

CTSA Program Steering Committee

Sept 11, 2023

2:30 – 3:30 ET

Agenda September 11th, 2023

Time	Topic	Speaker(s)
2:30 – 2:35	Welcome *Announcements	Michael Kurilla & Duane Mitchell
2:35 – 2:50	Clinical Research Workload and Study Complexity Assessment WG	Bernadette Capili & Allison Norful
2:50 – 3:05	Informatics EC	Peter Elkin & Jomol Mathew
3:05 – 3:30	Considering NCATS supported data platforms: What do the hubs need?	Karen Johnston Steven Reis Melissa Haendel Josh Fessel



Seeking New CTSA Program Steering Committee Members!

- NCATS is seeking **5 UL1 PIs** to serve on the committee for the next 2-3 years (2024 – 2027).
- If you would like to self-nominate or suggest a fellow PI, please submit the PI name, institution, and brief explanation by **Wednesday, October 18th** [here](#)

The eligibility criteria for SC appointments:

- A PI must be officially named in the Notice of Grant Award of an active CTSA Program hub.
- The PI's hub award must have at least 3 years remaining during the project period.
- The PI has not served on the SC since December 2017

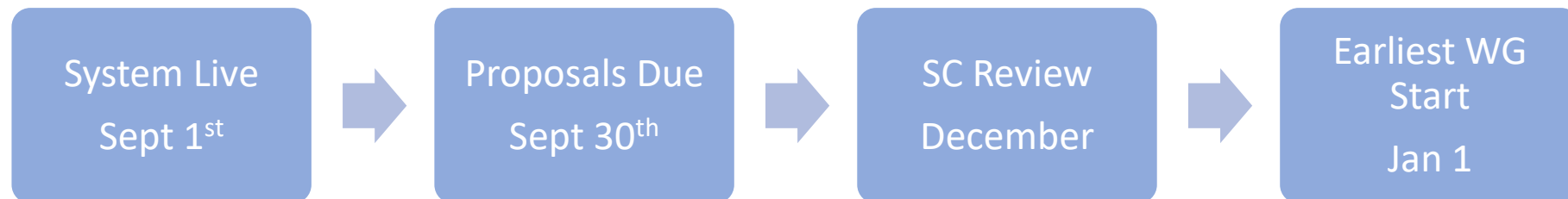


Working Group Proposal Submission Information

All submissions should be submitted between **September 1st - September 30th at 11:59 pm ET.**

The CTSA Program Steering Committee would like to encourage the consortium to create Working Group proposals that could align within the following key areas:

- Learning health and research systems
- Artificial Intelligence
- Best practices for navigating the Science of Translation
- Causes of rising midlife mortality in America (Case & Deaton, PNAS, 2015)
- Climate change and health
- National training curricula in CTS
- Diversity, equity, inclusion, and accessibility
- Enhancing the impact of clinical trials



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CTSA Clinical & Translational Science Awards Program

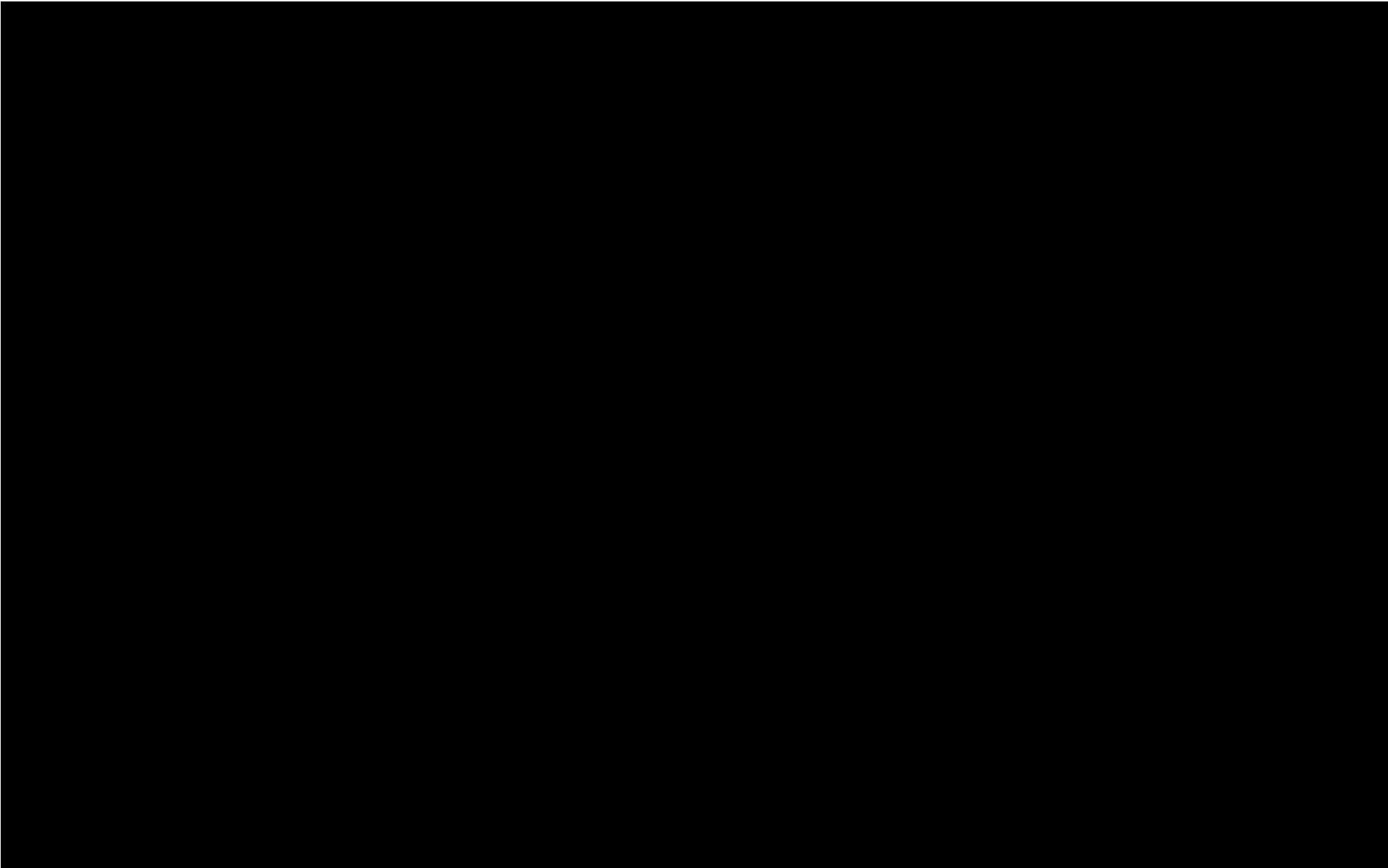
1:30 – 1:35	Welcome	Michael Kurilla and Duane Mitchell
1:35 – 2:00	CTSA Program and NCATS Update	Michael Kurilla
2:00 – 3:00	Pod Feedback	Chris Hartshorn
3:00 – 4:00	Considering NCATS supported Data platforms: What do the hubs need? Part 3	Karen Johnston, Steve Reis, Melissa Haendel, Arleen Brown, Teisha Johnson, Ruth O'Hara, Muredach Reilly and Josh Fessel
4:00 – 4:30	Break	
4:30 – 5:00	WG Overview and Support (1 year in, gap and landscape assessment)	CCOS
5:00– 6:00	Update on NCATS Strategic Plan (from CTSA-specific roundtables)	Joni Rutter / <i>Meredith</i>
6:00	Adjourn	



