

# Opportunities and Challenges of Transitioning to Research Independence for PhD-trained K Awardees: Perspectives from Current R01 Grantees and Former K99/R00, Early K99/R00 and K22 Awardees



Shaneda W Andersen



Justin Lathia



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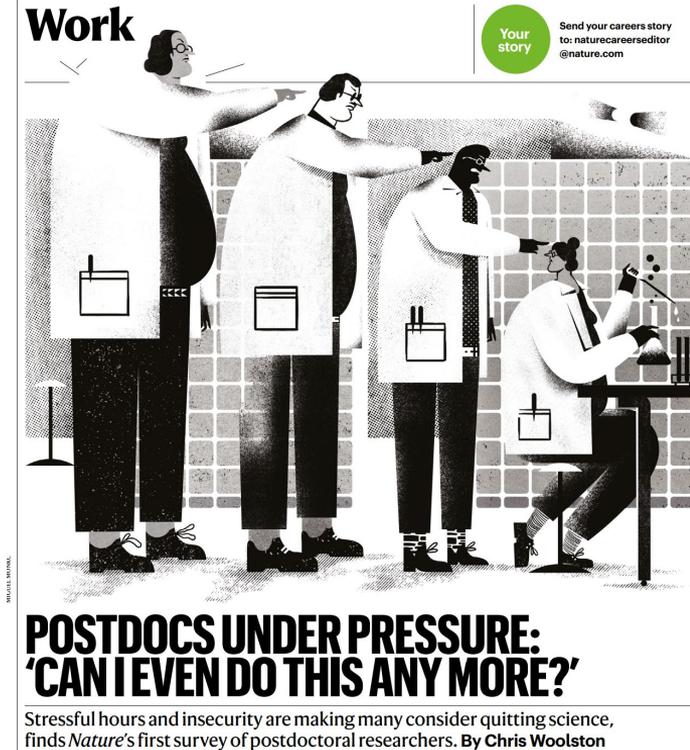


Sigrid V. Carlsson

# The Postdoc Crisis

## Challenges Faced by Postdoctoral Scholars

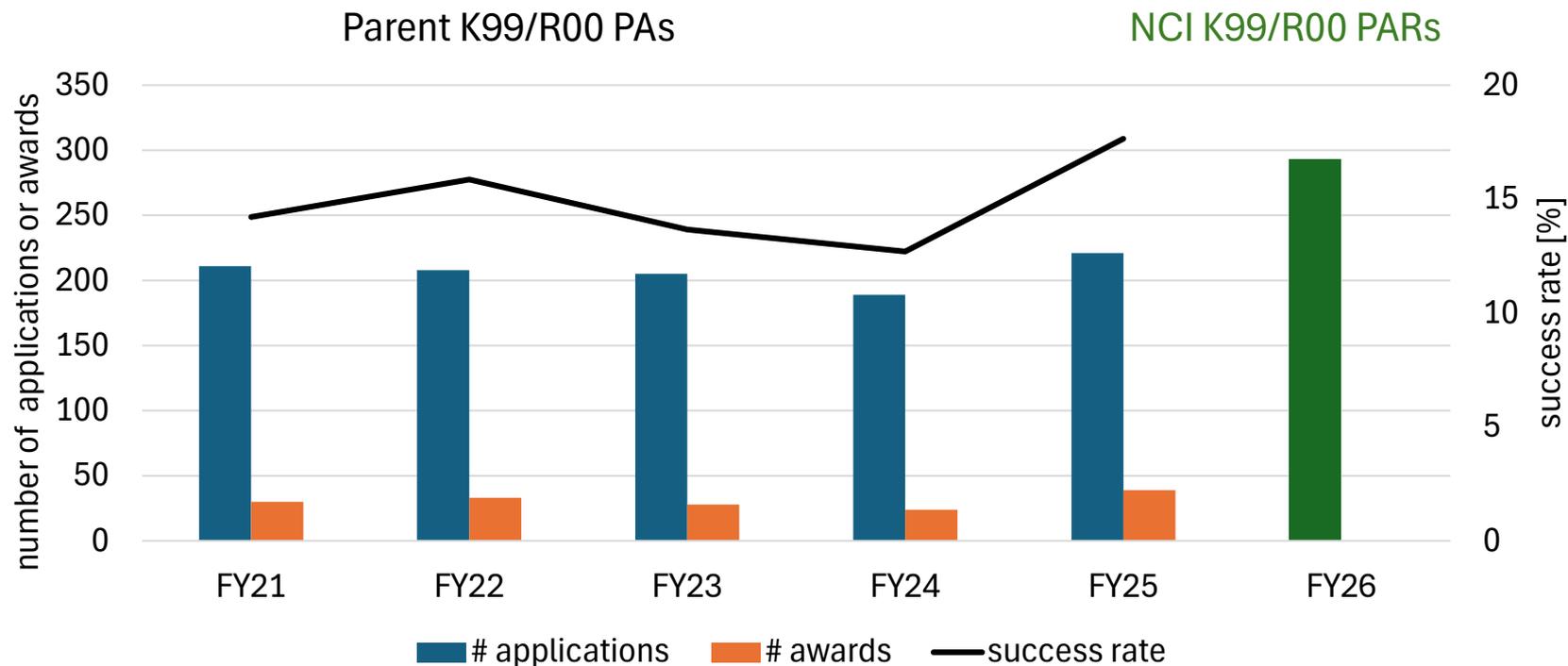
- **Vanishing Career Paths:** Only about 10% of postdocs secure tenure-track positions, with many stuck in temporary, "permadoc" roles for years.
- **Financial & Resource Instability:** Over 60% of postdocs report job instability, and 58% cite difficulty navigating funding, particularly with recent threats to federal research budgets.
- **Mental Health Crisis:** High rates of anxiety and depression are reported, driven by pressure to publish, harassment, and intense competition.
- **Exodus to Industry:** Due to these pressures, many are transitioning to industry, government, or non-profit roles, which often offer better pay.



