

# Racial and Cultural Bias in the Management of Chronic Pain

Why Our Field Should be on the Frontline for Solutions

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#### Eric Grigsby, MD, MBA

Founder and CEO of Neurovations

A Patient Care and Innovation Company



## Lawrence Poree MD, MPH, PhD

Professor and Director of Neuromodulation Service, UCSF







#### Patient Care & Innovation Since 1992

1989-90 1991-94 1997-98 2005 2010-11 2013-14 2016 2018-19

#### Inaugural Napa Pain Conference

Dr Grigsby starts one of the first university pain management clinics in the US at UC Davis.

#### Napa Pain Institute

Dr. Grigsby is certified in first cohort of pain management by the Board of Anesthesiology.

#### Clinical Research

Leveraging Mayo Clinic training, Dr. Grigsby becomes Principal Investigator in early stage trials with active involvement in clinical and translational patient care

#### Neurovations!

Research and education combine to become Neurovations-a patient care and innovation company.

#### N3 Laboratories

Neuromodulation: The Science debuts focused on science and innovation of neuromodulation. Napa Pain Institute earns conference accrediting rights for continued medical education which at multiple conferences and events. N3 Laboratories is established.

#### Spine and Pain Center of Kaua'i

The Kauai Clinic is established in part to handle an underserved clientele. Kauai Pain Conference debuts to an international audience.

#### Redwood Pain Institute

Redwood Pain Institute opens in partnership with St. Joseph's Health.

#### Neurovations Center for Hope

The Neurovations Center for Hope begins research and development phase with 5 patients.





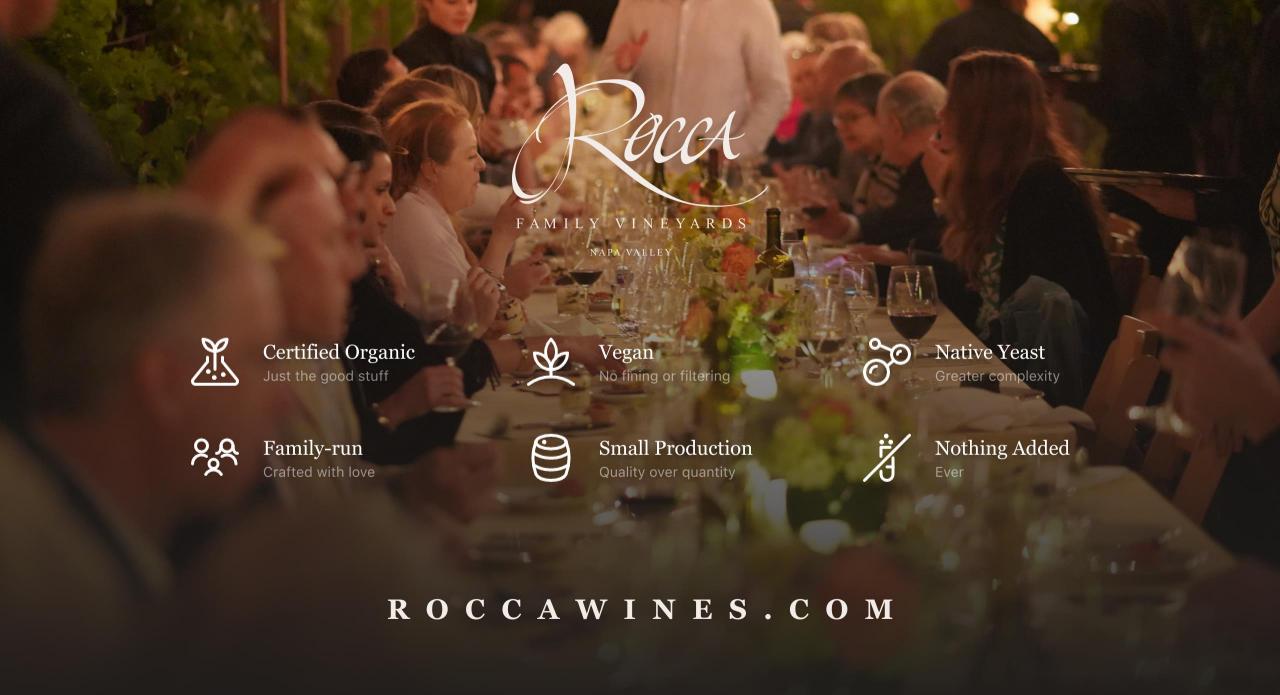
Clinics which do clinical research



An innovation company which owns medical

services





## The 27<sup>th</sup> Napa Pain Conference Online

August 15, 2020

Join us for Complimentary Registration and CME:

