

# Mentoring in the Clinical Research Environment of 2022

Sally L. Hodder MD  
Professor of Medicine  
Assoc. Vice President, Clinical and Translational Research  
Director, West Virginia Clinical and Translational Science Institute  
West Virginia University Health Sciences Center

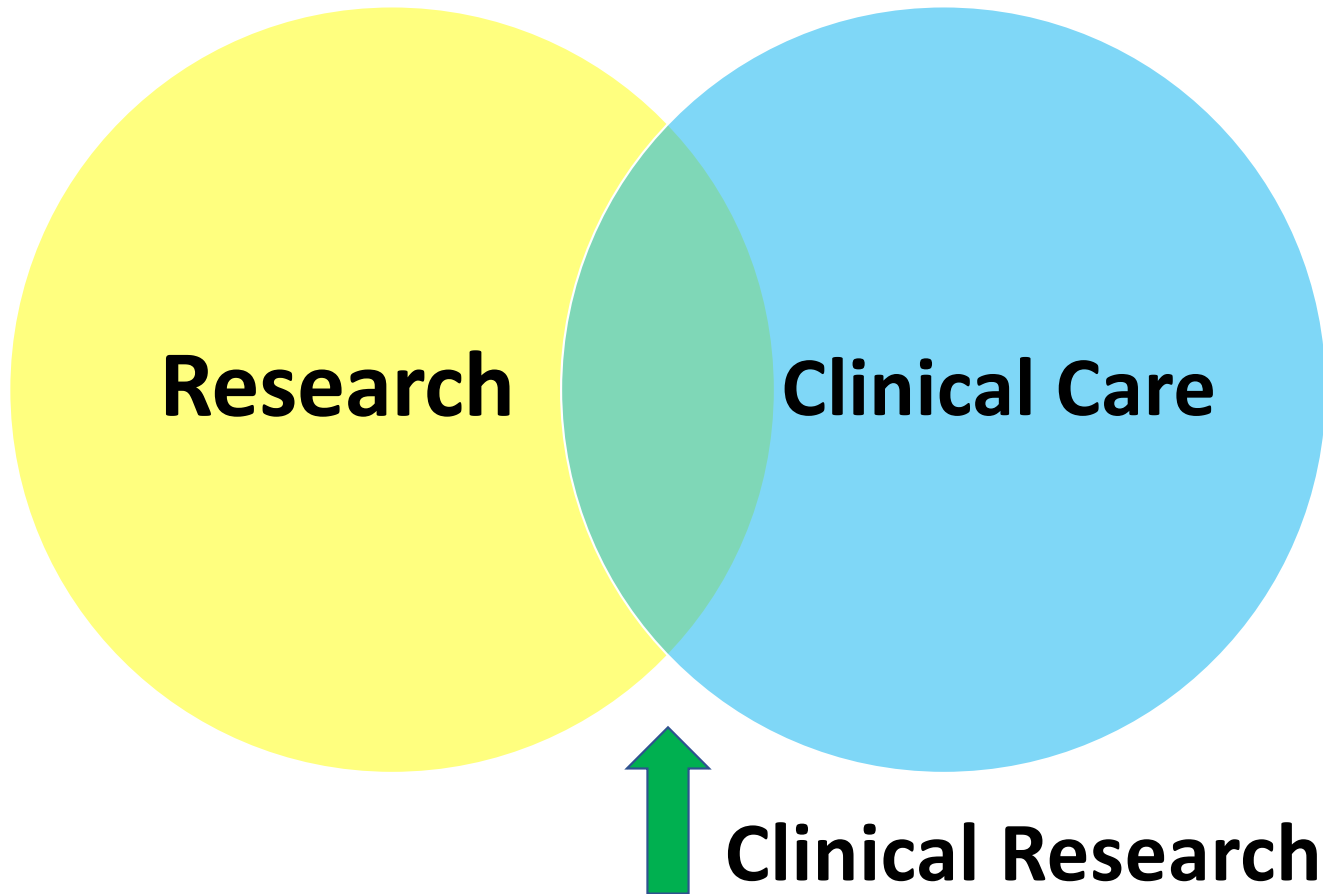


*Image: Telemachus and Mentor*

# Acknowledgements

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- Dr. Rob Milner – Professor of Clinical Neurology and Sr. Assoc Dean for Faculty Affairs. Keck School of Medicine of USC