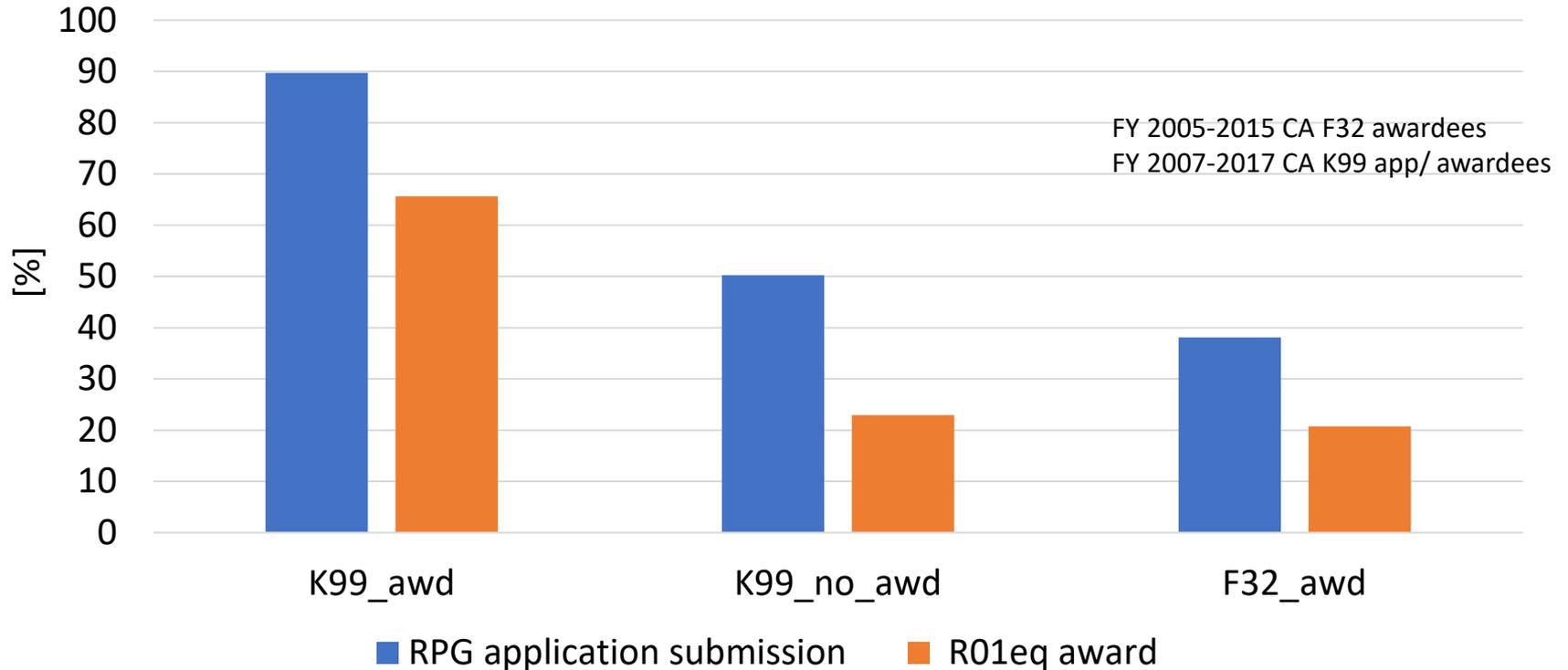
# The NCI Pathway to Independence Award (K99/R00)