NapaPainConference.com

#### **Speakers:**

Larry F. Abbott, PhD (Columbia)

Carol A. Warfield, MD (Harvard)

Jianguo Cheng, MD, PhD (Case Western)

Penney Cowan (ACPA)

Roger B. Fillingim, PhD (U. Florida)

Yun Guan, MD, PhD (Johns Hopkins)

Sten Lindahl, MD, PhD (Nobel Committee)

Carmen R. Green, MD (U. Michigan)

David Provenzano, MD (Pain Diagnostics)

Richard W. Rosenquist, MD (Cleveland Clinic)





# Racial and Cultural Bias in the Management of Chronic Pain

Why Our Field Should be on the Frontline for Solutions

Copyright@Neurovations2020 June, 2020 The Field of Pain Management Should Rightfully Lead the Conversation Toward Equity and Reducing Racial and Cultural Bias in Medicine



#### In the Early Days of Pain Management

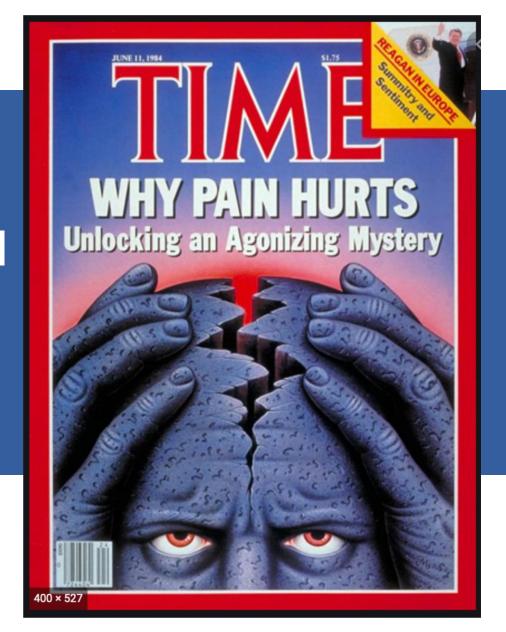
#### In the 1980's:

- Minimal tools for evaluation
- No long acting medications
- No fluoro or diagnostic ultrasound
- No pump, no useful stimulation
- No one owned surgery centers or labs
- Little was known about the pathophysiology of chronic pain.
- Pain was not a financially rewarding field



June, 1984

Pain as a Largely Behavioral Phenomenon





#### The Early Days of Pain Management

Most of our early patients – of all races and cultures- were profoundly underserved. They had been judged and marginalized. Word on the street was they were "lazy, crazy, or addicted."



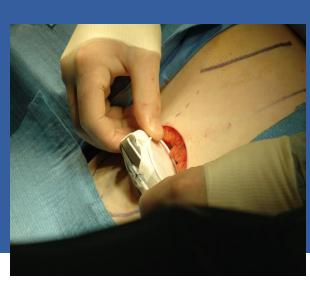
### Tremendous Progress in the First Decade and a Half of the Specialty

We began to understand that chronic pain has predictable and often treatable neuro-psycho-social characteristics.



#### Interventional Pain Management









#### Biases of all kinds still exist

The recent opioid contraction, and the subsequent return of our patients feeling the suffering of discrimination and judgement has opened up an old and painful scab.

Treating the underserved, eliminating bias and judgment is a fundamental pillar of our specialty since it's founding.