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Clinical Research Workload and Study Complexity Assessment WG

Bernadette Capili and Allison Norful





CTSA Working Group: Clinical Research Study Complexity Assessment



Background of the Project

- Barriers and challenges to developing and implementing clinical research.
 - Complex regulatory requirements
 - Restrictive eligibility criteria
 - Specific study timelines
 - Limiting funding
 - Appropriate staffing



Available Tools for Study Complexity

- Methods of evaluate clinical research study complexity are scant.
- Available tools are specific to oncology research
 - Ontario Protocol Assessment Level
 - Wichita Community Clinical-Trial Oncology Protocol Acuity
 - NCI Trial Complexity Elements and Scoring Model



Goals of the Project



- Identify the dimensions and attributes of clinical research complexity.
- Develop a scoring rubric to scale clinical research study complexity.
- Establish the initial psychometric properties of an instrument that aims to measure clinical research study complexity.

Processes Used in Clinical Research Studies

- Logistics/feasibility of protocol
- Protocol approvals
- Work with multiple departments (i.e., radiology, pharmacy, laboratory)
- Participant recruitment, screening, study visits, follow-ups
- Communication with sponsors, team members, study participants



Dimensions of Scaling Study Complexity

Structure			Process		Outcomes
Environment	Personnel	Resources	Procedures	Team-based processes	Study Outcomes
<ul style="list-style-type: none"> • Ample physical space in primary institution to conduct study procedures • Institutional and Stakeholder Support • Access to external environments required to conduct study procedures (if applicable) 	<ul style="list-style-type: none"> • Research Team Size/Composition • Research team experience level • Proposed investigator effort/allocation of time to complete study • Access to support staff to carry out study procedures 	<ul style="list-style-type: none"> • Required equipment & supplies to carry out procedures • Sufficient Source of Funding 	<ul style="list-style-type: none"> • Study procedures (*core elements) <ul style="list-style-type: none"> -feasibility of recruitment and enrollment, the sample size -number of study arms -registration or randomization steps -complexity of the intervention -length of study (number of study visits) -data collection complexity -follow-up requirements -personnel impact (number of disciplines/staff to coordinate/conduct the study) • Feasibility of timeline for study completion 	<ul style="list-style-type: none"> • delineated roles and responsibilities for each study team member • Measures of accountability for task completion • Conflict resolution 	<ul style="list-style-type: none"> • Novel evidence produced that warrants investigation and future research • Plan for feedback and evaluation of methodologic success needed for subsequent study planning

Original NCI

Heilbrunn Research Complexity Index

Element #	Study Element	Element #	Study Element
1	Study Arms	0	Pre-Study Prep
2	Informed Consent Process	1	Study Design
3	Registration or Randomizations Steps	2	Recruitment
4	Complexity of Investigational Treatment	3	Informed Consent
5	Length of Investigational Treatment (tx)	4	Randomization
6	Feasibility & Personnel Impact	5	Intervention/Dosing
7	Data Collection Complexity	6	Rsearch Team
8	Follow-up Requirements** (see link below)	7	Data Collection
9	Ancillary Studies A** Includes correlative science, imaging studies	8	Follow-up Requirements
10	Participant Feasibility and Enrollment	9	Data Analysis
		10	Dissemination

Content, Face & Cognitive Validity

Phase 1

- Content, Face, and Cognitive validity testing
- N = 6 Targeted

Eligibility Criteria

- Engaged in clinical research for five years or more
- Experience in preparing, directing, or coordinating clinical studies sponsored by industry, foundation, and/or government
- Certified in Good Clinical Practice
- Completed training in research, ethics, and compliance



