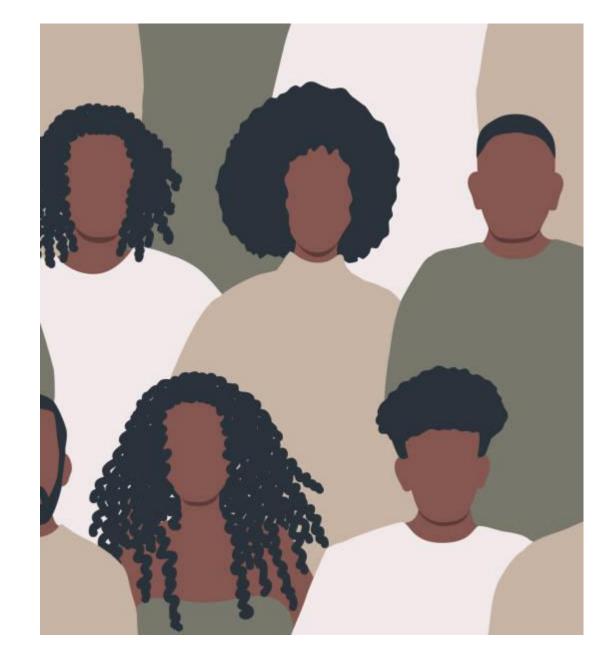
Nativity Differences in Etiology and Patterns of Health Risk and Behaviors Among Young Adults: Implications for Research and Practice

Wura Jacobs, PhD Indiana University School of Public Health Department of Applied Health Science



Disclosures

- I have never received research support from a tobacco/e-cigarette company
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- The funders have/had no influence on the work and findings been shared
- All information presented are from the facilitator's work and peer-reviewed scientific publications (acknowledged at the end of the presentation)

Objectives

- Explain why the emerging/young adulthood period is crucial and relevant for researchers and practitioners
- 2. Assess the role of nativity in mental health of and substance use among young adults; using Black persons in the U.S. as case study
- Discuss the research and practice implications of assessing/factoring nativity in care of emerging/young adults

Objective #1

Why is the emerging/young adulthood period crucial and relevant for researchers and practitioners?

Poll #1

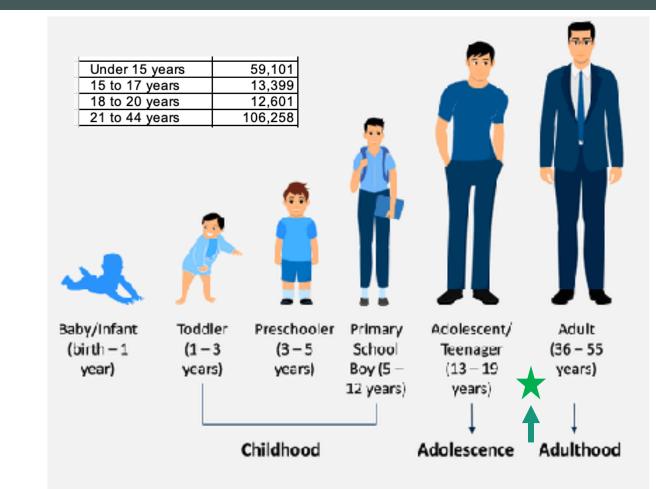
Our organization (or those I work with) has health and well-being programs and initiatives aimed specifically at young adults.

- a. Strongly agree
- b. Agree
- c. Not sure
- d. Disagree
- e. Strongly disagree

Emerging/Young Adulthood

What about this period?

- 18 25 years
- A significant proportion of individuals entering the workforce
- Distinct period of development different from adolescence that precedes it
- Data not usually aggregated to accurately count and track this age group



Emerging/Young Adulthood

- Unique for health risk behaviors due to a combination of factors
 - Biological
 - Physical maturity but not the brain –prefrontal cortex (decision making and impulse control)
 - Psychological
 - Identity exploration, Independence, Self-expression
 - Societal factors
 - Transitions (leaving home), Legally gain adult privileges but not roles and responsibilities yet

