



MULTI-REGIONAL CLINICAL TRIALS

THE MRCT CENTER of
BRIGHAM AND WOMEN'S HOSPITAL
and HARVARD



JOINT TASK FORCE FOR CLINICAL TRIAL COMPETENCY

Joint Task Force for Clinical Trial Competency (JTF): Biannual Global Meeting

Barbara E. Bierer, MD

Co-chair, JTF

Faculty Director, MRCT Center

Professor of Medicine, Harvard Medical School

bbierer@bwh.harvard.edu

Stephen Sonstein, PhD

Co-chair, JTF

Carmen Aldinger, PhD

Senior Administrative and Training Manager,

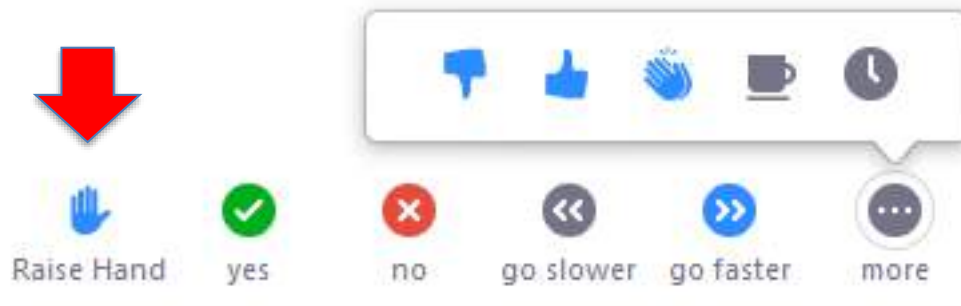
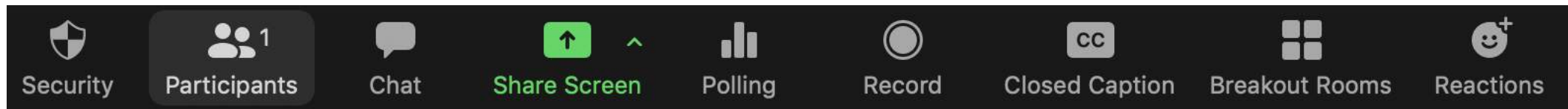
MRCT Center

2 May 2023

<https://mrctcenter.org/clinical-trial-competency/>

Virtual Meeting

- Please keep video on
- Please mute yourself unless you are speaking
- If you would like to speak, please **unmute and speak** or **'raise your Zoom hand'** (and introduce yourself)



This meeting

- We are recording this meeting for internal purposes of note taking only.
- Recording will not be posted and will be deleted after the executive summary is finalized.

- We do wish to post slides and an executive summary of the meeting.
- We will follow up regarding permission to post the slides.



Disclaimer:

- The opinions contained herein are those of the presenters and are not intended to represent the position of Brigham and Women's Hospital, Harvard University, or any of the institutions or organizations represented today.
- The MRCT Center is supported by voluntary contributions from foundations, corporations, international organizations, academic institutions and government entities (see www.MRCTCenter.org) and by grants.
- We are committed to autonomy in our research and to transparency in our relationships. The MRCT Center—and its directors—retain responsibility and final control of the content of any products, results and deliverables.
- We have no personal financial conflicts of interests with the content of this presentation.
- Today's meeting will be recorded for internal purposes.



The Multi-Regional Clinical Trials Center (MRCT Center)

The MRCT Center is a research and policy center focused on addressing the conduct, oversight, ethics and regulatory environment for clinical trials.

Our Vision

Improve the integrity, safety, and rigor of global clinical trials.

Our Mission

Engage diverse stakeholders to define emerging issues in global clinical trials and to create and implement ethical, actionable, and practical solutions.



 **Brigham and Women's Hospital**
Founding Member, Mass General Brigham

 **HARVARD**
UNIVERSITY



Agenda

Time	Topic	Speaker / Facilitator
9:00-9:10	Introduction Overview	Barbara Bierer, MD Co-Chair, JTF Faculty Director, MRCT Center
9:10-9:35	JTF Updates (5 min each)	
	Use of the JTF Framework in Rutgers MS in CRM Program	Lisa Palladino Kim, MS Program Director MS Clinical Research Management Program Rutgers School of Health Professions
	The JTF Framework and Clinical Development Teams in the Biopharmaceutical Industry: Harnessing innovation in data sciences	Howard Fingert, MD, FACP Vice President, Medical Oncology ONO Pharmaceuticals Inc, USA
	Integration of the JTF framework as part of the 3CTN's grant objectives and its utilization at the Odette Cancer Centre in Toronto, Canada Updates to the Arabic translation of the JTF Core Competency Framework	Christine Samara, MSc Manager, Quality Assurance and Education, Odette Cancer Center Clinical Research Program, Sunnybrook Research Institute, Toronto, Canada Member on the 3CTN Performance Strategy Sub-Committee, Canadian Cancer Clinical Trial Network (3CTN), Canada
	Adapting the JTF framework to non-interventional clinical research	Melanie Glättli, PhD Life Sciences SCTO Scientific Coordinator Swiss Clinical Trial Organisation
	Collaboration on Implementing the JTF Framework in China	Jean Wang CEO Shanghai Xunyu Information Technology Co., Ltd Guo Fuzhen China's Clinical Trial Development Team Capital Medical University & Beijing Tiantan Hospital
9:35-9:45	Open Discussion	Stephen Sonstein, PhD Co-Chair, JTF



Agenda cont.

Time	Topic	Speaker / Facilitator
9:45-9:55	Update: Data Management Task Force	Meredith Nahm Zozus, PhD Professor, Div. Chief and Director of Clinical Research Informatics University of Texas Health Science Center San Antonio
9:55-10:05	Discussion	Barbara Bierer, MD Co-Chair, JTF; Faculty Director, MRCT Center
10:05-10:15	Update: Assessment of competencies	Elias Samuels, PhD Program Director of Workforce and Evaluation Michigan Institute for Clinical & Health Research University of Michigan Susan Murphy, ScD, OTR Director, Behavioral Research Innovation and Support Program, Michigan Institute of Clinical and Health Research (MICHHR) Professor, Department of Physical Medicine and Rehabilitation, Department of Internal Medicine, Rheumatology Division University of Michigan
10:15-10:25	Discussion	Stephen Sonstein, PhD Co-Chair, JTF
10:25-10:40	Adaptations of the JTF Framework to Emergencies	Barbara Bierer, MD Co-Chair, JTF; Faculty Director, MRCT Center With comments by: Prof. Sandor Kerpel-Fronius, MD, PhD, DSc Semmelweis University Department of Pharmacology and Pharmacotherapy Budapest, Hungary
10:40-10:50	Discussion	Barbara Bierer, MD Co-Chair, JTF; Faculty Director, MRCT Center
10:50-11:00	Wrap up and next steps	Stephen Sonstein, PhD & Barbara Bierer, MD Co-Chairs, JTF



Professional competencies: Joint Task Force Core Competency Framework for Clinical Research Professionals

The JTF Core Competency Framework is made up of **8 Competency Domains**, broad categories of knowledge, skills, and attitudes necessary for conducting clinical research

47 Competency Statements, specific skills and abilities related to clinical research



- Identify competency statements
- Align and Harmonize similar concepts
- Reviewing and revision with collaborators

1

Domain 1: Scientific Concepts and Research Design

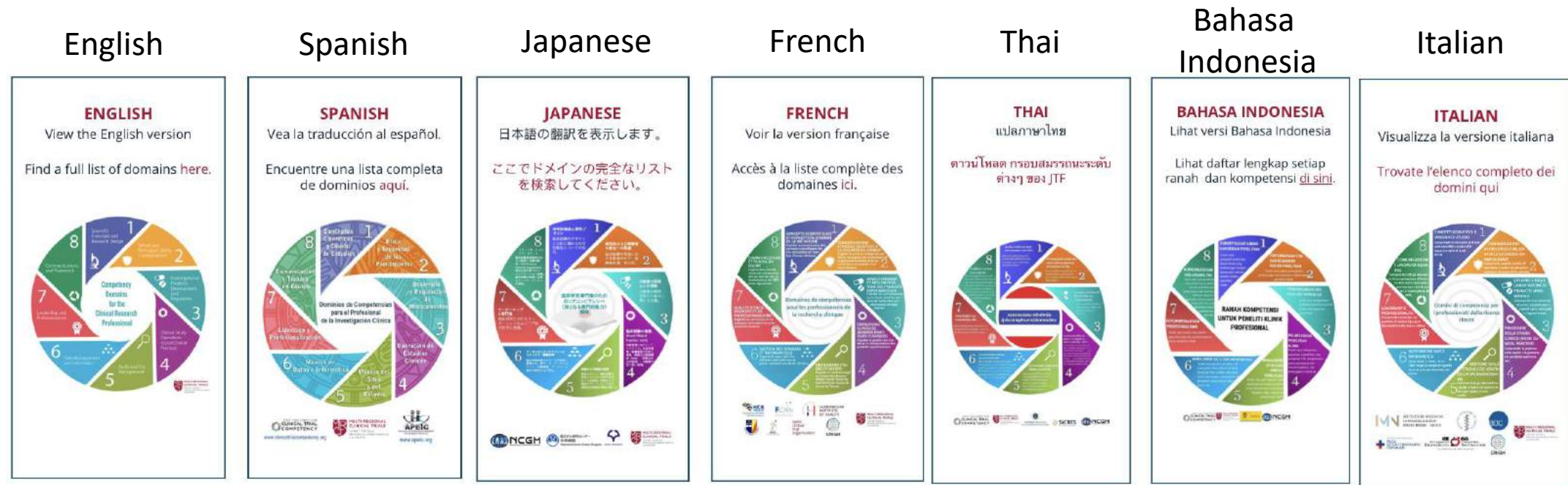
Encompasses knowledge of scientific concepts related to the design and analysis of clinical trials

1.1 Apply Principles of biomedical science to investigational – product discovery and development and health-related behavioral interventions

Fundamental Level	Skilled Level	Advanced Level
<p>A1. Recognize the need to apply scientific principles to discovery and development of biomedical investigational products and health-related behavioral interventions</p>	<p>B1. Apply scientific principles when implementing a clinical or behavioral study</p>	<p>C1. Plan biomedical research according to scientific principles</p>
<p>A2. Explain the basic scientific principles that should be applied during development of biomedical investigational products and health-related behavioral interventions</p>	<p>B2. Implement data collection according to scientific principles and based on protocol design</p>	<p>C2. Develop a data management plan according to scientific principles.</p>
<p>Example: When reviewing a clinical research protocol, researcher describes the objective and scientific techniques used to design and implement biomedical research.</p>	<p>Example: When given a clinical research protocol, researcher differentiates what principles could affect how the data should be collected and implement best practices accordingly.</p>	<p>Example: Given a clinical research protocol and data collected, the researcher evaluates the findings to assess results via a scientific framework.</p>



Joint Task Force Core Competency Framework for Clinical Research Professionals



Forthcoming Q2-3 2023

- Chinese
- Vietnamese

Portuguese in progress

Open call: Frontiers in Pharmacology special issue



< Research Topics

Building the Clinical Research Workforce: Challenges, Capacities and Competencies

Abstract Submission Deadline 01 June 2023

Manuscript Submission Deadline 17 September 2023

https://www.frontiersin.org/research-topics/53591/building-the-clinical-research-workforce-challenges-capacities-and-competencies?utm_source=F-RTM&utm_medium=TED1&utm_campaign=PRD_TED1_T1_RT-TITLE



Open call: Frontiers in Pharmacology special issue

- Authors are encouraged to address the challenges, opportunities, novel approaches and progress toward closing the gaps and improving clinical research professional development across the workforce spectrum.