Content

- Participants rate each element/response tier 4 point Likert-type scale ranging from 'highly relevant (4) to 'highly irrelevant' (1).
- Content validity index (CVI) computed.
- CVI greater than .8 will be eligible for inclusion and further psychometric testing

Face

- 1:1 interviews
- Participants asked to read each item aloud and interpret the intended element and response options
- Iterative revisions with each subsequent interview until agreement reached

Cognitive

Clinical Research Workload and Study Complexity Assessment

Page 2 of 12

Section A: Pre-Study Preparation

On a scale from 1-4, how **relevant** is the *Selection of Measures* item? (1= extremely irrelevant, consider removal; 2= somewhat irrelevant, major revision recommended; 3=slightly irrelevant, minor revisions recommended; 4= extremely relevant, no revisions recommended).

	1	2	3	4	
1. Selection of Measures (e.g. validated measures to the target population, translated, number of measures needed)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
Tier 1 (1 point): -1 measure -Validated in population	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Tier 2 (2 points): -2 to 3 measures -Not validated in population	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset
Tier 3 (3 points): -4 or more measures -Unknown validity of measures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	reset

On a scale from 1-4, how **clear** is your understanding of what *Selection of Measures* is measuring? (1= extremely unclear, consider removal; 2= somewhat unclear, major revision recommended; 3=slightly unclear, minor revisions recommended; 4= extremely clear, no revisions recommended).

Phase 1 Results

- Content Validity (n=7)
 - CVI .42-1.0
 - 34 elements/tiers fell below 0.8 threshold
 - New Instrument development justification
- Face & Cognitive Interviews (n=8)
 - Iterative revisions of elements and tiers
 - Goal: Inclusive of all study design and elements of research



25 Elements

- Selection of Study Instruments
- Physical equipment
- Budget Preparation
- Consultant Agreements
- Facilities or vendor agreement
- Multiple PI agreements
- Hiring and Job Descriptions
- Study Arms
- Access to Target Population
- Vulnerable Populations
- Participant Eligibility
- Incentives
- Informed Consent
- Randomization
- Type of Intervention
- Intervention Administration
- Research team
- Data Collection (Procedures)
- Data Collection (Frequency)
- IRB Prep
- Compliance Reporting
- Expected AE/Safety
- Follow up
- Statistical Analysis
- Dissemination

HEILBRUNN RESEARCH COMPLEXITY INSTRUMENT: The purpose of this instrument is to scale the complexity of a research protocol. For each of the following elements, circle which level best fits the protocol.			
Study Element	1 point	2 points	3 points
Selection of Study Instruments (e.g., surveys, tools)	1 instrument <i>and</i> Instruments validated in population	2 to 3 instruments <i>or</i> Instruments valid but not validated in targeted population <i>or</i> At least 1 case report form; simple; 1-page form	4 or more instruments <i>or</i> Unknown validity <i>or</i> 2 or more case report forms that require multiple categorization; multiple pages
Physical Equipment	Not applicable <i>or</i> Usual or standard care equipment (e.g. thermometer, ECG)	New to study team <i>or</i> Some learning required	Complex equipment in learning <i>or</i> Calibration needed
Budget Preparation/ Approvals	2 or fewer authorizers	3-4 authorizers	5 or greater authorizers
Consultant Agreements	Consultant Agreements (0)	Consultant Agreements that include different roles for each person (1-3)	Consultant Agreements that include different roles for each person (4 or more)

Phase 2

- Pilot testing to establish initial reliability
- Instrument built into REDCap
- Participants score 2 independent clinical research protocols
- N = 30 (Target)

Eligibility Criteria

- engaged in clinical research for five years or more
- experience in preparing, directing, or coordinating clinical studies sponsored by industry, foundation, and/or government
- certified in Good Clinical Practice
- completed training in research, ethics, and compliance

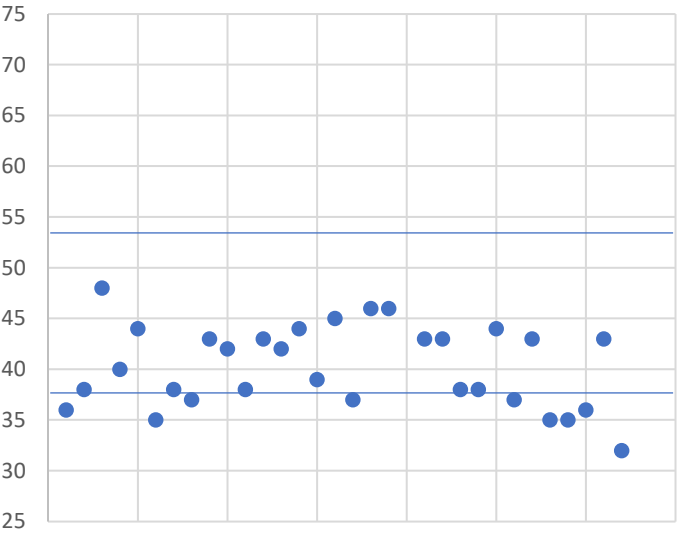
Data analysis: Descriptives (item mean/SD), % agreement; Fleiss Kappa statistic for inter-rater reliability