## Lawrence Poree MD, MPH, PhD

Professor and Director of Neuromodulation Service, UCSF







## Social Injustice: Impact on Healthcare and Corrective Actions

Lawrence Poree, MD, MPH, PhD
Professor of Anesthesiology and Pain Medicine
Director of Neuromodulation
University of California at San Francisco

Member of the Board of Directors for the International Neuromodulation Society & North American Neuromodulation Society

#### Is medical bias the result of lack of diversity in training?

The New England Journal of Medicine 1999

Special Article

#### THE EFFECT OF RACE AND SEX ON PHYSICIANS' RECOMMENDATIONS FOR CARDIAC CATHETERIZATION

KEVIN A. SCHULMAN, M.D., JESSE A. BERLIN, SC.D., WILLIAM HARLESS, PH.D., JON F. KERNER, PH.D., SHYRL SISTRUNK, M.D., BERNARD J. GERSH, M.B., CH.B., D.PHIL., ROSS DUBÉ, CHRISTOPHER K. TALEGHANI, M.D., JENNIFER E. BURKE, M.A., M.S., SANKEY WILLIAMS, M.D., JOHN M. EISENBERG, M.D., AND JOSÉ J. ESCARCE, M.D., PH.D.

#### Same History: More likely to be recommended for cardiac cath



#### Same History: Less likely to be recommended for cardiac cath



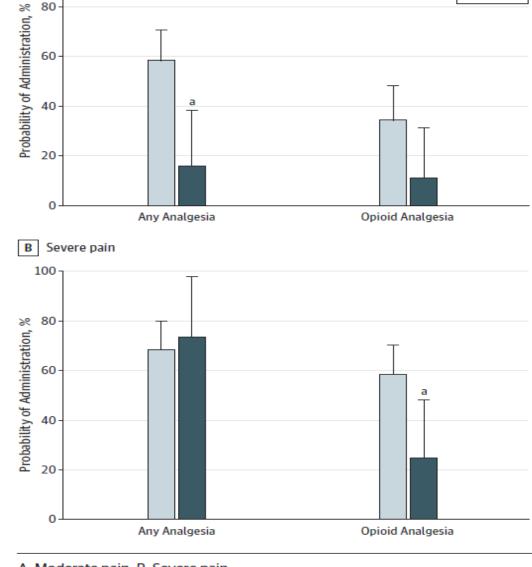
## JAMA Pediatrics Journal Club Slides: Racial Disparities in Pain Management for Appendicitis

Goyal MK, Kuppermann N, Cleary SD, Teach SJ, Chamberlain JM. Racial disparities in pain management of children with appendicitis in emergency departments. *JAMA Pediatr*. Published online September 14, 2015. doi:10.1001/jamapediatrics.2015.1915.



#### Results

Predicted Probabilities for Analgesic and Opioid Administration by Race Stratified by Pain Score and Adjusted for Ethnicity





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A, Moderate pain. B, Severe pain.

Moderate pain

100

<sup>a</sup> Statistically significant difference in administration (P < .05).



White

Black



## Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites

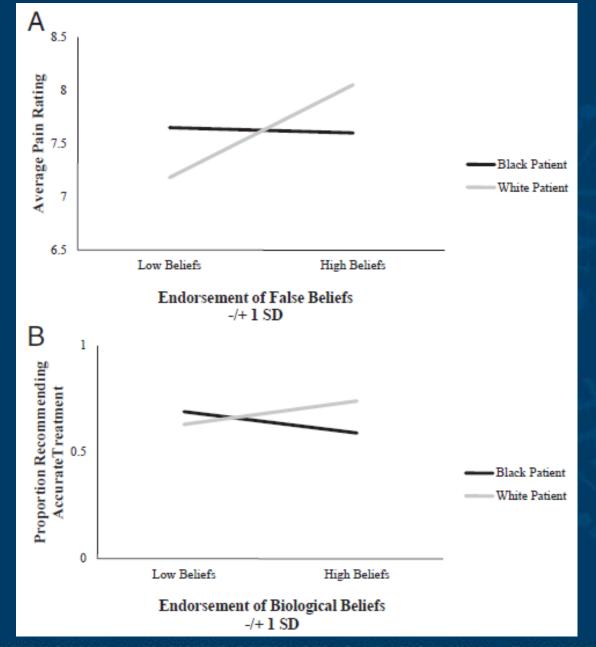
Kelly M. Hoffman<sup>a,1</sup>, Sophie Trawalter<sup>a</sup>, Jordan R. Axt<sup>a</sup>, and M. Norman Oliver<sup>b,c</sup>

