Expanding the Reach of the NCIBI Tools Beyond the University of Michigan

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Abstract

With the exponential increase in data, researchers have a fundamental need for resources that can analyze such data. Organizations like the NCBI (National Center for Integrative Biomedical Informatics) develop powerful and relevant bioinformatics tools to address this need. Connecting researchers with newly available resources, especially beyond the developing organization's home institution is a challenge. The Bioinformationist can confront this issue by introducing the biomedical informatics community to these resources and providing instruction on their use. The University of Michigan Bioinformationist has been involved in several recent events that have expanded the reach of the NCBI tools: 1) The National Cancer Institute-Frederick's Scientific Library Resource Fair 2) Remote Cytoscape training class 3) Medical Library Association Continuing Education Course. This poster discusses the Bioinformationist's role in these three events and the opportunity that they provided for expanding the reach of NCBI tools.

Introduction

NCBI, the National Center for Integrative Biomedical Informatics, is one of seven NCBCs (National Centers for Biomedical Computing) in the NIH (National Institutes of Health) Roadmap. Located at the University of Michigan in Ann Arbor, NCBI is engaged in developing and implementing powerful, relevant bioinformatics tools for Integrated Biomedical Informatics. Since its founding in 2005, NCBI has developed a suite of tools (http://portal.ncbi.nlm.nih.gov/ModularQueryTools.html), including the MiMI (Molecular Interaction) database, Gene2MeSH, Meta2MeSH, Metascape, and ConceptGen.

Because NCBI is physically situated at the University of Michigan, it is convenient and easy to provide outreach and education to the local community. More challenging is to get the resources used and accepted by a broader base of users. A conduit to the biomedical informatics community, the Bioinformationist can introduce these resources and provide instruction on their use. Bioinformationists are “information specialists who have received graduate training and practical experience that provides them with disciplinary background both in biomedical, behavioral or biological sciences and information sciences/informatics” as defined by the National Library of Medicine (NLM).¹

The University of Michigan Bioinformationist has been involved in several recent events that have expanded the reach of the NCBI tools:
1. The National Cancer Institute-Frederick's Scientific Library Resource Fair
2. Remote Cytoscape training class
3. Medical Library Association Continuing Education Course

Medical Library Association CE Course: Network Visualization Tools

<table>
<thead>
<tr>
<th>The Event</th>
<th>The Bioinformationist and the University of Michigan's Research and Informatics Coordinator at the Taubman Health Sciences Library have developed an MLA (Medical Library Association) CE (Continuing Education) course, focusing on Cytoscape and VisANT.</th>
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<tbody>
<tr>
<td>The Location</td>
<td>To Be Determined (TBD)</td>
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<tr>
<td>The Time</td>
<td>4 hour long course</td>
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<tr>
<td>The Format</td>
<td>In addition to the core Cytoscape and VisANT software products, this hands-on course covers the MiMI plugin for Cytoscape and other plugins and features.</td>
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<td>The Impact</td>
<td>Librarians successfully completing this course can receive MLA CE credit. This course informs librarians about Cytoscape and VisANT so that they can suggest and teach these resources to their researchers, thereby expanding the reach of the NCIBI-developed MiMI plugin.</td>
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The Bioinformationists felt that it is important for librarians to know about multiple visualization tools, leading to the inclusion of VisANT for this training, in addition to a discussion of criteria to explore when investigating these types of tools for use. This course will expand the reach of these two Bioinformationists, so that their training audience now includes other librarians. The goal of this course is to expand the role of librarians within the field of biomedical informatics, allowing more librarians to provide improved support to their biomedical researchers, thereby further expanding the reach of the NCIBI-developed plugins and resources.

Number of People Attending Each Event

<table>
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<tr>
<th>NCI-F Resource Fair</th>
<th>Remote Cytoscape Class</th>
<th>MLA CE Course</th>
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<tbody>
<tr>
<td>Number of People</td>
<td>39</td>
<td>30</td>
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This class introduced Cytoscape and its NCBI plugins to potential users in many locations beyond the University of Michigan.

Conclusion

Through each of the above events, the NCI-F Scientific Library Resource Fair, the Remote Cytoscape class, and the MLA CE Course, the Bioinformationist increases the reach and impact of the NCBI tools. As a result of these activities, potential users from many locations outside of the University of Michigan are introduced and trained on NCBI resources. The Bioinformationist hopes to continue offering and attending events and trainings that will further expand the use of these tools, to ensure that researchers from across the country and world know about these valuable tools.

References


Acknowledgements

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