This Research Topic aims to collect articles on the following topics:

- Clinical research roles and professionalism
- Clinical research academic education, training and competency development, assessment
- Clinical research professional employment, retention, progression
- Diversity of the clinical research workforce
- Applications and contributions of the JTF Framework
- Clinical research workforce development in the setting of the evolving clinical research paradigm
- Clinical research team science, defining research teams, workforce spectrum



JTF Updates



Lisa Palladino Kim





School of Health Professions

Mapping Professional Competencies in a Clinical Research Management Master's Level Program

Initiative was part of a NJ Acts Workforce Development Core 2021 Internship Program

Lisa Palladino Kim, MS

Program Director

Rutgers SHP MS in CRM Program

Presented to JTF Biannual Global Mtg on May 2, 2023



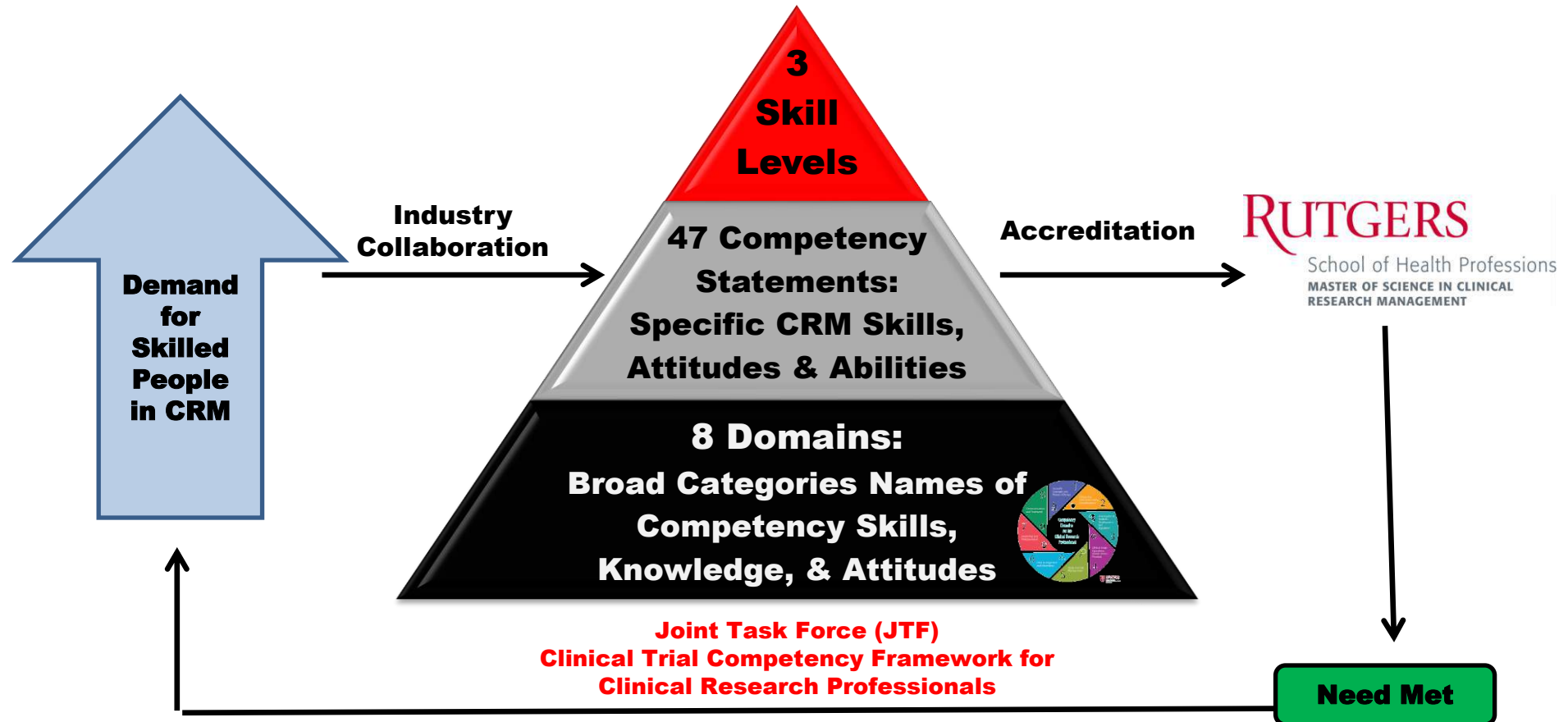
Student Intern
Lauren M. Castelli, MS, MBA
MS CRM Student 2022
Rutgers SHP MS in CRM

MS CRM Program Website



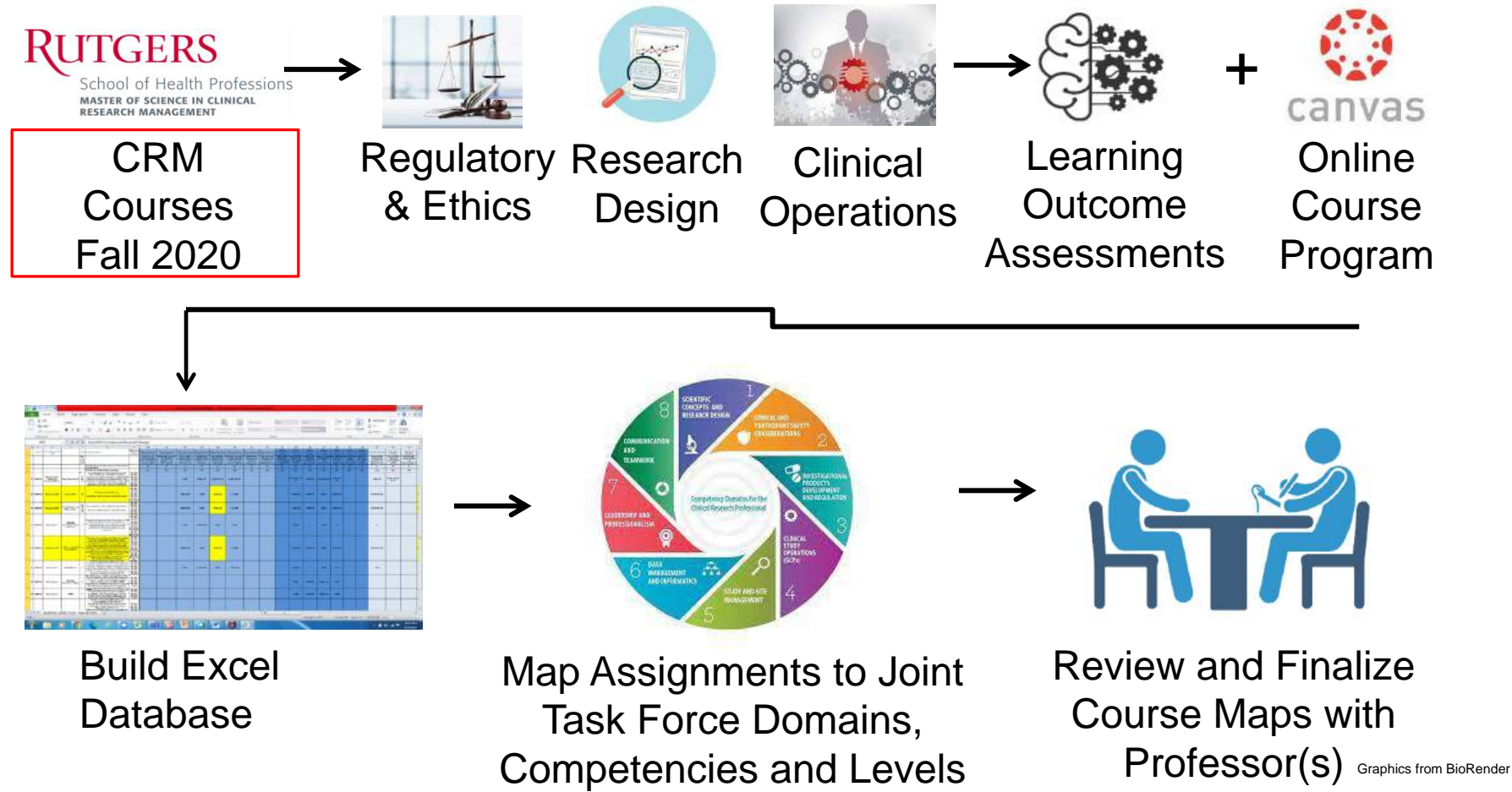
Mentor
Lisa Palladino Kim, MS
Program Director
Rutgers SHP MS in CRM