Factors Associated with Risks

- Transition period is now prolonged; due to social and economic forces
 - Multiple paths to adulthood
 - Paths that may involve college, military service, parenthood, and marriage
 - Increase in % pursuing post-secondary education
 - Shift in postindustrial economy
 - Delayed childbearing and marriage
 - Changes in women's roles (increased participation in labor force)
 - Rise in single-motherhood (highest non-marital birth rate by age group)
 - Rise in # of young men in prison
- Each with its unique set of constraints and role expectations—for health

Health Risks in Young Adulthood

- This period is associated with a wide range of risk behaviors
 - Prosocial risk taking
 - Risky sexual practices
 - Increased substance use rate and risk
 - Rates of substance use peak in young adulthood
 - Development of maladaptive coping strategies

Behaviors in Young Adulthood

- Can increase risk of developing chronic disease later in life
 - Substance use addiction
 - Heart disease from smoking, poor diet, inadequate physical activity
- Prosocial risk taking could lead to debilitating injuries/disability
- Can determine health of the workforce
 - Impacts productivity, economy, life expectancy

However...

- Current health care system for YA falls short in several respects [although ACA offers hope through greater insurance coverage and accessibility]
 - Healthcare financing is difficult to navigate for YA and leaves many out
 - E.g., <u>immigrants</u> (documented & undocumented), English-language learners, Low SES, <u>Racial/Ethnic minorities</u>
 - Healthcare system rewards acute care over preventive services and chronic disease management
 - Limited providers trained in and comfortable serving YA
 - Limited research on <u>needs</u> and <u>contexts</u> supporting/increasing health risks among YA

Poll #2

What is the most urgent health issue facing young adults in the United States?

- a. Injuries
- b. Substance Use and Disorders
- c. Food and Housing Insecurity
- d. Mental Health Crises

Example of a Research/Practice Need-<u>Mental Health & Substance Use</u>

- Anxiety increased most rapidly among YAs ages 18–25 years old [2008 2018]
- Nearly 7% of adults and 15% of YAs reported anxiety in 2018
- Depression levels <u>rose most sharply among YAs</u> aged 18–34 years from 7.8% in 2017/2018 to 21.2% in April 2020
- Despite increasing awareness, <u>Black</u>, <u>Latine</u> and <u>Asian</u> persons less likely to use mental health services despite need
 - <u>Cultural</u> and <u>linguistic</u> predisposing factors are sometimes identified as major contributors to this disparity

Example of a Research/Practice Need-*Mental Health & Substance Use*

- More than <u>one third</u> of YA binge drank (having 5 or more alcoholic drinks in a row) in the past month [2018]
- About two in five used an illicit drug in the past year [2018]
- YAs are the biggest abusers of prescription opioid pain relievers, ADHD stimulants, and anti-anxiety drugs [2018]
- Disparities exist in substance use pattern, consequences, and treatment seeking/success
 - Result of complex interplay among <u>race</u>, <u>ethnicity</u>, and <u>social</u>
 determinants of health

Poll #3

How familiar are you with the concept of **Social Determinants of Health**?

- a. Very familiar
- b.Somewhat familiar
- c.Not very familiar
- d.Not familiar at all

Poll #4

My/Our organization's approach to health and well-being assesses the social determinants of health?

- a.Yes
- b.Somewhat
- c.I don't know
- d.No
- e.Not applicable

Example of a Research/Practice Need-*Mental Health & Substance Use*

- Together these show
 - YA are a <u>priority group</u> for mental health and substance use prevention/treatment support
 - Drivers of mental health and health risks are related to <u>race</u>, <u>ethnicity</u>, and <u>social</u>
 <u>determinants</u>
 - A need to better understand the drivers of adverse mental health and substance use risks
 - And to determine if these drivers [determinants and factors] work through the same mechanisms and processes for diverse YA in different contexts?
 - E.g., Nativity (<u>U.S.- vs. Foreign-born?</u>) Black vs. White vs. Latine vs.
 Multiracial? Sexual/Gender Minorities? Rural vs. Urban ...?

I'll start with Nativity. Why Nativity?

Objective #2

What is the role of nativity in the mental health of and substance use risk among young adults; using Black persons in the U.S. as case study?