<sup>a</sup>Department of Psychology, University of Virginia, Charlottesville, VA 22904; <sup>b</sup>Department of Family Medicine, University of Virginia, Charlottesville, VA 22908; and <sup>c</sup>Department of Public Health Sciences, University of Virginia, Charlottesville, VA 22908

Edited by Susan T. Fiske, Princeton University, Princeton, NJ, and approved March 1, 2016 (received for review August 18, 2015)

Table 1. Percentage of white participants endorsing beliefs about biological differences between blacks and whites

		Study 2			
ltem	Study 1: Online sample ( $n = 92$ )	First years (n = 63)	Second years (n = 72)	Third years (n = 59)	Residents (n = 28)
Blacks age more slowly than whites	23	21	28	12	14
Blacks' nerve endings are less sensitive than whites'	20	8	14	0	4
Black people's blood coagulates more quickly than whites'	39	29	17	3	4
Whites have larger brains than blacks	12	2	1	0	0
Whites are less susceptible to heart disease than blacks*	43	63	83	66	50
Blacks are less likely to contract spinal cord diseases*	42	46	67	56	57
Whites have a better sense of hearing compared with blacks	10	3	7	0	0
Blacks' skin is thicker than whites'	58	40	42	22	25
Blacks have denser, stronger bones than whites*	39	25	78	41	29
Blacks have a more sensitive sense of smell than whites	20	10	18	3	7
Whites have a more efficient respiratory system than blacks	16	8	3	2	4
Black couples are significantly more fertile than white couples	17	10	15	2	7
Whites are less likely to have a stroke than blacks*	29	49	63	44	46
Blacks are better at detecting movement than whites	18	14	15	5	11
Blacks have stronger immune systems than whites	14	21	15	3	4
False beliefs composite (11 items), mean (SD)	22.43 (22.93)	14.86 (19.48)	15.91 (19.34)	4.78 (9.89)	7.14 (14.50)
Range	0-100	0-81.82	0-90.91	0-54.55	0-63.64
Combined mean (SD) (medical sample only)		11.55 (17.38)			

