Aarhus Genome Center - *i*SEQ seminar series on Precision Medicine

Wednesday 9 May 2018 at 14.00 – 15.00

Katherine A Hoadley, PhD
Assistant professor in Cancer Genetics at UNC-Chapel Hill

Talk:
The Cancer Genome Atlas – PanCancer Molecular Classifications.

Abstract:
The Cancer Genome Atlas has culminated over a decade of work characterization over 11,000 tumors from 33 different tumor types in a large scale, multidimensional data analysis called the PanCancer Atlas. This multi-institutional project resulted in 26 papers under three main themes – Cell of Origin, Oncogenic Processes, and Signaling Pathways.
In the Cell of Origin marker paper, we explored the molecular classification of samples by chromosome arm level aneuploidy, DNA methylation, mRNA, miRNA, and protein data. Integrative clustering approaches identified groups of samples with shared molecular characteristics and identified diversity within tumor types and similarities that cross tumor types.
This work provided support for additional analyses looking at pan-organ systems including pan-gynecological, pan-gastrointestinal, pan-kidney, pan-squamous, and stemness.

Reference:
Cell-of-Origin Patterns Dominate the Molecular Classification of 10,000 Tumors from 33 Types of Cancer.
Hoadley KA, Yau C, Hinoue T, Wolf DM, Lazar AJ, Drill E, Shen R, Taylor AM, Cherniack AD, Thorsson V, Akbani R, Bowlby R, Wong CK, Wiznerowicz M, Sanchez-Vega F, Robertson AG, Schneider BG, Lawrence MS, Noushmehr H, Malta TM; Cancer Genome Atlas Network, Stuart JM, Benz CC, Laird PW.
Cell. 2018 Apr 5;173(2):291-304.e6. doi: 10.1016/j.cell.2018.03.022.

Link to website:
https://unclineberger.org/people/profiles/katherine-hoadley

Venue:
Eduard Biermann Auditory, The Lakeside Theatres, Aarhus University, Bartholins Allé 3, 8000 Aarhus C.