Poll #5

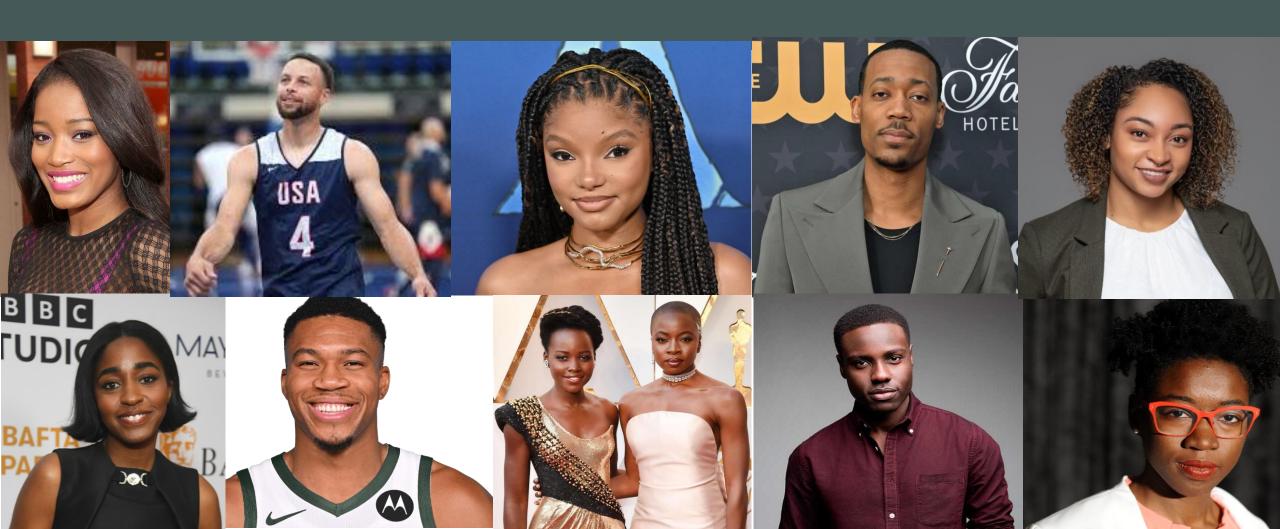
How much do you think a person's nativity (U.S.-born vs. foreignborn) influences their health outcomes and access to healthcare?

- a. Significantly influences
- b. Moderately influences
- c.Minimally influences
- d.Doesn't influence at all

Why Nativity Matters

- Nativity, distinction between foreign-born (immigrant) and U.S.-born YAs, is relevant in health care and public health research because
 - 13.7% (~45million) of people residing n the U.S. are foreign-born
 - One-third of YA in the U.S. are either foreign-born or have at least one foreign-born parent
 - 30% of YAs between the ages of 18 and 34 are first- or second-generation immigrants
- There are nativity differences in
 - Health behaviors and outcomes
 - Social determinants of health (food, housing, education, economic stability, health care access, community)
- It is <u>crucial for achieving health equity</u>

Are they all similarly "Black/African American"?



Black YA: Homogenous or Heterogenous?

- Different nativity implies different historic, socioeconomic, political, social, and cultural contexts linked to
 - Substance use
 - Risk and Protective Factors
 - Mental health disorder
 - Help-seeking, Diagnosis, Treatment
 - Psychosocial stressors
 - Discrimination, Racism, Societal Concern





Overarching Research Question

Are there nativity differences in risk and protective factors associated with substance use and common co-occurring mental health disorders (anxiety and depression) among U.S.-and foreign-born Black YAs?

Nativity Differences in Association of Health-Related Social Needs with Anxiety and Depression Among Black YAs

Predictors

- Social Determinants of Health Risk
 - Living situation
 - Food
 - Transportation
 - Utilities
 - Safety
- Nativity
 - U.S.-Born
 - Immigrant

