BDK01: Biomedical Big Data Science

Exercises

KEY

1. In your own words, define biomedical research, clinical research, and translational research.

Biomedical research focuses on the health and diseases of humans.

Clinical research uses human subjects in studies and trials. It can include patient-oriented research, epidemiologic and behavioral studies, outcomes research, and health services research.

Translation research focuses on moving research results from the laboratory to clinical settings and on to the community.

1. Choose a topic of interest to you (such as a treatment of a disease) and search for translational research studies relating to that topic (try PubMed: <http://www.ncbi.nlm.nih.gov/pubmed>). Try to find 1 to 3 studies each that can be classified as T1, T2, or T3 translational research, and briefly describe how you classified each study. (For more information on translational research, see BDK01-01, slide 5.)

T1: activity to test what care works, such as clinical efficacy research.

T2: activities to test who benefits from promising care, such as outcomes research, comparative effectiveness research, or health services research.

T3: activities to test how to deliver high-quality care reliably and in all settings, such as measurement and accountability of health care quality and cost, or implementation of interventions and health care system redesign.