WITS 2017 Panel Discussion: Government-Academia Collaboration

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Discussion areas

- Potential Federal and State agencies for collaboration
- Areas of research
- Sample data sources
- Funding agencies
- Research project setup and timelines
- Constraints, nationality status, data access, etc.
- Other

Why IS researchers and Federal agencies?

- Grand challenges – Need to tackle new and interesting problems
  - Paradigm shift?
- Interdisciplinary research to tackle such grand challenges using Big Data
- What unique or complementary skillsets do we bring?
Areas of research

• Research in the public benefit
• Developing public policy
• Projects aligned to respective dept providing data
• Win-win project proposals required

US Census Bureau data

• Individual micro-data
• List of datasets currently available at Census:
  • [https://www2.census.gov/about/linkage/data-file-inventory.pdf](https://www2.census.gov/about/linkage/data-file-inventory.pdf)
• Legal authority for data linkage at Census:
  • [https://www.census.gov/about/adrm/linkage/about/authority.html](https://www.census.gov/about/adrm/linkage/about/authority.html)
• Sample of published and current research using Census data:
  • [https://www.census.gov/ces/publications/annualreport.html](https://www.census.gov/ces/publications/annualreport.html)
• Supported by Commission on Evidence-Based Policymaking
  • [https://cep.gov/](https://cep.gov/)
Census Bureau data access locations

- Federal Statistical Research Data Centers
- [https://www.census.gov/fsrdc](https://www.census.gov/fsrdc)
- Click on “RDC locations”

Other Potential Sources of Data

- Veterans Affairs (VA)
  - Million Veteran Program (MVP)
    - Generic and medical/clinical data from ~400K veterans
- U.S. Patent Data
  - Derwent Innovation database
- Current: [Data.gov](http://data.gov)
  - Created as part of 2013 Federal Open Data Policy
  - Searchable database with over 200K datasets on a wide range of areas such as: health, manufacturing, finance, energy, and local government
- Looking Ahead: Open, Permanent, Electronic, and Necessary (OPEN) Government Data Act
  - Requires all federal agencies to publish the entirety of their information as open data – using standardized, nonproprietary formats...and under open licenses
  - Voted out of Senate on 9/27/2017 as part of National Defense Authorization Act (NDAA)
  - Passed U.S. House of Representatives on November 15
South Korea Statistics


Other US Federal Agencies for collaboration

- Centers for International Business Education & Research (CIBER)
- Securities and Exchange Commission (SEC)
- Office of the Inspector General (OIG)
Funding opportunities

• How to leverage private and government funding and data

• Funding agencies
  • NSF
  • NIH
  • Sloan
  • Kauffmann
  • Others

Research project setup

• Timelines
• Proposal to federal agency
  • Submit proposal
  • Get approval (3-6 months)
  • Do background checks (1 month)
  • Get access to datasets mentioned in proposal (1-3 months)

• Constraints
  • Data access
  • Researcher background check

• Publication opportunities and process
Non-research data projects

- US Census Bureau “Opportunity” projects
  - [https://opportunity.census.gov/](https://opportunity.census.gov/)
- Look for “Innovation” projects under various agencies

3 slides from Ritu Agrawal
Data We have Used

- Health related
  - AHRQ, CMS, CDC, Local Public Health Departments
- Economic and demographic data
  - Census
- Others
  - BLS, DOD (Defense Health Agency, Air Force Medical Service)
- Open government data sets
  - NY Food inspection
  - California Hospital Quality
- Combining with proprietary data

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Smith School FSRDC

| Census/FSRDC Datasets | Program Data Sets
|-----------------------|-------------------|
| Decennial Census      | National Health and Nutrition
| American Community Survey (ACS) | National Health Examination Survey (NHANES)
| Current Population Survey Supplements | National Health Interview Survey (NHIS)
| American Housing Survey | National Health Interview Disability Survey
| Survey of Income and Program Participation | National Immunization Survey
| National Crime Victimization Survey | Longitudinal Study on Aging
| National Longitudinal Mortality Study | National Survey of Family Growth
| National Longitudinal Survey (NLS) | National Maternal and Infant Health Survey
| Economic Data | AHRQ Data
| Establishment Surveys |
| Firm Surveys | Other Restricted Use Data Sets
| Business Register Data | Florida Agency for Healthcare Administration
| Transactions Data | Hospital Admissions Data
| Linked Employer Household Dynamics (LEHD) | Defense Health Agency
| Military Medical Informatics Data |
Wins and Challenges

• Successful in working extensively with health data/agencies (some examples)
  – RWJ funded project with local health department
  – Ongoing relationship with HHS/ONC
  – New “Health Insights AI Lab” established in partnership with major health data aggregator
  – Funding from provost for 5 seed grants for AI related work in Finance, Marketing, and Health

• Faculty training and incentives to develop proposals
  – In my SAD Research role I do a lot of heavy lifting

• Framing interesting, novel, and important problems
  – Brainstorming on “big ideas”

Wrap-up: WITS and IS community action items

• Curate WITS workshop presentations under one roof for reference
• Create searchable abstracts to attract researchers other domains
• WITS feeder workshop with Federal agencies
• Promote research that “makes a difference”
  • Orient reviewers and editors for socially important research
• Liaison with INFORMS to promote IS in federal (and state) agencies