2021 NATIONAL NURSING RESEARCH ROUNDTABLE

NURSING RESEARCH OF THE FUTURE: USING CLINICAL BIG DATA TO EXPLORE HEALTH INEQUITIES & SOCIAL DETERMINANTS OF HEALTH
Presentation Overview

- NIH News
- NINR News
- Vision
- Strategic Plan
- NNRRR Introduction
NIH’s Commitment to Ending Structural Racism

- NIH is committed to instituting new ways to support diversity, equity, and inclusion, and identifying and dismantling any policies and practices that may harm our workforce and our science.

- NIH established the UNITE initiative to address structural racism in biomedical research with the goal of ending racial inequity.

- Primary goals of the initiative are:
  
  U Understanding stakeholder experiences through listening and learning
  N New research on health disparities, minority health, and health equities
  I Improving the NIH culture and structure for equity, inclusion and excellence
  T Transparency, communication, and accountability with our internal and external stakeholders
  E Extramural research ecosystem: changing policy, culture and structure to promote workforce diversity
New Health Disparities Research

UNITE-Common Fund Transformative Health Disparities Research Initiatives: Bolster innovation, solve challenges, and address emergent opportunities in health disparities research

https://commonfund.nih.gov/healthdisparitiestransformation

Notice of Intent to Publish a Funding Opportunity Announcement: Understanding and addressing the impact of structural racism and discrimination on minority health and health disparities

NIH Funds Cohort Recruitment and Development Program to Enhance Faculty Diversity:
Faculty Institutional Recruitment for Sustainable Transformation (FIRST) Program

https://commonfund.nih.gov/first/funding_opportunities
Stephen I. Katz Early Stage Investigator Research Grant Program

- **PAR-21-038**: Stephen I. Katz Early Stage Investigator Research Project Grant (Parent R01 Clinical Trial Not Allowed)

- **PAR-21-039**: Stephen I. Katz Early Stage Investigator Research Project Grant (Parent R01 Basic Experimental Studies with Humans Required)

https://grants.nih.gov/funding/katz-esi-r01.htm

Dr. Stephen I. Katz
COVID19.nih.gov

NIH COVID-19 Website

✓ Get trusted, up-to-date, accurate information about NIH research.

✓ Learn about vaccines, treatments, and testing that are readily available.

✓ Find out how to join clinical trials and view resources from other federal agencies.
NINR RADx Initiative Awards

RADx UP (Underserved Populations)

• Reaching Communities through the Design of Information Visualizations (ReDIVis) Toolbox for Return of COVID-19 Results


RADx-rad (Radical)

• Multi-modal Wireless COVID Monitoring & Infection Alerts for Concentrated Populations
NINR Joins HEAL Executive Committee

- HEAL Initiative established to develop long-term solutions to the national opioid crisis

- Has already supported 100’s of projects across the U.S.

- NINR recently joined the HEAL Executive Committee

Website: heal.nih.gov
NINR Events

Maternal Health Workshop: Summary Now Available

Collaborating Institutes and Offices: NICHD, NIMHD, ORWH, THRO

www.ninr.nih.gov/sites/files/docs/MaternalHealthWorkshop_Summary_508c.pdf

NINR and NIMHD Joint Directors’ Seminar: The Science of Structural Racism

David R. Williams, PhD
Dr. Shannon Zenk Sworn in as NINR Director
My First Months at NINR

Meetings with many groups and individuals to gather input on planning the future of NINR:

- NINR staff
- Members of the National Advisory Council for Nursing Research
- NIH leadership and directors of many of the other NIH Institutes, Centers and Offices
- Nursing organizations and outside groups with interests in nursing science (e.g., FNINR, AACN, AAN, Nursing Community Coalition, APHA PHN section, ISONG, and many others…)

