Supplemental digital content for Fernandez A, Chen V, Quan J, Martinez A, Flowers L, Aronson L.

Evaluation of a medical student research and career development program to increase diversity in academic medicine.

Academic Medicine.

Supplemental Digital Appendix 2A: IICSE RESEARCH PRE-PROGRAM SUF

Supplemental Digital Appendix 2A: UCSF RES	SEARCH PRE-PROGRAM SURVEY
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To help us track your (anonymous) responses from the pre-program evaluation to the post-program evaluation, please enter below the name of the street you grew up on, followed by the last four digits of your cell phone number.

Example: Potrero1234					
Please tell us about your background and scholarly experience.					
Gender identification:					
• O Male					
• Female					
Racial identification (please choo	se all that apply):				
African-American					
Asian/Pacific Islander					
• Latino					
Native American					
Non-Hispanic White					
• Mixed					
Year in school:					
• 🔘 1					
• 0 2					
• 🔾 3					
• 04					
• 🔾 5					
• 6					
Are you doing:					
A summer (Pathways)	Explore) or quarter research project?				
A yearlong research p	roject?				
Do you have prior research expen	ience?				
None					
A little					
• Some					
Moderate					
Substantial					
Have you (please check all that a	oply):				
Designed a study?					
Collected data?					
Analyzed data?					
Have you:					
Have you.	Yes	No			

Supplemental digital content for Fernandez A, Chen V, Quan J, Martinez A, Flowers L, Aronson L. Evaluation of a medical student research and career development program to increase diversity in academic medicine. Academic Medicine. Yes No 1. Presented a POSTER at a 1. Presented a POSTER at a professional 2. Presented an ORAL PRESENTATION professional meeting? at a professional meeting? meeting? 2. Presented an ORAL 2. Presented an ORAL PRESENTATION 1. Presented a POSTER at a professional PRESENTATION at a meeting? at a professional meeting? professional meeting? 3. Been an author on a peer 1. Presented a POSTER at a professional 2. Presented an ORAL PRESENTATION reviewed paper? meeting? at a professional meeting? 4. Been FIRST AUTHOR on a 1. Presented a POSTER at a professional 2. Presented an ORAL PRESENTATION peer reviewed paper? at a professional meeting? meeting? 5. Written an op-ed or other 1. Presented a POSTER at a professional 2. Presented an ORAL PRESENTATION non-peer reviewed article about meeting? at a professional meeting? your work? Please indicate your level of confidence in your SKILLS and ABILITIES in the following areas on a scale of 1-5. 1=not at all confident and 5=extremely confident. 1 2 3 5 1. To choose 2. To choose 5. To be 4. To be 1. To choose the career that the career that the career that 3. To achieve successful in a successful in an best fits my interests the career I want best fits my highlights my research career academic career interests abilities 1. To choose 2. To choose 4. To be 5. To be 2. To choose the career that 3. To achieve the career that the career that successful in a successful in an highlights my abilities highlights my the career I want best fits my research career academic career abilities interests 1. To choose 2. To choose 4. To be 5. To be the career that the career that 3. To achieve 3. To achieve the career I want successful in a successful in an best fits my highlights my the career I want research career academic career interests abilities 1. To choose 2. To choose 5. To be 4. To be 4. To be successful in a the career that the career that 3. To achieve successful in a successful in an research career best fits my highlights my the career I want research career academic career abilities interests 1. To choose 2. To choose 4. To be 5. To be 5. To be successful in an the career that the career that 3. To achieve successful in a successful in an academic career highlights my the career I want best fits my research career academic career abilities interests 1. To choose 2. To choose 4. To be 5. To be 3. To achieve the career that the career that 6. To find good mentors successful in a successful in an best fits my highlights my the career I want research career academic career interests abilities 1. To choose 2. To choose 4. To be 5. To be