- **Objective:** To help highly talented postdoctoral researchers complete needed, mentored career development, transition in a timely manner to independent, tenure-track or equivalent faculty positions and establish a successful independent research program.
- **Eligibility:**
  - U.S. citizens and non-U.S. citizens (@domestic institutions)
  - Less than **6 years** of postdoctoral research training
  - mentored, non-independent appointment (postdoc or equivalent)
  - MDs: Time spent in clinical training is not counted towards K99/R00 eligibility
  - Cannot have held an independent faculty or tenure-track position
- **Research:** all areas of cancer research

# Number of applications, awards, and success rates for FY2021-2026



# The K99/R00 mechanism facilitates the successful transition of postdoctoral researchers to research independence



END



# Transitioning to Research Independence: Perspectives from a Former K99/R00 & Current R01 Awardee

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Shaneda Warren Andersen, PhD

Associate Professor

Population Health Sciences, University of Wisconsin-Madison

NCI Transition Career Development Workshop

# Biography: Shaneda Warren Andersen

## Associate Professor of Population Health Sciences

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My current research program uses molecular epidemiologic methods to investigate the relations between social factors, genetic variation, and the molecular attributes of tumors in association with cancer risk and survivorship.

I am particularly interested in reducing the burden of cancer by focusing on the populations with the worse outcomes: African Americans, individuals of low socioeconomic status, diagnosis of aggressive/advance cancers

# Postdoctoral Research Fellow, Vanderbilt University Medical Center

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SCHOOL OF MEDICINE  
VANDERBILT UNIVERSITY

- **Molecular and Genetic Epidemiology of Cancer (MAGEC) Training Program**
  - NCI R25 Training program
  - Attracted to:
    - Opportunity to work with successful, thoughtful mentors
    - Data & collaboration opportunities
    - Formal training in topics that interested me: genetic epidemiology, molecular epidemiology, cancer epidemiology, big data, cohort analysis

# Postdoctoral Research Fellow, Vanderbilt University Medical Center



- **K99/R00 funded by NIH/NCI**
  - Association between vitamin D and colorectal cancer risk in diverse populations
  - This award supported my transition to research independence

# The K99 Award Supported:

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- **Protected time as a postdoctoral fellow**
  - Effort towards research project specific to my interests
- **Experience with grants management**
- **Negotiation of Independent Position**
  - Discussed the types of items negotiable in the process of obtaining a first independent position
    - Salary & Unrestricted funds
    - Less known: access to staff, especially administrative or statistical support, travel funds, protected time, etc

# The R00 Award Supported:

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- **Protected time as an Assistant Professor to get my research underway**
- **(more) Experience with grants management**
- **Important Funding for my research:**
  - Data collection, Analyses, Travel to meetings, and Staff →
    - Leading to publications & results which supported my R01 application

# Subset of my Roles as related to NIH/NCI Support

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**Associate Professor of Population Health Sciences**

## Subset of Roles Associated with NIH/NCI

**PI:** My current research program uses molecular epidemiologic methods to investigate the relations between race, genetic variation, and molecular attributes with cancer risk and survivorship.



**Thomas Lawler,**  
MS, PhD  
Cancer  
Researcher



**Zoe Walts**  
PhD  
Candidate



**Rida A. Khatri,**  
MPH  
PhD Student



**Toyosi  
Ogunmuyiwa,**  
MPH  
PhD Student



Scan to learn  
more about  
the SWA Lab!

# Subset of my Roles as related to NIH/NCI Support



Tenured Associate Professor of Population Health Sciences

**Co-Leader of Cancer Prevention & Control Program**

## Aim 1

### Prevention & Biomarkers

Identify novel targets, biomarkers, agents, and strategies for cancer prevention and risk reduction.

## Aim 2

### Cancer Care Delivery

Conduct health services research, emphasizing provider and system factors, with the goal of enhancing the quality of cancer care.

