and/or Master's students.	Level 1 & Candidate understands the implications of doing research with non-PhD students on scope of project.	Level 2 & Research plan is specifically tailored to the institution's undergraduate and/or Master's population.	Level 3 & Candidate is able to propose projects of different calibers for different student populations. (7)
		Т	9%	9%			
Tinetitutiene		RT	91% Required	18%	9%	55%	9%
T institutions		R	5%	5%			
(n=11) RT institutions (n=22)	RT	Experience Co Research with		Candidate can articulate a scientific mentoring philosophy that meets the needs of the non- PhD student population served by this institution.	Level 1 & Candidate has experience conducting research with non-PhD students	Level 2 & Research conducted with non-PhD students produced preliminary data.	Level 3 & Data produced by non-PhD students was included in a scientific poster or paper.
		Т	27%	18%	9%		
		RT	82% Required	45%	36%		
R institutions		R	16%	13%	3%		
(n=38)							

Inclusion of Undergraduate Research Experiences in Research Plan

Experience Conducting Research with Students

TRAIN-UP Introduction to Mentoring Course career.ucsf.edu/ TRAIN-UP-course

TRAIN-UP UCSF-CCSF Inclusive Mentoring Fellows career.ucsf.edu/inclusive-mentoring-fellows

We teach trainees how to be inclusive research mentors and manage for productivity and well-being of their research team. <u>TRAIN</u>-UP Series <u>Training Researchers and</u> <u>Interns</u>

Introduction to Mentoring Program (4 workshops, Summer and Winter quarters)

UCSF-CCSF Inclusive Mentoring Fellows Advisor (new, Spring and Fall 2020) NSF-funded

> Mentoring Workshops (TRAIN-UP applied)

		Research Vision	& Strategy	Research program is exciting (16) with a clear direction and includes explicit, feasible steps to attain this direction over the first couple of years.	Level 1 & There is an interesting, broad, research question that fills important gaps in the field and provides direction for the next 5 to 10 years.	Level 2 & The research question is broken down into smaller, feasible projects that use appropriate methods to answer the question.	Level 3 & The candidate has demonstrated experience successfully implementing this or a similar vision independently. (17)
T institutions		Τ	9%	9%			
		RT	77% Required	41%	18%	18%	
(n=11)	R	R	87% Required	13%	29%	34%	11%
RT institutions (n=22)		Funding Plan		Candidate can suggest specific funding agencies and program names to fund proposed research program. (18)	Level 1 & Proposed research program is ambitious and impactful enough to be funded by an R01 grant. (19)	Level 2 & Candidate has developed specific aims that can be realistically achieved with a first R01 grant. (20)	Level 3 & Candidate has developed a funding plar beyond the first R01 grant. (21)
		Т	9%	9%			
		RT	45%	45%			
R institutions		R	68% Required	8%	24%	34%	3%
(n=38)		Research Indepe	endence	Candidate has the technical expertise to run their proposed research program independently. (22)	Level 1 & Candidate shows ability to lead a research program, by developing own ideas and new collaborations independently. (23)	Level 2 & Candidate's proposed research program does not appear to be in competition with their current advisor's. (24)	Level 3 & Candidate can provide evidence of independence through advisor's recommendation letter.
		Т	0%				
		RT	59% Required	27%	23%	5%	5%
		R	82% Required	11%	32%	24%	16%

## QualificationLevel 1Level 2Level 3Level 4

	Research Feasib with Available R	-	Candidate demonstrates ability to develop a research program within the limitations of the start-up funds. (8)	Level 1 & Candidate demonstrates the ability to independently manage and run the equipment required for their research program. (9)		Level 3 & Research plan is tailored to the non-R1 institution's highly limited resources. (11)
T institutions	Т	9%	9%			
	RT	82% Required	14%	9%	36%	23%
(n=11)	R	66% Required	16%	26%	24%	
RT institutions (n=22)	Verbal Commur of Research	nication	Can present research clearly and effectively to labmates.	Can present science clearly to scientists in the same sub-discipline (for example, to other microbiologists).	Can present science clearly and effectively to scientists outside of subfield.	Can present science clearly and effectively and can spark the interest of scientists outside of subfield and non-PhD students.
	т	27%	9%		9%	9%
	RT	73% Required			14%	59%
R institutions	R	87% Required		3%	61%	24%
(n=38) <b>RT</b>						
	Publications		Candidate has produced a few papers, regardless of authorship or impact.	Candidate has produced first author papers during postdoc and (12) PhD (regardless of impact) (13).	Candidate has produced first author papers during postdoc and (12) PhD, with at least one paper contributing significantly to the field (14).	Candidate has produced first author papers during postdoc and (12) PhD, at least one of which was published in Cell, Nature, or Science (15).
	New T	18%		18%		
	RT	77% Required	9%	64%	5%	
career.ucsf.edu/ACR	R	100% Required		3%	95%	3%
A	1					