the career that

highlights my

abilities

3. To achieve

the career I want

successful in a

research career

successful in an

academic career

the career that

best fits my

interests

7. To manage my relationship

with my mentor

	1	2	3	4	5
8. To effectively showcase myself professionally	1. To choose the career that best fits my interests	2. To choose the career that highlights my abilities	3. To achieve the career I want	4. To be successful in a research career	5. To be successful in ar academic caree
9. To manage professional challenges	1. To choose the career that best fits my interests	2. To choose the career that highlights my abilities	3. To achieve the career I want	4. To be successful in a research career	5. To be successful in an academic caree
10. To effectively describe my esearch	1. To choose the career that best fits my interests	2. To choose the career that highlights my abilities	3. To achieve the career I want	4. To be successful in a research career	5. To be successful in an academic caree
11. To communicate professionally	1. To choose the career that best fits my interests	2. To choose the career that highlights my abilities	3. To achieve the career I want	4. To be successful in a research career	5. To be successful in ar academic career
Please indicate your level of ag	reement with the foll	owing statements	on a scale of 1-5. 1=	=Strongly Disagree	e and 5=Strongly
Please indicate your level of ag Agree.	reement with the foll	owing statements of	on a scale of 1-5. 1=	=Strongly Disagree	e and 5=Strongly
Agree. 1. A research and/or academic career will complement my	I	_			
Agree. 1. A research and/or academic career will complement my clinical work 2. A research and/or academic career will provide me with personal and professional	1 1. A research and/or academic career will complement my	2 2. A research and/or academic career will provide me with personal and professional	3. A research and/or academic career will best utilize my skills	4. Minority students are encouraged to pursue careers in	5. Non-minority student are encouraged to pursue careers it
	1. A research and/or academic career will complement my clinical work 1. A research and/or academic career will complement my	2 2. A research and/or academic career will provide me with personal and professional satisfaction 2. A research and/or academic career will provide me with personal and professional	3. A research and/or academic career will best utilize my skills and training 3. A research and/or academic career will best utilize my skills	4. Minority students are encouraged to pursue careers in research 4. Minority students are encouraged to pursue careers in	5. Non-minority studen are encouraged pursue careers i research 5. Non-minority studen are encouraged pursue careers i

Supplemental digital content for Fernandez A, Chen V, Quan J, Martinez A, Flowers L, Aronson L. Evaluation of a medical student research and career development program to increase diversity in academic medicine. Academic Medicine. 1 2 3 4 complement my provide me with utilize my skills pursue careers in pursue careers in clinical work personal and and training research research professional satisfaction 2. A research 5. Non-1. A research and/or academic 3. A research 4. Minority 5. Non-minority students are and/or academic career will and/or academic students are minority students encouraged to pursue careers in provide me with career will best career will encouraged to are encouraged to research complement my personal and utilize my skills pursue careers in pursue careers in clinical work professional and training research research satisfaction 2. A research 3. A research 4. Minority 5. Non-1. A research and/or academic and/or academic career will and/or academic students are minority students 6. I have a clear set of future career will provide me with career will best encouraged to are encouraged to goals for my career complement my personal and utilize my skills pursue careers in pursue careers in clinical work professional and training research research satisfaction 2. A research 3. A research 4. Minority 1. A research and/or academic 5. Nonand/or academic career will and/or academic students are minority students 7. I have discussed my career career will best career will provide me with encouraged to are encouraged to goals with my mentor(s) complement my personal and utilize my skills pursue careers in pursue careers in clinical work professional and training research research satisfaction 2. A research 1. A research and/or academic 3. A research 4. Minority 5. Nonand/or academic career will and/or academic minority students students are 8. I plan to pursue an academic career will provide me with career will best encouraged to are encouraged to career complement my personal and utilize my skills pursue careers in pursue careers in professional clinical work and training research research satisfaction 2. A research 1. A research and/or academic 3. A research 4. Minority 5. Nonand/or academic career will and/or academic students are minority students 9. I plan to pursue research as career will provide me with career will best encouraged to are encouraged to part of my career complement my personal and utilize my skills pursue careers in pursue careers in clinical work professional and training research research satisfaction 2. A research 5. Non-1. A research and/or academic 3. A research 4. Minority 10. I plan to continue building and/or academic career will and/or academic students are minority students my network and skills to career will provide me with career will best encouraged to are encouraged to develop my career complement my personal and utilize my skills pursue careers in pursue careers in clinical work professional and training research research satisfaction Please indicate your level of agreement with the following statements on a scale of 1-5. 1=Strongly Disagree and 5=Strongly Agree 1 2 1. I have mentors who provide 1. I have 2. I have strong support for my research

