Clinical and genomic data integration in support of biomedical research and clinical practice

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Eric Neumann is a graduate from MIT and holds a PhD in neurobiology, developmental genetics, and pharmacology from Case Western Reserve University. He is a recognized expert in semantic information, and has worked on many information initiatives for the pharmaceutical and life sciences, including the W3C Semantic Web Healthcare and Life Science Interest Group (HCLSIG).

Eric Neumann was the Global Head of Knowledge Management for Scientific and Medical Affairs within Sanofi-Aventis and the VP of Informatics at BG Medicine. He founded Genstruct (now Sleventa) and has also worked at Bolt, Beranek, and Newman (now BBN Technologies - Raytheon) on several advanced scientific computation projects over the span of several years.

He is Founder and CTO of PanGenX, a personalized medicine company, whose mission is to optimize therapeutic care by facilitating the discovery and application of medical knowledge towards patient segmentation.

Starting from the current definition of pharmacogenomics, in his talk Eric Neumann will show how it drives the personalized medicine vision, and will discuss what new forms of clinical and genomic information will be required for making clinical decision in personalized medicine.

He will illustrate some available public data sources, showing what they still lack and the value of deep focus curation. He will contrast data vs. "Actionable Knowledge" and discuss how leveraging semantically linked data to help progress personalized medicine. He will also address large-scale analytics and argue about who will benefit from linked knowledge.