
CREST PROGRAM EVALUATION AND NEXT STEPS

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The Clinical Research/Reproductive Scientist Training (CREST) Program: An Evolving Opportunity for Research Workforce Development and Career Satisfaction and Advancement

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INTRODUCTION AND OBJECTIVES

CREST began in 2005 as a partnership between the ASRM, the National Institute for Child Health and Human Development, and the Duke University Clinical Research Training Program to train REI subspecialists in the conduct of clinical research. The program evolved to include urologists and other Ob-Gyn subspecialists seeking to develop their clinical research skills. Program support transitioned to an R25 grant after intramural NICHD support was terminated. CREST has trained over 100 Scholars to date. Evaluation of its first 6 years in 2012 indicated a desire for more mentoring and career advancement opportunities for Scholars. The current project sought to evaluate the recent experience of CREST Scholars to assess programmatic progress and further opportunities for improvement.

METHODS

36 Scholars from the 2013-2018 cohorts invited online survey
interview

Overall program satisfaction and components
online clinical research modules
team science manuscript production
biostatistical support
mentoring support & career advancement

8 Stakeholders (Program faculty, support staff) benefits to scholars, to the field of reproductive medicine and to the stakeholders

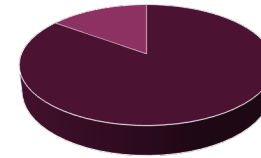
Scholar Characteristics		
	All (N=41)	Survey (N=22)
Sex/Gender		
%male	24.4	9.1
%female	75.6	77.3
NR		13.6
Race and Ethnicity		
Hispanic/Latino	2	1
Asian American	3	3
African American/Black	4	1
White	32	16
NR	.	3
Position		
University based/funded		18
Clinician Scientist		2
Community non-academic		2

CONCLUSIONS & IMPACT

The CREST Program continues to evolve as a premiere educational opportunity for physicians who practice reproductive medicine. CREST appears to influence physician scientists towards pursuing more research. Ongoing support through networking and career development are desired attributes of the program that can be further expanded.

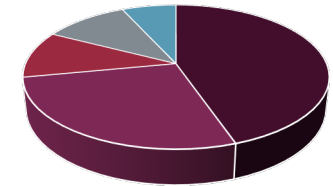
RESULTS

Overall Program Support

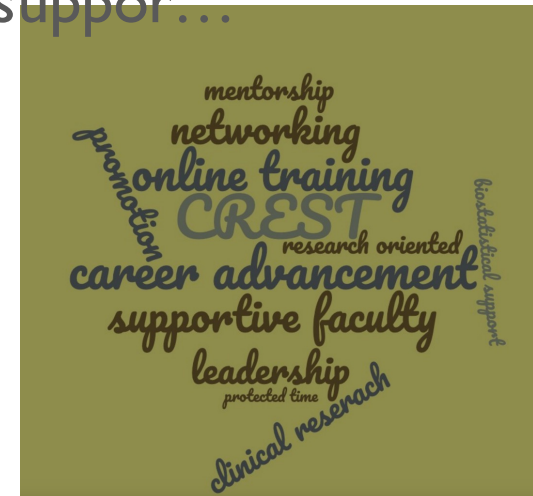


Very supported/support...

Biggest Benefits of CREST



Networking/relationships

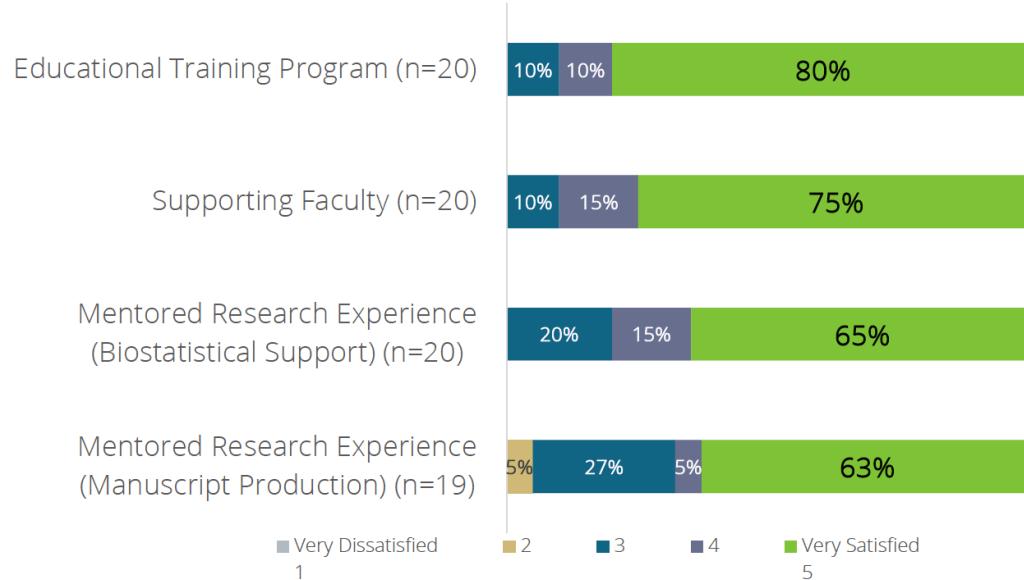


ACKNOWLEDGEMENTS

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CREST PROGRAM EVALUATION – Scholar Experiences continued (Pg.5)

63% or more of the survey respondents were **Very Satisfied** with the four components of the program.



