

Collaboration Essentials

Structuring One-on-one Meetings




ASA Committee on Applied Statisticians Collaboration Webinar Sep 15, 2017

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Laboratory for Interdisciplinary
Statistical Analysis

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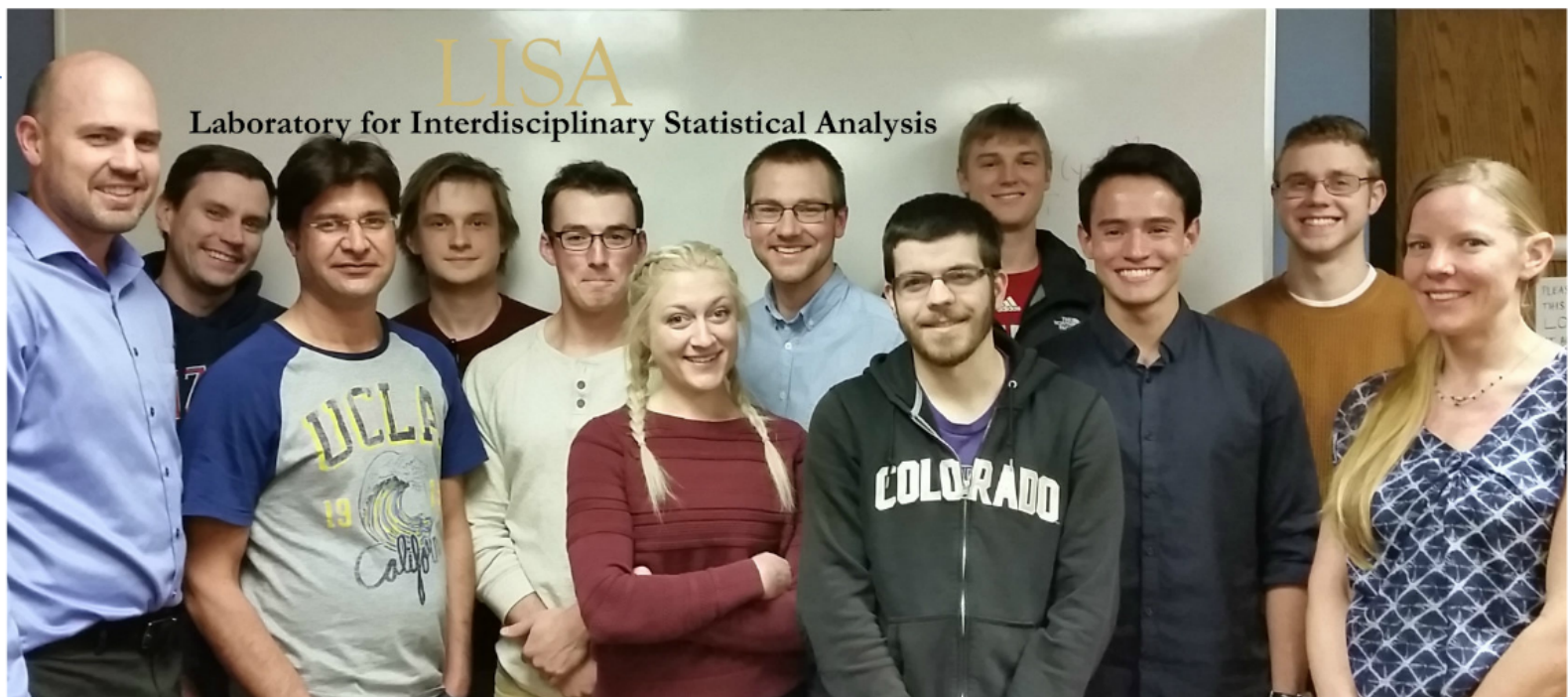
University of Colorado **Bou**


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Created in 2008

Moved/recreated in 2016

- 254 Statisticians
trained in LISA
- 2770 Collabor-
ation Projects
- 204 Short
Courses



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CAL POLY
SAN LUIS OBISPO

Cal Poly's Statistical Consulting Service

- Six part-time faculty consultants
- Several undergraduate consulting interns
- Service about 160 clients/year
- Free for most clients



Statistical Communication and Consulting Course

- Train 30-40 undergraduate collaborators/year
- 40+ hours of supervised instruction, practice, and mentoring
- Non-technical and technical content
- More than 250 collaborators trained since 2004

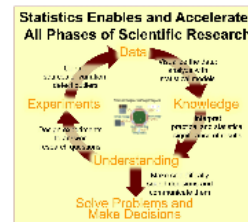
“Structuring One-on-one Meetings”

Attitude of Collaborative Relationship

“Seek first to understand, then to be understood.”