Introduction

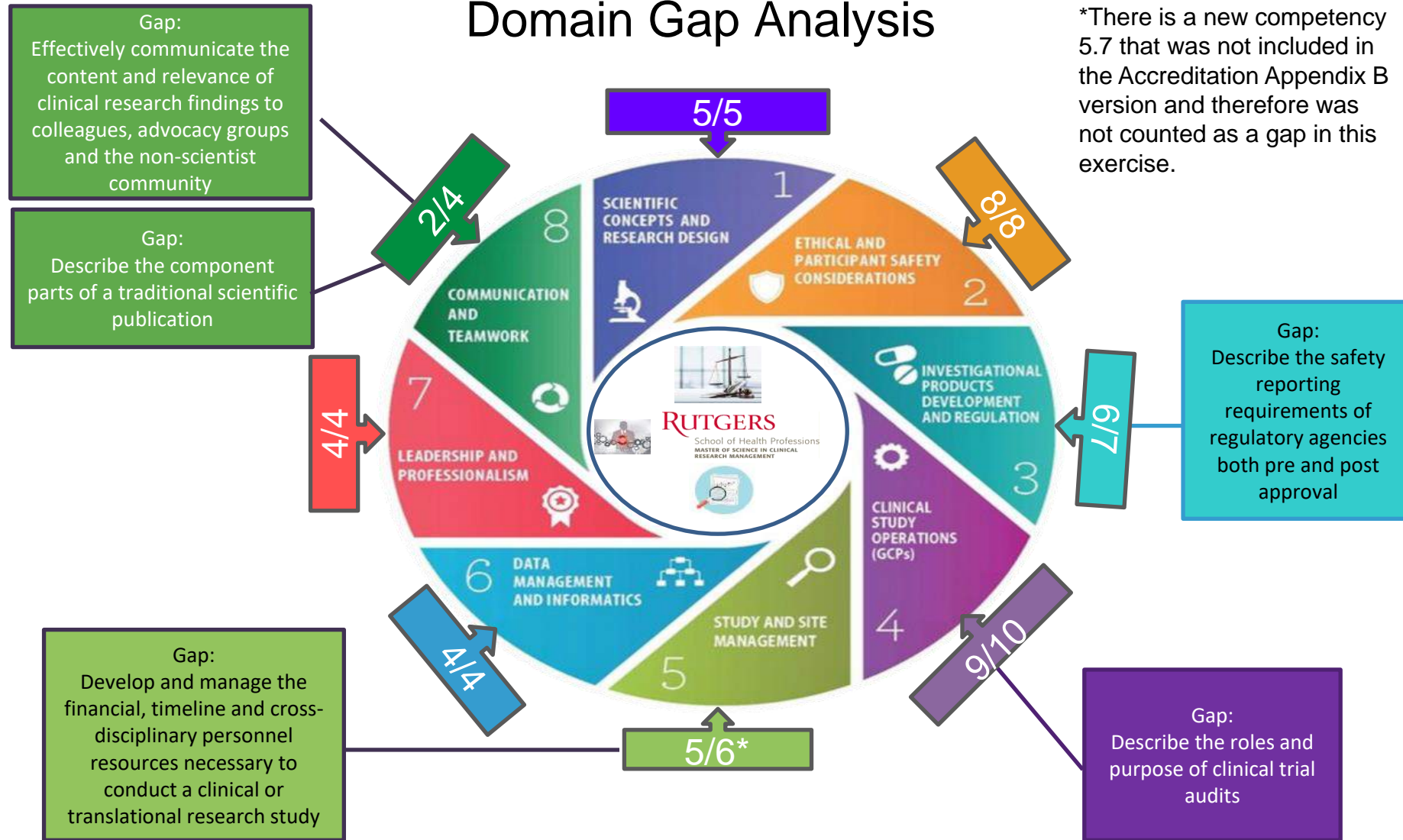


Graphic Joint Task
Forcemrctcenter.org

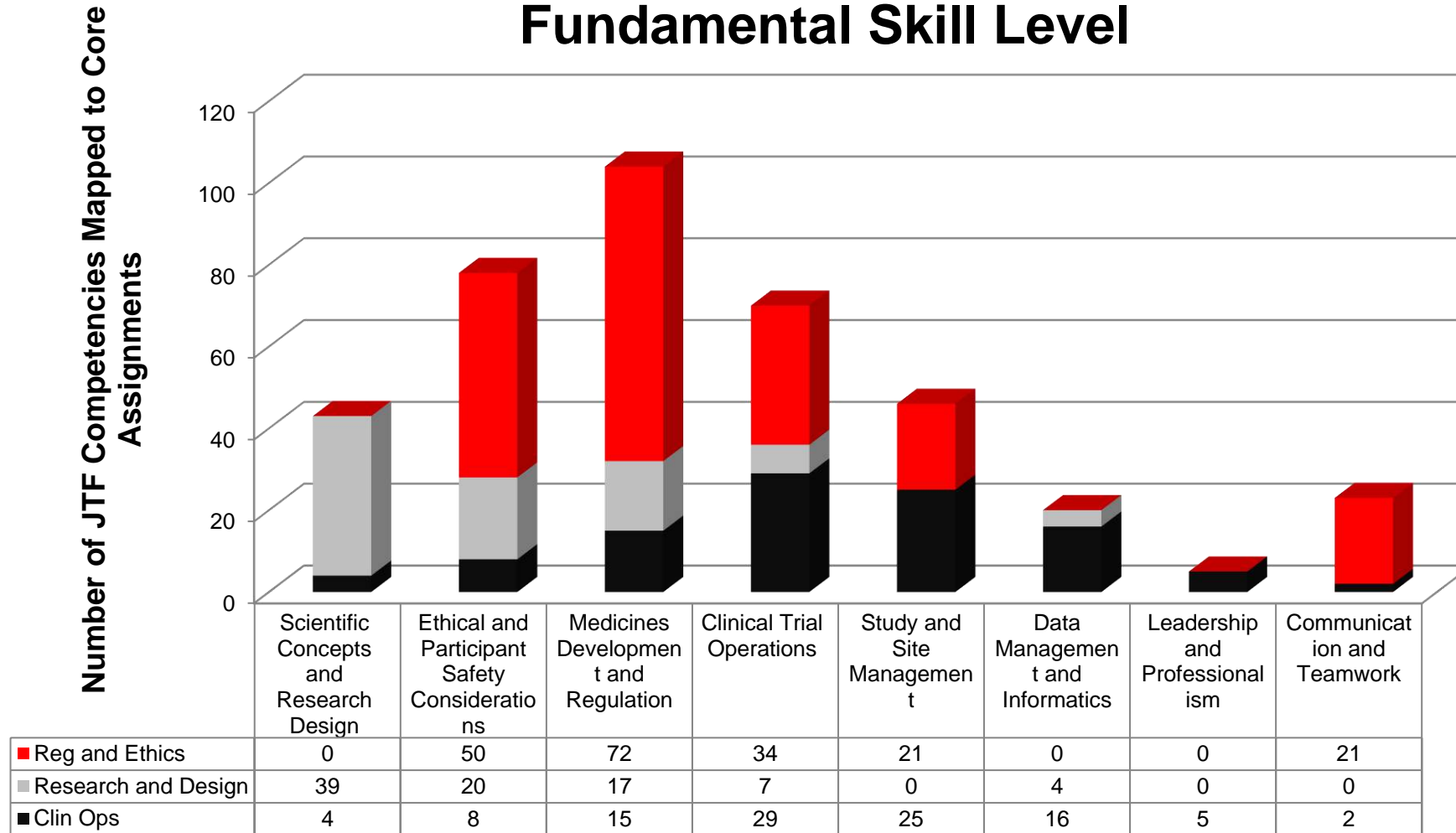
Methods



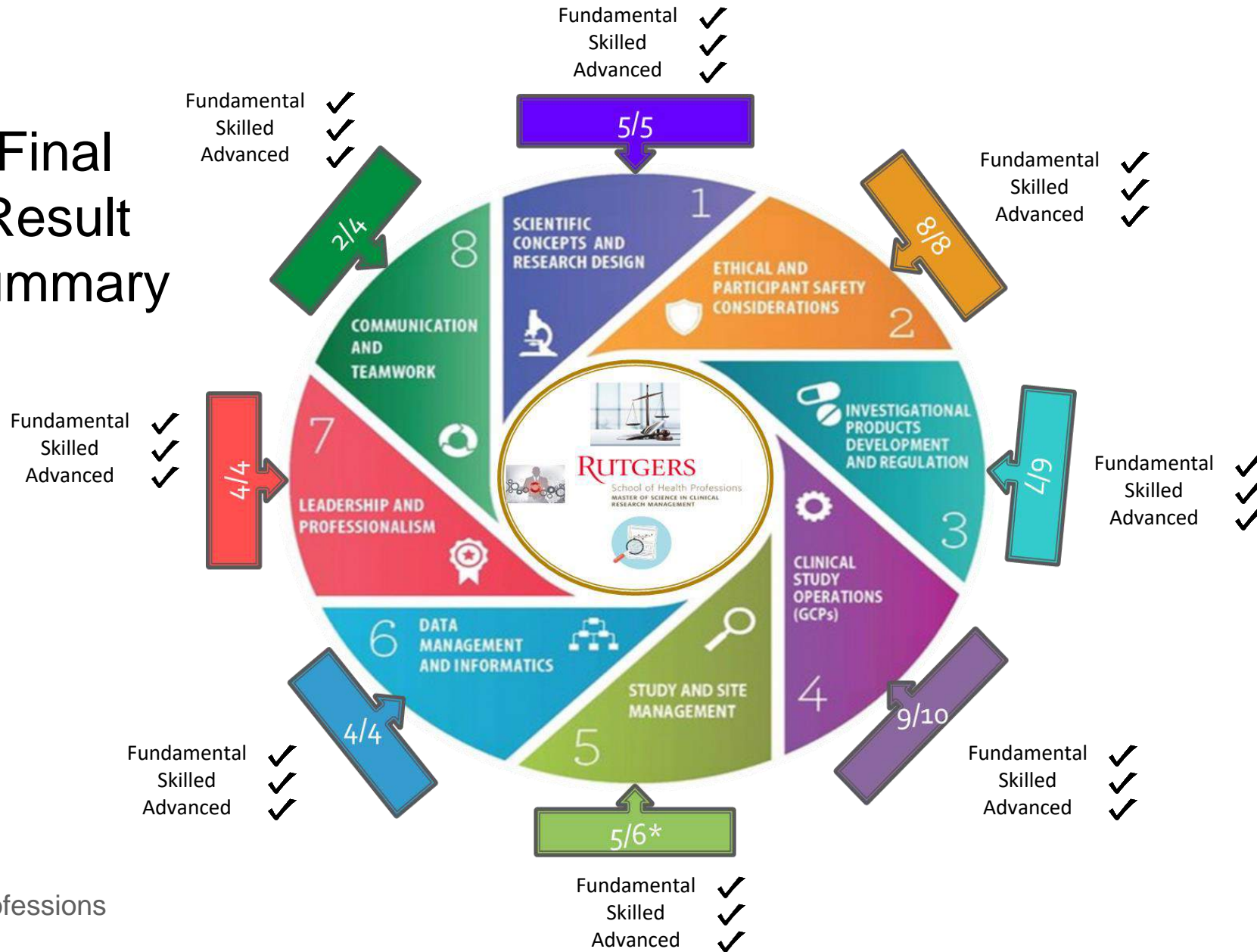
Domain Gap Analysis



JTF Domains Met in CRM Core Courses Fundamental Skill Level



Final Result Summary



RUTGERS

School of Health Professions



Any additional questions,
please contact:

Lisa Palladino Kim, M.S.
Program Director/Lecturer
M.S. in Clinical Research Management
E-mail crmprogram@shp.rutgers.edu

Howard Fingert



The JTF Framework and Clinical Development Teams in the Biopharmaceutical Industry:

Harnessing innovation in data sciences

Howard Fingert, MD, FACP

Vice President Medical Oncology, ONO Pharmaceuticals, USA

Brief BIO:

Global Clinical Development of Heme-Lymphoma and Solid Tumor Therapies

Academic experiences:

- Training & research at UCLA, NCI, Harvard, MIT, other public & private organizations
- Former Assistant Professor Massachusetts General Hospital/ Harvard Med Schl
- NIH/NCI/ACS supported lab - translational research in cancer sciences

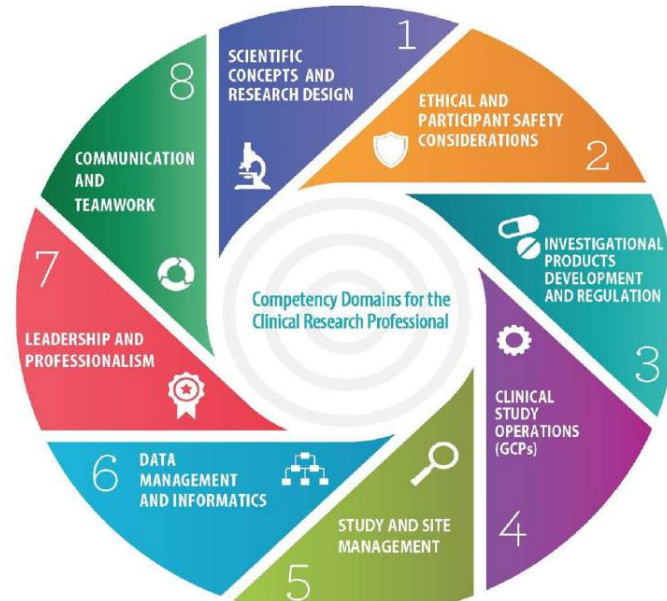
Industry career:

- 25 years global biopharma experience bringing products Phase 1 to commercialization
- Member ICH Expert Working Group to update ICH E8 Guidance for Protocols
- Biopharma Industry Representative to US FDA Oncology Drugs Advisory Committee (ODAC)
- Current Industry Representative to US National Cancer Advisory Board

The materials and views represent personal opinions of the presenter. All slides are for educational purposes and considered confidential & proprietary and must not be reproduced or distributed.

CONVERGENCE OF CORE COMPETENCIES BY CLINICAL RESEARCH TEAMS

Source: Joint Task Force of academia, biopharma industry, regulators sponsored by the Harvard Multi-Regional Clinical Trials (MRCT) Initiative



The JFT Framework, updated document, and domains reflect:

- Teams build on multi-disciplines, structure, constructive interaction
- Updates needed to manage the changing research landscape
- Deep learning builds on interfacing internal and external environments