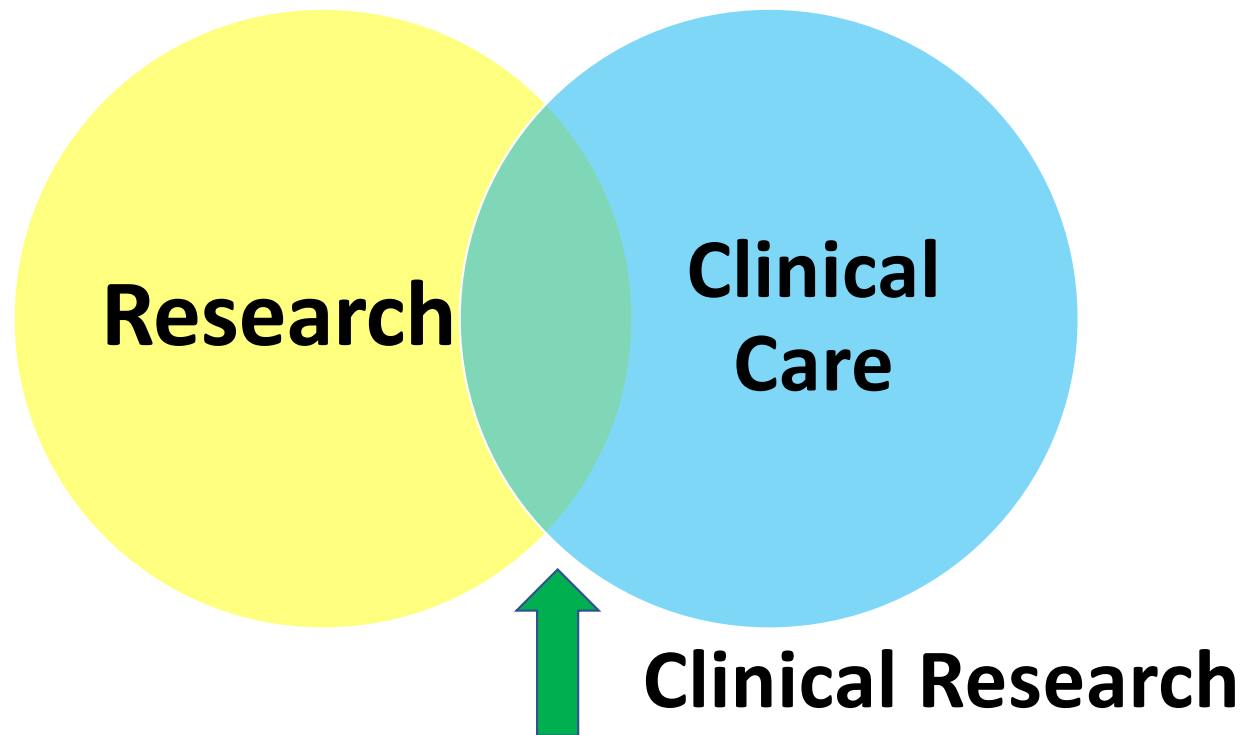
# Clinical Research At the Nexus



# Complexity of the Clinical Investigator's World

- The Research World Culture and the Clinical Care World Culture
- Clinical Research
  - Subject productivity requirements of each world (e.g., grant funding AND RVUs)
  - Patient needs always come first
  - Clinical documentation requirements have increased
  - Regulatory requirements have greatly increased
    - As an example – trial results posting on [Clinicaltrials.gov](https://clinicaltrials.gov)
  - Socialization norms of these two worlds may differ