Outcomes

- Depression
 - 20-item CESD
- Anxiety
 - 7-item GAD



SDOH Risk and Anxiety

| | Model 1 | | | Model 2 | | | Model 3 | | |
|------------------|---|------------|-----------|--|------------|-----------|--|------------|-----------|
| Age | ß 0.02 | SE 0.14 | р 0.88 | ß -0.09 | SE 0.12 | р 0.45 | ß -0.08 | SE 0.12 | р 0.50 |
| Gender [Female] | -1.43 | 0.54 | 0.01 | -1.60 | 0.47 | <0.001 | -1.59 | 0.47 | <0.001 |
| Education | -0.01 | 0.22 | 0.97 | 0.28 | 0.19 | 0.16 | 0.27 | 0.19 | 0.17 |
| Finance | -0.27 | 0.31 | 0.38 | 0.055 | 0.28 | 0.84 | 0.07 | 0.28 | 0.79 |
| Immigrant | | | | -2.00 | 0.49 | <0.001 | -1.98 | 0.49 | <0.001 |
| SDOH risk | | | | 1.36 | 0.12 | <0.001 | 1.27 | 0.17 | <0.001 |
| Immigrant * SDOH | | | | | | | 0.19 | 0.24 | 0.45 |
| Model summary | R ² =0.02, F=1.84, p=0.12 | | | R ² =0.23, F=24.04, p<0.001 R ² change= 0.22, p<0.001 | | | R²=0.24 , F=20.69,p>0.001 R ² change= 0.001, p=0.40 | | |

SDOH Risk and Depression

| | Model 1 | | | Model 2 | | | Model 3 | | |
|------------------|---------|------|------|---------|------|---------|---------|------|---------|
| _ | ß | SE | р | ß | SE | р | ß | SE | р |
| Age | -0.10 | 0.26 | 0.71 | -0.36 | 0.22 | 0.10 | -0.31 | 0.22 | 0.13 |
| Gender [Female] | -2.13 | 1.03 | 0.04 | -2.54 | 0.84 | 0.003 | -2.45 | 0.85 | 0.004 |
| Education | -0.46 | 0.42 | 0.27 | 0.13 | 0.35 | 0.71 | 0.09 | 0.35 | 0.79 |
| Finance | -0.57 | 0.58 | 0.33 | 0.29 | 0.49 | 0.56 | 0.39 | 0.50 | 0.42 |
| Immigrant | | | | -3.47 | 0.88 | < 0.001 | -3.38 | 0.89 | < 0.001 |
| SDOH risk | | | | 3.14 | 0.22 | < 0.001 | 2.625 | 0.35 | < 0.001 |
| Immigrant * SDOH | | | | | | | 1.09 | 0.50 | 0.01 |

| wiodei summary | Model | summary |
|----------------|-------|---------|
|----------------|-------|---------|

R²=0.02, F=1.98, p=0.10

R²=0.35, F=41.88, p<0.001 **R² change**= 0.33, p<0.001

R²=0.36, F=37.22, p<0.001 **R² Change**= 0.01, p=0.01

What the results show

- Foreign-born Black YAs reported <u>lower depression and anxiety</u> relative to their U.S.-born counterparts
- SDOH risk and immigrant status had <u>independent associations</u> with anxiety and depression among Black young adults in the study
- Interaction models show immigrant status only <u>moderated the relationship between</u> <u>SDOH risk and depression</u>
 - Foreign-born YAs, especially new immigrant, have limited opportunities for social and economic participation,
 geographical mobility, and access to quality health care services risks for depression
- Depression among foreign-born Black YAs could be uniquely driven by <u>interaction of</u> <u>social determinants and immigrant status/immigration policies</u>

Tobacco use Among Black YAs in the US: An Examination of Nativity Differences in Social, Mental, Financial, and Structural Correlates

Polytobacco/Nicotine Use

- Tobacco market has become increasingly complex over the past decade
- Increasing diversity of products will change the way people use tobacco and other nicotine-containing substances
- Study aim
 - To determine multi-level correlates of single and polytobacco/nicotine product use among Black YAs
 - Assess similarities and differences in these correlates by nativity and use pattern

Study 2: Tobacco/nicotine use Among Black Young Adults in the US: An Examination of Nativity Differences in Social, Mental, Financial, and Structural Correlates

Predictors

- Mental Health Adversity
 - GAD (Anxiety)
 - CESD (Depression)
- Race-Related Adversity
 - EDDS (Everyday Discrimination)
 - SRE (Schedule of Racist Events)
- Societal Concern
 - Increased hostility and discrimination
 - Shootings or violence in schools/community
 - Police brutality and unfair treatment of Blacks
- Food insecurity
- Housing insecurity

Outcomes

- Past 6-month use of tobacco/nicotine products
 - Any use
 - Past 6-month use of one or more products