**To make progress we must embrace
deep thinking & data sciences**



Distracting visions of can seen attractive
but lead to shallow R&D decisions



Dr. Tachi Yamada inspires focused, deep,
data-driven R&D decisions

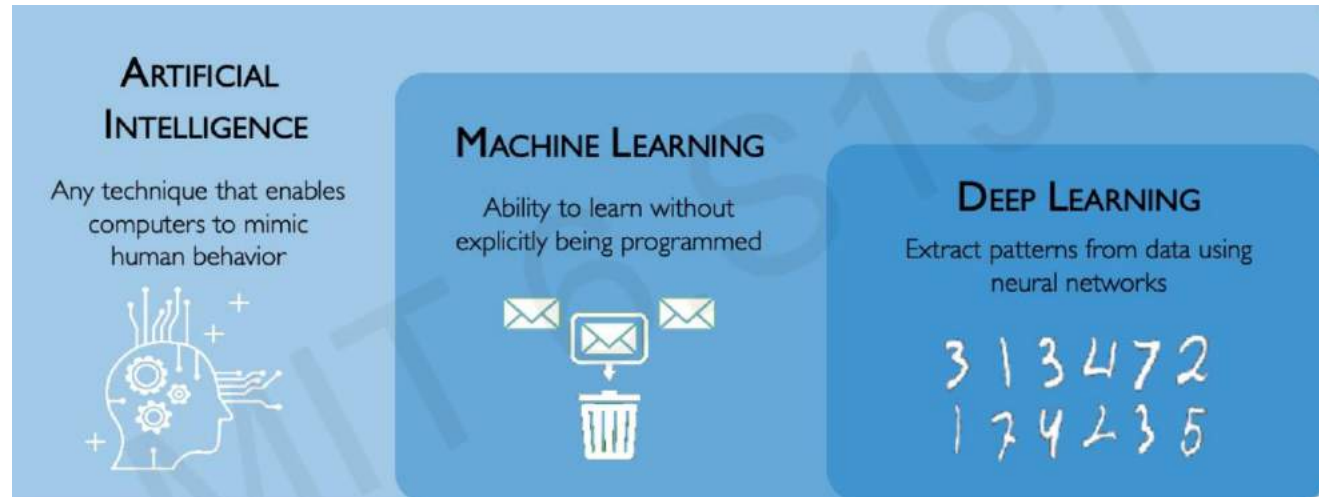
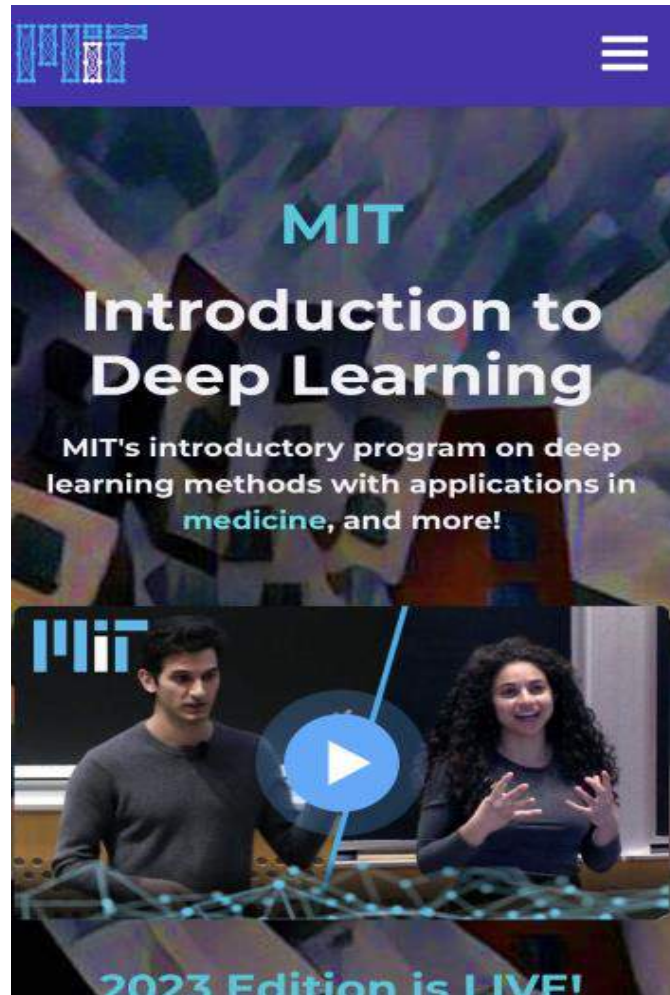
**Dr. Tachi Yamada transitioned between academia - Industry
former leader at U. Michigan GSK, Takeda, Gates Foundation:**

“Beware of being a mile wide...but an inch deep.”

DATA SCIENCES, DEEP LEARNING IN ACADEMIA

Advancing multi-regional opportunities in medical research & care

Excerpts from on-line MIT course about Deep Learning and relevant informatics.



Teaching computers how to **learn a task** directly from **raw data**

DATA-SHARING, HARDWARE- SHARING, DEEP LEARNING

Advancing multi-regional opportunities to accelerate progress
in medical research & care

Why Now?

Neural Networks date back decades, so why the resurgence?

I. Big Data

- Larger Datasets
- Easier Collection & Storage

2. Hardware

- Graphics Processing Units (GPUs)
- Massively Parallelizable

3. Software

- Improved Techniques
- New Models
- Toolboxes



CENTER FOR GLOBAL CLINICAL RESEARCH DATA

[Home](#) [About](#) [Members](#) [News & Events](#) [Resources](#)

[LOG IN](#)



A global clinical research data sharing platform

The Vivli team is dedicated to helping researchers share and access data from clinical trials to advance science.

MULTI-REGIONAL HARDWARE-SHARING BY TOKYO-1 SUPERCOMPUTER

Planned access for artificial intelligence (AI) and other applications

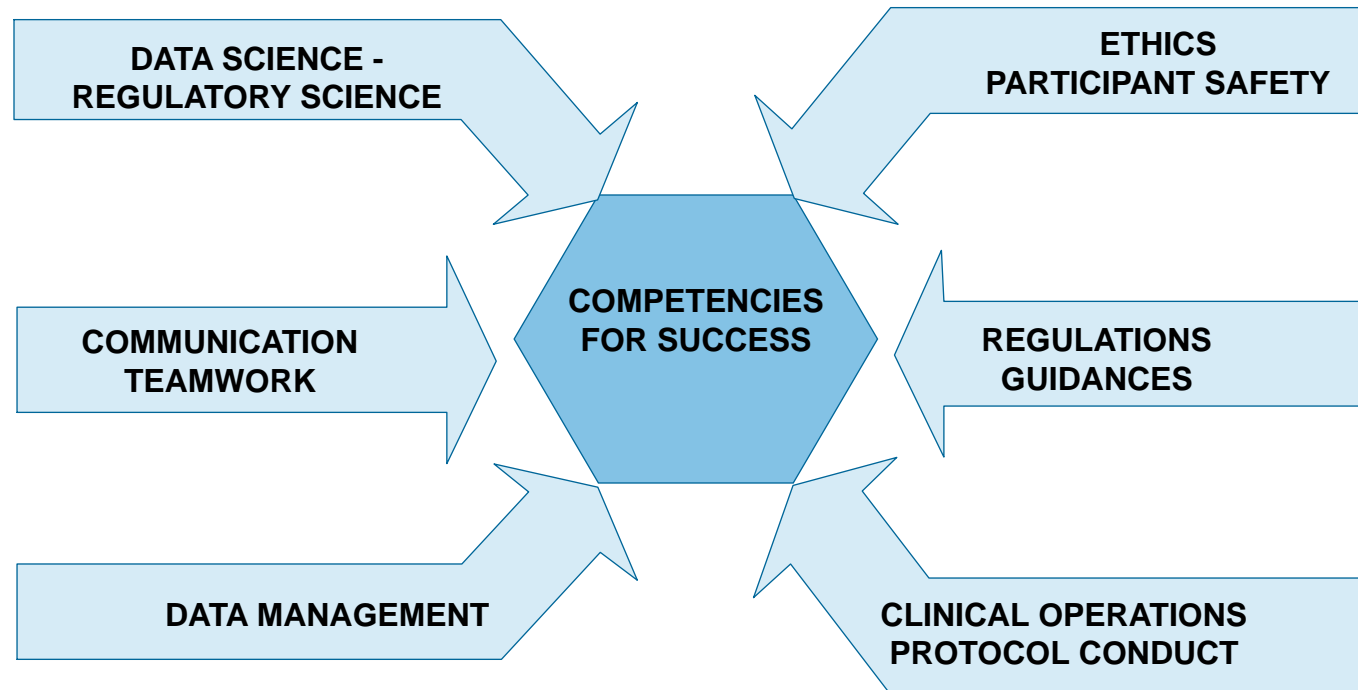


Director Drug Discovery at a global biopharma company was quoted:

“Beyond the pharmaceutical industry, Mitsui plans to make the Tokyo-1 supercomputer accessible to medical-device companies and startups — and to connect Tokyo-1 customers to AI solutions developed by global healthcare startups ...NVIDIA will also connect Tokyo-1 users with the hundreds of global life science customers in its developer network.”

EXPANDING SKILLS FOR BIOPHARMACEUTICAL CLINICAL DEVELOPMENT

DATA SCIENCES ENABLE NEW R&D METHODS AND COMMERCIAL OPPORTUNITIES



Moderna 2nd-Generation mRNA Cancer Vaccine Shows Promising but Modest Clinical Benefit



← AACR Annual Meeting 2023 Itinerary Planner Home

[Share Page](#) [Print Page](#)

Session CTPL01 - Harnessing the Immune System in the Clinic

CT001 - A personalized cancer vaccine, mRNA-4157, combined with pembrolizumab versus pembrolizumab in patients with resected high-risk melanoma: Efficacy and safety results from the randomized, open-label Phase 2 mRNA-4157-P201/Keynote-942 trial

[Add to My Itinerary](#)

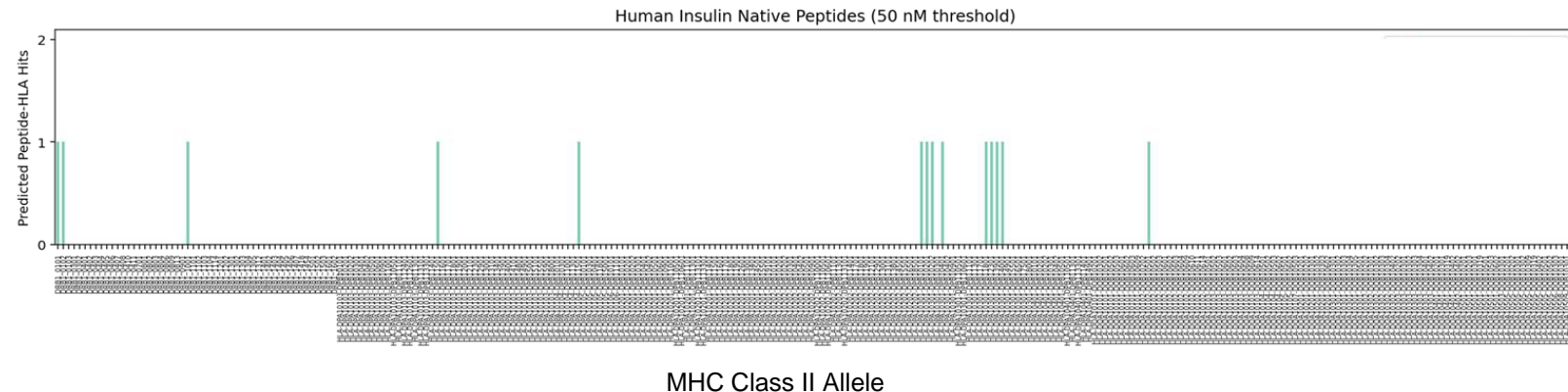
Abstract from American Assn. Cancer Research, April, 2023

- Full journal publication in press
- Phase 3 registration trial planned

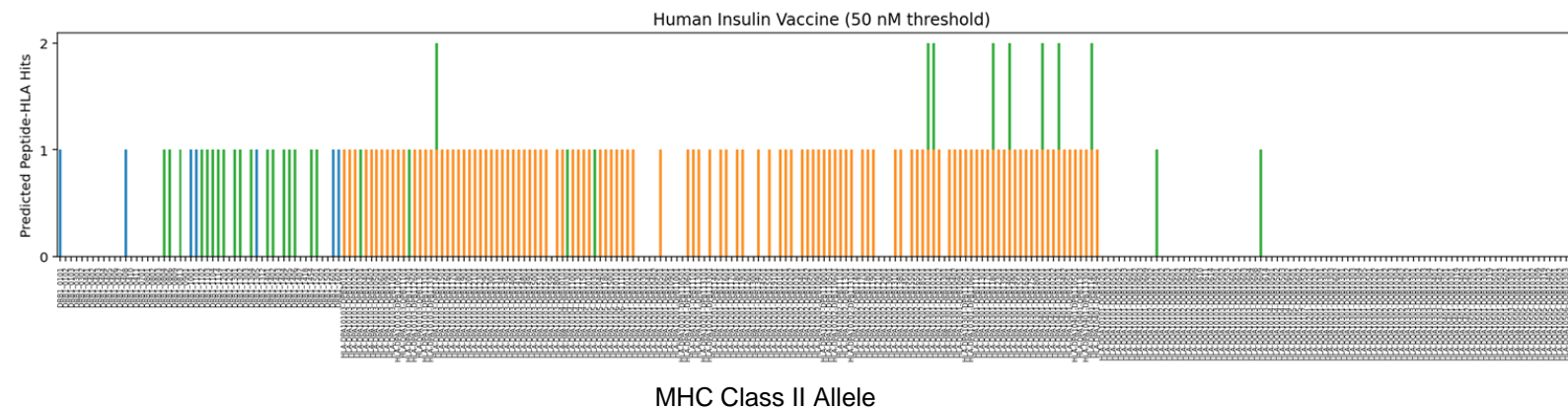
EXAMPLE: ACTIONABLE MODERN DATA SCIENCES

Updated AI, Analytics, and Cloud Supercomputer Lead to patented 3rd-Generation, off-the-shelf mRNA Vaccines

Older designs
15.5%
population
coverage



New
Vaccine -
99.9%
population
coverage



Lower figure illustrates 3rd-Generation, broad coverage & practical 'off the shelf' mRNA vaccine without the burdens from 2nd generation, that required >1 month for surgery; biopsy processing; vaccine manufacture



**Navigating
the Stepstones**

What sources and competencies are needed to ...

