



U.S. Department  
of Veterans Affairs



# Physiology at the Crossroads: how to go up from here

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- **Is Physiology a Dying Discipline?** [G. G. Pinter](#) and [Vera Pinter](#) 1993  
<https://doi.org/10.1152/physiologyonline.1993.8.2.94>
- **Dissecting the Meanings of “Physiology” to Assess the Vitality of the Discipline** [Maël Lemoine](#) and [Thomas Pradeu](#) 2018 <https://doi.org/10.1152/physiol.00015.2018>
- **Physiology in Perspective: Physiology is Alive and Well** [Gary C. Sieck](#) 2018  
<https://doi.org/10.1152/physiol.00022.2018>

**“The lady doth protest too much, methinks”.- Shakespeare**

**The best defense is a good offense.- George Washington**

# 1. Support the younger generation (more)

"Unfortunately, (our) concerns are frequently dismissed as 'the price of doing business in academia'...if (we can) overcome the trials and tribulations of (the) training period, the reward at the end (is) a career with academic freedom to pursue your own interest(s)."

# Solutions

## Low wages, high debt, and inconsistent benefits

Low NIH minimums, no consistent increase with respect to inflation, High academic debts of terminal degree, No/inconsistent benefits

## Poor work-life balance

High work demand, blurred academic work hours, increased competition, faltering mental health, unfavorable to parents,

## Dismal job prospects

No permanent positions in academia other than faculty positions

## Unfavorable to diversity

Lack of mentors for minorities, inaccessible to underrepresented minorities, microaggressions, social isolation, lack of options and proper guidance for temporary visa holders

## Proactively adjust wages and benefits

Raise NIH minimum, keep up with inflation, expand NIH loan repayment program, increase childcare allowance, improved benefits to attract scholars

## Improve postdoc mentorship

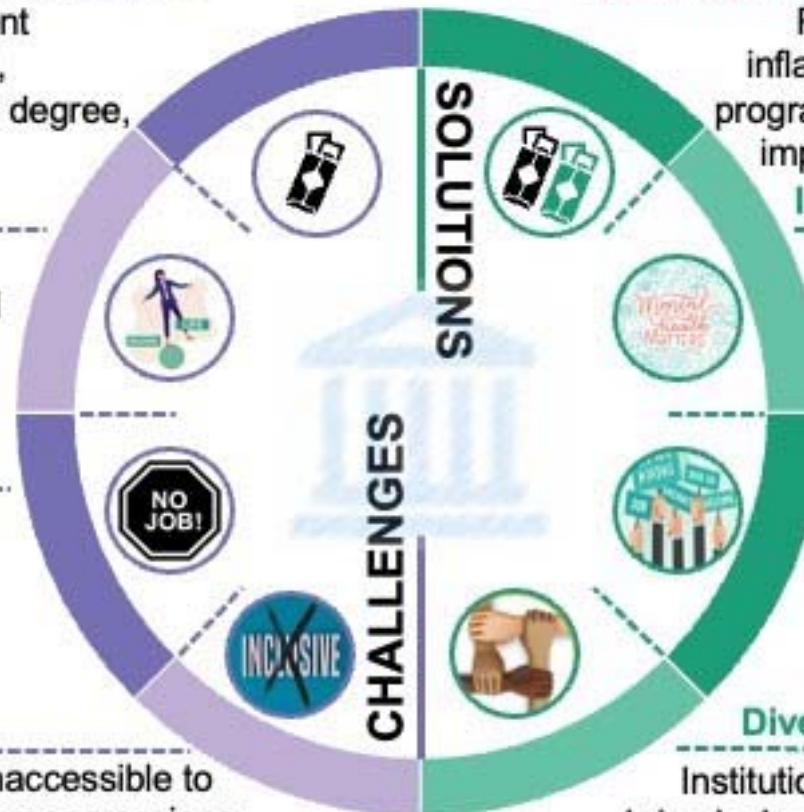
Mentorship training to mentors, increase awareness of mental health, check trainee burnouts, institutional proactivity to improve training