Phase 2: Pilot Testing

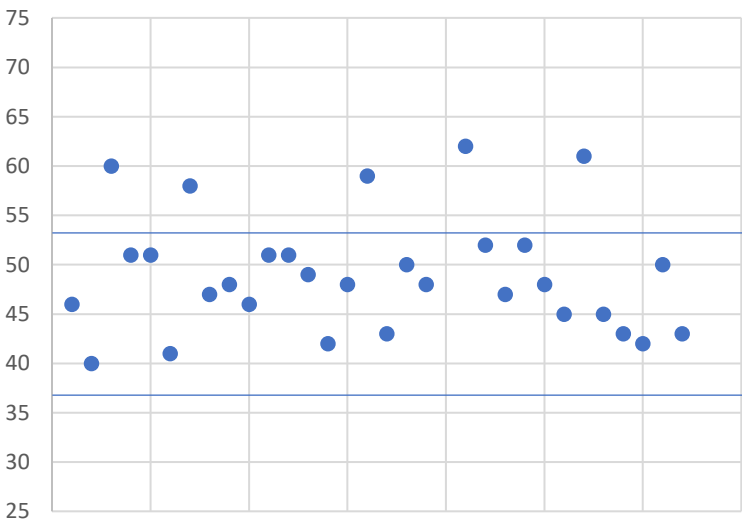
Phase 2 results

- N=31 participants
- Potential Range 25-75 points
- Protocol 1 composite score range 32-48
- Protocol 2 composite score range 40-60

Protocol 1



Protocol 2



Rating Category	Conditional Probability	Agreement on Individual Categories ^a		95% Confidence Interval					
		Kappa	Asymptotic Standard Error	z	Sig.	Lower Bound	Upper Bound		
1.00	.502	.216	.010	20.873	.000	.196	.237		
2.00	.503	.122	.010	11.792	.000	.102	.143		
3.00	.427	.282	.010	27.184	.000	.262	.302		

a. Sample data contains 31 raters.

<u>Element</u>	Protocol 1			Protocol 2		
	1	2	3	1	2	3
Selection of Study Instruments	0.00%	22.58%	77.42%	0.00%	22.58%	64.52%
Physical equipment	51.61%	48.39%	0.00%	45.16%	41.94%	0.00%
Budget Preparation	83.87%	12.90%	0.00%	70.97%	12.90%	0.00%
Consultant Agreements	67.74%	29.03%	3.23%	58.06%	29.03%	0.00%
Facilities or vendor agreement	25.81%	70.97%	3.23%	19.35%	64.52%	3.23%
Multiple PI agreements	74.19%	12.90%	12.90%	67.74%	12.90%	6.45%
Hiring and Job Descriptions	64.52%	32.26%	3.23%	58.06%	25.81%	3.23%
Study Arms	77.42%	6.45%	16.13%	67.74%	6.45%	12.90%
Access to Target Population	41.94%	38.71%	19.35%	35.48%	32.26%	19.35%
Vulnerable Populations	29.03%	64.52%	6.45%	25.81%	54.84%	6.45%
Participant Eligibility	0.00%	74.19%	22.58%	0.00%	61.29%	22.58%
Incentives	6.45%	16.13%	77.42%	6.45%	12.90%	67.74%
Informed Consent	19.35%	77.42%	3.23%	16.13%	67.74%	3.23%
Randomization	100.00%	0.00%	0.00%	90.32%	0.00%	0.00%
Type of Intervention	93.55%	6.45%	0.00%	80.65%	6.45%	0.00%
Intervention Administration	90.32%	9.68%	0.00%	77.42%	9.68%	0.00%
Research team	58.06%	32.26%	9.68%	51.61%	25.81%	9.68%
Data Collection (Procedures)	19.35%	58.06%	22.58%	16.13%	51.61%	19.35%
Data Collection (Frequency)	25.81%	64.52%	9.68%	22.58%	54.84%	9.68%
IRB Prep	0.00%	83.87%	16.13%	0.00%	70.97%	16.13%
Compliance Reporting	38.71%	58.06%	0.00%	38.71%	45.16%	0.00%
Expected AE/Safety	90.32%	9.68%	0.00%	77.42%	9.68%	0.00%
Follow up	87.10%	12.90%	0.00%	74.19%	12.90%	0.00%
Statistical Analysis	54.84%	35.48%	9.68%	51.61%	25.81%	9.68%
Dissemination	70.97%	16.13%	9.68%	61.29%	12.90%	9.68%

Summary

- Develop and establish initial psychometric properties of a novel instrument to scale study complexity
- Pilot testing demonstrates high cognitive validity and fair inter-rater reliability
- 4 elements potentially warrant further investigation including revision and/or removal
- Future research should include construct validity testing with a greater sample size
- Potential Future Use
 - Grant/Budget Planning
 - Resource allocation
 - % effort delineation
- Dissemination Plans
 - Presentations
 - CTSA Webinar September 27, 2023
 - International Association of Clinical Research Nurses Oct 17, 2023
 - Manuscript
 - Journal of Clinical Translational Science



Workgroup Members:

Margaret Barton-Burke PhD, RN, FAAN (Memorial Sloan Kettering Cancer Center)

Bernadette 'Candy' Capili PhD, NP-C (Rockefeller University) - CHAIR

Christine Kovner PhD, RN, FAAN (New York University)

Allison Norful, PhD, RN, ANP-BC, FAAN (Columbia University)- STUDY LEAD

Olga Jarrin-Montaner, PhD, RN (Rutgers University)

Laura Viera MS, CCRP (University of North Carolina-Chapel Hill)

Bridget Adams, MS (Oregon Health & Science University)

Ashley Arrington (University of North Carolina-Chapel Hill)

Jackie Attia (University of Rochester – CCOS)

Maria Chiodo, MPH (University of Rochester)

Gallya Gannot, PhD (NIH, NCATS)