<u>PAC</u> -UI	
Series	

<u>P</u>reparing for an <u>A</u>cademic <u>C</u>areer Exploring Faculty Careers workshop (ACRA introduction)

Preparing for an Academic Career course Developing an independent research program (new: GRAD 201, Winter quarter)

Applying, Interviewing and Negotiating positions (6+ workshops, Summer-Fall)

Research

We *supplement* career and professional development for faculty careers using ACRA-based materials.

Veuleel

Compe- tency	Publications, Scholarship	Research Vision & Strategy	Funding Plan	Research Independence	Feasibility with Available Resources	Verbal Communication of Research
Programs	detting recubuok	P Di	PAC-UP The job talk for a faculty position at			
on your faculty application materials career.ucsf.edu/pa cup-events		tting feedback on y stration: Giving a ch	C-UP our research stateme alk talk for a faculty p u/pacup-events		<b>a PUI</b> career.ucsf.edu/ job-talk-PUI	



Recommendations

MANAGE-UP

career.ucsf.edu/ ManageUp We teach trainees to assess and navigate any professional relationship and environment, for improved productivity and well-being.

### Manage-Up Series

#### Manage-Up for Third Year students

(Having a career conversation with your Pl, Managing your relationship with your research mentor, Identifying and managing your mentorship team)

### Manage-Up for Applying to Positions

(Strengthening your candidacy, Handling Q&A, Interviewing while pregnant, Interviewing to find if a place is the right fit)

# Course activity page 5:

Complete your activities and share with a neighbor **Training Plan** 

Qualification	Your level	ACRA target level
Teaching Experience	4	3
Teaching Practices	1	3
Publications	2	2

Top 4 qualifications	Activity
Teaching Practices	Register to STEP-UP course in May
Recommendations	<ol> <li>Set up a meeting with Laurence to discuss relationship with my PI</li> <li>Reach out to faculty I met at the conference last September and ask them to provide feedback on my research plans</li> </ol>

2. Use the next part of the lecture to fill in the activities you will need to engage in Share your plan with a partner, provide suggestions



What activities do you need to engage in to attain your career goals? Based on the ACRA framework, what is your level of mastery for each skill?

What is your career goal?

What should be the outcome of your time in graduate/postdoctoral training?

## OCPD counseling appointments

Course activity 6:

Do you need a counseling appointment?

If you are a graduate student or a postdoctoral scholar, you have access to 4 counseling appointments a year:

- Academic careers with me
- Non-Academic careers with Mike Matrone

https://career.ucsf.edu/appointments

You can use the academic career appointments to discuss specific challenges you may have on the path to academia.

OCPD counseling appointments

Last page of the survey is our feedback page - please complete it now!

If you are a graduate student or a postdoctoral scholar, you have access to 4 counseling appointments a year:

- Academic careers with me
- Non-Academic careers with Mike Matrone

https://career.ucsf.edu/appointments

You can use the academic career appointments to discuss specific challenges you may have on the path to academia.

## Our UCSF Community 3,198 Students, 1,111 postdocs = 4,309

Our Goal

Tutorial: bit.ly/exploring 2020

ACRA: career.ucsf.edu /ACRA

Every single student and postdoc at UCSF has the knowledge, skills and confidence to navigate your career successfully.

## **Our 2 Minute Ask**

- 1. Try anything you learned today
- 2. Tell someone else
- 3. Share the slides
- 4. Give a person a card
- 5. Put up a flyer (or take one down)
- 6. Normalize it...on social media UCSFOCPD O G
- 7. Give us feedback
- 8. Come back....and bring a friend
- 9. Greet each other on campus
- 10. Do your thing

Everyone deserves to belong to a healthy, functioning workplace

Share what you learned today with one other trainee Tutorial: bit.ly/exploring2020 ACRA: career.ucsf.edu/ACRA Laurence Clement, PhD laurence.clement@ucsf.edu Office of Career & Professional Development

Student Academic Affairs