## Aim 3

### Psychosocial and Supportive Care Research

Evaluate biopsychosocial factors and interventions that influence the patient and family experience of cancer and supportive and palliative care needs.

Prevention

Early  
Detection

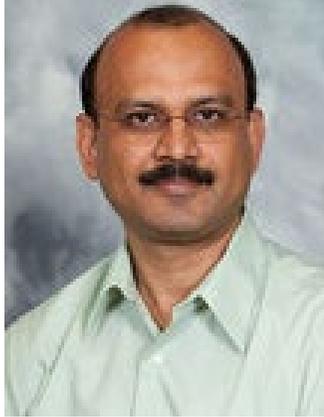
Diagnosis

Treatment

Survivorship

End-of-Life

# UWCCC Cancer Prevention & Control: Leadership



**Nihal Ahmad, PhD**

Professor and  
Vice Chair for Research,  
Department of Dermatology  
*Basic Science Applications*



**Lisa Barroilhet, MD, MS**

Associate Professor,  
Department of Obstetrics and  
Gynecology  
*Translational and Clinical Science  
Applications*



**Shaneda Warren Andersen, MS,  
PhD**

Associate Professor,  
Department of Population Health Sciences  
*Population Science Applications*

## How CPC co-leaders work together:

- Leading retreats & collaborative working group meetings
- Connecting members with shared resources
- Strengthening ties with other programs
- Awarding pilot grants
- Providing experienced mentorship
- Guiding program goals and strategies

# Subset of my Roles as related to NIH/NCI Support

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Tenured Associate Professor of Population Health Sciences

- **PI** of epidemiologic program of cancer risk and survivorship
- **Co-Investigator** within the CEECR Coordinating Center

**Faculty Director** of a Shared Resource within University of Wisconsin  
Carbone Cancer Center

- REACH: Real-world  
Evidence to Advance  
Community Health



# Other NIH/NCI Career Support: Grant Review

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- **Early Career Reviewer Program: Cancer Biomarkers Study Section**
  - <https://public.csr.nih.gov/ForReviewers/BecomeAReviewer/ECR>
  - Improve your grant writing through reviewing grants
  - Hear from experts in your field
  
- **More recently:**
  - **NIH/NCI: Cancer and Hematologic Disorders Study Section Member**
  - **NIH/NCI: P50 Specialized Programs of Research Excellence (SPORE) Study Section (x2)**
  - **NIH/NCI: Special Emphasis Panel – Clinical and Translational Cancer Research**
  - **Colorectal Cancer Alliance (x2)**

# Piece of Perspective:

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- **Say yes to opportunities especially writing or working with collaborators who are doing interesting work, and say not yet/not right now to opportunities that are not clearly aligned with your career goals**
- **Patience and persistence is key**
- **Be efficient and consistent → Your early career work can be the foundation for your career**