Susanne Heining (University of Rochester)

Scott McIntosh, PhD (University of Rochester – CCOS)

Kitt Swartz, MPH (Oregon Health & Science University)

Abby Williams (University of Rochester – CCOS)





Thank you

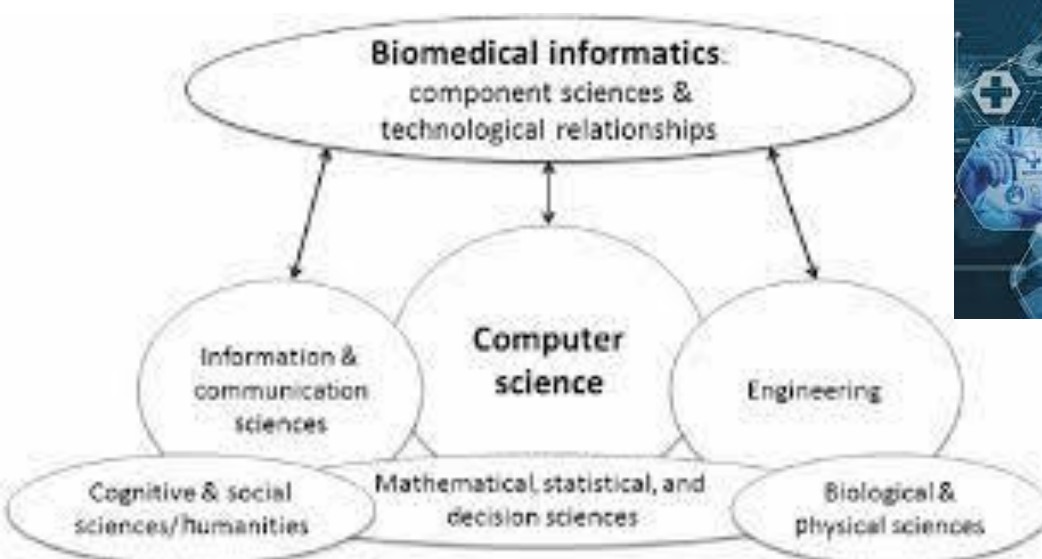
Informatics EC

Peter Elkin and Jomol Mathew



iEC Lead Team Report to NCATS CTSA Steering Committee

September 11, 2023



NCATS CTSA Informatics Enterprise Committee

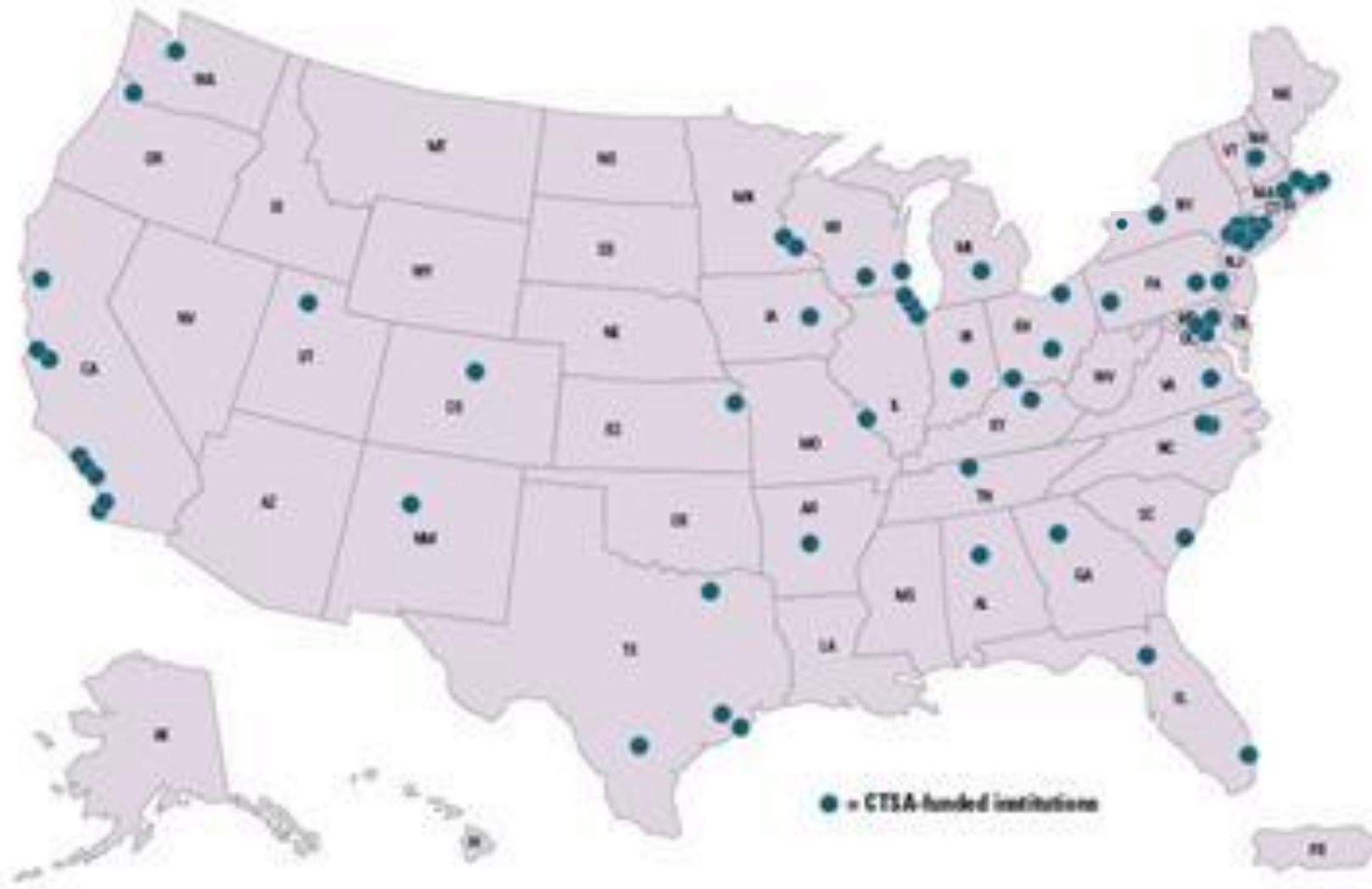
- Co-chairs:
 - Peter L. Elkin, MD
 - University at Buffalo
 - Jomol Mathew, PhD
 - University of Wisconsin
- Rest of the Lead Team
 - Voting: Thomas Campion, PhD (Cornell), Hongfang Liu, PhD (Mayo soon to be UT), Emily Pfaff, MD (Univ of North Carolina)
 - Non-Voting: Ken Gersing, MD (NCATS), Christopher Hartshorn, PhD (NCATS), Thomas Radman, PhD (NCATS), Paul Harris, PhD (Vanderbilt), Chris Chute, MD, Dr.PH (Hopkins), Melissa Haendel, PhD (Univ of Colorado), Leonie Misquitta, PhD (NCATS) and Jeanne Holden-Wiltse (CLIC)