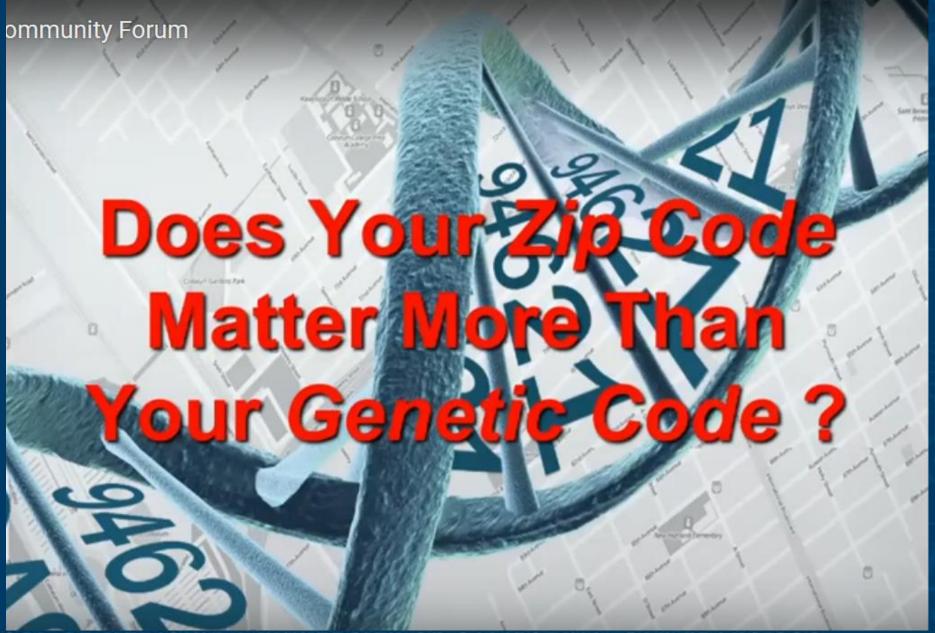




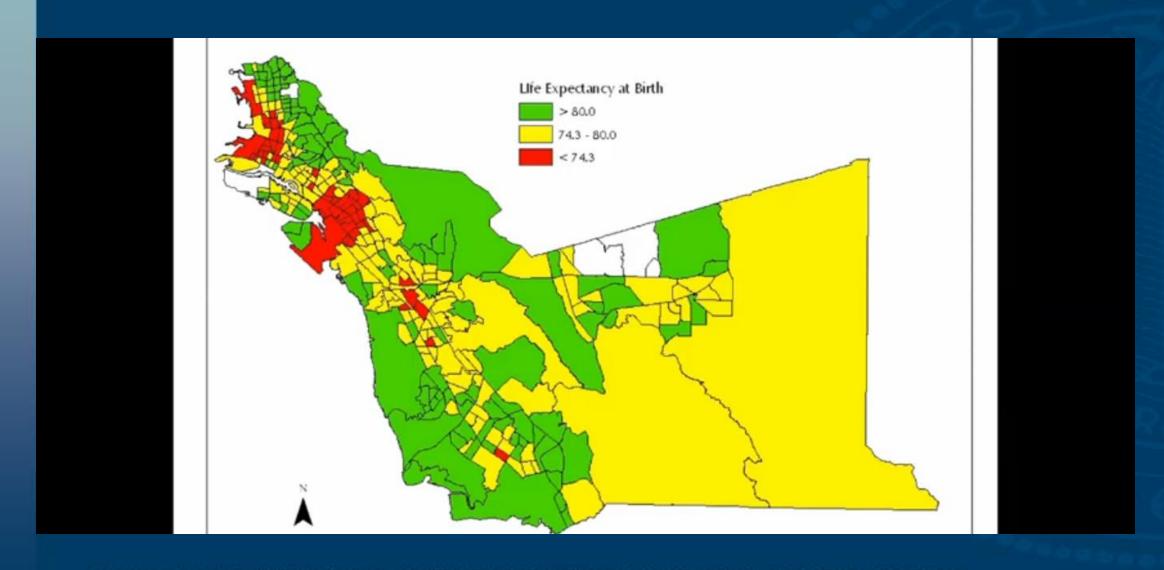
#### Dr. Anthony Iton, MD, JD, MPH

Senior Vice President for Healthy Communities at The California Endowment





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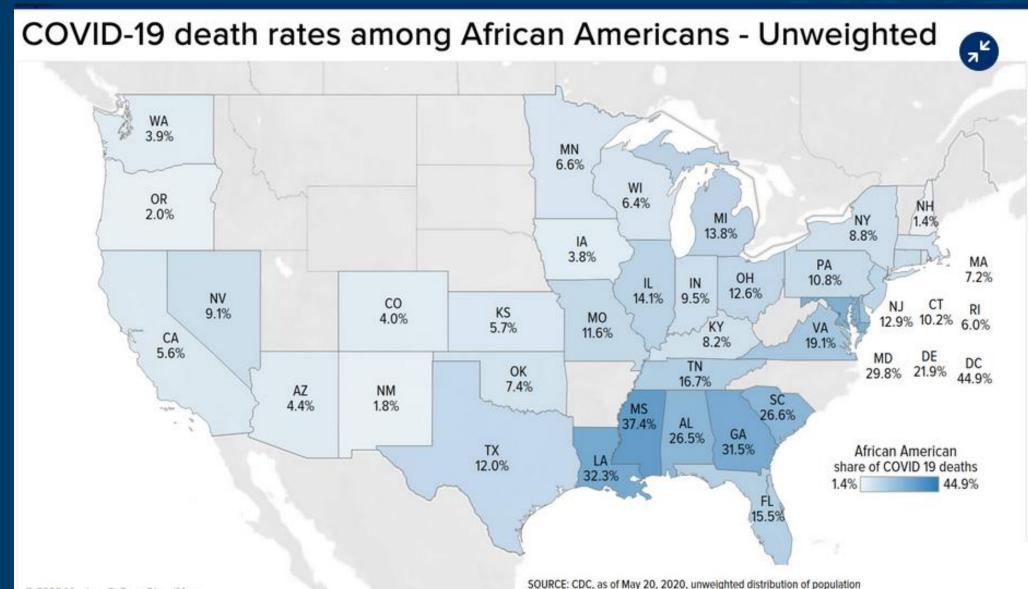
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69 81

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#### Consequence of Social Injustice on Health: African Americans are twice as likely to die from Covid19 as White Americans