# Opportunities and Challenges of Transitioning to Research Independence for PhD-trained KAwardees

**Dr. Sigrid Carlsson** | NCI Career Development Workshop March 9, 2026

Head of Division

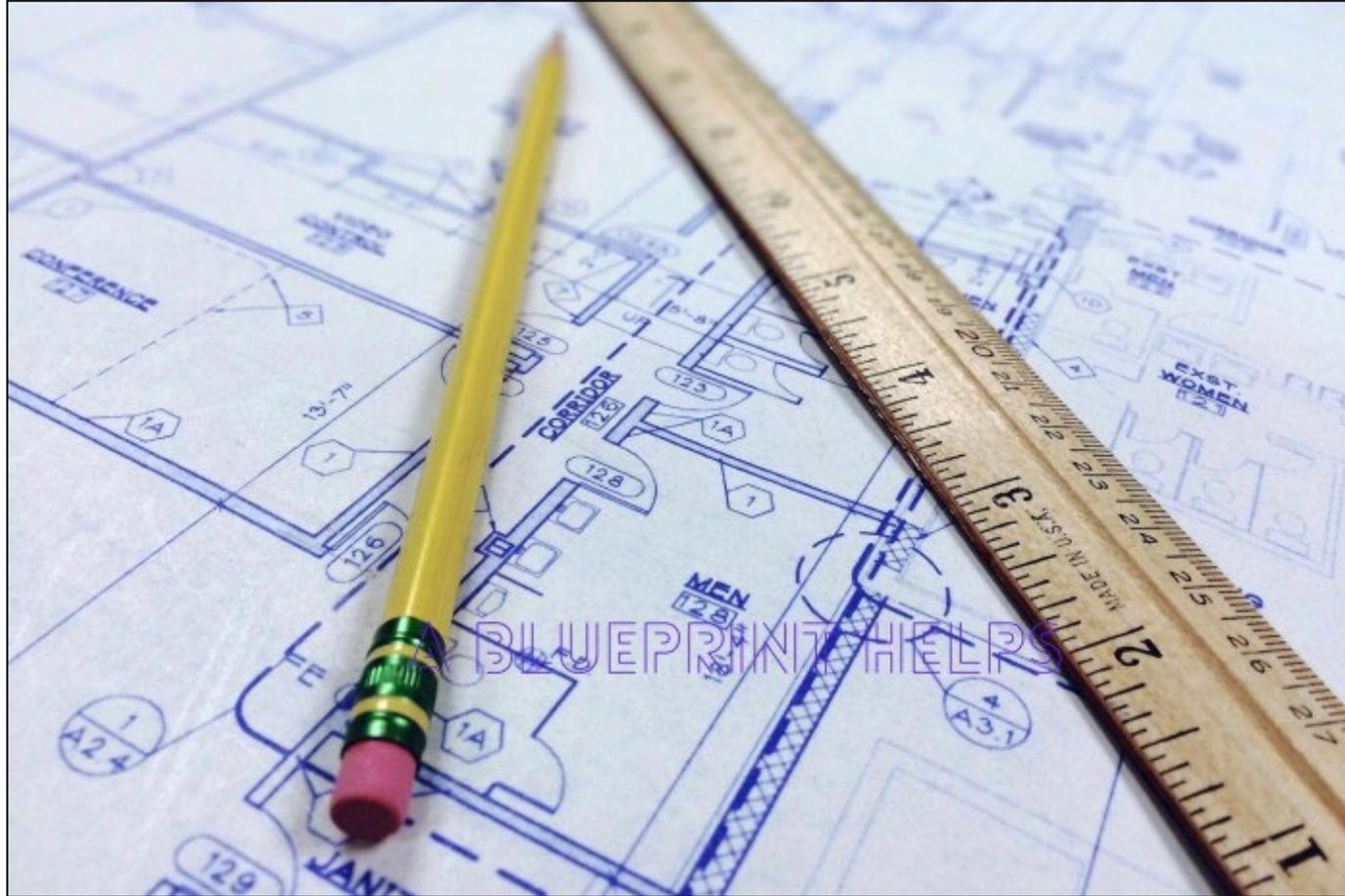
Clinical Epidemiology of Early Cancer Detection

German Cancer Research Center (DKFZ), Heidelberg, Germany

Former K22 Awardee

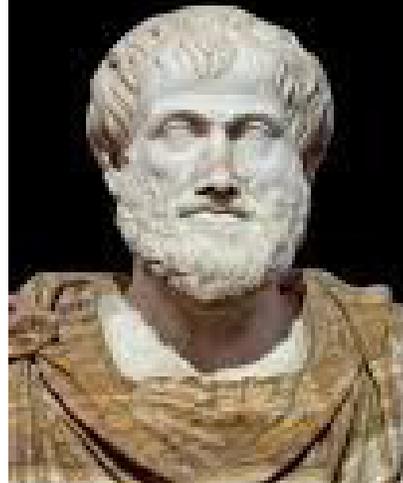
RESEARCH FOR A LIFE WITHOUT CANCER

# Successful researchers learn the blueprint of grant writing early by studying, training and peer feedback



**Success is built through habits of persistence and consistency. Be resilient and patient!**

"We are what we repeatedly do.  
Excellence, then, is not an act,  
but a habit."