CTSA Clinical & Translational Science Awards

Informatics Enterprise Committee

- **Coordination**
- **Interoperable Data Sharing**
- **Enhancing Translational Research Capability**



CTSA Program Goals:

- Train and cultivate the translational science workforce.
- Engage patients and communities in every phase of the translational process.
- Promote the integration of special and underserved populations in translational research across the human lifespan.
- Innovate processes to increase the quality and efficiency of translational research, particularly of multisite trials.
- Advance the use of cutting-edge informatics.

All of these Goals are enhanced by sets of strong Informatics capabilities.

iEC Goals

- Advise the Steering Committee regarding Informatics Priorities
 - We are requesting to report to the Steering Committee Quarterly
- Set Interoperability Standards for Data Sharing Across Hubs
 - Review standards and help make choices that benefit translational research using nationally approved and emerging standards
- Provide services and consultation to help hubs achieve the Informatics Goals
 - Provide consultative services
 - Facilitate Software hosting with NCATS of utilities and scripts that assist hubs achieve their goals
- Highlight the Informatics achievements of all CTSA hubs
 - Shareware Talk program (Thank you for those who have signed up and if not please do sign up to give a talk)
<https://docs.google.com/spreadsheets/d/1tkZ3NBidpR xuJ A j 3 B X t 5 L b m h l d U Q P j D L L H c y m U 6 z E S o / e d i t # g i d = 0>
- Advise NCATS on Informatics Research Priorities
 - Provide Practical Guidance to help solve important translational science informatics problems.
- Ensure that all Hubs have a voice in the iEC
 - Shareware talks
 - Open discussions

The most important message is that everyone has a voice and a part to play in this plan.

New Accomplishments since our last Report

- Held a very successful Face2Face meeting – Informatics Leaders and some PIs attended the meeting in DC.
 - Discussed the Informatics Research Agenda
 - Goals toward Interoperability
 - Translating Informatics innovations into Practice
 - Improved recruitment to clinical trials using eConsenting and Real World Evidence
 - Discussed and provided examples for the new Data Management Sharing guidelines and provided examples
- New F2F meeting is being expanded to be a whole day meeting from ½ day in 2024
- Leadership representation at AMIA and ACTS to develop synergy across the informatics forums
 - Peter Elkin (AMIA)
 - Peter Elkin and Jomol Mathew (ACTS)
 - Developed a shared data science advocacy document with the BERD SIG in ACTS.
 - Presentations at ACTS 2023 and AMIA Informatics Summits to inform both communities of the richness available in the other community and encourage synergy. This was so successful it is being repeated this year and at AMIA we have three talks one on Translational bioinformatics, one on Clinical Research Informatics and the other on Data Science and Artificial Intelligence.
- There is a call out for new Mission Statement for the NIH. The old one does not really serve the Translational Science and Translational Research Missions. Nor does it serve the Informatics mission.
 - Suggestions: To bring safe and effective treatments to patients faster by translating scientific discovery into better patient outcomes using a systematic approach that combines Informatics, data science, Implementation and team science with new approaches to clinical trials.

Emerging Important Research Areas in Biomedical Informatics

- Use of AI in Streamlining Research (Implementations, Innovation, Ethical Social and Legal issues, Use of LLMs in research, etc.)
- Use of AI for targeted recruitment of underrepresented in research subjects by focusing on people more amenable to participation
- Geographically diverse recruitment
- Focusing recruitment on individuals most likely to be retained in the study.
- Utilizing Clinical Notes via NLP to augment our clinical data warehouses.

Data Sharing for Translational Research

- Assumes comparable interoperable data is exchanged or utilized in the same way in a distributed or centralized architecture
- Requires common data model(s) be utilized
- Requires data governance
- Requires data provenance
- Requires indexing with standardized ontologies
- Data aggregation starts with a strong study design
- Requires common methods for data access, ETL and indexing of the data
- Requires common methods for assessing data quality, data cleaning and data access including sharable phenotypes and SDOH.
- Worked with NCATS and NIH OD to create example Data Sharing and Management Plans for hubs to use.

