

# Data Visualization Enables Efficient and Effective Communication for Quantitative Scientists



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(Bio)statisticians and data scientists are effective at utilizing cutting-edge methodologies to address the complexities of data in order to produce meaningful results. Despite this technical prowess, quantitative scientists struggle to communicate the story contained within these data to their non-statistical colleagues. With the high cost of conducting clinical research, the expectation is to collect as much data as possible on as many endpoints as possible to better understand the question(s) under investigation. Further, increased storage capacity coupled with the passive collection of vast amounts of data require ongoing analysis and interpretation to make informed decisions to improve research and development processes. Finally, given the complexity of many analyses, there is an increased use of sensitivity analyses to assess the consistency and robustness of results to varying assumptions. Given the volume of data to review, the variety of analyses to perform, and the need to turn findings into actions quickly, it should come as no surprise that clear insight is often out of reach to the research team. The traditional means of data summary – static tables and listings – are ineffective for understating the story hiding in plain sight; data visualization is the key to effective communication for the modern quantitative scientist. In this seminar, categorical, continuous, and time-to-event endpoints are discussed, and numerous illustrations showcasing analyses from clinical trials including signal detection, benefit-risk, subgroup analysis, patient journeys, questionnaires, and co-occurrence are presented.

**Thursday, October 31, 2024, 3:30-4:30PM Eastern**

**133 Rosenau Hall**

**Zoom Link:**

<https://unc.zoom.us/j/93457075747?pwd=hsg9eT4nlw9b6ClAVwoiL4z6ZcXYOa.1>

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