

Data visualization: New directions or just familiar routes?

Written by Ed Champness

Tuesday, 25 August 2015 13:27 - Last Updated Wednesday, 30 August 2017 14:37

Ed Champness gave this presentation at the ACS Fall 2015 National Meeting & Exposition held in Boston, USA on 19th August 2015.

Abstract

Data visualization tools make it very easy to represent our data graphically and present it in a way that clearly communicates patterns and trends. But, there is a risk that visualizations may be used, in practice, to confirm or justify our own hypotheses and biases. Instead, can data visualizations bring to light patterns in our data, drive new hypotheses and show us things we weren't expecting? In this presentation we will look at a number of common data analyses and visualizations used within the drug discovery process. We will illustrate some of the ways that these approaches can be misleading, with examples showing how inappropriate use of data visualization can lead us to conclusions which aren't necessarily supported by our data. We will discuss alternative, visual methods to guide our decisions in drug discovery and consider ways in which these can enable us to drive the analysis of data without introducing any of our own biases.



You can download this presentation as a [PDF](#).