

Finding your Research Path: What, Where, How

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Disclosures



None

My Path



- Oberlin College, Ohio
 - Neuroscience/Women's Studies Major
 - Development of research questions
 - Each "answer" leads to more questions
 - Emphasis on PROCESS
- Mount Sinai Medical School
- Mount Sinai Hospital General Surgery
- Rockefeller University Research Fellowship
- Mount Sinai Hospital Vascular Surgery Fellowship
- University of Pittsburgh Medical Center my first (and only) academic/clinical job

My Path



Mount Sinai Hospital – General Surgery

- Rockefeller University Research Fellowship
- 2 years
- PROCESS
 - There is no shortcut
 - But there is no substitute for vision
 - Was not clinically active at the time
- Didn't publish a d*#% thing ☺
- Big problem....this is what I wanted to do



2000, 2001, 2002



9/11





2000, 2001, 2002



9/11



Life and Death Happen

Models in research often don't work

My Path



- University of Pittsburgh Medical Center
 - Protected research time
 - Busy clinical practice
 - The right environment
 - Mentorship (Dr. Tzeng)
 - Access to resources
 - Dedication from leadership to academic pursuits in surgery (Drs. Billiar and Makaroun)

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Deep Thoughts



- There is tremendous value AND PRECEDENT for being a person who walks the line between research and clinical care
- Surgical innovation has ALWAYS involved research
- Our ability to innovate, create, and accumulate data creates a huge advantage to pursue meaningful research that changes lives

The conflict...



- Medicine advances through the process of research
- Funding is at an all time low (getting better)
- Competition with people who do not have clinical responsibilities
- Clinical productivity appears to be of greater value
- Reimbursements for clinical activity are diminishing, thus pressures are even more intense

Persistence in the Face of Failure Pays Off



- Wylie Scholar Award (Vascular Cures 2008)
- Competitive Medical Research Fund
- Clinical and Translational Scientist Institute
- National Institutes of Health K08
- SVS/ACS Mentored Clinical Scientist Award
- R01
- Opportunity
 - To hire help
 - to mentor students and residents
 - to travel and present
 - to collaborate within and across disciplines
 - To contribute to the academic pursuit of the institution, which promotes recruitment of patients and of talent
 - To potentially contribute to medical treatment of vascular disease

What a junior faculty member can do



- Negotiate dedicated research time and help— ENVIRONMENT MATTERS
- Seek collaborators (mentors, other specialties, PhDs, residents, medical students, college students)
- Build a network
- Identify grants for junior faculty
- "Persistence is key"

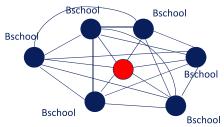


- BIG concept in business
- Not emphasized in medicine
- Benefits:
 - Exposure to more diverse resources
 - Greater visibility
 - Career development
 - Promotions and money
- Risks:
 - Requires commitment



A Look at the Extremes

Hometown



Actors are loosely connected; hub of

Employer

Actors are more closely and intensely tied to one another "strong ties"

"weak ties"

Open Network

acquaintances

Closed Network



Bschool

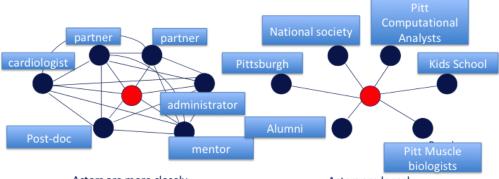
Book club

Running

club



A Look at the Extremes



Actors are more closely and intensely tied to one another "strong ties"

Closed Network

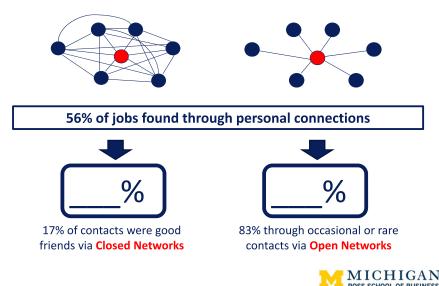
Actors are loosely connected; hub of acquaintances "weak ties"

Open Network



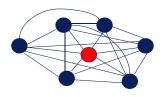


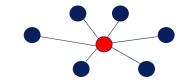
Networks & Accessing Info on Job Leads





Who Do You Want To Be?

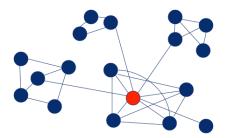




Rainmaker Network

Combines the benefits of Open and Closed networks.

About the structure, Not size.





Smaller Grants for Junior Faculty



- Generally good for those who are within five years of completing training
- Usually around 25-50K/year for one to two years
- Institution (Pitt as an example)
 - Competitive Medical Research Fund
 - Clinical and Translational Science Institute (CTSI)
 - supported by the National Institutes of Health (NIH) Clinical and Translational Science Award (CTSA) program, grant UL1 TR001857
 - CTSA program is led by the NIH's National Center for Advancing Translational Sciences (NCATS)
 - University of Pittsburgh Physicians Foundation Award
- Foundation grants
 - VascularCures (Wylie Award 50K/year for three years!!!)
 - SVS Foundation (in collaboration with the ACS will supplement a K award!!!)
 - Jobst Foundation
 - SUS Junior Faculty Research Award

Bigger Awards for Junior Faculty



- NIH K series
 - Mentored grant (need one-two mentors and an advisor group)
 - Mostly salary support with little for the project
 - 75% protected time for research (some leniency in the later years)
 - MUST PUBLISH DURING THIS TIME!!!
- VA Career Development Award
 - Requires s
- American Heart Association Career Development Award

K to R Transition



Become an Early Career Reviewer

- Can be a temporary member of a study section
- · Learn the process and what reviewers want

Make sure your profile is current on era commons

- ESI status is CRITICAL
 - Early stage investigator will have a higher payline in some institutes (as much as 10 points)
- Time off for family leave can be deducted from your total time as an ESI

Speak to program officers on the phone

- Email first with a nice introduction
- · Send a specific aims page
- They want to help you

GO TO THE MEETINGS OFFERED BY NIHU

- K to R meeting (for K08 and K23)
- Networking
- Meet program officers

Establish independence

- Transition from first to senior author
- Move your lab
- Identify a "new" research question
- · Meet new collaborators

Thank you!!





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