## Modify academic job options

Open permanent scientist level positions in academia for interested postdocs and graduates

## Diversity and inclusion initiatives

Institutional and faculty level initiatives to bring inclusivity along with diversity, creating mentors for minorities, visa information and transition support to temporary visa holders



Realizing the Price of Academic Freedom Upendra Chalise, D Ryan King  
PMID: 37889255 DOI: 10.1152/ajpheart.00480.2023

## **2. Broaden definition of physiology to be more inclusive**

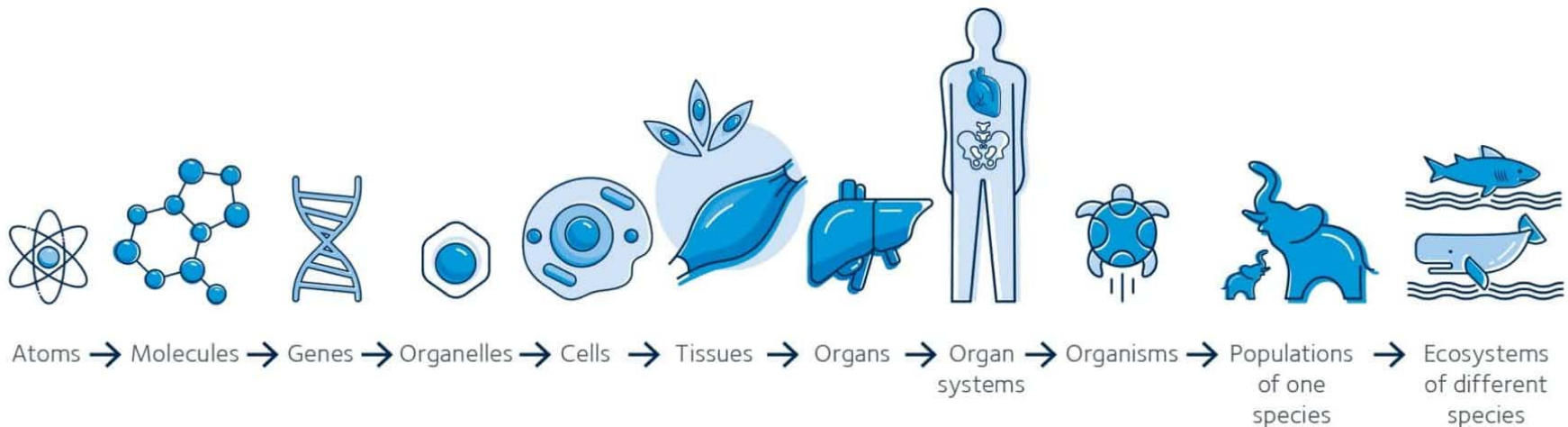
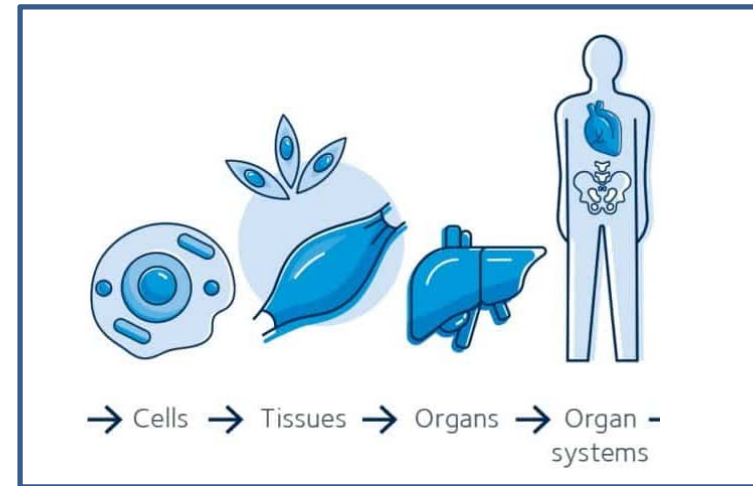
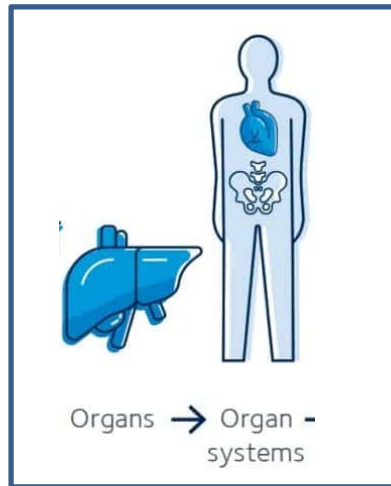
“...claims made about the vitality and utility of physiology depend heavily on the definition of “physiology” adopted.”