getting adequate

mentors who

getting adequate

getting adequate

mentors who

interests

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	1	2	3	4	5
	provide strong support for my research interests	provide strong support for my clinical interests	support from the institution to pursue my research interests	support to develop skills to pursue a research career	support to spend the summer working in the area of my greatest interest
2. I have mentors who provide strong support for my clinical interests	1. I have mentors who provide strong support for my research interests	2. I have mentors who provide strong support for my clinical interests	3. I am getting adequate support from the institution to pursue my research interests	4. I am getting adequate support to develop skills to pursue a research career	5. I am getting adequate support to spend the summer working in the area of my greatest interest
3. I am getting adequate support from the institution to pursue my research interests	1. I have mentors who provide strong support for my research interests	2. I have mentors who provide strong support for my clinical interests	3. I am getting adequate support from the institution to pursue my research interests	4. I am getting adequate support to develop skills to pursue a research career	5. I am getting adequate support to spend the summer working in the area of my greatest interest
4. I am getting adequate support to develop skills to pursue a research career	1. I have mentors who provide strong support for my research interests	2. I have mentors who provide strong support for my clinical interests	3. I am getting adequate support from the institution to pursue my research interests	4. I am getting adequate support to develop skills to pursue a research career	5. I am getting adequate support to spend the summer working in the area of my greatest interest
5. I am getting adequate support to spend the summer working in the area of my greatest interest	1. I have mentors who provide strong support for my research interests	2. I have mentors who provide strong support for my clinical interests	3. I am getting adequate support from the institution to pursue my research interests	4. I am getting adequate support to develop skills to pursue a research career	5. I am getting adequate support to spend the summer working in the area of my greatest interest
6. I am able to communicate my needs to my mentor	1. I have mentors who provide strong support for my research interests	2. I have mentors who provide strong support for my clinical interests	3. I am getting adequate support from the institution to pursue my research interests	4. I am getting adequate support to develop skills to pursue a research career	5. I am getting adequate support to spend the summer working in the area of my greatest interest
7. I understand the rules of authorship	1. I have mentors who provide strong support for my research interests	2. I have mentors who provide strong support for my clinical interests	3. I am getting adequate support from the institution to pursue my research interests	4. I am getting adequate support to develop skills to pursue a research career	5. I am getting adequate support to spend the summer working in the area of my greatest interest
8. I have discussed authorship with my mentor	1. I have mentors who provide strong support for my research interests	2. I have mentors who provide strong support for my clinical interests	3. I am getting adequate support from the institution to pursue my	4. I am getting adequate support to develop skills to pursue a research	5. I am getting adequate support to spend the summer working in the

Evaluation of a medical student research and career development program to increase diversity in academic medicine. Academic Medicine. 2 3 5 1 4 research interests career area of my greatest interest 5. I am 4. I am 3. I am 1. I have 2. I have getting adequate getting adequate getting adequate 9. I understand the various mentors who mentors who support to spend support from the support to ways to disseminate research provide strong provide strong the summer develop skills to institution to and scholarship working in the support for my support for my pursue my pursue a research research interests clinical interests area of my research interests career greatest interest Please comment on your expectations of your summer/yearlong (Pathways Explore/Pathways) experience -- 1) what you hope you will achieve and/or learn, and 2) what you expect will be your challenges.

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Supplemental Digital Appendix 2B: UCSF RESEARCH POST-PROGRAM SURVEY

Please keep in mind that completion of this post-program survey is mandatory for all RAPtr yearlong and summer/quarterly learners.

Thank you for your time and participation!
Thank you for your time and participation!
To help us track your (anonymous) responses from the pre-program evaluation to the post-program evaluation, please enter below the name of the street you grew up on, followed by the last four digits of your cell phone number.
Example: Potrero1234
Please tell us about your summer research experience. Did you attend regular study or lab team meetings? • Yes • No
Did you review research literature related to your topic?
 Yes No
Display This Question: If Did you review research literature related to your topic? Yes Is Selected Edit
Had you ever reviewed literature before?
• O Yes
• O _{No}
Did you collect data?
Yes
• O No
Display This Question: If Did you collect data? Yes Is Selected Edit
Had you ever collected data before?
Yes
• O No
Did you recruit patients for study participation?
Yes
No
Display This Question: If Did you recruit patients for study participation? Yes Is Selected Edit
Had you ever recruited patients before?

•	Supplemental digital content for Fernandez A, Chen V, Quan J, Martinez A, Flowers L, Aronson L. Evaluation of a medical student research and career development program to increase diversity in academic medicine. Academic Medicine. No
Did you	analyze data?
•	Yes
•	○ No
4	Display This Question: If Did you analyze data? Yes Is Selected Edit
Had you	ever analyzed data before?
•	O Yes
•	○ No
D:	weath with a statistician O
Dia you	work with a statistician?
•	Yes
•	○ No
4	Display This Question: If Did you work with a statistician? Yes Is Selected Edit
Had you	ever worked with a statistician before?
•	O Yes
•	○ No
0	
	write an abstract describing the findings?
•	O Yes
•	○ No
L	Display This Question: If Did you write an abstract describing the findings? Yes Is Selected Edit
Had you	ever written an abstract before?
•	O Yes
•	○ No
0	
Did you	draft a manuscript?
•	Ves Yes
•	○ No
L	Display This Question: If Did you draft a manuscript? Yes Is Selected Edit
Had you	ever drafted a manuscript before?
•	O Yes

