Introduction to Informatics and Data Science in the Clinical Health and Biomedical Context
(July 22-26, 2019)

Time: 9am-4:30pm
Level: Pre and Post-Docs, No Programming Experience Required
Fee: $300
Location: West Campus Conference Center – Bldg. 800 – Room 218
Registration URL: https://yale-biomedical-data-course.eventbrite.com

One-week summer course on biomedical data science knowledge and health informatic skills offered to pre and postdoctoral fellows involved in data-driven research at Yale. Each day will consist of morning lectures and afternoon labs. No prerequisites.

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<th>Time</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
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<tbody>
<tr>
<td>9 - 12 Lectures</td>
<td>Python Introduction and SQL Database</td>
<td>Python, NoSQL Database</td>
<td>Ontology, Natural Language Processing (NLP) Basics</td>
<td>Machine Learning and Bioinformatics Applications</td>
<td>Visualization, FAIR data sharing</td>
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<td>1 - 4:30 Labs</td>
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Learning objectives:
1. Understand a variety of tools made available by the biomedical informatics community, and select the appropriate tools to solve data problems in the clinical, health and biomedical domains
2. Apply the fundamentals of computing and programming to integrate the aforementioned tools to address various sources of error across clinical, health and biomedical domains
3. Students will take away a basic command of computing and programming to develop their own research as it is shaped by the data science and statistics at the core of the research infrastructure alongside the Yale University Science Strategy.

Stay for an end of class celebration on Friday July 26!

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