Physiology's Impact

Maël Lemoine and Thomas Pradeu

Physiology 33: 236 –245, 2018

# Physiology is the science of life



<https://www.physoc.org/explore-physiology/what-is-physiology/>

### 3. Sponsor women & minorities (for real)

1. Amplify their voices
2. Anticipate the issues- do not set up
3. Avoid moving the bar of expectations
4. Aspire to do better



## 4. Promote importance & value of creating a legacy

- A leader's lasting value is measured by succession & how well their people did after they were gone.
- Be both strategic & intentional.





# How to Create A Legacy That Matters

1. Cultivate right mindset for legacy & succession.
2. Decide ahead of time what sacrifices you are willing to make.
3. Take initiative, start the process.
4. Know your goals with each leader on your team.
5. Prepare to pass the baton well.



# I.D.E.A. exercise

1. Instruct- share vision & align priorities
2. Demonstrate- model the way
3. Experience- learn, develop, & grow as a team
4. Assess- continual quality improvement

takes ~18-24 months

# The TEAM

## Meharry

Amos Sakwe, Pius Nde, Letha Woods, LaMonica Stewart, Lisa Johnson, Nicolle Patterson, Angelle Fizer, Brandon Harris, Lauren Dahm, Leah Alexander, Michelle Drumgold

Jing Lin, Jessica Ibarra, Rushit Kanakia, Tejas Patel, Jessica Lambert, Christian Corbitt, Jamie Berger, Paul Gravel, Vinh Nguyen, Tariq Dayah, Patricia Shamhart, Steven Kim, Arvin Bansal, Roger Dikdan, Annie Joy, Rachel Finn, Harrison Davis, Crystal Samaniego, Jesse Garcia, Michelle Okoronkwo, Daniel Levin, Reanna Witherspoon, Sarah Rozinek, Sarah McCurdy, Joaquin Cigarroa IV, Adam Mankowski, Ying Ann Chiao, Rogelio Zamilpa, Qiuxia Dai, Charlene Loeffler, Wesley Lowell, Nicolle Patterson, Trevi Ramirez, Jianhua Zhang, James Heaberlin, Ganesh Halade, Elizabeth Lopez, Sharday Young, Fayez Mourad, Ahmed Allaf, Kayla Thomas, Dustin Bratton, Fouad Zouein, Ryan Clark, Ashley DeCoux, Lisandra De Castro Brás, Yuan Tian, Raffaele Altara, Andriy Yabluchanskiy, Courtney Cates, Majdouline Asher, Hiroe Toba, Beau Henry, Abdullah Kaplan, Kim Martin, Jared White, Signe Holm Nielsen, Haihui Pan, Presley Cannon, Kayla Thomas, Mira Jung, Cesar Meschiari, Rugmani Padmanabhan Iyer, Osasere Kelvin Ero, Kristi DeLeon-Pennell, Elizabeth Flynn, Alan Mouton, Osvaldo J. Rivera Gonzalez, Chevonne Robinson, Courtney Harrison, Fritz Valerio, Amanda R. Kaminski, E Taylor Moore, Mavis Tenkorang, John Daseke II, Shelby Konfrst, Sharon Morais, Jocelyn Rodriguez-Paar, Upendra Chalise, Mediha Becirovic-Agic