- reduce risks
- gain efficiencies
- navigate to accelerate progress?

1. Advice from academic Professors who succeed only according to academic standards

2. Publications in news articles and blogs

3. Publications in peer-reviewed journals

4. Consultants or coworkers who simply repeat (outdated?) experiences without updated analyses

5. Collaborating TEAMS, structured to include updated biomedical, regulatory & data sciences



Core Competencies

CONCLUSION

What sources and competencies are needed to ...

- reduce risks, gain efficiencies
- accelerate progress?

Best answer:

Collaborating TEAMS, working together to apply updated biomedical, regulatory & data sciences



Core Competencies

Christine Samara





Canadian
Cancer Clinical
Trials Network

3CTN Objectives

Christine Samara, 3CTN PSC member
Performance Strategy Sub-Committee (PSC)

Overview of 3CTN

The Canadian Cancer Clinical Trials Network (3CTN) is a pan-Canadian initiative to improve recruitment, efficiency and quality of academic clinical trials

Member Cancer Centres

- Sites collaborate on common initiatives and share best practices via our innovative Network structure

Patient and Public Involvement (PPI)

- Patient Representatives, Patient Groups, Advisory Committees
- Contribute a crucial perspective to clinical trials by providing feedback, insight, expertise and support towards trial activities and initiatives

Governance and Scientific Oversight

- Scientific Advisory Board and Directors ensure the appropriateness and optimal impact of the Network strategic plan and activities
- Governance Committees provide oversight for 3CTN management and support key functions: The trials Portfolio, Performance, PPI

Coordinating Centre

- Central support for operations, project management, strategic planning & governance and communications

Cancer Centre Site – Research Core Competencies

Improving the performance and quality of academic, multi-centre trials on the 3CTN Portfolio is a shared priority for the current business period, 2022-2027

- Develop the clinical research professional core competency framework & development strategy for Network sites

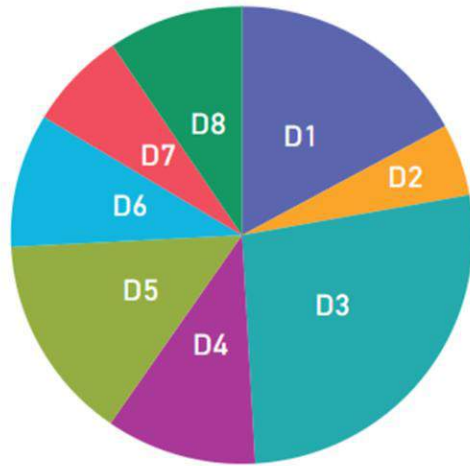
Network-wide implementation of the Joint Task Force Core Competency Framework aims to

- Promote the capacity for high-quality cancer clinical research
- Highlight identified core competency gaps – both locally and shared, and
- Link to available, best-practice training and education resources by core competency domain/sub-domain

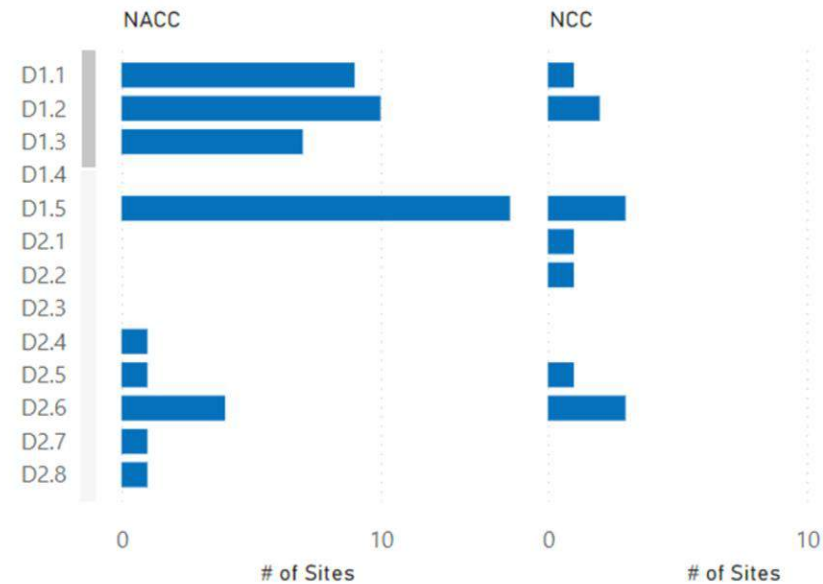


Core Competency Report

Identified Core Competency Gaps by Domain



Identified Core Competency Gaps



Domain Resources

Domain	Resource Owner	Resource Title	Resource Type	Resource Link
D1	CITI Program	Biomedical (Biomed) Comprehensive	Course	Link
D1	CITI Program	Biomedical (Biomed) Foundations	Course	Link
D1	CITI Program	Essentials of Statistical Analysis (EOSA): Complete (Parts 1, 2, and 3)	Course	Link
D1	CITI Program	Protocol Development and Execution: Beyond a Concept	Course	Link
D1	CITI Program	Research Study Design	Course	Link
D1	ACRP	ACRP Course Catalog - Scientific Concepts and Research Design	Course	Link
D1	Duke Office of Clinical Research (DOCR)	Duke Office of Clinical Research (DOCR) - Scientific Concepts	Course	Link

Last Updated : October 17, 2022

Core Competency Priorities – Network Survey Results

Domain/ Sub-Domain	Domain Category	Core Competency Statement	# Sites Reporting	Impact	Effort	Ranked Priority
D4 - 4.1	Clinical Study Operations (GCP)	Explain how the design, purpose, and conduct of individual clinical studies fit into the goal of developing a new intervention	3	High	Low	5
D4 – 4.7	Clinical Study Operations (GCP)	Describe how global regulations and guidelines assure human subject protection and privacy during the conduct of clinical studies	6	High	Low	4
D4 – 4.8	Clinical Study Operations (GCP)	Describe the role and process of monitoring a clinical study	3	High	Low	3
D5 – 5.5	Study and Site Management	Identify the legal responsibilities, liabilities and accountabilities that are involved in the conduct of clinical studies	11	High	Low	2
D6 – 6.1	Data Management & Informatics	Describe the role and importance of statistics and informatics in clinical studies	6	High	Low	6
D6 – 6.3	Data Management and Informatics	Describe best practices and resources required for standardizing data collection, capture, management, analysis, and reporting	10	High	Low	1

Proposed 3CTN Priority Initiatives

Rank	Initiative	Description
1	Training/education	Provide training opportunities for clinical research professionals
2	Share job description/salary ranges	Provide platform to share job description, salary ranges
3	Mentorship	Connect requests for mentors with targeted expertise
4	Role-specific Development Pathway	Role specific framework for professional growth and development

Integration of the JTF as a 3CTN Objective and its utilization at the Odette Cancer Center in Toronto, Canada.

*Sunnybrook Research Institute
Sunnybrook Health Science Center*

Christine Samara
Manager, Quality Assurance and Education
Odette Cancer Centre Clinical Research Program



Tertiary Hospital Toronto, Ontario. Canada



- Internationally recognized health science center
- Affiliated with University of Toronto (UofT)
- Leading research institute



New Training Initiative Focus JTF Core competencies for CRP @ SRI OCC CR

- August 2021 as part of the onboarding & training of new staff
- 3CTN Grant Cycle (2022-2027) – Application Dec 2021

Ongoing efforts to improve the efficiency and effectiveness of clinical trial sites across the Network

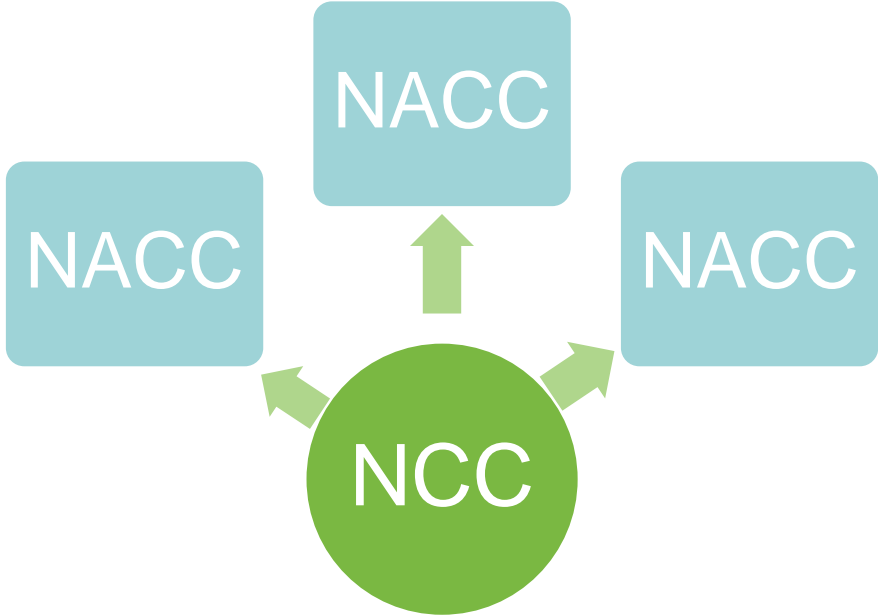
- *Diagnostic tool for sites to assess areas of competency and deficiency within their clinical trial staff*
- *Promote a competency framework for clinical research professionals*
- *Identify area (s) of potential improvement for their trial unit*



Under 3CTN Objective

NCC – Network Cancer Center / NACC – Network Affiliate Cancer Centers

NCCs are larger centres with capabilities to recruit cancer patients to a broad portfolio of trials, and to work with Network Affiliated Cancer Centres (NACCs) to ensure broader patient access to trials.