Presentations

- Houston Methodist Center for Nursing, Education, and Practice, Back to Science Symposium
- University of Colorado College of Nursing, Research and Scholarship Symposium
- AACN Doctoral Education Conference and Student Policy Summit
- Vanderbilt University School of Nursing, PhD Intensive Session
- George Washington University School of Nursing, Center for Health Policy and Media Engagement
- Yale University School of Nursing, Promoting Health in the Community Course
- Northeast Ohio Year of the Nurse 2020
- FNINR Nightingala 2020
- 2020 State of the Science Congress (CANS)
Nursing Science’s Contribution – A Holistic Perspective
To use nursing's holistic perspective to improve individual and population health and advance health equity by bridging biomedical science and health care delivery with the realities of peoples’ lives and living conditions, or social determinants of health.
Taking Nursing Science to New Levels

• Push discoveries in multilevel integration
  • Molecular to the macro
  • Health care and community approaches
• Prioritize social determinants of health
• Identify practice and policy solutions and their effective implementation
Key Principles For Our Process

• Think boldly; think differently
• Think about the end at the beginning: plan for translation
• Demonstrate impact
• Embrace change and opportunity
• Mentor the next generation
• We want to hear from you!
We Want to Hear from You!

Strategic Planning at NINR...A Bold New Agenda for Nursing Research

NinrStrategicPlan@mail.nih.gov  www.ninr.nih.gov/strategicplan
Annual Meeting of the National Nursing Research Roundtable

• Share advances in science and practice
• Identify, advance, leverage research resources
• Assess research challenges, gaps, redundancies, opportunities
• Support strategies, innovations, policy initiatives
• Foster communication, collaboration, dissemination while informing research efforts nationally
“Nursing Research of the Future: Using Clinical Big Data to Explore Health Inequities and Social Determinants of Health”
The Health and Health Care Landscape

- Pressing health challenges and persistent health inequities
- Broader recognition of racial and social injustices and their health effects
- Public demand for change
- **Urgently needed nursing practice and policy solutions**
Maternal Mortality And Preterm Birth Rates (CDC)

Maternal Mortality (2007-2016)

Preterm Birth (2014-2016)
Hypertension-Related Mortality, 2000-2013 (CDC)

Figure 3. Age-adjusted hypertension-related death rates, by race and Hispanic origin: United States, 2000–2013

- Non-Hispanic black
- Hispanic
- Non-Hispanic white

NOTES: Linear increases for the non-Hispanic white population from 2000 through 2013 and for the Hispanic and non-Hispanic black populations from 2000 through 2005 are statistically significant at the $p < 0.05$ level. Linear decreases for the non-Hispanic black population from 2005 to 2013 and for the Hispanic population from 2005 to 2009 are statistically significant at the $p < 0.05$ level. Hypertension-related deaths are identified using ICD–10 codes I10, I11, I12, I13, and I15 for underlying and contributing causes of death, according to the International Classification of Diseases, 10th revision (ICD–10). Access data table for Figure 3 at: http://www.cdc.gov/nchs/data/series/sr_19/sr19_236.pdf.

### Community Environments and COVID-19

**Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity**

<table>
<thead>
<tr>
<th>Rate ratios compared to White, Non-Hispanic persons</th>
<th>American Indian or Alaska Native, Non-Hispanic persons</th>
<th>Asian, Non-Hispanic persons</th>
<th>Black or African American, Non-Hispanic persons</th>
<th>Hispanic or Latino persons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cases</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1.9x</td>
<td>0.7x</td>
<td>1.1x</td>
<td>1.3x</td>
</tr>
<tr>
<td><strong>Hospitalization</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3.7x</td>
<td>1.1x</td>
<td>2.9x</td>
<td>3.2x</td>
</tr>
<tr>
<td><strong>Death</strong>&lt;sup&gt;3&lt;/sup&gt;</td>
<td>2.4x</td>
<td>1.0x</td>
<td>1.9x</td>
<td>2.3x</td>
</tr>
</tbody>
</table>

Race and ethnicity are risk markers for other underlying conditions that affect health including socioeconomic status, access to health care, and exposure to the virus related to occupation, e.g., frontline, essential, and critical infrastructure workers.
“Nursing Research of the Future: Using Clinical Big Data to Explore Health Inequities and Social Determinants of Health”

I. Capturing and Exploring Data on Social Determinants of Health to Improve Care and Reduce Health Disparities

II. Mining Data to Inform Clinical Interventions

III. Panel Discussion with Presenters/Participants