Department of Medicine Biostatistical Shared Resource

Through this pilot program, the University of Rochester Department of Medicine is committed to providing biostatistical support to mentored trainees and faculty performing excellent science who do not have current funding available to cover those activities. Trainees need to include their mentor's name in the request.

The program will start on July 1, 2022. The program supervision is provided by Dr. Robert Strawderman, and statistical analysis will be supported by masters-level biostatisticians, Anita Chen, MS (clinical research); Lu Wang, MS (basic science). Access to the Shared Resource biostatistical support is through a REDCap tool.

Areas of support: 1. Study preparation and pre-study planning. 2. Sample size, power calculations, and analytic plans, 3. Basic statistics, including bivariate analyses (chi-square, t-tests, and ANOVA), multivariate regression (linear and logistic), non-parametric tests, correlations, and basic survival analyses (log-rank tests, Kaplan Meier curves, and Cox regression), 4. Database management.

Priority will go to: 1. major scientific conference deadlines, 2. extramural peer-reviewed grant deadlines, 3. intramural peer-reviewed grant deadlines, 4. manuscript revisions, 5. manuscripts in preparation. In order to protect biostatistician time during busy periods, the deadline for applications for meetings/grants is **2 months** before the due date, so plan ahead: October, February, and June NIH deadlines (**remember ORPA's 5 business days lead time**). Link to Survey - https://redcap.link/DOMBiostats

Please remember to acknowledge the Department of Medicine (DOM) support for the analyses in any papers or presentations, and consider including them as co-authors: "Supported in part by the Department of Medicine Biostatistical Shared Resource and the University of Rochester School of Medicine and Dentistry"

In the first year, 2022-2023, this will run as a pilot program to assess DOM Biostats needs, and we will adjust support in future years based on documented use. We are hopeful this resource will facilitate the development of exciting new research grants within the DOM, with a fair and equitable access to all.

If you have any questions related to this program, please directly reach out to Laura Calvi Laura_Calvi@URM.Rochester.edu, Valentina Kutyifa Valentina.Kutyifa@heart.rochester.edu, or Stefanie Fingler Stefanie_Fingler@URMC.Rochester.edu

DOM Biostatistical Shared Resource Process

Link to Survey - https://redcap.link/DOMBiostats
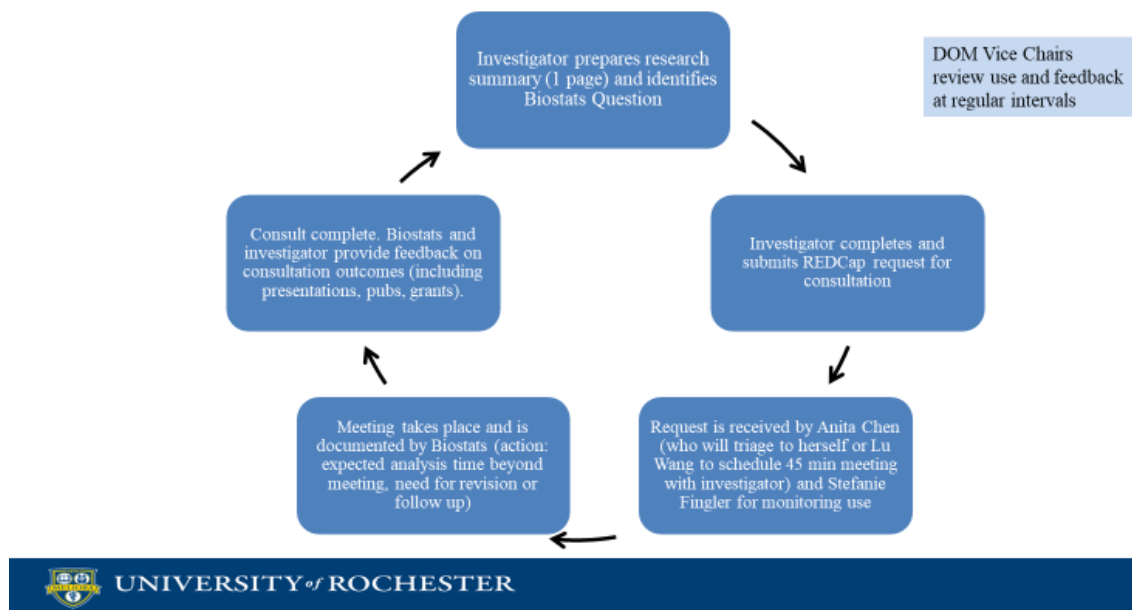
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This request form has been developed to request biostatistical support for Department of Medicine residents/fellows and faculty to facilitate research work. If you have any questions please reach out to one or more of the following:

Laura_Calvi@URMC.Rochester.edu

Valentina.Kutyifa@heart.rochester.edu

Stefanie_Fingler@URMC.Rochester.edu

Please complete the survey below.