Poly use

 Past 6-month use of two or more products

Participant Characteristics

| | Overall | U.SBorn | Foreign-Born | р |
|---------------------------------|---------------|---------------|---------------|--------|
| Mental health adversity | | | G | • |
| Anxiety, M±SD | 7.90 (5.90) | 8.96 (5.99) | 6.19 (5.36) | <0.001 |
| Depression, M±SD | 42.06 (11.82) | 44.44 (11.11) | 38.25 (11.95) | <0.001 |
| Race-related adversity | | | | |
| Everyday discrimination, M±SD | 15.50 (8.61) | 16.65 (8.84) | 13.65 (7.91) | <0.001 |
| Schedule of racist events, M±SD | 22.59 (19.44) | 24.01 (20.02) | 20.30 (18.29) | 0.046 |
| Societal concern | | | | |
| Social concern, M±SD | 7.24 (3.04) | 7.30 (3.21) | 7.14 (2.74) | 0.601 |
| Social worry, M±SD | 6.82 (3.16) | 6.87 (3.34) | 6.73 (2.86) | 0.644 |
| Social stress, M±SD | 6.50 (3.17) | 6.49 (3.32) | 6.52 (2.93) | 0.942 |
| Food insecurity, M±SD | 1.53 (1.36) | 1.70 (1.36) | 1.26 (1.32) | <0.001 |
| Housing insecurity | | | | 0.495 |
| No | 329 (73.93) | 199 (72.63) | 130 (76.02) | |
| Yes | 116 (26.07) | 75 (27.37) | 41 (23.98) | |
| Past 6-month Substance Use | | | | |
| Any nicotine/tobacco use | | | | 0.105 |
| No | 269 (60.45) | 157 (57.30) | 112 (65.50) | |
| Yes | 176 (39.55) | 117 (42.70) | 59 (34.50) | |
| Poly-nicotine/tobacco use | | | | 0.017 |
| No | 350 (78.65) | 205 (74.82) | 145 (84.80) | |
| Yes | 95 (21.35) | 69 (25.18) | 26 (15.20) | |

Predictors

| | Overall ^b (N=445) | | <u>U.S Born</u> | ^b (n=274) | Foreign-born ^c (n=171) | |
|---------------------------|------------------------------|-------------|-----------------|----------------------|-----------------------------------|-------------|
| | Single product | Polytobacco | Single product | Polytobacco | Single product | Polytobacco |
| | use | use | use | use | use | use |
| | | | | | | |
| | aOR | aOR | aOR | aOR | aOR | aOR |
| | [95% CI] | [95% CI] | [95% CI] | [95% CI] | [95% CI] | [95% CI] |
| Biological sex | | | | | | |
| Female | Ref | Ref | Ref | Ref | Ref | Ref |
| Male | 1.01 | 2.72** | 0.62 | 2.01 | 1.64 | 2.72 |
| | [0.55-1.85] | [1.41-5.27] | [0.27-1.40] | [0.91-4.44] | [0.69-3.87] | [0.92-8.03] |
| Highest education level | | | | | | |
| High school or lower | Ref | Ref | Ref | Ref | Ref | Ref |
| Some college or higher | 0.84 | 0.76 | 1.71 | 0.49 | 0.40 | 1.73 |
| | [0.42-1.68] | [0.35-1.65] | [0.63-4.58] | [0.19-1.28] | [0.14-1.16] | [0.46-6.43] |
| Parental education level | | | | | | |
| High school or lower | Ref | Ref | Ref | Ref | Ref | Ref |
| Some college or higher | 0.45* | 0.90 | 0.21** | 1.07 | 0.66 | 0.22 |
| | [0.23-0.92] | [0.41-1.98] | [0.08-0.57] | [0.40-2.84] | [0.22-1.98] | [0.05-1.02] |
| Income/Financial status | | | | | | |
| Just meets basic needs or | Ref | Ref | Ref | Ref | Ref | Ref |
| less | | | | | | |
| Exceed needs | 1.51 | 0.90 | 3.25* | 1.29 | 0.74 | 0.58 |
| | [0.80-2.85] | [0.46-1.78] | [1.30-8.16] | [0.55-3.00] | [0.30-1.84] | [0.19-1.79] |
| Mental health adversity | 0.96 | 1.17 | 0.91 | 1.23 | 1.00 | 0.95 |
| score | [0.77-1.20] | [0.91-1.49] | [0.70-1.19] | [0.93-1.62] | [0.68-1.47] | [0.58-1.56] |
| Race-related adversity | 1.15 | 1.49** | 1.08 | 1.41* | 1.26 | 2.31** |
| | [0.93-1.44] | [1.16-1.90] | [0.84-1.39] | [1.08-1.84] | [0.80-1.97] | [1.23-4.33] |
| Societal concerns | 0.98 | 0.94** | 0.98 | 0.94* | 0.96 | 0.89* |
| | [0.94-1.02] | [0.89-0.98] | [0.94-1.03] | [0.89-0.99] | [0.89-1.04] | [0.80-0.99] |
| Food insecurity | 1.33* | 1.33 | 1.42* | 1.25 | 1.23 | 2.06** |
| | [1.02-1.74] | [0.98-1.80] | [1.03-1.96] | [0.88-1.76] | [0.77-1.97] | [1.19-3.57] |
| Length stayed in the US | - | - | - | - | 1.04 | 1.10 |
| | | | | | [0.94-1.14] | [0.97-1.26] |