SRI – OCC

Use of the JTF Core Competency Framework

1. Define professional roles
 - ▶ Revised Job Titles and Job Description
 - ▶ Created a mechanism for growth



Data Manager	CRA I *	CRA II *
Supervisor		

***Protocol Activator**

SRI – OCC

Use of the JTF Core Competency Framework

2. Identify training and educational requirements

- ▶ Revamped the onboarding plan
- ▶ N2 Source, CRF and Good Data Management
- ▶ CITI Clinical Research Coordinator
- ▶ Increased time spent on shadowing various tasks
- ▶ Therapeutic Area Training
- ▶ Overview on different study designs



SRI – OCC

Use of the JTF Core Competency Framework

3. Outline continuing professional development

- ▶ Customize training, mentoring and coaching for various new tasks and job responsibilities
- ▶ Solicit feedback from staff on training needs
- ▶ Share new training platforms and initiatives as needed



4. Interdisciplinary Collaboration

- ▶ Build bridges across departments and various stakeholders
- ▶ Enhance communication
- ▶ Share knowledge, experience and best practices



SRI – OCC

Use of the JTF Core Competency Framework

5. Focus

- ▶ Interpersonal skills (negotiating, influencing, resolving conflict, etc.)
- ▶ Effective and efficient communication and teamwork
- ▶ Professional communication practices in written and verbal interactions





SRI – OCC

Use of the JTF Core Competency Framework

6. Evaluate on the job performance

- ▶ Developed a Performance Evaluation Tool
- ▶ Ready to pilot



EMPLOYEE PERFORMANCE REVIEW (DATA MANAGER / CLINICAL RESEARCH ASSOCIATE I / CLINICAL RESEARCH ASSOCIATE II)

Instructions: The performance evaluation is divided into 3 components:

- Self-assessment: Employee to review and complete the performance evaluation and send back to the Supervisor, if applicable, or DSL/CTPL*
- Supervisor and DSL/CTPL to review the employee's self-assessment and add feedback and comments
- DSL/CTPL or delegate to set up meeting with Employee to discuss feedback and future development

*Disease Site Lead / Clinical Trial Physician Lead

Employee Information	
Name of Employee: Click here to enter text.	Employee Title: Click here to enter text.
Disease Site: Click here to enter text.	Disease Site Lead: Click here to enter text.
Period of Review: Click here to enter text.	Date of Review: Click here to enter text.
Name of Reviewer: Click here to enter text.	Next Review: Click here to enter text.

Employee Performance Evaluation – Core Competency Domains for Clinical Research Professionals **

Employee Performance Review

Two level review

- Self assessment
- Review of self assessment by DSL/CTPL (along with Supervisor feedback, as applicable)

Self assessment

- ✓ Honest assessment
- ✓ Self reflect / consider strengths and areas of improvement
- ✓ Personal growth
- ✓ Self awareness
- ✓ Opportunity to list goals and objectives for the upcoming year

Reviewers

- ✓ Feedback from employee
- ✓ How employee see themselves (team and organization)
- ✓ Motivation (beyond salary)
- ✓ Achievements
- ✓ Growth



Deploying the JTF framework across the world

Arabic Translation

Christine Samara

UNITED ARAB EMIRATES
MINISTRY OF HEALTH & PREVENTION



الإمارات العربية المتحدة
وزارة الصحة ووقاية المجتمع

Arabic translation of the MRCT JTF Core Competency Framework is

- Coordinated by Christine Samara
- Led by the UAE Ministry of Health and Prevention
 - Dr. Khalil Qayed, Director National Center for Health Research
 - Dr. Ahmed Radeef Ibrahim Alosi, Research Consultant



- ✓ Identified the organization for collaboration - Initial contact and agreement November – December 2022 with Dr. Khalil Qayed
- ✓ Initiated translation – February 2023, led by Dr. Ahmed Alosi
- ✓ Discussed the plan for document translation and progress on April 11, 2023 (*Received preliminary draft of 3 domains*)
- ✓ Finalize the initial complete draft for all domains: anticipated June 2023
- ✓ Start the revision and validation: expected July 2023

Melanie Glättli





Adapting the JTF framework to non-interventional clinical research

Core Competencies for HRO research projects

JTF Strategic Global Meeting, May 2, 2023
Melanie Glaettli, Swiss Clinical Trial Organisation (SCTO)

Swiss legal framework for human research

Human Research Act ([HRA](#))

with human beings

without human beings

Clinical Trials
Ordinance
([ClinO](#))



- Medicinal products
- Other
- Transplant products, transplantation
- Gene therapies

Ordinance on
Clinical Trials with
Medical Devices
([ClinO-MD](#))



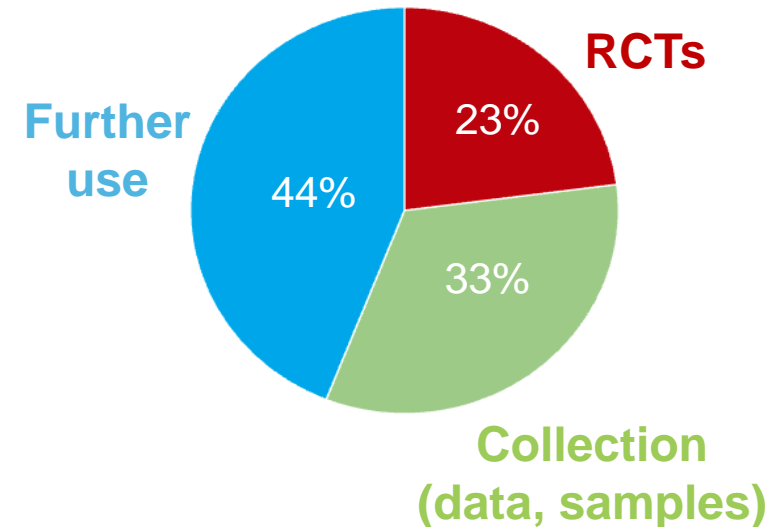
Medical devices

Ordinance on Human
Research with
Exception of Clinical
Trials
([HRO](#))



- Collection of data and/or biological material (chap. 2)
- Further use of data and/or biological material (chap. 3)

- > 75% research projects submitted to ECs are non-interventional (follow Human Research Ordinance, HRO)
- Consulted physician-scientists welcomed the idea
- More accessible and suitable for young researchers
- Useful for other health researchers (not only MDs)
- Mandate from our Board of CTU Directors (BCD) → develop tools to enhance quality of HRO projects



Raise the awareness of developing the competencies necessary to conduct non-interventional research projects

We aim for a **simple framework** with:

- shorter statements
- 2 columns for:
 - Collection of data and/or biological material (HRO, chapter 2)
 - Further use data and/or biological material samples (HRO, chapter 3)

Next steps

- Review & have it approved by other Platforms (RA, PM) and stakeholders
 - Implement it on cr-careers.ch and further disseminate via NL, Tools & Resources website, etc.
-

2 — Ethics and participant rights

Encompasses the care of patients, their rights, and aspects of participant protection in the conduct of a clinical trial

2.1 Explain the evolution of the regulatory framework ensuring the protection of participants

2.2 Differentiate between standard of care and clinical trial activities

2.3 Define "clinical equipoise", the "uncertainty principle", and "therapeutic misconception"

2.4 Apply principles and regulations of trial participant protections and privacy

2.5 Explain the evolution of the requirement for an Informed Consent Form (ICF) for trial participants

2.6 Describe the ethical issues involved when dealing with vulnerable populations

2.7 Evaluate and apply an understanding of the relevant ethical issues and cultural variation

2.8 Summarise the principles and methods of distributing and balancing risks and benefits

Collection of data and/or samples (HRO, chapter 2)	Further use of data and/or samples (HRO, chapter 3)
<p>1. Identify the historical events and key documents, which have led to the development of the current informed consent regulations.</p> <p>2. Recognise the critical nature of communicating the potential risks or hazards as well as the benefits of a research project using terminology and a manner that is understandable by potential participants during the informed consent process.</p> <p>3. Apply knowledge of the current national and international regulations, especially concerning data protection measures, when drafting an ICF for a research project.</p> <p>4. Implement processes and control measures to ensure participant protection regulations' requirements are met.</p> <p>Example: Researcher composes and evaluates the ICF in relationship to the protocol to assure that it not only meets current regulations and guidelines but also provides the information needed for a potential participant to make an informed decision.</p>	<p><i>Statements for HRO chapter 2 also apply to HRO chapter 3 research projects. Further statements need to be considered:</i></p> <p>1. Investigate whether sites to be included in the research project have implemented the General Consent (GC) allowing the further use of health-related data and biological material already collected during standard of care for research purposes.</p> <p>2. Develop an appropriate information form (and/or consent form) according to the type of data (genetic versus non-genetic and coded versus uncoded) to be reused in the project (HRO, Art. 28-32).</p> <p>3. Assess surrogate consent by the ethics committee (HRA Art. 34) allowing exceptional further use of data without consent by participants.</p> <p>Example: Researcher contacts person in charge of the institutional General Consent (GC) to assess whether further use project can be carried out with the use of GC.</p>



Thank you for your attention



Melanie Glaetli



Laura Di Petto



Aurélie Fayet



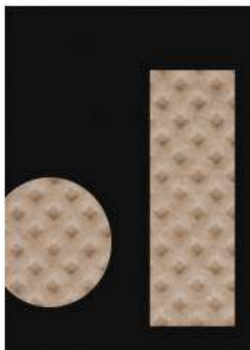
Caecilia Schmid



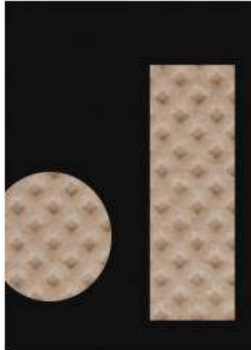
Andreja Vujicic Zagar



Verena Küppers



Claudia Fila



Simone Kälin



Antoine Poncet



Sven Trelle

Jean Wang &
Guo Fuzhen



Collaboration on Implementing the JTF Framework in China

Beijing Tiantan Hospital, Capital Medical University
&
XunYuan Information Technology Co., Ltd.]



首都医科大学附属北京天坛医院
BEIJING TIAN TAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学公共卫生学院
School of Public Health, Capital Medical University

Content

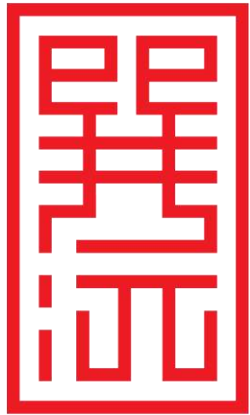
- Introduction of XunYuan and Beijing Tiantan Hospital
- Implementing Plan of JTF Framework in China



首都医科大学附属北京天坛医院
BEIJING TIAN TAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学公共卫生学院
School of Public Health, Capital Medical University



巽沅
XUNYUAN

About Xunyuan

- **Established in 2015**
- **Partner of competence development for 20+ sponsors, CROs and hospitals in China**
- **Pioneer in Independent/Freelancing Clinical Research Market in CHINA.**
- **Independent Quality Assurance and Inspection Readiness Services**

Jean Wang

Funder & Principal Trainer

- 8+ years experience of the clinical research training
- Speech content sharpener, "Ma Xujun New Year's Speech" content partner;
- The situational leadership II ® II certified trainer





首都医科大学附属北京天坛医院
BEIJING TIANTAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学 公共卫生学院
School of Public Health, Capital Medical University



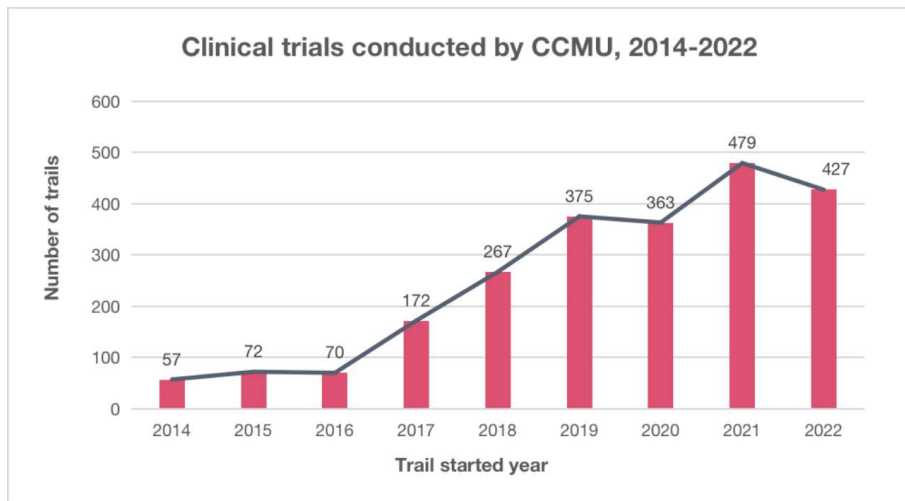
首都医科大学
临床流行病学与临床试验学系
Department of Clinical Epidemiology and Clinical Trial,
Capital Medical University



国家神经系统疾病临床医学研究中心
China National Clinical Research Center for Neurological Diseases

China's Clinical Trial Development Team of Beijing Tiantan Hospital & Capital Medical University





- **The largest affiliated hospital cluster in China**
- **The highest number of clinical trial institutions**
- **Five National Medical Centers**
- **Six National Clinical Medical Research Centers**



国家神经系统疾病临床医学研究中心
China National Clinical Research Center for Neurological Diseases



首都医科大学附属北京友谊医院
国家消化系统疾病临床医学研究中心
NATIONAL CLINICAL RESEARCH CENTER FOR DIGESTIVE DISEASES



国家老年疾病临床医学研究中心(宣武医院)
National Center Research Center Of Geriatric Diseases
(Xuanwu Hospital)



国家心血管疾病临床医学研究中心
NATIONAL CLINICAL RESEARCH CENTER FOR CARDIOVASCULAR DISEASES



国家呼吸系统疾病临床医学研究中心
National Clinical Research Center for Respiratory Disease



国家精神心理疾病临床医学研究中心
National Clinical Research Center for Mental Disorders

首都医科大学附属北京儿童医院



首都医科大学附属北京天坛医院
BEIJING TIANTAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学公共卫生学院
School of Public Health, Capital Medical University



首都医科大学
临床流行病学与临床试验学系
Department of Clinical Epidemiology and Clinical Trial,
Capital Medical University



国家神经系统疾病临床医学研究中心
China National Clinical Research Center for Neurological Diseases

Beijing Tiantan Hospital & NCRC-ND



Beijing Tiantan Hospital

- A **Grade-3 Class-A hospital** with a neurosurgery unit and a leading characteristic neuroscience cluster
- “Noble Medical Ethics, Persistent Excellence, Rigorousness and Practicality, Diligence and Honesty”
- Awards: Highest Science and Technology Award and First-Class / Second-Class Prizes for the State Scientific and Technological Progress Award ...