#### Veterans Health Administration



#### Medicare



#### Selected characteristics

- Structure: health care payer, entitlement program
- Service population: 58.4 million individuals aged 65 and older, certain individuals with disabilities, and individuals with end-stage renal disease.
- . Funding: mandatory spending
- Services covered: include inpatient, outpatient, kidney dialysis, among others
- Key health concerns: higher rates of individuals with multiple, chronic medical conditions

#### Medicaid

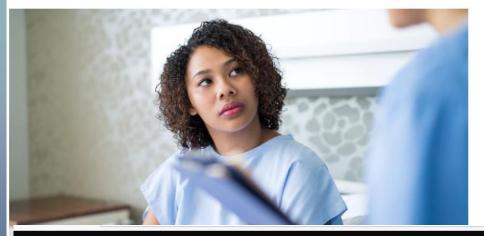
#### Dollars Selected characteristics 15,000 · Structure: health care payer, entitlement · Service population: 73.5 million low-income individuals, including 12,000 pregnant women, children, the disabled, and adults 65 and over Funding: annual appropriations 9,000 · Services covered: states must cover inpatient and outpatient services, certain long-term care services and supports, and 6,000 may cover optional services (e.g., pharmacy, physical therapy) \$8,109 · Key health concerns: widely varied across

the subpopulations covered

3,000

Per capita spending

### Is bias keeping female, minority patients from getting proper care for their pain?



The Washington Post

Democracy Dies in Darkness

The New York Times

## The Secret to Keeping Black Men Healthy? Maybe Black Doctors

In an intriguing study, black patients were far more likely to agree to certain health tests if they discussed them with a black male doctor.

#### **PowerPost**

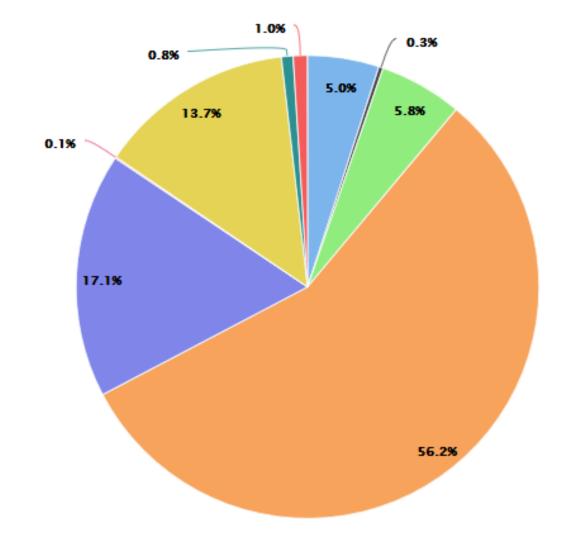
PowerPost • Analysis

The Health 202: Black patients are less likely to face discrimination from black doctors



 Just 5 percent of doctors in the United States are black, even though 13 percent of the population is black

Figure 18. Percentage of all active physicians by race/ethnicity, 2018.



Click on legend item below to add or remove a section from the report.