## Clinical Research At the Nexus



**At this intersection is where important questions will be asked and answers found**

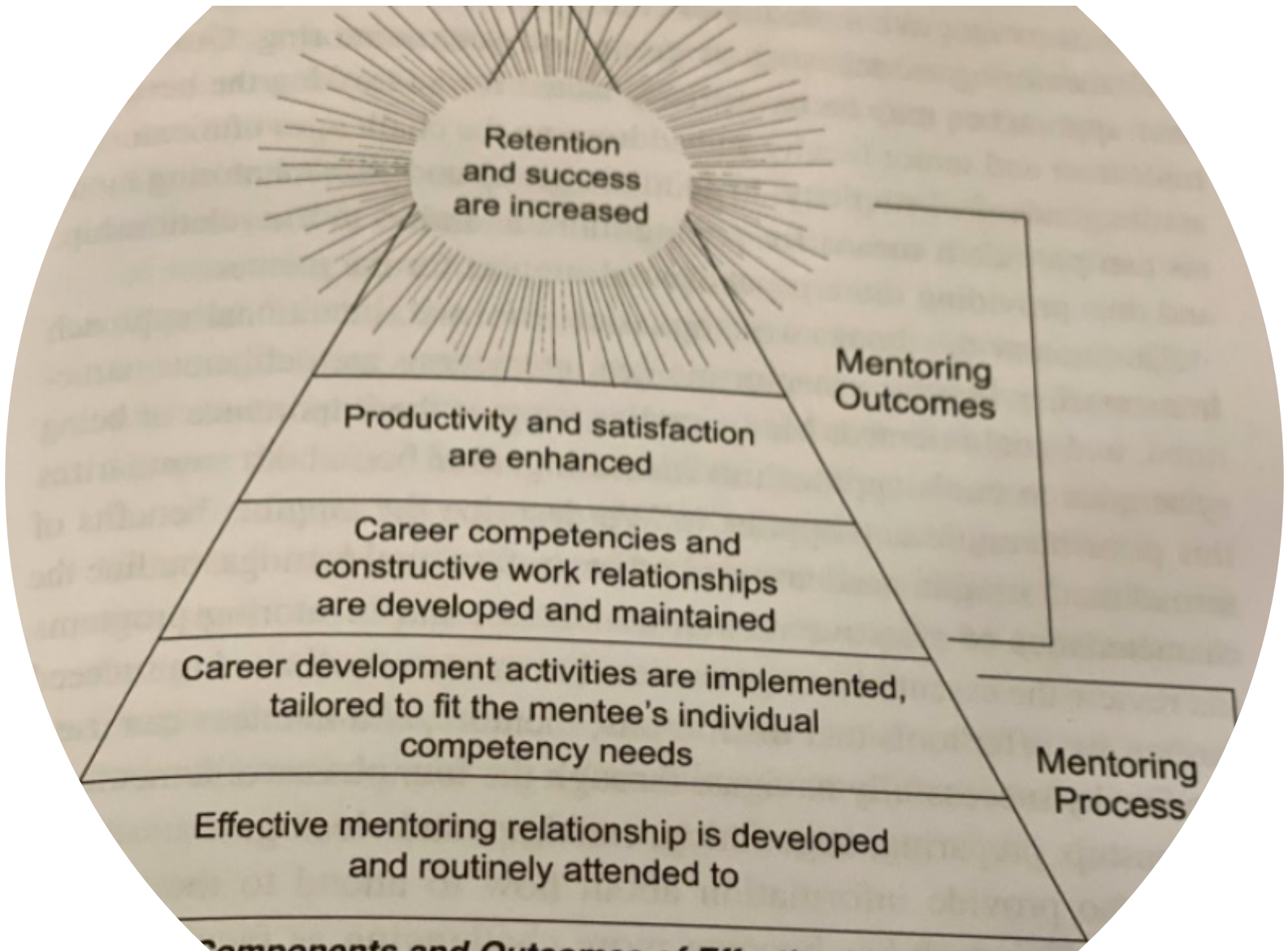
# The Clinician Scientist – An Endangered Species

- Physician Scientists now constitute just 1.75% of the overall physician workforce (down from 4.75% in the 1980s). Factors include:
  - Curricular
  - Institutional
  - Financial
  - Cultural
- Yet – biomedical science has never been so promising
- “Today, encounters with clinicians who do research are increasingly uncommon.”
- “The building-the-village approach that was once the defining hallmark of the medical profession is being supplanted by a survival-of-the-silo mentality.”

Utz PJ, et al. Science Translational Medicine. February 2022

# Suggested Strategies to Save the Endangered Clinician-Scientist

- Building a leak-free clinician-scientist network
  - Address financial barriers through debt forgiveness
  - But there is more





# Productivity, An Essential Element of Career Advancement for Clinical Investigators

## Predictors<sup>1</sup>

- Drive
- Socialization
- Deep content knowledge
- Uninterrupted work time
- Well-developed external network
- Formal research training

“in terms of scholarly productivity...there is no substitute for a sustained relationship grounded in research projects sponsored by one or more experts and supported by continuous resources...” (Byrne and Keefe 2002).