In addition to the four components of the program, scholars who were interviewed also mentioned **networking** ($n=15$) and **building base knowledge as a new researcher** ($n=5$) when asked about their general experiences engaging in the CREST program.

Networking ($n=15$)

It just opened up doors to work with the RMN and some of the leaders in the field on research projects with them. The lasting impact has probably been that for me."

"For me, the CREST program is really important as far as finding like-minded individuals to collaborate with and to discuss research."

Building Base Research Knowledge ($n=5$)

I started the CREST program right after I finished fellowship, so during my first year as an attending physician. It was actually incremental in helping me, as I was building my clinical practice, really learn how to integrate research and being a research scientist at the same time that I was building a busy clinical practice."



CREST PROGRAM EVALUATION – Career shifts and Growth (Pg.7)

Leadership Roles

Fourteen scholars interviewed mentioned receiving **leadership roles** since participating in the CREST program. These roles include Directors of programs, Medical Directors, Site PIs, lead authors, lead researchers, Assistant Program Director, Patient Education Committee member, Fellowship Director, Division Chief, and Directors of residency programs.

7
interviewees

The CREST program helped me acquire this leadership role or promotion

8
interviewees

Scholars say the CREST program:

- Improved their CV
- Increased publications
- Provided access to the Society for Assisted Reproductive Technology (SART) data
- Increased networking and opportunities such as being active in ASRM
- Helped them stay focused on their research activities
- Increased their confidence in work and research
- And increased their confidence to teach fellows and be meaningful mentors

Promotions

Eleven scholars interviewed mentioned receiving **promotions** since participating in the CREST program. These promotions include Associate Professorship and/or entering tenure track, Site PIs, and Head of the research program for their division.

Staying in academia or research

Six scholars interviewed specifically mentioned **they are focusing more on research** in their careers than they initially thought as a direct result to participating in CREST and having access to the CREST network of professionals and data.



I think the main thing it did was to continue to keep me academically engaged in scholarly activity at times when the infrastructure of the job that I was working at would not have allowed me to do this. I think what it has done is it has given me the opportunity to continue to have a good academic standing and a high level of research output with recognition from the community like the REI [Reproductive endocrinology and infertility] community."



CREST PROGRAM EVALUATION – Challenges and Recommendations (Pg.11)

Challenges of participating in CREST

Five scholars interviewed experienced no challenges.

$n=5$

Collaborating with peers and mentors was difficult when people have limited time and different schedules.

$n=5$

Staying connected to the CREST network and continuing to move new work forward is a challenge. It is difficult to find time to continue collaborating and making the monthly meetings.

$n=4$

Finding a mentor or project for the mentored research project was arduous. It was difficult to know where to get the data, and who to reach out to if you had an idea or did not know where to start.

$n=4$

The data set they were working on for the mentored research project was difficult and posed challenges for analysis and to finishing the project in a timely manner.

Recommendations for the CREST program

Six scholars interviewed had no recommendations.

$n=8$

More structure and support starting the mentored research project.

CREST scholars are more junior so we want to do a good job for the PIs that we're trying to work with. At the same time I think it would be helpful if those PIs or the statisticians at CREST could do a little background work before they propose topics to CREST scholars because all of our time is precious. It's frustrating as a junior person to sign up for a project and then realize after you spend a lot of work on it that it's not actually going to ever fly."

"If I could change one thing about the program, I would have a faculty mentor assigned to each scholar, in terms of designing and implementing their research project."

Other recommendations include:

- Having more conferences like the ASRM ($n=5$)
- Providing protected time within scholars' institutions ($n=2$)
- Include more career specific mentorship ($n=1$)
- Provide more post program bio-statistical support ($n=1$)
- Increase the visibility of the program ($n=1$)

PROPOSALS FOR CHANGE

- With the dissolution of the Reproductive Medicine Network, the concept proposal (CSAP) approval process needs to change
- Proposal: CREST calls will be the forum for CSAP approval. Scholars will prepare a brief PowerPoint presentation for their CSAP which will be discussed and suggestions will be made for modification or the CSAP will be approved.

CREST MENTORSHIP: PROPOSALS FOR CHANGE

- We are now approaching 100 CREST Scholars trained to date!
- The past and current leadership team of the CREST R25 (Santoro, Sammel, Polotsky, Zhang, Eisenberg) is insufficient to provide stewardship
- RMN past PIs and current Consortium PIs have volunteered to co mentor CREST Scholars

REMAINING ISSUES: SUGGESTIONS?

- Protected time: a rare commodity, difficult to enforce through the distance learning program
 - Can we enforce/require some protected time or will this compromise our candidate pool?
- Some Scholars get lost in the shuffle
 - Can't get/stay connected with a mentor
 - Can't find a project that works
 - Can't get started



THANKS!