

Notes on “*Establishing an academic niche in cardiothoracic surgery: The earlier the better*” by Garrett Coyan MD MS, Leonid Emerel MD, and Christopher Sciortino MD, PhD

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This article from the November issue of the *Journal of Thoracic and Cardiovascular Surgery* by Drs. Coyan, Emerel and Sciortino highlights the essential strategies for all CT surgery trainees who aspire to have successful academic careers, which according to a recent survey, comprises 76% of us.

They observe that the research environment for CT surgeons has grown more strenuous over the years as clinical and administrative demands are increasing, the overall size of the work force is shrinking, and funding for research is becoming increasingly more difficult to secure.

Thus, they contend that “...academic cardiothoracic surgeon of the future must indeed look very different from those of our predecessors and mentors.”

The most important strategies?

- 1) Developing a research career as early as possible.

Of course, this is not an easy task. But the authors suggest that it is very feasible at most training programs available to us today. First, there needs to be an environment built around nurturing and mentoring budding clinician–scientists. This entails increased exposure to “...advanced (or even basic) statistical analysis techniques, scientific writing, grantsmanship, laboratory/personnel management, and scientific/clinical study design...” Over time, the accumulation of these skills leads to a natural progression among trainees into well-versed academicians who can take a project from start to finish.

- 2) Narrowing the focus of research

This is important for increasing early productivity, credibility and protection because “...it allows for early recognition of expertise in an area that may yield fruitful results...” for the field. Moreover, doing so leads to a “...more cohesive stream of research products, and...a clearer pathway for funding...” or protected time.

One intuitive way to narrow one’s focus is surrounding specific disease processes or operations one conducts. It may also be helpful to narrow the focus based on the type of research, such as big data/outcomes research, surgical physiology, or costs/benefit analysis.

- 3) Honestly assess oneself

The authors lastly contend that research is an individualized process that requires introspection and an honest assessment of one’s skill, knowledge, interest, time commitment, and support from peers.

Borrowing from the business community, they outline the following questions as a way to evaluate oneself:

- Where and how do you conduct research?
- What value/skill do you bring?
- What resources will you use?
- How do you sustain value/productivity?

Overall, this thought-provoking article by Drs. Coyan, Emerel and Sciortino is a must-read for all trainees. If you are interested in learning more, please find the [article here](#) at the *Journal of Thoracic and Cardiovascular Surgery*.