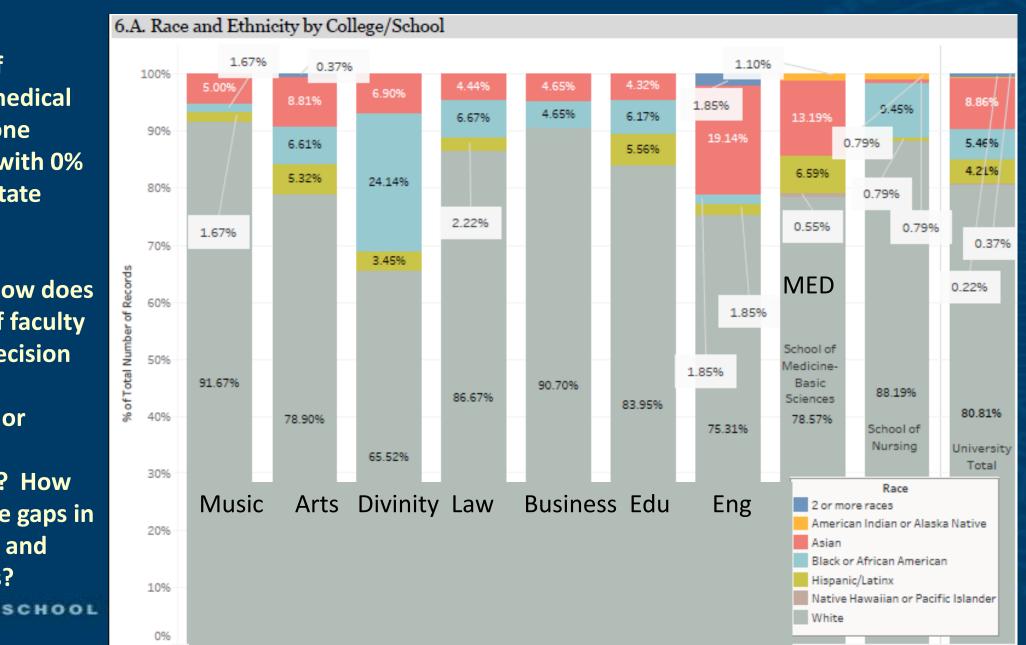
- American Indian or Alaska Native (2,570)
- Black or African American (45,534)
- Multiple Race, Non-Hispanic (8,932)
- Other (7,571)
- White (516,304)

- Asian (157,025)
- Hispanic (53,526)
- Native Hawaiian or Other Pacific Islander (941)
- Unknown (126,144)

### As the leader in healthcare education Universities should strive to be as diverse as our patient population and take note of big business strategies

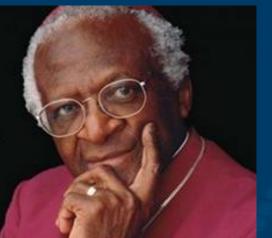
Example of lack of diversity among medical school faculty at one major university with 0% AA faculty 0% in state with 16% AA.

Open question: How does lack of diversity of faculty impact trainees decision to pursue careers neuromodulation or patients to accept neuromodulation? How can NANS fill these gaps in access to mentors and diverse physicians?



"If you are neutral in situations of injustice, you have chosen the side of the oppressor."

- Archbishop Desmond Tutu



National Center of Excellence in Women's Health





Black Women's Health & Livelihood Initiative

#### **NANS Diversity and Outreach Committee Leadership**

Stephanie G.
Vanterpool,
MD, MBA, FASA:
Outreach
committee chair
and NANS BOD



THE UNIVERSITY OF TENNESSEE KNOXVILLE

Johnathan Goree, MD Mentorship





Ken Ike, MD: Research





Eric Lee MD
Native American
Outreach





Myrdalis Diaz-Ramirez, MD Hispanic Outreach





### Questions?

Thank you for attending!



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David Provenzano, MD (Pain Diagnostics)

Richard W. Rosenquist, MD (Cleveland Clinic)



## The 2020 NPC Legacy Lecture Navigating Career Crossroads

Carol A. Warfield, MD

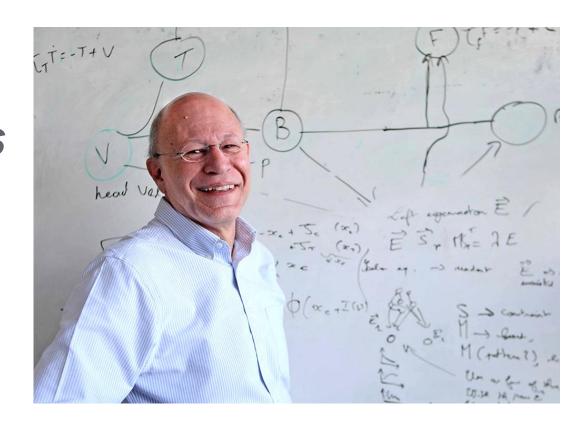
Edward Lowenstein Distinguished Professor of Anaesthesia, Harvard Medical School





## The 2020 Lindahl Lecture Homeostasis Mechanisms Gone Berserk

#### Larry Abbott, PhD



William Bloor Professor of Theoretical Neuroscience Professor of Physiology and Cellular Biophysics Principal Investigator at Columbia's Zuckerman Institute







### What are our next steps? Email us at education@Neurovations.com

Thank you for attending!