1. Bland, Weber-Main, Lund, Finstad, 2005

# Satisfaction, An Essential Element for Faculty Retention

## Predictors<sup>1-4</sup>

- Department collegiality
- Work climate
- Recognition (e.g., salary, promotion & tenure)
- Autonomy

# Mentoring



Psychosocial Support  
"Expressive Function"



Career Advancing  
"Technical/  
Instrumental" function

# Mentor Roles

## **Career Advancing Functions**

- Advise on overall professional goals
- Advise on development of academic scholarship
- Serve as content expert
- Facilitate professional networking within and outside the institution
- Sponsor for specific strategic opportunities
- Advise on skill development such as grant writing, manuscript writing, or teaching skills
- Advise on promotion policies or processes within an institution

# Mentor Roles

## **Psychosocial Functions**

- Advocate
- Role model
- Coach
- Champion

## High quality mentoring should include BOTH psychosocial and career advancing functions.



Women and underrepresented minority faculty are less likely to get high quality mentoring that provides both these functions.

Mott, 2002, Pololi & Knight, 2005, and Ibarra, 1993)

The traditional, hierarchical, dyadic **mentoring relationships can be enriched by an additional network of individuals** providing very specific guidance in areas of professional development that may not be addressed within a single dyadic relationship.

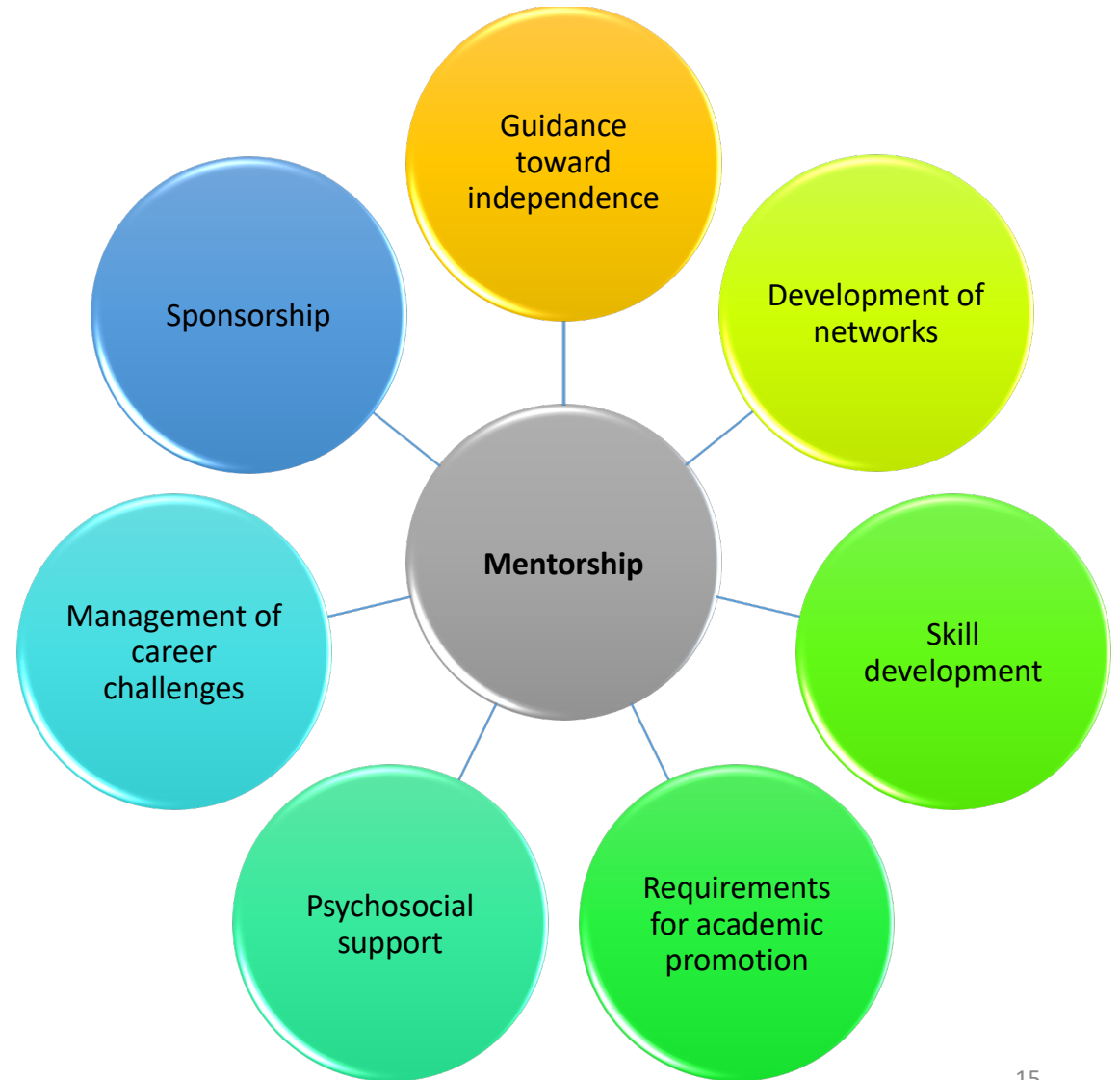
**Mentoring networks are particularly relevant to faculty groups traditionally underrepresented in the professoriate.**