Supplemental digital content for F Evaluation of a medical student r Academic Medicine.				cademic medicine.		
• O No						
Are you doing:						
A summer (Pathways Ex	plore) or quarter rese	arch project?				
A yearlong research proj	ect?					
Display This Questio If Are you doing: A sum		ore) or quarter res	earch project? Is Se	lected Edit		
If you are doing a summer (Pathway the coming school year?	s Explore) or quarte	er research projec	t, will you continue	e to work on your	project during	
• O Yes						
• O No						
Have you:						
nave you.		Yes		No		
Presented a poster at a professional meeting?		0		0		
Presented an oral presentation at a professional meeting?		0				
Been an author on a peer reviewed paper?		0				
Been first author on a peer reviewed paper?						
Written an op-ed or other non-peer reviewed article about your work?		0		0		
Please indicate your level of confider confider and 5=extremely confider	ence in your SKILLS it.	and ABILITIES in	the following area	s on a scale of 1-	5. 1=not at all	
	1	2	3	4	5	
1. To choose the career that best fits my interests	0	0	\circ	\circ	\bigcirc	
2. To choose the career that highlights my abilities	0	\circ	\bigcirc	\circ	\bigcirc	
3. To achieve the career I want	0	0	\circ		0	
4. To be successful in a research career	0	0		0	0	
5. To be successful in an academic career	0	\circ	\circ	\bigcirc	\odot	
6. To find good mentors	0	0	0		0	
7. To manage my relationship with my mentor	0	\circ	\circ	\bigcirc	\odot	
8. To effectively showcase myself professionally	0	0	\circ	\circ	\circ	
9. To manage professional challenges	0	0	0	0	0	
10. To effectively describe my research	0	\circ	\circ	\bigcirc	\circ	
11. To communicate professionally	0	0	0	0		

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Please indicate your level of agreement with the following statements on a scale of 1-5. 1=Strongly Disagree and 5=Strongly Agree.

Agree.					
	1	2	3	4	5
1. A research and/or academic career will complement my clinical work.	0				
2. A research and/or academic career will provide me with personal and professional satisfaction.	0	0	0	0	0
3. A research and/or academic career will best utilize my skills and training.	0	0	\circ	\circ	\bigcirc
4. Minority students are encouraged to pursue careers in research.	0			\bigcirc	\bigcirc
5. Non-minority students are encouraged to pursue careers in research.	0	0	0	0	0
6. I have a clear set of future goals for my career.	0	0	0	0	\bigcirc
7. I have discussed my career goals with my mentor(s).	0	\circ	\bigcirc	\circ	\circ
8. I plan to pursue an academic career.	0				
9. I plan to pursue research as part of my career.	0	0	0	0	0
10. I plan to continue building my network and skills to develop my career.	0	0	0	0	0
Please indicate your level of agreeme Agree	ent with the followi	ng statements on	a scale of 1-5. 1=9	Strongly Disagree	and 5=Strongly
	1	2	3	4	5
1. I have mentors who provide strong support for my research interests.	0	0		\circ	\circ
2. I have mentors who provide strong support for my clinical interests.	0			\bigcirc	\circ
3. I am getting adequate support from the institution to pursue my research interests.	0	0	0	0	0
4. I am getting adequate support to develop skills to pursue a research career.	0	0	0	0	0
5. I received adequate support to spend the summer working in the area of my greatest interest.	0	0	0	0	0
6. I am able to communicate my needs to my mentor.	0	0	\circ	0	\circ
7. I understand the rules of authorship.	0	0	0	0	0
8. I have discussed authorship with my mentor.	0		0	0	\circ
9. I understand the various ways to disseminate research and scholarship.	0	0	\odot	\circ	\circ

Please tell us a few things about you.

What year in school are you?

I completed 1st year in May 2014

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	Other (please explain):
Gender	identification:
•	Male Male
•	Female
(8)	
Racial/e	thnic identification (please choose all that apply):
rtaolai, o	
•	African-American
•	Asian/Pacific Islander
•	Latino
•	Native American
•	Non-Hispanic White
•	Mixed
_ •	Other (please explain):
Please o	comment on your summer experience, its strengths, and how it might have been improved.