探索铸就希望



China National Clinical Research Center for Neurological Diseases

- The **first** clinical medical research center for neurological diseases identified in China
- A large internationally standardized clinical and sample resource pool
- A national science and technology construction base
- The center collaborative research network



首都医科大学附属北京天坛医院
BEIJING TIANTAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学公共卫生学院
School of Public Health, Capital Medical University



首都医科大学
临床流行病学与临床试验学系
Department of Clinical Epidemiology and Clinical Trial,
Capital Medical University



国家神经系统疾病临床医学研究中心
China National Clinical Research Center for Neurological Diseases

Establishment, Positioning & Targets

- The Department of Clinical Epidemiology and Clinical Trials of Capital Medical University was formally **established on May 20, 2020.**
- It serves as a **university-wide resource integration platform for clinical epidemiology and clinical trials,** aiming at cultivating high-level clinical scientists and creating a more pleasant research atmosphere, thus promoting the development of clinical research in China.



Compositions of Department

- **Affiliated to Beijing Tiantan Hospital**
- **Consisting 32 Clinical medical schools, Affiliated hospitals, Teaching hospitals & Schools**

Beijing Tiantan Hospital, Xuanwu Hospital, Beijing Friendship Hospital, Beijing Chaoyang Hospital, Beijing Tongren Hospital, Beijing Anzhen Hospital, Fuxing Hospital, Beijing Youan Hospital, Beijing Chest Hospital, Sanbo Brain Hospital, Beijing Children's Hospital, Beijing Stomatological Hospital, Beijing Anding Hospital, Beijing Obstetrics and Gynecology Hospital, Beijing Traditional Chinese Medicine Hospital, Beijing Shijitan Hospital, Beijing Rehabilitation Hospital, Beijing Luhe Hospital, China Rehabilitation Research Center, China-Japan Friendship Hospital, Fengtai Teaching Hospital, Electric Power Teaching Hospital, Shijing Teaching Hill Hospital, Miyun Teaching Hospital, Daxing Teaching Hospital, Liangxiang Teaching Hospital, Huairou Teaching Hospital, Changping Teaching Hospital, Yanqing Teaching Hospital, Mentougou Teaching Hospital, Shunyi Teaching Hospital, School of Public Health...

- **Plays an important role in clinical teaching for the whole university**



首都医科大学附属北京天坛医院
BEIJING TIANTAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学公共卫生学院
School of Public Health, Capital Medical University




首都医科大学
临床流行病学与临床试验学系
Department of Clinical Epidemiology and Clinical Trial,
Capital Medical University



国家神经系统疾病临床医学研究中心
China National Clinical Research Center for Neurological Diseases

Education & Training Programs


Education Types



Five Postgraduate Students

Academic Education

Master & Doctor Conferrable Spots



Broad Physician Scientist

Non-academic Education

Clinical Scientist Training Program

Public Training Program

For Clinical Scientists



64 Sessions Until Now

Every Wednesday Night

More Professional Research Teams

More Experienced Clinical Scientists

Better Clinical Research Atmosphere



首都医科大学附属北京天坛医院
BEIJING TIANTAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学公共卫生学院
School of Public Health, Capital Medical University



首都医科大学
临床流行病学与临床试验学系
Department of Clinical Epidemiology and Clinical Trial,
Capital Medical University



国家神经系统疾病临床医学研究中心
China National Clinical Research Center for Neurological Diseases

Implementing Plan of JTF Framework in China

Step 1: Translate the JTF Framework into Chinese

April		May			Jun		
		The 1st Translation					
			The 1st Round Discussion				
				Translation Revision			
					Internal Team Review		
						JTF Team Review and Finalization	



首都医科大学附属北京天坛医院
BEIJING TIAN TAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学公共卫生学院
School of Public Health, Capital Medical University

Implementing Plan of JTF Framework in China

Step 2: Moving Forward with a Clear Strategy

- Use JTF core competency assessment to evaluate the competence level and role relevance of Chinese clinical trial personnel.
- Understand the competency requirements of Chinese clinical trial personnel and develop training plans based on the JTF core competency framework.
- Develop graduate courses and assessment standards that are consistent with the 8 domains of JTF.
- Develop training program to professionals working in pharmaceutical company and CROs.
- Integrate JTF into the professional qualification certification of Chinese clinical trials.



Let's Work Together



For a Better Future of Clinical Research



巽沅
XUNYUAN



首都医科大学附属北京天坛医院
BEIJING TIAN TAN HOSPITAL, CAPITAL MEDICAL UNIVERSITY



首都医科大学公共卫生学院
School of Public Health, Capital Medical University

Discussion



Update: Data Management Task Force: Meredith Zozus



Quick Update

JTF Data Management Competencies

Meredith Nahm Zozus, PhD

Professor, Div. Chief and Director of Clinical Research Informatics
Joe R. and Teresa Lozano Long School of Medicine
University of Texas Health Science Center San Antonio

Manju Bikkanuri, MD, MS

Clinical Research Informaticist
Joe R. and Teresa Lozano Long School of Medicine
University of Texas Health Science Center San Antonio

Goal:

to update the Data Management and Informatics JTF Competencies.

Competencies are for Clinical Research Professionals such as

- Site PIs,
- Study Coordinators,
- Clinical Trial Monitors,
- Statisticians,
- Site Data Managers, ...

AKA:

*What every Clinical Research Professional
should know about
Informatics and Data Management*

Status

- Team of 12 participants agreed to participate
- Plus 2: Dr. Bikkanuri and myself
- Plus 2: Drs. Sonstein and Bierer

- Kick-off call held 2 weeks ago
- Implementing the first questionnaire in REDCap now.

- Plan: draft report to JTF for an internal peer review late summer.

Delphi Process

Round 1: Free text, “Blue Sky” input re leveled Data Management and Informatics competencies for Clinical Research Professionals.

Round 2: Two-dimensional rating

- (1) importance of the competency regardless of the indicated level and
 - (2) level of agreement with the competency at each indicated level
- PLUS comment fields to explain low importance and disagreement

Round 3: participants receive their results versus aggregate and are free to change their two-dimensional rating.

Round 4:

If significant disagreement: calls with individual participants to discuss their remaining differences and to perform additional member-checking if needed.

If minor disagreement or group is split on issues: from 1 to 3 group calls

Analysis following Round 4: group vetted draft competencies

Peer-review of results: review of the initial draft by the larger JTF. **Late Summer.**

Group Members

- Philippe Andry, p.andry@accelsiors.com
VP Data Mgt. and Data Integration, Accelsiors, significant experience in Europe
- Kaye Fendt, MS, Kaye_Fendt@msn.com
Former FDA and NIH, Statistics and Data Mgt.
- Susan Fenton, PhD, Susan.H.Fenton@uth.tmc.edu
Assoc. Professor and Assoc. Dean for Academic and Curricular Affairs, UT Health Science Center Houston
- Susan Howard, Susan.Howard@adaptimmune.com
Adaptimmune, Small Biotech, Data Management
- Rick Ittenbach, PhD, Richard.Ittenbach@cchmc.org
Cincinnati Children's Hospital, Statistics and Data Mgt.; Academia
- Yiannis Karageorgos, yiannis.karageorgos@gmail.com
Former BMS, Current IQVIA (CRO), Data Management, Europe
- Michelle Kelly, Michelle.Kelly@ppdi.com
Senior Director, Clinical Data Systems at PPD/ThermoFisher, CRO, Data Mgt.
- Muayad Maallah, MD, maallah@uthscsa.edu
Research Informatics, Univ. of Texas Health Science Center San Antonio, significant experience in Middle East
- Blandina T Mmbaga, MD, blaymt@gmail.com
Kilimanjaro Clinical Research Institute (KCRI)
- Steve Wilson, DrPH, stephen.wilson@fda.hhs.gov
FDA, Statistics
- Meredith Zozus, PhD, Zozus@uthscsa.edu
Univ. of Texas Health Science Center San Antonio, Clinical Research Informatics and Data Mgt.

JTF Leaders

Steve Sonstein ssonstein@gmail.com

Barbara E. Bierer, MD bbierer@bwh.harvard.edu

Delphi Leader

Manju Bikkanuri, MD

bikkanuri@uthscsa.edu

Discussion



Update: Assessment of Competencies: Elias Samuels & Susan Murphy



Updating Assessments of JTF Competencies

Presentation to the Joint Task Force for Clinical Trial
Competency (JTF)

Biannual Global meeting

May 2, 2023

Elias M. Samuels, PhD

Director of Evaluation & Quality improvement

UM Michigan Institute for Clinical and Health Research

Susan Murphy, ScD, OTR

Professor, Department of Physical Medicine and Rehabilitation, Internal Medicine,

Director, Behavioral Research Innovation and Support Program

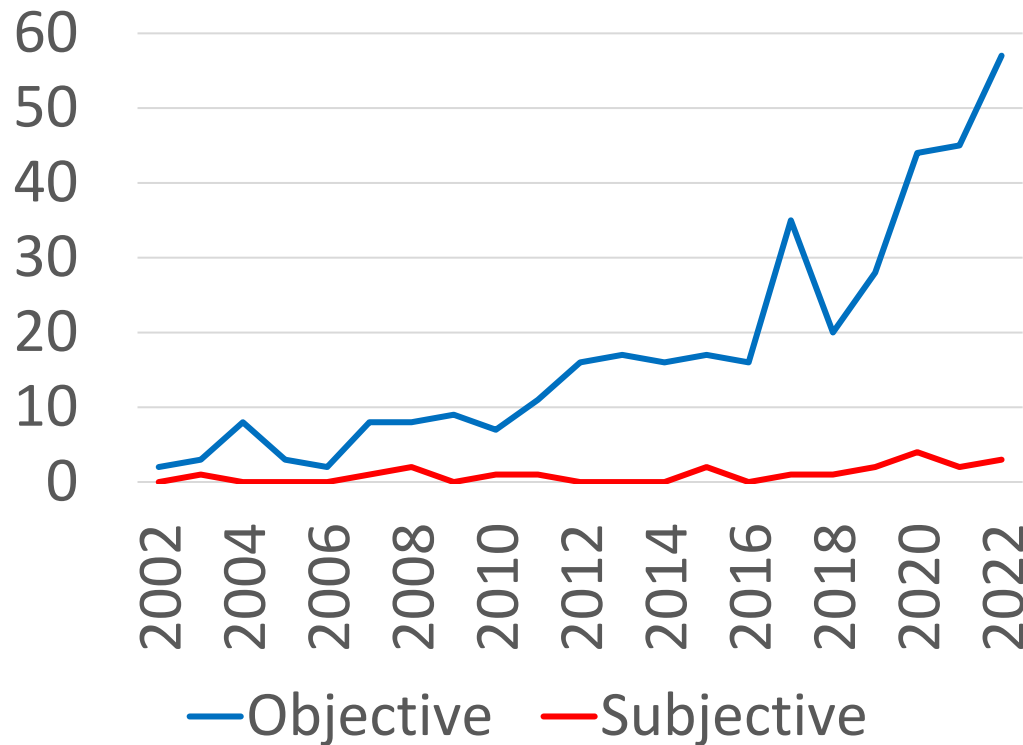
UM Michigan Institute for Clinical and Health Research

Presentation Outline

- Need for objective competency assessments
- Methods for validating objective assessments
- Applying JTF Competency Framework to BSSR
- Potential next steps
- Challenges

Objective assessments of CTR competence are needed

General trends in PubMed articles on “competency assessment” by type



While **objective** assessments of competence are increasingly published in health research, **subjective** assessments of competence are published comparatively infrequently.