Zellers, Howard, & Barcic 2008; Kram & Isabella 1985. Pololi & Knight 2005; Pololi 2012; Bickel 2014; Chesler 2002; De Janasz 2003; Van Emmerik 2004

# Mentoring Targets

Time Management

Clinical Research Knowledge



# What Kind of Mentoring Do You Need?

- What kind of function do you need more of right now?
- What are your short-term and long-term goals?
- Are you facing any major career challenges?
- What is your mentoring environment?
- What is your preferred communication style?
- What are your gaps/skillsets you need to develop?

*Adapted from Susan Rosenthal, PhD  
Columbia University Medical Center  
Department of Pediatrics*



# Tips for Mentees

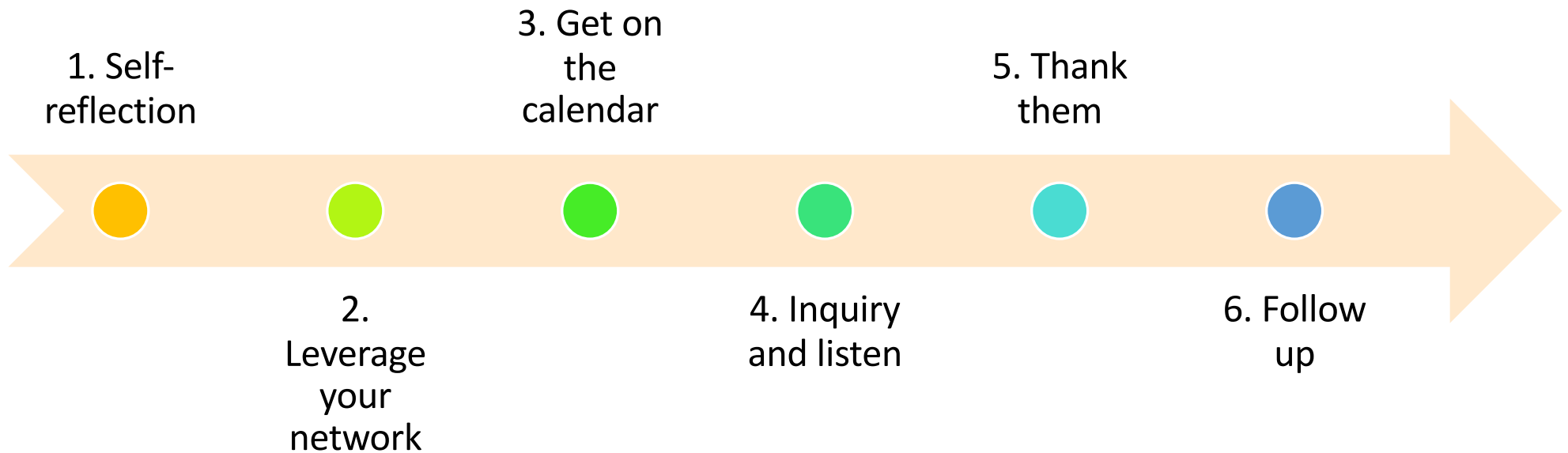
## Maintaining Successful Mentorship Relationships



- Mentoring is an **active collaboration** that requires commitment and engagement from mentees.
- Develop your career goals and timeline for your professional progress.
- **Identify specific guidance needs and interests**, think broadly about sources of advice.
- Think critically about your “network” – technical and psychosocial support to be included.
- Know the key academic domains of importance for success at your institution.
- Perspectives and guidance for teaching, student supervisory efficacy.
- Advising and preparation for promotion processes and timelines.

# Tips for Mentees

## Steps for Initiating a Mentoring Relationship



Adapted from Stacy Blake-Beard, PhD

# Conclusions

- Clinician-scientists are an endangered species
- To be successful, they must effectively compete in two distinct worlds
- Mentoring clinician-scientists need to consider providing guidance to navigate those distinct worlds
  - A team of individuals is essential to successfully mentor clinician-scientist
- Mentee active contribution and targeted requests for help are essential for an optimal mentoring relationship