What do the results show?

- Nativity is implicated in mental health and subsequent substance use behaviors
- Race-related adversity, that is **experiences of racism and discrimination**, positively associated with polytobacco product use overall and among U.S.- and foreign-born Black YAs
 - Race-related adversity can potentially eliminate the health advantage among foreign-born Black YAs
 through engendering uptake of unhealthy behaviors to alleviate the negative affect of race-related adversity
 - Highlights one mechanism through which the immigrant health advantage diminishes among Black persons
- Greater **societal concern is protective** of substance use among U.S.- and foreign-born Black YAs
 - Heightened concerns about systemic inequalities and social injustice may motivate health prioritization and avoidance of high-risk behaviors like polytobacco use
 - Racial socialization and greater racial/ethnic identity may moderate maladaptive risk behaviors
- Food insecurity is a much bigger determinant of high-risk behavior among foreign-born Black YAs
 - Foreign-born YAs may face intersecting inequities related to race, immigrant status, and limited preventative care access

Objective #3

What are the research and practice implications of assessing/factoring nativity in care of young adults?

Poll #6

What best describes your organization's approach to nativity and cultural consciousness?

- a. We tailor our data monitoring and initiatives relating to those who are foreign-born.
- b. I'm not aware of any initiatives relating to foreign-born or other cultures.
- c. I expect we would avoid tailoring initiatives to foreign-born.

Implications for Practice

- Nativity is a salient health and behavior determinant for YAs
 - Significant proportion of of those entering the workforce are foreign-born/from immigrant families
- Culturally conscious health promotion should consider nativity
- Health promotion efforts need to transcend health care settings and a narrow view of health determinants
 - Fostering engagement in societal issues and promoting community involvement can be protective against substance use
 - There is scientific evidence to encourage programs and activities that emphasize social justice, social awareness, affinity groups as been beneficial to health
 - Helps build and foster resilience
 - Socially-aware health care can increase critical and social consciousness and empower YA to make healthy decisions

Implications for Practice

- Not all social determinants equally puts U.S.-and foreign-born individuals at risk for unhealthy behaviors and health outcomes
 - Institutionalize asking about the social determinants of health during care encounters
- One size does not fit all; ask about nativity and tailor programs/interventions (E.g.,)
 - Stress tolerance and norms might be different because of nativity and could have chronic implications on health
 - Collaboration with community organizations to diversify food options available and donated to food banks
 - Connect YA employees to local organizations to support racialized socialization along with acculturation
 - Encourage socialization [acculturation] opportunities that do not normalize health-risking behavior (e.g., "happy hour")

Implications for Research

- Nativity is a risk classifier/identifier among Black YAs; more national research needed
 - Including among other racial/ethnic groups
- More mechanistic and long-term comparative studies to better understand the risk and protective processes unique to native and foreign-born YA is needed
- Encourage data disaggregation to better understand how inequities in social determinants of health affect health disparities among those from racial and ethnic minoritized populations

Focusing resources on improving health, especially among all subgroups of young adults, is a costeffective clinical and public health approach that would set the foundation for a healthier society in the future, as young adults age and adolescents reach adulthood.



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Wura Jacobs, PhD Indiana University Bloomington

wujacobs@iu.edu