“Statistical Collaboration”

—statisticians working cooperatively with domain experts to answer research, business, government questions and achieve research, business, government goals.



Asking —
Great Questions

Q₁Q₂Q₃ Process

Q₁ Qualitative: What is the research or business question?

Asking good questions
Verifying your understanding

Q₂ Quantitative: Apply statistics to analyze the data and answer the business question

Apply the theory and methods of statistics
What does statistics focus on

Q₃ Qualitative: What is the answer to the research or business question?

Explain/Implement
Discuss/Interpret

POWER Structure

Prepare

Open

Work

End

Reflect

Providing structure frees your brain to focus on the research/business/policy questions and on the statistics

Addi

Additional materials: www.osf.io/xmtce

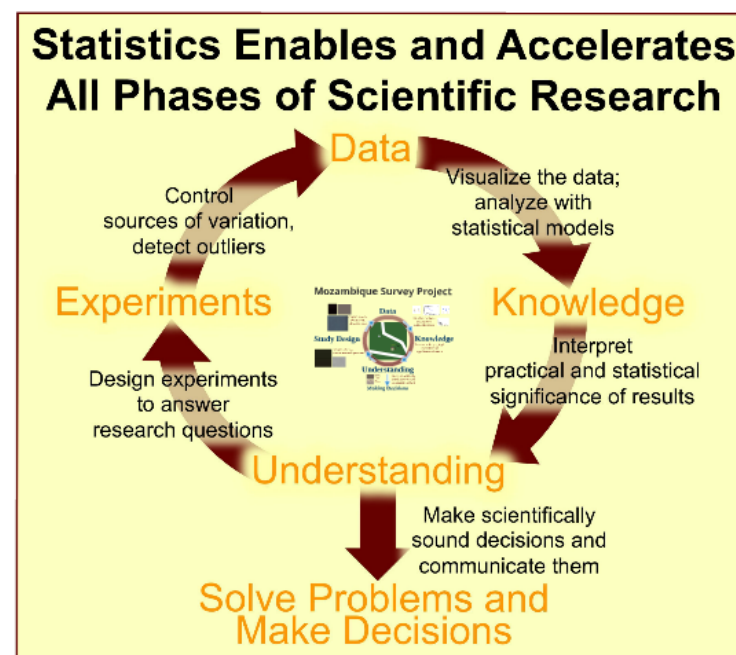
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Asking good questions
Verifying your understanding
"Exactly!"
"Finally someone who gets me!"

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Apply the theory and methods of statistics

What most statisticians focus on

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Explain Discuss Interpret Implement
"If you are 99% done, you are 0% done."
—Dr. Leanna House

Q₁ Qual

Asking good questions

What data will you need to answer your questions?

What data do you have?

Where is the data collected?

How will you use the results?

**Verifying your
understanding**

Ask

- What data will you need to answer your research questions?
- What data do you have?
- How were the data collected?
- How will you use the results?

understand

“Exactly!”

“Finally someone
who gets me!”

Q₂ Quant

**Apply the theory and
methods of statistics**

What most statisticians focus on

Q3

Qual

**“If you are 99% done,
you are 0% done.”**

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Explain

Discuss

Interpret

Implement

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**Providing structure frees your
brain to focus on the research/
business/policy questions and
on the statistics**

A

Prepare

Ready yourself:
mentally,
physically,
and emotionally

Open

Complete openings
lead to effective and
efficient meetings

- Greet the domain expert
- Verify the **time** available
- Ask and clarify the client's **wants**
Ask if there is anything else?
- Are you **willing** and **able** to address these wants?

Work

Apply the $Q_1Q_2Q_3$ Process

Clarify the big picture sufficiently
to address the client's wants

Explain the statistics to
be useful for your client

End

Save at least 10-15%
of the meeting time

- Were all wants addressed?
- Summarize decisions
- Timeline for next steps
Who? What? When?
- “What can I clarify?”
- ‘As we discussed...’ email

Reflect

What went well?

**Use reflection to
improve your skills**

What did not go
well?

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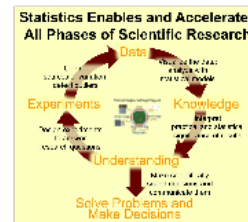
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Collaboration Essentials

“Collaboration Essentials for Practicing Statisticians and Data Scientists”

4-hour Workshop at the ASA
Conference on Statistical Practice
in Portland, OR on Feb. 15, 2018



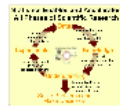
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“What can we clarify?”

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