

UC San Diego

Health Sciences

HOW TO WORK EFFECTIVELY WITH YOUR BIOSTATISTICIAN (Dos and Don'ts)

Biren Kamdar, MD, MBA, MHS

Associate Professor

Division of Pulmonary,
Critical Care and Sleep Medicine

Jaclyn (Nikki) Bergstrom, MS

Senior Statistician

Division of Geriatrics, Gerontology,
and Palliative Care

2021 Clin-STAR Annual Meeting

Clinician-Researcher Perspective – Biren Kamdar

General Info:

- Pulmonary/Critical Care at UC San Diego; clinician in Medical ICU
- Biostats, epidemiology, clinical methodology, systematic reviews background (MHS)
- Research: ICU sleep-wake disruption & delirium; ICU outcomes; QI/implementation sci.
- Grants: NHLBI F32 NRSA 2010-2012; UCLA KL2 2015-2018; NIA K76 Beeson 2018-Current
- Team: Mentors, research coordinator, junior faculty, housestaff, undergrads, ICU nurses
- Work with biostatisticians:
 - ICU Sleep/Delirium QI intervention: multivariable regression, transition models, questionnaire reliability
 - Return to work after ICU: competing risk models
 - Systematic reviews on return to work after ICU: Meta-regression
 - Actigraphy in ICU: multivariable regression of activity/inactivity levels, circadian analyses (COSINOR, NPCRA)
- I enjoy “Geeking out” with ICU/survey/systematic review datasets in Excel and STATA

Clinician-Researcher Perspective – Biren Kamdar

DOs:

- Planning phase:
 - Include mentor in conversations
 - Set clear goals and timelines
 - Outline authorship plan
- Analysis phase:
 - Leverage your own biostats/epi skills to reduce need for support
 - Clean the dataset
 - Make a data dictionary
 - Complete basic stats on your own
 - Mock-up/make Graphs/Tables

DON'Ts:

- Assume biostatistician is working with you as “part of their job”
- Show up to meetings unprepared
- Assume biostatistician remembers everything about your project
- Ask biostatistician to re-run analyses until you find significant results
- Forget to include biostatistical support in grant applications (ask your mentor)
- Be afraid to email biostatistician with updates and questions

Biostatistician Perspective – Nikki Bergstrom

General Info:

- Masters Level Biostatistician currently working with 2 Divisions within UC San Diego Health Sciences
- Consult on 10-12 projects at a time
- Work with Faculty/Clinician Researchers, Post-Docs, PhD and Med students
- Work includes:
 - power analysis/sample size calculation for grant proposals
 - database management, statistical analysis, tabulation/visualization of results
 - drafting statistical analysis plans for grant proposals and methods/results sections of manuscripts
- Supported through grants and occasionally through discretionary funds of division/faculty

Biostatistician Perspective – Nikki Bergstrom

DO:

- Talk to biostatistician early
- Think about what you want from the biostatistician
- Be explicit with project timeline
- Get comfortable with the answer “it depends”

DON'T:

- Assume that the biostatistician can start working with you immediately
- Think everything has to be perfect before you talk to your biostatistician
- Be afraid to ask for clarification
- Assume that there is such a thing as “quick question”

UC San Diego

Health Sciences