



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

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April 2016*



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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%

# 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

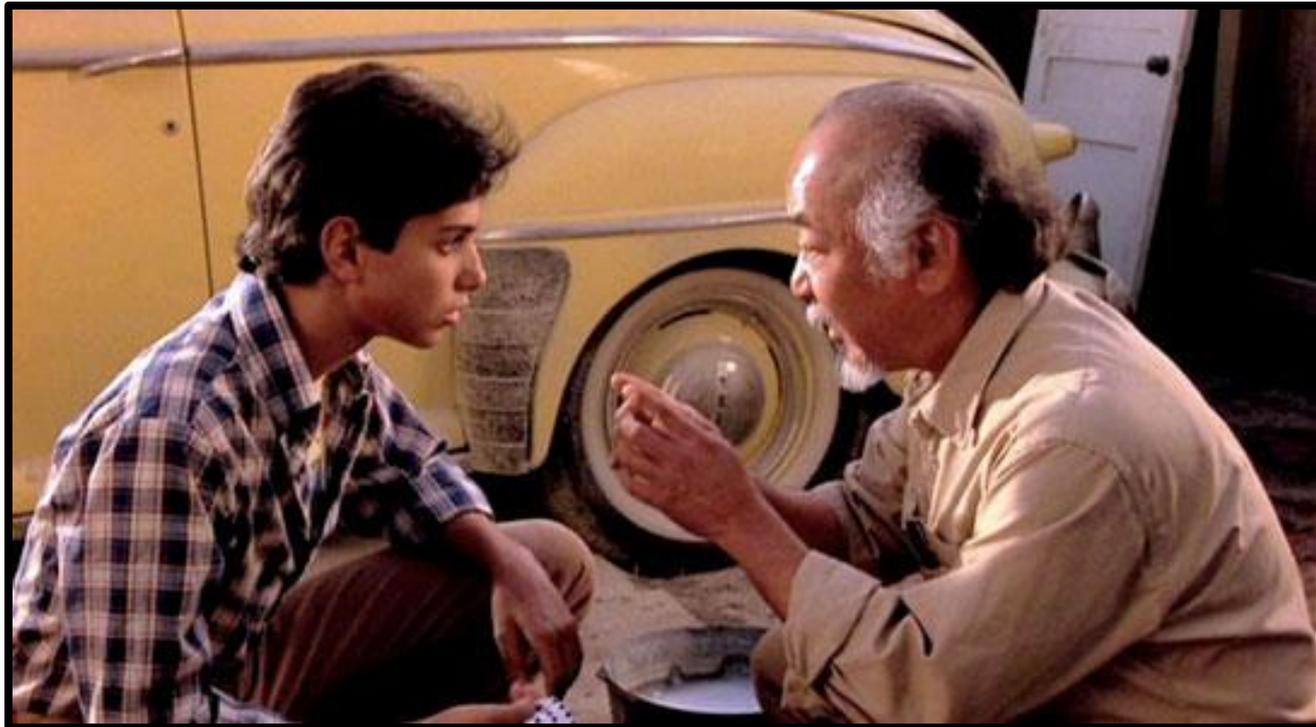
# Fostering research during fellowship:

## *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

# 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 pay scale to PGY-6 (e.g.)?
- How many years are supported?

# 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”)

# 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)



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# 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