Yale University

From the SelectedWorks of Rolando Garcia-Milian

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Survey Instrument: Data Challenges of Biomedical Researchers in the Age of Omics

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Available at: https://works.bepress.com/rolando_garciamilian/25/
Welcome!

We would like to invite you to participate in this survey entitled: “Data Needs Assessment of Biomedical Researchers in the Omics Era”. The purpose of this survey is to provide the Cushing/Whitney Medical Library with a better understanding of the needs of biomedical researchers for data analysis tools and training that will facilitate and increase productivity in research labs.

Please complete this survey if you do biomedical research and are 18 years of age or older. The survey will take 10 to 15 minutes to complete. Participation in the survey is voluntary and anonymous. You may skip any questions you prefer not to answer. Any responses you provide will be collected and analyzed. You may end the survey at any time, but you will not be able to re-enter the survey where you left off. Leaving the survey indicates your completion of this survey.

We will keep the information you provide confidential. However, federal regulatory agencies and Yale University’s Institutional Research Ethics Board may inspect and copy records pertaining to this survey. If results of the survey are presented in a report, you will not be identified.

There are no known risks from taking this survey, and there are no direct benefits nor compensation to the participants. However, there may be indirect benefits to participants and the biomedical community in that they are helping to develop not only workshops and training for biomedical research at Yale University, but to identify adequate tools and training needed to support their research.

If you require any further information regarding this survey, you may contact Rolando Garcia-Milian at 203-785-6194, email: Rolando.milian@yale.edu and or Denise Hersey dhersey@princeton.edu. If you have questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) for Human Subjects at (203) 785-4688, or access their website. Thank you for your consideration. Moving forward (clicking the button below) indicates that you are 18 years of age or older and your willingness to participate in this survey as described in this consent form.
Q1. Which of the following best describes your role? Please select all that apply.

- Faculty
- Staff (lab/tech personnel)
- Postdoctoral/ Fellow
- Resident
- Clinical Fellow
- Medical student
- Graduate Student
- Other (please specify) ___________________________________________________________

Q2. Please provide the name of your department.

________________________________________________________
Q3. Please select your main location on campus

- Amistad Park
- Edward S. Harkness Hall
- Jane Ellen Hope Building
- Laboratory of Medicine and Pediatrics (LMP)
- Molecular Medicine (Boyer Center)
- The Anlyan Center for Medical Research (TAC)
- Science Hill
- Sterling Hall of Medicine (SHM)
- Yale New Haven Hospital
- West Campus

- Other (please specify) ____________________________________________
Q4. What is (are) the primary organism(s) that you study?

☐ Human

☐ Mouse

☐ Rat

☐ Zebrafish

☐ Drosophila

☐ Yeast

☐ Viruses

☐ Bacteria

☐ Fungi

☐ Protists

☐ Other (please specify) ____________________________________________
Q5. Please indicate how important are the following types of data analysis for your research?

<table>
<thead>
<tr>
<th>Analysis of high throughput data (e.g. microarray data, RNA/DNA-Seq)</th>
<th>Not Important</th>
<th>Important</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNA/protein sequence manipulation and analysis</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>SNP, genetic variation, Genome wide association data analysis</td>
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<tr>
<td>Integrated searches of literature and high throughput data</td>
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<tr>
<td>Functional analysis of high throughput data</td>
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<tr>
<td>Signaling, network, and pathway analysis</td>
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<tr>
<td>Transcription factor and gene regulatory sequence analysis</td>
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<tr>
<td>Other data analysis needs (please list below)</td>
<td></td>
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</tr>
</tbody>
</table>
Q6. What are the main challenges with data analysis that you are facing in your research? Please check all that apply and comment if you would like.

- [ ] Not having the proper databases/software/tools
- [ ] Not having the adequate hardware/storage/computing capacity
- [ ] Not having the adequate training
- [ ] Other (please comment) ______________________________________________________

Q7. Does finding, retrieving, analyzing high-throughput, omics-related, or other type of data (e.g. image, text, etc.) represent a bottleneck for your research project? Please comment below.

- [ ] Yes
- [ ] No ______________________________________________________
Q8. Do you have data that you have not been able to analyze because you lack access to the appropriate software? Please comment below.

☐ Yes

☐ No ________________________________

Q9. Are there commercial bioinformatics databases, software programs/tools that you would like the medical library to consider licensing?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Q10. Do you have data that you have not been able to analyze because you lack sufficient training to use the analysis software/tool that is required? Please comment.

- Yes
- No

Q11. Are there training, classes or how-to sessions that you would like to see offered?

____________________________________________________________
____________________________________________________________
____________________________________________________________
____________________________________________________________
____________________________________________________________

Q12. Would working groups and discussion panels on the challenges and solutions to data collection and analysis be helpful? Please comment.

- Yes
- No

Q13. Would you or someone you know, here at Yale, be willing to teach or provide training on tools for the analysis of data? If interested, please contact us.

- Yes
- No
Q14. If you are willing to provide training, are there any barriers or challenges that impede you from doing this? Please select the main challenge.

- [ ] Not enough time
- [ ] Not adequate resources
- [ ] Organizational issues (booking room, inviting attendees, preparing materials, etc.) (3)
- [ ] Recognition or credit
- [ ] Others (please comment) ________________________________________________
Q15. The high amount, diversity, and complexity of the data generated by high-throughput Omics-related technologies pose challenges in terms of finding, retrieving, analyzing, and sharing data. Therefore, we would like to support collaborative work and networking to overcome these challenges. What format of networking and/or social event would foster the most opportunities for interaction and collaboration among Yale colleagues regarding finding, retrieving, analyzing data/information?

☐ Short presentations (faculties, postdocs, graduate students) on specific data analysis tools followed by coffee/tea light snacks

☐ Monthly meetings in casual atmosphere and thematic discussions

☐ Short to-the-point how-to sessions

☐ Other ideas (please comment below)

________________________________________________________________________________________
Q16. What is the best way to inform you about future data/information-related events (training, workshops, networking) offered by the Yale Medical Library? Check all that apply.

☐ Direct emails

☐ Monthly email newsletter from the library

☐ Medical Library website

☐ Shown on TV displays located in common areas

☐ Shown on printed posters located in common areas

☐ On handouts such as flyers or brochures

☐ On social media (e.g. Facebook)

☐ On topic-based list-servs or mailing lists

☐ Other (please specify) ________________________________________________

Q17. If you are willing to provide additional ideas, details and information in a focus group or interview, please contact us. Your email address will not be used in the analysis of this survey data, nor will it be provided to outside parties.

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Page 11 of 11