



HARVARD MEDICAL SCHOOL
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Status of CV Research Training in the Post-COCATS 4 Era

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Disclosure Information

Douglas E. Drachman, MD

Abbott Vascular, Inc: Advisory Board

Corindus Vascular Robotics: Advisory Board

St. Jude Medical: Consultant

Atrium Medical Corporation: Research Grant Support

Lutonix/BARD: Research Grant Support

Off label use of products will be discussed in this presentation as indicated. Many stents used in the peripheral arterial circulation are indicated for biliary or tracheal application.



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Objectives

- The current “research landscape” in CV fellowship
- Strategies to foster research in a training program
- Challenges, competing interests, and other requirements
- The trajectory: life and career beyond fellowship

A background question:

What percent of fellows in your program pursue a research career?

A. 0-25%

B. 25-50%

C. 50-75%

D 75-100%



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Overview:

Research Pathways in CV Fellowship

- Physician-Scientist
- Clinical Research
- Clinician-Educator (with Educational Research focus)

Key elements to promote research in fellowship

- Protected time
- Funding
- Mentorship

Question #2:

How much time is protected for research in your fellowship program?

- A. No protected time
- B. 1-4 months
- C. 4-8 months
- D. 8-12 months
- E. More than 12 months

Fostering research during fellowship:

Protected time

- *How much time is needed?*
- Depends on objectives
 - Physician-Scientist: may require 2+ years
 - Clinical Researcher: depends on the goal
 - Obtain basic experience, or
 - Establish path to independent funding
- Competing interests
 - COCATS 4 requirements
 - Clinical proficiency (e.g. Level II)



Fostering research during fellowship:

Protected time

- Competing interests during protected time
 - e.g. Clinical (level II)
 - Lesson from “Karate Kid” (Mr. Miyagi)



Ralph Macchio and Pat Morita



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Fostering research during fellowship:

Protected time

- Competing interests during protected time
 - e.g. Clinical (level II)
 - Lesson from “Karate Kid” (Mr. Miyagi)
- Persistent debate in our institution:
 - 100% dedication to research, vs.
 - Share time between research and clinical experience
 - Synergy vs. competitive/detracting (“dabbling”)?
- Is the environment supportive of research/protected time?
 - Call schedule (during research time?)
 - Burden of responsibility on clinical fellows

Fostering research during fellowship:

Funding

- Division funds (what source?)
- Grants
 - NIH T32/F32
 - Other institutional awards
 - ACCF/Merck
 - AHA Fellow-to-Faculty, K-08
- Is there a “penalty” financially during research years?
- Salary supplement from NIH payscale to PGY-6 (e.g.)?
- How many years are supported?



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Fostering research during fellowship:

Mentorship

- Selecting a research mentor
 - Fellow has inherent interest or prior experience
 - Catalog
 - Matchmaking (serial referral)
 - Co-fellow/peer referral
 - Value of prior successful mentoring relationships
- Separate consideration: Assigned mentor (beginning of fellowship)?
 - Objectivity
 - Guidance

Fostering research during fellowship:

Mentorship

- Critical role of **mentor** at time of transition to faculty
 - Provide bridge funding
 - “Plug-and-play” → space, equipment, collaborators
 - “Defender” role
- What percent of fellows matriculate to home institution?
- Challenge to “start up” at new institution
- Need for mentorship, protection at new institution (“adoption”)



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Additional Issues

- Era of diminishing research funds
- Competitive job market for academic researchers
- Lifestyle considerations (stage of life, family, transitions)
- Can physician-scientist successfully pursue subspecialty clinical training?
 - Tension: maintain research momentum while acquiring subspecialty clinical proficiency
 - One to two year “pause” on research productivity → impact on ability to get funding
 - Challenging start up at new institution: protection for research, clinical involvement (the three A’s)



Conclusions

- Different programs may place different emphasis on research pathways
- Strategies to foster research: protected time, funding, mentorship
- Challenges include: competing interests, requirements, other responsibilities → balance
- Goal/trajectory: life and career beyond fellowship