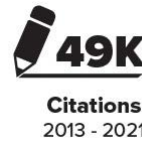
## Funding:

VA 5I01BX000505

NIH R25GM151274

Merry L. Lindsey, PhD

Editor in Chief, *AJP-Heart and Circulatory Physiology*



### Calls for Papers

- Cardiovascular Complications
- Molecular and Cellular Biology
- Heart Failure and Cardiomyopathy
- Sleep, Circadian Rhythms, and Health
- Hypertension
- SABV

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### Content

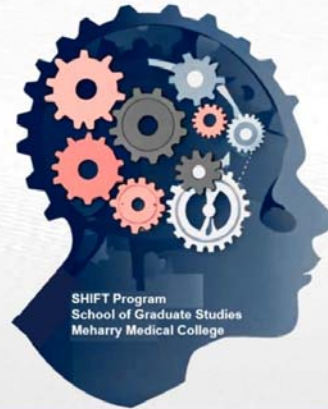
AJP-Heart and Circ Podcast  
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 Night Covers  
 Impact factor 4.8  
 Cited half-life 12.7 years

**Talk to me about guest editing a call for papers**

\*source: Dimensions

# SHIFT PROGRAM

## SHORT COURSE IN TRANSFERABLE SKILLS TRAINING



### ABOUT THE PROGRAM

The SHIFT Program is a one-year program designed to assist PhD Graduate Students in Biomedical Sciences with developing transferable skills needed to launch and sustain a successful biomedical research career.

### PROGRAM GOALS

1. Identify career options that complement student strengths identified by self-assessments.
2. Increase student awareness and development of transferable skills needed to transition into their 1st job with confidence.
3. Provide a practicum experience for participants to hone skill development.
4. Develop and implement an individual development plan to prepare for a career that aligns with their skills and interests.

### DURATION

- One year program beginning April 2024
- You must be able to commit to monthly meetings, the in-person short course offered June 10-14 in Washington, DC, and annual follow-up surveys

### BENEFITS

- Increased Confidence and Self Awareness
- Research Business Skills
- Career Marketing and Promotion
- Sustained Peer Network
- Better Understanding of Skills Needed for Success

### APPLICATION

**OPENS: NOVEMBER 15, 2023**

**DEADLINE: JANUARY 31, 2024**

#### REQUIRED DOCUMENTS:

- Application
- Personal Statement
- CV/Resume
- PhD Director Recommendation

**SCAN THE QR CODE BELOW TO APPLY**



**CONTACT BRANDON HARRIS AT  
[BRHARRIS@MMC.EDU](mailto:BRHARRIS@MMC.EDU) FOR MORE  
INFORMATION**

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# PhD in Biomedical Sciences



## HIGHLIGHTS

- Started in 1972, the MMC PhD Program has awarded PhDs to >300 trainees.
- Competitive Stipend (\$40k annual)- among the highest in the U.S.
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- Internships available
- Excellent Professional Development provided
- Strong Alumni Network
- Dual Degrees Offered
  - MD/PhD
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## EMPHASIS AREAS:

- Biochemistry
- Microbiology
- Cancer Biology
- Molecular Biology
- Cardiovascular
- Neuroscience
- Genetics
- Pharmacology
- Immunology
- Physiology



For more information about our program, please email [npatterson@mmc.edu](mailto:npatterson@mmc.edu)

## APPLICATION

**DEADLINE: DECEMBER 15, 2023**

### REQUIRED DOCUMENTS:

- Curriculum Vitae
- Statements of Purpose and Research Experience
- Official Transcripts
- Two Letters of Recommendation

**TO APPLY CLICK [HERE](#) OR FOLLOW THE QR CODE BELOW**



# Conclusions

Physiology is only as dead as we make it.

It is choice - not chance - that determines our destiny.