Challenges facing the Informatics Community's ability to contribute to the goals of the Consortium

- Funding
 - Without a strong statement from NCATS, PIs are lowering informatics investments
 - High Quality Data warehouses require quality assessment and attention and this takes staff and hardware investments
 - Rather than big grants to a few hubs using the same money to support the data infrastructure at all hubs would lead to synergies and better data availability and interoperability
 - AMCs are sending data to Epic Cosmos and Cerner, which makes local investment harder to justify - NCATS funding leads to AMCs prioritizing the NCATS / CTSA agenda.

Shareware Talks

- An effective way to:
 - educate and disseminate knowledge about successful tools and methods used at our hubs.
 - start the discussions around best practices in Translational Informatics
 - Propagate/popularize the right tools for the right problems
 - make it easy to share and to implement work from across the consortium
 - decrease unnecessary duplication in effort
 - serve everyone's Informatics needs in the CTSa consortium
- These have become extremely popular across the iEC

Shareware Talks (Software and Methods)

- 9/2/22 - UNC - Emily Pfaff presented the quality reports and metrics for data warehousing for the consortium
- 9/2/22 - University of Kentucky - Cody Bumgardner presented Cresco: An agent-based edge computing platform/tool and its use in clinical and research operations
- 10/7/22 - Adam Wilcox and Randi Foraker, Washington University in St. Louis presented on Synthetic Data Generation and Use
- 10/7/22 - Michele Morris from Univ of Pittsburgh presented on Sharephe, sharable phenotypes in OMOP

Shareware Talks

- 11/4/22 Richard Moffitt and Kate Bradwell from Emory presented on Harmonization of Units in lab and clinical data
- 11/4/22 Chunlei Wu and Shawn O'Neil from Univ of Colorado presented on the CD2H Informatics Playbook
- 12/2/22 Johanna Loomba Univ of Virginia presented on the CD2H-N3C Logic Liaison Service
- 12/2/22 Mark Fletcher from UCSF presented **Eureka a platform for enabling distributed national recruitment to clinical trials with remote RWE data gathering using SMART on FHIR**

Shareware Talks

- 1/6/23 Chunlei Wu, PhD – Scripts Research Dave Eichmann, PhD Univ of Iowa CD2H: Resource Discovery Portal
- 1/6/ 23 Nic Dobbins – University of Washington Leaf
- 2/3/23 Ramkiran Gouripeddi – Univ of Utah Exposure Health Informatics Ecosystem
- 3/3/23 Peter Elkin – University at Buffalo Report from the NCATS Quality Committee
- 4/7/23 Peter Elkin – UB and Jomol Mathew Hosted a discussion with Drs Rutter and Kurilla

Shareware Talks

- 5/5/23 Johanna Loomba – University of Virginia and Harold Lehmann Johns Hopkins – CD2H Knowledge Artifacts
- 5/5/23 Justin Starren – Northwestern University The proposed CTMS Maturity Model
- 6/2/23 Jeff Klann and Grifen Weber – Harvard University What's new with i2b2 – Cohort discovery and data analysis of i2b2 on OMOP using the redesigned i2b2 platform
- 6/2/23 Peter Elkin – UB understanding institutional approaches to regulating the use of LLMs

Shareware Talks

- 7/7/23 Alex Cheng – Vanderbilt University Multisite Research Participation Perception Survey Infrastructure
- 8/4/23 Karthik Natarajan, Columbia University Interoperability for Precision Health
- 8/4/23 Samuel Armstrong, University of Kentucky Smartstate: A protocol driven human interface

CTSA iEC /UB **Free Summer** **Informatics &** **Data Science** **Bootcamp –** **iLAB**

411 Attendees
46 Hubs
attended

Date	Time (ET)	Topic	Lecturer	Notebook to be utilized
Jul-11	3 - 4:30	Introduction to Python Programming	Skyler Resendez	Python
Jul-12	3 - 4:30	Human Factors Engineering	Ross Koppel	Assigned readings
Jul-13	3 - 4:30	Elements of logic for ontology	Werner Ceusters	
Jul-14	3 - 4:30	Medical Terminology & Standards	Peter Elkin	
Jul-15	3 - 4:30	R-Studio Basics and Regression Analysis	Skyler Resendez	R-Studio and Statistics
Jul-18	11 - 12:30	Public Health Informatics	Diane Schwartz	Public Health Informatics
Jul-19	3 - 4:30	Computer Science for Informatics	Jim Hitt	
Jul-20	3 - 4:30	Realism-based biomedical ontology	Werner Ceusters	
Jul-21	3 - 4:30	Biomedical Ontology - SPARQL Queries	Alex Diehl	SPARQL Queries
Jul-22	1:30 - 3:00	Structural bioinformatics in drug discovery	Ram Samudrala	
Jul-25	11 - 12:30	Consumer Health Informatics	Diane Schwartz	Assigned readings
Jul-25	3 - 4:30	Machine Learning - Logistic Regression and Neural Networks	Zack Falls	logreg+nn
Jul-26	3 - 4:30	Cybersecurity & Qualitative Research Methods	Ross Koppel	Assigned readings
Jul-27	3 - 4:30	Recitation on Ontology	Werner Ceusters	
Jul-28	3 - 4:30	Translational bioinformatics - CANDO	Will Mangione	CANDO Tutorial
Jul-29	3 - 4:30	Machine Learning - Decision Trees and Random Forest	Zack Falls	decision_tree+rf
Aug-15	3 - 4:30	Structured Query Language (SQL)	Peter Elkin	
Aug-17	3 - 4:30	Modeling and HL7 (including FHIR)	Peter Elkin	
Aug-18	3 - 4:30	Natural Language Processing (NLP)	Frank LeHouillier	NLP
Aug-23	3 - 4:30	Image Analytics	John Tomaszewski	
Aug-25	3 - 4:30	Clinical Decision Support (CDS)	Peter Elkin	

