



Use Of Natural Language Processing to Extract Information from Clinical Text

Workshop

June 15, 2017

**Food and Drug Administration, UCSF-Stanford Center of Excellence
in Regulatory Science & Innovation, San Francisco State University**

Workshop Planning Committee



**FDA Office of the Chief Scientist/
Office of Regulatory Science &
Innovation**

Donna Blum-Kemelor

Amal Manseur

Catherine Ng

Audrey Thomas

York Tomita, PhD

Frank Weichold, MD, PhD

Rebekah Zinn, PhD

**FDA-Center for Drug Evaluation and
Research**

Ruth Barratt, PhD

Rita Ouellet-Hellstrom, PhD, MPH

Mitra Rocca, PhD

**FDA- Center for Biologics Evaluation
and Research**

Mark Walderhaug, PhD

**FDA-Center for Devices and
Radiological Health**

Isaac Chang, PhD

**UCSF-Stanford Center of Excellence in
Regulatory Science & Innovation**

Russ Altman, MD, PhD

Lawrence Lin, PhD

San Francisco State University

Dragutin Petkovic, PhD

Anagha Kulkarni, PhD

Today's Agenda



- Opening Remarks
- Morning Session (8:30 am – 12:30 pm)
- Afternoon Session (1:30 pm – 5:00 pm)
- ~20 min presentation, 10 min Q & A
- Panel discussions at the end of each session
 - Morning: 11:15 -12:30
 - Addressing the strengths and limitations of NLP solutions
 - Afternoon: 3:45 - 4:45
 - Addressing what is the way forward for clinical NLP
- Wrap up at the end of the day



Questions – Can NLP Assist by itself or as part of a system

Using clinical text or clinical notes to

- Identify
 - Indication or reason for medical product use?
 - Application or treatment outcomes and Adverse Events?
 - Confounders: demographic, biological, cultural, or behavioral?
- Validate medical codes?
- Enhance randomized clinical trials (RCTs)?

Today's Logistics for Attendees



- Please use microphones in room to ask questions
- Remote attendees can type questions in Adobe chat box
- Cell phone: please mute or turn off ringers
- Restrooms are outside and to the right
- Breaks – snacks, lunch options, and coffee are available for purchase at kiosk- please pre-order lunch by 10:30 am
- WiFi information is included on last page of agenda
- Meeting recording and slides will be available on UCSF-Stanford CERSI website with speaker's permission