VERITY NEWSLETTER

VERITY Updates

- **VERITY has a new website!** Please visit **www.verityresearch.org** to learn more about VERITY

- **VERITY/Brigham Course in Rheumatology Clinical Research** begins Monday, May 7 with 15 trainees and junior faculty from around the US attending the 6-day course

- **VERITY Membership** offers many benefits. For more information, please visit **www.verityresearch.org/become-a-member/membership-details/**

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Letter from the VERITY Director

Pediatric and adult rheumatic and MSK diseases challenge the clinical researcher: they affect the population across the lifespan, impact a broad range of patient-centered outcomes, are rarely cured, and often have multiple possible treatment strategies. VERITY (Value and Evidence in Rheumatology using bioInformaTics, and advanced analYtics), a NIAMS-funded P30 (Clinical Research Cores) is organized around central scientific themes that can be applied to multiple rheumatic and musculo-skeletal (MSK) diseases. VERITY consists of 3 cores: Enrichment core, Bioinformatics core, and Methodology core. Each of these cores will implement novel analytic methods and outcome measures that address existing and emerging needs in clinical research for preventing and treating rheumatic and musculoskeletal disorders. The overarching goal of VERITY is to facilitate advancements in the methodologic sciences supporting clinical research within the NIAMS pediatric and adult rheumatic and MSK disease missions. We invite you to participate.

Daniel Solomon, MD, MPH
VERITY Director

Upcoming Meetings in May

Wednesday, May 2:
Time & Location: 9:00-10:00AM ET, BTM 02006B
Lindsey Criswell (Peter Schur lecture on SLE)

Thursday, May 17:
Time & Location: 12:30-1:30PM ET, TBD
VERITY-SCS Journal Club presented by Lindsey MacFarlane
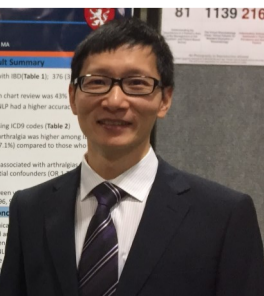
Thursday, May 31:
Time & Location: 12:30-1:30PM ET, TBD
VERITY Early Investigators Research Seminar
Nancy Shadick presents "Working with Industry"

Plus many more, please visit verityresearch.org for more information.

Letter from the VERITY Methodology Core

Rheumatic and musculoskeletal (MSK) disorders often persist for decades, have profound impact on quality of life, and require complex and costly management. Epidemiologic studies to identify persons at high risk for these disorders and to identify factors leading to worse prognosis merit a high priority. Clinical trials to establish treatment efficacy in these disorders are even more crucial. Both types of studies must account for the complexity of the phenotype and longevity of the clinical course, and they must address the balance between efficacy and toxicity in treatments for rheumatic and MSK disorders. The VERITY Methodology Core addresses these methodologic needs and challenges. The Methodology Core is a key, centralized resource that will support investigators planning or conducting clinical research in patients with rheumatic or MSK disorders. Core faculty and staff possess methodologic expertise in patient-centered research, comparative effectiveness studies, cost-effectiveness studies, behavioral interventions, and randomized controlled trials (RCTs). They are adept at matching clinical questions to appropriate study designs and outcomes, developing and implementing statistical analysis plans, and optimizing data management systems and data collection methods. The Methodology Core links innovative ideas from the VERITY Community with rigorous study designs, innovative trials, methods development, data management and analysis, compliance with data safety and Health Insurance Portability and Accountability Act (HIPAA) regulations, and clear reporting of findings.

Letter from the VERITY Bioinformatics Core

Bioinformatics methods are increasingly being applied in clinical research studies to approach research questions from a different perspective. For example, the use of natural language processing (NLP) allows us to use information that was previously embedded in narrative clinical notes. Leveraging our experience from the past decade in developing and applying bioinformatics tools for clinical studies, the VERITY Bioinformatics Resource Cores seeks to support investigators who would like to learn about and apply these tools to their research. Examples of resources available to the VERITY community includes access to integrated electronic medical record with NLP in a large RA cohort to obtain hands on experience working with these integrated data while testing study hypotheses. We also provide customizable chart review tool which uses NLP to assist investigators in finding outcomes of interest; this tool can improve the efficiency of chart reviews when sifting through thousands of notes are needed. More details on our services is available online at http://verityresearch.org/.

VERITY Member Spotlight - Tianrun (Austin) Cai, MD

Dr. Tianrun (Austin) Cai is a post-doctoral fellow in Dr. Liao's lab in the Section of Clinical Sciences, Division of Rheumatology, and a member of the VERITY Bioinformatics Resource Core. His research focus and expertise is in natural language processing (NLP) and clinical informatics. Prior to coming to BWH, he was a practicing general surgeon in China. As part of Dr. Cai's work at BWH, he developed tools using NLP to facilitate chart review and to extract numerical data from narrative notes. Dr. Cai's has also developed an NLP processing pipeline to extract information from narrative electronic health record notes used in phenotyping algorithms

***For each issue, the newsletter will feature a VERITY member. For more information, please contact Jackie Stratton (jstratton1@bwh.harvard.edu) or visit verityresearch.org to become a VERITY member.

Please visit verityresearch.org for more information.