Overall Conclusions

- The Shareware talks are helping disseminate solutions to the consortium
- Let's work together to improve our ability to utilize and share our data and tools toward improved translational research and translational science outcomes
- As a community we are much stronger than we are individually. Through common goals, work programs and sharing credit we can and will significantly strengthen the Informatics capabilities of the CTSA consortium in support of our translational research goals.
- Topics of Interest: New trial designs using RWE, LLM and AI (and the ethical use of AI), SDOH as a driver of recruitment to clinical trials, Genomic Data integration, Image Data integration and analytics



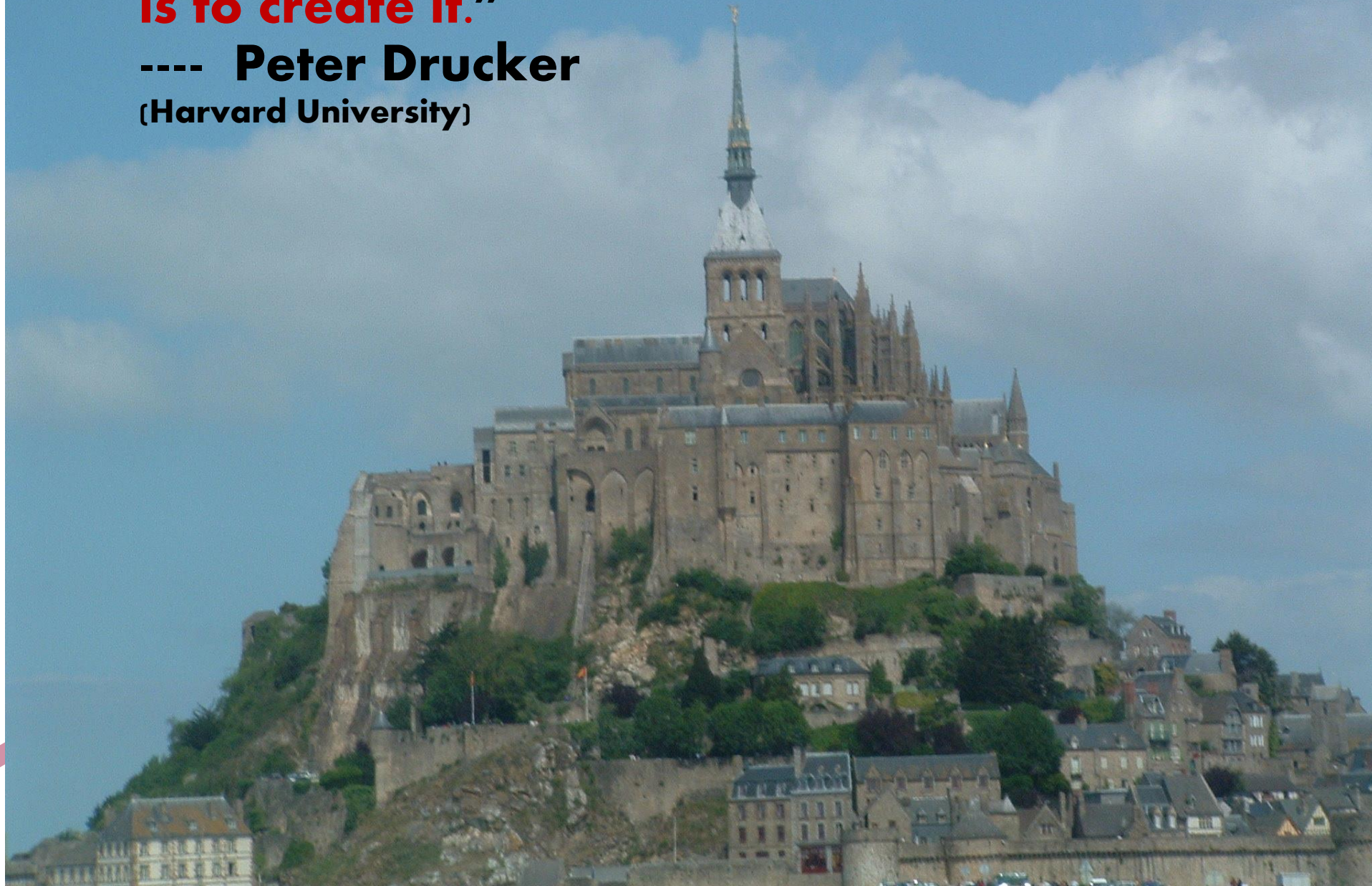
“The secret of change is to focus all of your energy not on fighting the old, but on building the new”

-Socrates



**“The best way to predict the future,
is to create it.”**

---- Peter Drucker
(Harvard University)



Crowd Sourced Topic: Considering NCATS supported data platforms Part 2

Karen Johnston, Melissa Haendel, Steve Reis and Josh Fessel

Identified Needs and Plans to Start to Address

- Common terminology/definitions
 - Primer of terms and concepts
- Understanding of NCATS-supported data platforms
 - What do they offer? How do we access/use them?
 - FAQ-style informational resource
- Training & support
 - Seeking input to define full need and options available within existing resources

NEXT MEETING

October 23rd, 2023
2:30-3:30 PM



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