*Aristotle*

# Scientific success depends on handling criticism and letting go of ego



**KEEP  
CALM  
AND**

**DON'T TAKE IT  
PERSONALLY**

**Or take it personally...and learn from it!  
The most effective response to reviewers is:**

**CAPITULATE!**



# GOLDENBUZZER



# Career development awards accelerate independence through time, money and resources





**DKFZ Clinical Epidemiology of Early Cancer Detection  
Division Head | July 2025**

# You must be a self-starter!

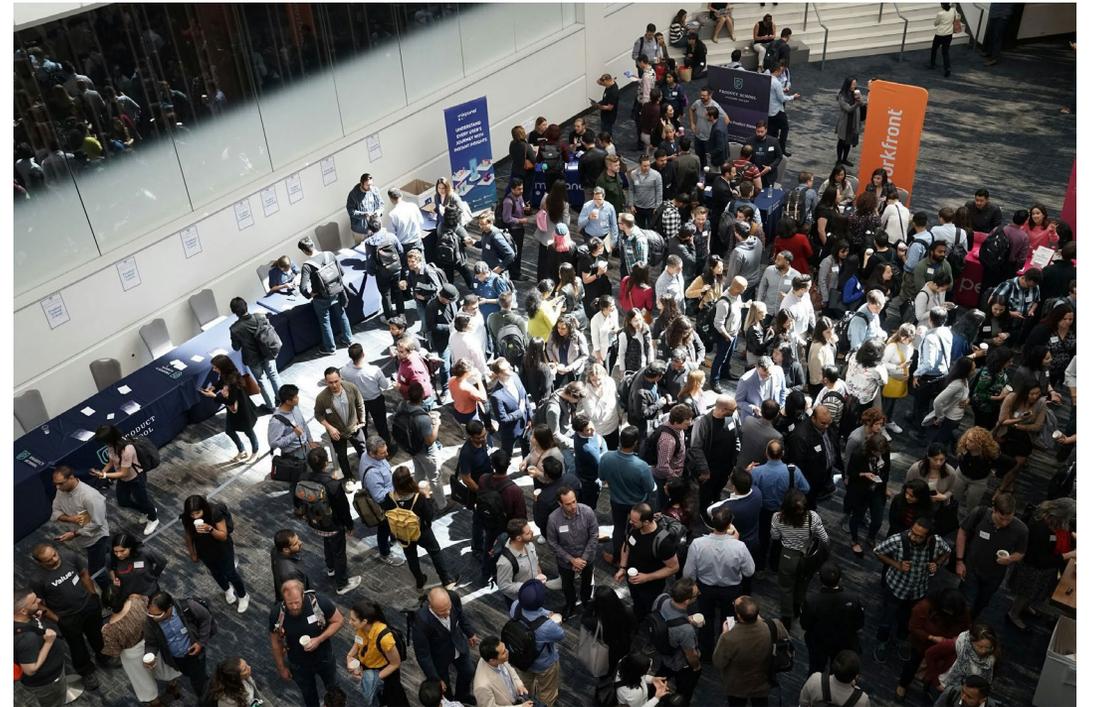


# Diverse teams are more successful



Careers advance  
through networks  
and collaborators,  
not isolation

# Mentorship multiplies career opportunities, especially mentors who open doors for you



# Say YES!



Luck is what  
happens when  
preparation  
meets opportunity.

SENECA

And learn to  
say NO  
effectively!

# Service roles increase visibility and leadership

- Serve on committees
- Review manuscripts
- Editorial Board
- Grant review sections
- Leadership skill development



# Academic advancement requires managing your time and projects effectively



- Inbox Zero
- Block time in your Outlook calendar
- Turn off email notifications
- Turn off your phone (or at least turn it upside down)
- Install a social media controlling app

# Doing rigorous, ethical, patient-centered science leads to long-term success



BMJ 2014;348:g2296 doi: 10.1136/bmj.g2296 (Published 28 March 2014) Page 1 of 10

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**RESEARCH**

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**Influence of blood prostate specific antigen levels at age 60 on benefits and harms of prostate cancer screening: population based cohort study**

 OPEN ACCESS

Sigrid Carlsson *research fellow*<sup>1,2</sup>, Melissa Assel *assistant research biostatistician*<sup>3</sup>, Daniel Sjoberg *research biostatistician*<sup>3</sup>, David Ulmert *research fellow*<sup>2</sup>, Jonas Hugosson *attending urologist, professor*<sup>1</sup>, Hans Lilja *attending clinical chemist, professor*<sup>2,4,5,6,7</sup>, Andrew Vickers *attending biostatistician*<sup>3</sup>

# Credibility is built through data, publications and recognition

- Publications
- Citation metrics
- Invited talks



# Learn to present your science well and how to make Powerful PowerPoints!



<https://www.presentyourscience.com/resources>

Melissa Marshall, Presentation Coach  
TED talk "Talk nerdy to me"



Thank you and  
best wishes  
in your academic careers

Contact:

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RESEARCH FOR A LIFE  
WITHOUT CANCER

**dkfz.** GERMAN  
CANCER RESEARCH CENTER  
IN THE HELMHOLTZ ASSOCIATION