2016 Business Meeting: Design and Data Analytics (DaDA)

Westin Harbour Castle Hotel, Room: Harbour C
Saturday, July 18, 2015, 9:30 – 10:30am

Agenda

1. Welcome & Introductions

2. Overview of DaDA PIA

3. Current PIA Membership Roster

4. Plans for survey to membership: Major initiatives, working groups, and conference topics

5. Discussion of 2016-2017 goals

6. Adjournment

1. Welcome & Introductions:

2016 Executive Committee

- Scott Hofer, DaDA Chair
  - Director, Institute on Aging & Lifelong Health, University of Victoria and Director, IALSA, Dept. of Neurology, OHSU

- Graciela Muniz, DaDA Vice-Chair
  - Senior Lecturer in Biostatistics and Epidemiology at the Centre for Dementia, University of Edinburgh

- John Gallacher, Member at Large
  - Director, UK Dementia Platform, Professor, University of Oxford

- Sue Luergans, Member at Large
  - Professor of neurological sciences and preventive medicine; Core leader, Data Management and Statistics Core of the Rush Alzheimer's Disease Center; Rush University Medical Center

- Sharon Xie, Member at Large
  - Professor of Biostatistics and Epidemiology, PI Biostatistics and data management core, Alzheimer's Disease Center, University of Pennsylvania

- Andrew Zhou, Member at Large
  - Professor, Department of Biostatistics, University of Washington, Co-investigator and Senior Biostatistician, *NACC*

Overview of DaDA PIA

DaDA Objectives:

- To support and coordinate joint research activities involving a variety of study designs and facilitate access to metadata from existing studies.

- To stimulate innovative research on optimal design, measurement, and harmonization of exposures and outcomes, and research synthesis of multiple sources of data.

- To promote, facilitate, and organize training in advanced statistical methods and develop and disseminate best practices in the field.

2a. Longitudinal Data, Big Data, Little Data

- Longitudinal Data
  - Regular and repeated follow-up
  - Natural history studies
  - Epidemiological cohorts

- Big Data
  - population-based health and health care data

- Little/Deep Data
  - Personal quantification
  - mobile health technologies

- Unobtrusive monitoring
  - Embedded technology

2b. Integrative Data Analysis & Harmonization

- Maximise use of existing data

- Data linkage across data types

- Analysis of multiple data sets

- Research synthesis

3. Current PIA Membership Roster

- 123 Current Members

- 17 Students / 105 Professional

- Wide range of disciplines and expertise

- Strategies for PIA growth
  - Identify additional researchers in design and data analytics who are not current members
  - Other suggestions?

4. Plans for survey to membership: Major initiatives, working groups, and conference topics

- Work with ISTAART staff to develop a survey about topics of interest for future meetings and projects

- Publications to emerge from working groups

- AAIC workshops

- Further suggestions ?

5. Discussion of 2016-2017 goals

- Upcoming meetings and workshops

- Links with consortia and development of DaDA PIA network

- Preliminary topic areas to consider for 2017 PIA Day Meeting

- Form working group to plan topics and submission of DaDA symposia/papers for 2017 AAIC scientific program

- Planning for teleconference topics and other communication avenues

- Development of DaDA website

5a. Upcoming meetings and workshops

- [Statistical Methods Conference on Aging & Dementia](#)
  - Thursday, October 13, 2016

- Plan for 2017 pre-conference AAIC workshop on DaDA

5b. Links with consortia and development of DaDA PIA network

- Objective: To support and coordinate joint research activities involving a variety of study designs and facilitate access to metadata from existing studies.

- How to best enhance communication across international research groups?

- Consortia may include:
  - Cohort Studies of Memory in an International Consortium (COSMIC)
  - Cohorts for Heart and Aging Research in Genomic Epidemiology (CHARGE)
  - Consortium on Health and Ageing: Network of Cohorts in Europe and the United States (CHANCES)
  - European Prevention of Alzheimer's Disease (EPAD)
  - Integrative Analysis of Longitudinal Studies of Aging & Dementia (IALSA)
  - International Centenarian Consortium of Dementia (ICC-Dementia)
  - Methods for Longitudinal Studies in Dementia (MELODEM)
  - STROKOG

5c. Preliminary topic areas to consider for 2017 PIA Day Symposia

- Please suggest topics

- Potential topics:
  - Benefits and challenges of linking longitudinal, big, and little data
  - Analysis of non-traditional designs and complex data
  - Challenges in the study of natural history of aging and dementia
  - Multistate models applied to progressive cognitive impairment
  - Modeling disease progression: Analysis of change in pre-symptomatic dementia
  - Modeling attrition, mortality, and left truncation
  - Multivariate risk scores
  - Harmonization and standardization of cognitive and health outcomes and covariates

5d. DaDA 2017 and onwards

- Form working group to plan topics and submission of DaDA symposia/papers for 2017 AAIC scientific program

- Raise profile of statistical and design issues in dementia research at relevant statistical meetings
  - International Society for Clinical Biostatistics (e.g., STRATOS)
  - Design and methods papers

5e. Planning for teleconference topics and other communication avenues

- These plans will follow the survey results and development of working groups

5f. Development of DaDA website

- Upcoming workshops, conferences, symposia, etc.

- Dissemination of new publications: Published papers and preprints

- Highlight member activities related to DaDA themes

- Update working group activities and opportunities

- Disseminate funding opportunities

- Highlight opportunities for students

- Provide overall progress report of DaDA PIA

6. Adjournment

- DaDA curated itinerary

- Join your colleagues at the ISTAART Membership Reception - Monday, July 25 from 5:45 p.m. – 7:45 p.m. at the Delta Toronto Hotel, Soco Ballroom.

- This is a great opportunity for you to meet with fellow ISTAART members and discuss the latest trends, while you enjoy hors d'oeuvres and refreshments.