## Mar 27, Niland, NLP for Automated Extraction of Data from Clinical Reports



Natural language processing (NLP) applied to unstructured text of patient records can assist in codifying data elements. We will describe the portability and reusability of NLP queries across institutions, introducing a technique called "Iterative Interactive Enrichment" to optimize identification of discrete data points within pathology reports for Non-Hodgkin's Lymphoma (NHL) patients.

Session details...

## BIO:

Joyce Niland: Dr. Joyce Niland is the first holder of the Edward & Estelle Alexander Endowed Chair in Information Sciences at City of Hope Comprehensive Cancer Center. She received her Bachelor's degree in Human Biology from Stanford University, a Master's degree in Physical Therapy from the University of Southern California (USC) and Master's and Doctoral degrees in Biometry from USC. She is an Associate Director of City of Hope Cancer Center, Full Professor in the Beckman Research Institute, and adjunct professor in the USC Keck School of Medicine. Dr. Niland chairs the Department of Information Sciences, including the Divisions of Biostatistics, Clinical Research Information Management, and Research Informatics and Systems. In 2013 she was promoted to Chief Research Information Officer for City of Hope.

Dr. Niland has over 30 years of experience collaborating in translational research. She has published more than 140 biomedical research papers, numerous book chapters, and a text on informatics tools for clinical trials. She directed the National Comprehensive Cancer Center Network Outcomes Research Data Coordinating Center (DCC) for 15 years, and currently directs national DCCs for the Integrated Islet Distribution Program for Type 1 diabetes research, the Intestinal Stem Cell research consortium, and the Human Islet Research Network. Dr. Niland is on advisory boards for the Clinical Data Interchange Standards Consortium (CDISC), the Computational Statistics and Data Analysis (CSDA) journal, and the American Society of Clinical Oncology (ASCO) CancerLing system. She is an elected Fellow of the American Statistical Association (ASA) and has served as Vice President of ASA and Scientific Secretary of the International Association of Statistical Computing. In 2004 she received the City of Hope Medical and Scientific Achievement award for her contributions to biomedical research.

## SUMMARY:

Topic: A Systematic Approach to Building Natural Language Processing (NLP) for Automated Extraction of Data from Clinical Reports

Speaker: Joyce Niland, Ph.D., chair and professor in the Department of Diabetes & Cancer Discovery Science within City of Hope's Diabetes & Metabolis m Research Institute

Date: March 27, 2019

Time: 11:00 a.m. - 12:00 p.m.

Room: 1W032-034

WebEx: https://cbiit.webex.com/cbiit/onstage/g.php?MTID=e6fb8e4f33a6bae74b80c4f3db1feacc0

Event Number: 736 119 224

Event Password: \$Peakerseries19

You are invited to listen to Dr. Niland's presentation in the NCI Shady Grove Building on Medical Center Drive or via WebEx. Dr. Niland will present remotely via WebEx.

Presentation: A screencast of the presentation will be available for viewing after the event on the NCI CBIIT Speaker Series YouTube Playlist.

## About the NCI CBIIT Speaker Series:

The National Cancer Institute (NCI) Center for Biomedical Informatics and Information Technology (CBIIT) Speaker Series presents talks from innovators in the research and informatics communities. The biweekly presentations allow thought leaders to share their work and discuss trends across a diverse set of domains and interests. The goals of the Speaker Series are: to share leading-edge research; to inform the community of new tools, trends, and ideas; to inspire innovation, and to provide a forum from which new collaborations can begin. For additional information, including past speaker series presentations, visit the <u>CBIIT Speaker Series page</u>.

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