CTR is lagging this trend.

Of the 28 publications listed on the JTF website, the need for objective assessments is widely noted & most of the validated competency assessments published are subjective.

Subjective vs objective assessments of competence

Subjective measures of comprehension & skill include

- learning outcomes: 'As a result of this course I can...'
- self-efficacy: 'How confident are you in your ability to...'
- expert ratings: 'How well does _____ understand...'

Objective measures of comprehension & skill include

- 'See One, Do One, Teach One'
- knowledge checks & competency-based tests
- programmatic benchmarks & milestones
- tests of skill with validated interpretations & applications

Objective assessments of CTR competency, ...

are comparatively difficult to design, administer and validate, yet

Jones, C.T., Jester, P., Croker, J.A., Fritter, J., Roche, C., Wallace, B., Westfall, A.O., Redden, D.T. and Willig, J., 2020. Creating and testing a GCP game in an asynchronous course environment: The game and future plans. *Journal of Clinical and Translational Science*, 4(1), pp.36-42.

Ianni, P.A., Eakin, B.L., Samuels, E.M., Champagne, E. and Ellingrod, V.L., 2021. The Research Objective Structured Clinical Exam (R-OSCE): an innovative tool to assess clinical and translational research competencies. *MedEdPublish*, 10(143), p.143.

are needed for more rigorous evaluation & quality improvement

Samuels, E., Ianni, P.A., Chung, H., Eakin, B., Martina, C., Murphy, S.L. and Jones, C., 2020. Guidelines for evaluating clinical research training using competency assessments. *MedEdPublish*, 8(202), p.202.

Sonstein, S.A., Samuels, E., Aldinger, C., White, S.A. and Bierer, B.E., 2022. Self-assessed competencies of clinical research professionals and recommendations for further education and training. *Therapeutic Innovation & Regulatory Science*, 56(4), pp.607-615.

Objective competency assessments should be validated using complimentary theoretical models

The Content-Criterion Model

Validate assessments can predict related measures and outcomes

The Construct Model

Validate that assessments measure coherent and comprehensive constructs

The Unified Construct Model

Validate that assessments have theoretically sound construct and content validity

The Argument-Based Approach to Validation

Validate that assessments produce evidence of practical value for specific applications

Kane, M.T., 2021. Articulating a validity argument. In *The Routledge handbook of language testing* (pp. 32-47). Routledge.

Kane, M.T., 2013. Validating the interpretations and uses of test scores. *Journal of Educational Measurement*, 50(1), pp.1-73.

Adapting JTF Competency framework for Behavioral & Social Science Research (BSSR) studies

- Right framework, but needs tailoring
 - Competency domains align with BSSR rigor
 - Competencies and knowledge needed to perform them is different
- BSSR nuances
 - Lower risk
 - Participatory approach involving community/stakeholders
 - Instead of safety being priority, acceptability and feasibility needed for translation



Clinical Study Operations - BSSR Nuances



GCP – ICH principles

FDA-regulated trials
drug, device, biologic trials

Research Best Practices

BSSR trials

- **Adapted GCP was needed**
- **Parallel training was developed**
- **Assessment of BSSR competency**

Murphy SL, Byks-Jazayeri C, Calvin-Naylor N, Divecha V, Anderson E, Eakin B, Fair A, Denton L. Best practices in social and behavioral research: report from the Enhancing Clinical Research Professional's Training and Qualifications project. J Clin Trans Sci 2017; 1: 26-32.



Potential Next Steps for Assessment

1. Define BSSR competencies

- Look to adapted tools – NIH template, CONSORT
- Additional workforce development projects

2. Operationally define knowledge and tasks that lead to competencies

- Perhaps study specific quality metrics, may be very different depending on study type
 - CBPR study conduct
 - Study requiring handing of mobile device data

3. Identify models & methods for validity testing

Challenges to using objective assessments

- Evaluating impact at the person level or study level?
 - Existing assessments are not validated for all CT researchers
- Study level – Auditing – can be problematic
 - Adverse Event Conundrum – are more AEs a sign of better or worse quality of study?
 - What should measurable trends in outcomes be compared to?
- New study at UMich
 - Examining research compliance issues in BSSR trials
 - Partnership of MICHR with research compliance office
 - Help identify strategies to improve competencies
 - Can lead to an objective assessment strategy

Thank you
for your time & interest

CONTACT INFORMATION:

Elias Samuels, PhD (eliasms@med.umich.edu)

Susan Murphy, ScD, OTR (sumurphy@med.umich.edu)

Discussion



Adaptation of the JTF Framework to Emergencies: Sandor Kerpel-Fronius & Barbara Bierer



Recommendation for developing a practical guidance for managing clinical trials in times of crisis



Sándor Kerpel-Fronius, M.D., D.Sc., FFPM
Semmelweis University
Department of Pharmacology and
Pharmacotherapy
Budapest, Hungary
Email: kerpel-fronius.sandor
@med.semmelweis-uni.hu

Vulnerable patients who already entered clinical trials

Vulnerable patients due to war and destruction



Vulnerable patients due to economic sanctions



Main ethical conclusion and recommendation of the IFAPP Ethics Working Group

- ❖ According to International Ethical Guidelines for Health-related Research Involving Humans [Prepared by the Council for International Organizations of Medical Sciences (**CIOMS**) in collaboration with the World Health Organization (**WHO**) (2016)]
 - ❖ *“the judgment that groups are vulnerable is context dependent and requires empirical evidence to document the need for special protections.”*
- ❖ Based on this principle the IFAPP Ethics Working Group postulated that seriously ill participants enrolled already into clinical trials performed in countries involved in armed conflicts, economic sanctions hitting healthcare or natural disasters should be considered belonging to a **vulnerable patient population**
- ❖ The investigational treatment might be the last chance for these patients to obtain therapeutic benefit for their disease

Phases of trial management in times of war The experience in Ukraine

- 1. Emergency trial management during the initial „chaotic” phase of a developing disaster*
2. Trial management under continuing development of a disaster
3. Consolidation, return to normal trial management

Emergency trial management during the initial „chaotic” phase of a developing disaster

D
E
V
E
L
O
P
I
N
G

D
I
S
A
S
T
E
R

Investigator site	Sponsor
<ul style="list-style-type: none"> • Unfolding disaster, extent unknown • Contact with the sponsor either non-existent or sporadic and inadequate 	<ul style="list-style-type: none"> • Unfolding disaster, extent unknown • Contact with investigator site either non-existent or sporadic and inadequate
<p>Evaluation of the effects of the disaster on the staff, healthcare facilities and social infrastructure</p>	<p>Information gathering concerning the effects of the disaster on the staff, healthcare facilities and social infrastructure</p>
<p>Ethically motivated emergency clinical decisions</p> <ul style="list-style-type: none"> • Clinical activities impossible • Stopping clinical trials and providing best treatment outside the trials • <i>Continuation of already initiated trial treatments if possible</i> • Modified GCP level documentation of trials 	<p>Ethical and scientific evaluation of possible management changes without destroying the scientific value of the study</p> <ul style="list-style-type: none"> • Closing the trial if trial treatment is impossible • Provide guidance for GCP conform trial management under altered circumstances • Organize transfer of participants to alternate research sites

Primary recommendation for ongoing clinical trials in times of emergency

- ❖ **The continuation of already initiated trial treatments for the benefit of the patients is the primary ethical obligation of clinical investigators in case of war, economic sanctions or natural catastrophes**

Suggested cooperation with CIOMS

Developing a guidance for the conduct of clinical trials in crisis situations

- ❖ **February 20, 2023. Recommendation for a CIOMS-hosted Working Group to Develop Guidance for Health-related Research in Times of Crisis**
 - Joint recommendation by IFAPP, UCRSI and MRCT
- ❖ **March 31, 2023. *Further clarification of the goals of the suggested Guidance for Health-related Research in Times of Crisis Contact with Dr. Lembit Rägo, Secretary General of CIOMS***
- ❖ **Concerns:**
 - Most of the participants of the CIOMS Executive Board considered that the present ethical guidance's provide adequate background for correctly performing clinical trials even under crisis situation.
 - They were concerned that our intention is to develop a specific “crisis related additional ethical guidance”.

Suggested cooperation with CIOMS

Developing a guidance for the conduct of clinical trials in crisis situations

- ❖ ***March 31, 2023. Further clarification of the goals of the suggested Guidance for Health-related Research in Times of Crisis***

Answers:

- ❖ According to our opinion, a list of detailed practical recommendation how to overcome difficulties created by external circumstances ***in agreement with the spirit of the accepted ethical guidelines*** could be very useful for ethics committee members, investigators and sponsors
- ❖ Such guidance would be especially needed in times when a crisis develops and rapid actions are required to keep trials going in a modified but still GCP conform way.
- ❖ The experience obtained in Ukraine showed convincingly the outstanding importance of rapidly communicated practical, GCP conform suggestions to the investigators by the local regulatory authorities.
- ❖ A joint TC with the CIOMS Executive Board is planned to discuss pros and cons concerning our proposal.

Adapting the JTF Framework to Emergencies

- Not all emergencies are the same
 - Variably variable in type
 - ❖ Natural disasters (e.g., earthquakes, hurricanes, floods)
 - ❖ War, conflict
 - ❖ Public health crises (e.g., pandemics, epidemics)
 - ❖ Other disruptive events (e.g., 9/11)
- Emergencies occur at different scales
 - Variable in intensity, from catastrophic (e.g., Covid-19, war in Ukraine) to relatively minor
- Responses should reflect the type and extent of the emergency
- Preparedness is necessary as disruption is unpredictable

Are different competencies necessary?



Adapting the JTF Framework to Emergencies

- Proposal: review JTF framework (both domains and more specifically the competencies) to determine if:
 - Determine whether there are specialized professional competencies in the context of emergencies and whether those competencies differ by type of emergency
 - Review each competency to determine adjustments.
 - Anticipate no change to competency itself, but additional skills needed

1

Domain 1: Scientific Concepts and Research Design

Encompasses knowledge of scientific concepts related to the design and analysis of clinical trials


+ 1.1 Apply Principles of biomedical science to investigational product discovery and development and health-related behavioral interventions

+ 1.2 Identify Scientific Questions that are Potentially Testable Clinical Research Hypotheses

+ 1.3 Identify the Elements and Explain the principles and Processes of Designing a Clinical Study

+ 1.4 Maintain awareness of new technologies, methodologies and techniques which enhance the conduct, safety and validity of the clinical study

+ 1.5 Critically analyze clinical study results

 Emergency preparedness competency or considerations

Discussion



Wrap-Up and Next Steps



Questions, Comments, Suggestions



Questions and discussion

Carmen Aldinger, PhD
caldinger@bwh.harvard.edu

Barbara E. Bierer, MD
bbierer@bwh.harvard.edu

Stephen Sonstein, PhD
ssonstein@gmail.com