Thank you!

Investigator Name * must provide value	[ ] Last Name, First Name
Investigator Level * must provide value	[⌄] Select one
Type of Research * must provide value	[⌄]

*If Trainee Level – you will be prompted to include your mentor name

Contact Information * must provide value	[ ] Name and Email
Department of Medicine Division * must provide value	[⌄] List primary division requesting support
Title of Project * must provide value	[ ] Limit to 200 characters
Please attach a 1-2 page summary of the project, including specific aims, study population, analysis plan, and any information about the biostatistical support requested. (Submissions with missing information will not be reviewed). * must provide value	⬆ Upload file No more than 2 pages

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What type of support is requested? Select the option that best fits with your needs.
* must provide value

○ Study preparation and/or pre-study planning

○ Sample size, power calculations, and analytic plans

○ Basic statistics, including bivariate analyses (chi-square, t-tests, and ANOVA), multivariate regression (linear and logistic), non-parametric tests, correlations, and basic survival analyses (logrank tests, Kaplan Meier curves, and Cox regression).

○ Database management

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What are the analyses for? Select the option that best fits with your needs.
* must provide value

○ Abstract submission

○ Presentation preparation

○ Pilot grant submission within UR

○ Pilot grant submission outside UR

○ Extramural peer-reviewed grant funded by NIH

○ Extramural peer-reviewed grant funded by other organization

○ Manuscript in preparation

○ Manuscript in revision

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Due Date (We recommend 2 months prior to the deadline)
* must provide value

[📅] [Today] M-D-Y

MM-DD-YYYY

Do you have other grant funds that could support this biostatistical request?
* must provide value

○ Yes

○ No

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Are you willing to write biostatistical support into the future grants?
* must provide value

[⌄]

[**Submit**]

Upon submission, you will have the option to download your survey response (PDF):

and save for your records.

DOM Biostatistical Resource Best Practices and Glossary

Preparing for a meeting: please prepare a 1-2 pages summary of your study analysis proposal. Please focus on ONE relevant question and one hypothesis, as typically done for pilot grants or preliminary analysis, as this allows for quickest turnaround, and allows others to utilize this resource as well. Please review your submitted document and be ready to answer questions related to your study and your database variables as needed.

Areas of support: we cover the following areas of support.

1. Study preparation and pre-study planning: this typically relates to analyzing preliminary data needed to identify a new hypothesis for a new study, and typically includes a smaller dataset/pilot data. It could be planning only.

2. Sample size, power calculations, and analytic plans: if you are submitting a research grant, you may need a sample size or power evaluation, along with a description of the primary and secondary analyses. We recommend that for grant submissions, you include a biostatistician to support the study (besides the initial consultation).

3. Basic statistics, including bivariate analyses (chi-square, t-tests, and ANOVA), multivariate regression (linear and logistic), non-parametric tests, correlations, and basic survival analyses (log-rank tests, Kaplan Meier curves, and Cox regression): tests will be determined based on your study question and hypothesis. You can suggest specific tests to be conducted, however, the biostatistician might recommend different tests to be conducted.

4. Database management: the shared resource can provide advice and basic assistance with data management for smaller studies. Complex database management needs require the expertise of trained personnel; shared resource personnel can review your needs and recommend expertise in that area.

Feedback following a meeting: The biostatistician might ask for revisions of the study plan and might set up a follow-up appointment with you to continue the discussion. The biostatistician will provide an estimated timeline of analysis completion. We will ask you to complete a feedback form in REDCap about this service.

Contacts: Anita Chen Anita_Chen@URMC.Rochester.edu, Lu Wang Lu_Wang@URMC.Rochester.edu

Biostatistical Shared Resource Faculty

Robert Strawderman

- Clinical / observational study design and analysis, survival and recurrent outcomes.

Anita Chen

- Observational study analysis, dichotomous and survival outcomes.

Lu Wang

- Clinical / observational study analysis.