BIOSTATISTICS SEMINAR



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Some Statistical Problems Involving Rare Somatic Mutations

In this talk I will focus on two interlinked problems. In the first I'll be describing research from our group to develop tests for clonal relatedness of tumors in the modern clinical context where the tumors have been evaluated for somatic mutations using a limited panel of cancer genes. This involves some unusual challenges in formulating and interpreting the statistical test. An important feature of the test is the need to have information on the probabilities of occurrence of the individual somatic mutations that are observed in the tumors. However, most somatic mutations occur very rarely, and indeed many mutations in new tumors will never have been observed before, leading to the technical challenge of estimating these rare probabilities. In the second part of my talk I will describe some efforts to overcome this problem.

Thursday January 16, 2020 3:30 pm - 4:30 pm Blue Cross and Blue Shield of North Carolina Foundation Auditorium

