# ON-BOARDING IMPACT-MH Consortium

Accelerating scientific discoveries in mental health research. (updated as of 12/4/24 by Polly Painter)

**TASK 1**:For Onboarding and access to password protected website materials: Go to the <u>TEAM ONBOARDING SITE HERE</u> <u>Onboarding Essentials</u>

\*To access the shared documents folder on Google, you need a gmail account.\*

TASK 2: Review Background Information

https://impact-mh.org/

Password:

In a nutshell: The Data Coordination Center is responsible for collecting and harmonizing de-identified data from 8 projects in the consortium. The DCC collects the data, harmonizes it and submits it to the NDA at NIH/NIMH. The NDA is the NIH Data Archive.

There are 3 CORE groups that comprise the Data Coordination Center (DCC), funded by a U24 grant from NIH/NIMH. The DCC is responsible for organizing this work. CORE 1, the data management center is led by Dr. Hua Xu at Yale. CORE 2, the data standards group is led by Dr. Tao Cui at Mayo, CORE 3 data analytics is led by Yong Chen from UPenn.

## **DCC Cores**

## Project Coordination & Data Management

This core will ensure seamless coordination and communication among IMPACT-MH projects, and it will also establish a robust data management system. The system will efficiently collect, store, harmonize, and manipulate multi-modal data from multiple projects. Moreover, it will ensure compliance with data submission requirements for NDA.

Yale | Dr. Hua Xu

#### **Data Standards**

This core will define common data models by leveraging the RDoC framework and existing ontologies and other data standards such as CDEs (Common Data Elements). It will establish a consensus process and data harmonization methods, and support awardees to implement such standards among IMPACT-MH projects

Mayo | Dr. Cui Tao

#### **Data Analytics**

This core will focus on conducting rigorous analyses on the aggregated data from the IMPACT-MH projects, developing methods to address potential biases associated with the datasets, algorithms, and applications, and evaluating phenotype models.

UPenn | Dr. Yang Chen

The DCC ("U24") is responsible for coordinating 8 subaward grantees of U01 grants. **These 8 institutions are known as the "U01s"**. They include: University of Washington, University of Michigan, Mount Sinai/Mass General Hospital, Oregon State Health and Science University, Harvard/MGH, Yale, University of Pittsburgh/Boston Children's, Stanford.

Contact PI	Affiliation	Project Title	Grant
Dr Dror Ben-Zeev	University of Washington	Developing Data-Driven Clinical Signatures for People Who Experience Hallucinations (HALO)	U01MH135901
Dr Amy Bohnert	University of Michigan at Ann Arbor	COMPASS: A Comprehensive Mobile Precision Approach for Scalable Solutions in Mental Health Treatment ( <b>COMPASS</b> )	U01MH136025
Dr Rene Kahn		Phenotypes Reimagined to Define Clinical Treatment and Outcome Research (PREDICTOR)	U01MH136535
Dr Bonnie Nagel	Oregon Health & Science University OHSU	Person-Centered Diagnostics and Prediction for Child Dysregulatory Psychopathology Using Novel Phenotypes	U01MH135970
Dr Roy Perlis		<b>JASPer</b> -MH: Jointly Assessed Scalable Phenotypes for Mental Health	U01MH136059
Dr Chris Pittenger	Yale University	IMPACT-MH: Clinical and Behavioral Fingerprints of Psychopathology	U01MH136497
Dr Adriane Soehner	University of Pittsburgh Boston Children's Harvard	The Pediatric Precision Sleep Network ( <b>PPSN</b> )	U01MH136020
Dr Leanne Williams	Stanford University	<b>ACE-D</b> : Accelerating Cognition-guided Signatures to Enhance Translation in Depression	U01MH136062
Dr. Jonathan Posner		Leveraging Artificial Intelligence to Predict Mental Health Risk among Youth Presenting to Rural Primary Care Clinics	UF1MH141631

Dr. Jessica Turner		<b>ARTEMIS</b> : Analyses to Reveal Trajectories and Early Markers of Imminent Shifts in Suicidal States	UF1MH136537
Dr. Moriah Thomason	NYU Langone (Child Study Center)	<b>REACH:</b> Behavioral Phenoscreening: Remote Assessment of Child Mental Health	UF1MH141129
Dr. Laura Germine	Albert Einstein College of Medicine	TRACC-MH: Trajectories of Risk and Cognitive Change in Mental Health	UF1MH135991
Dr. Andrea Edlow		<b>SPARC-XP</b> : Scalable Phenotyping to Assay Risk in Childhood after eXposures in Pregnancy	UF1MH141632
Dr Hua Xu	Yale University	Coordinating Individually Measured Phenotypes to Advance Mental Health Research (Data Coordination Center, DCC)	U24MH136069

#### 1. Project Summaries NIH RePORTER

<u>U24 "Coordinating Individually Measured Phenotypes to Advance Mental Health Research"</u>

**U01s Project Summaries** 

#### 2. Communication and Documentation

- a. Documentation is stored on Google Drive: IMPACT-MH
- b. Contact Lists (multiple tabs)
- c. Website: impact-mh.org -
- d. Slack: impact-mh
- e. Outlook email: <a href="mailto:impact.mh.adm@yale.edu">impact.mh.adm@yale.edu</a> use this outlook calendar to post internal events, which will automatically appear in Slack

#### 3. Core roles and responsibilities:

- a. Core 1 Contact PI: Dr. Hua Xu (Yale)
  - i. Project Manager: Polly Painter
  - ii. Website: Christian Horgan, Daniella Weng
  - iii. Contracts: Polly Painter, Yvonne Rafferty (Yale)
  - iv. Data Infrastructure at Yale: Christian Horgan, Chris Gilman, Huan He, Ahmed Abdelhady

- v. Software Tools: Josh Kenney
- vi. Data Collection Plan: Kalpana Raja, Fang Li, Na Hong, Yujia Zhou
- vii. Data Structures: Josh Kenney, Rakesh Kumar (Mayo), Na Hong, Kalpana Raja

**IMPACT-NDA Data Dictionary Search Tool** 

### viii. Data Standards Working Group (DSWG)

Kalpana Raja	kalpana.raja@yale.edu
Fang Li	Li.Fang@mayo.edu
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Natasia Jacko	Natasia.Jacko@Pennmedicine.upen n.edu
Yujia Zhou	yujia.zhou@yale.edu

### **DCC Point People**



- ix. <u>Small Groups</u> (Taskforces and Working Groups)
  Polly Painter, Natasia Jacko (UPenn), Josh Kenney, Fang Li
  Rakesh Kumar, Na Hong, Hua Xu
- x. <u>Seminar Series</u>: Natasia Jacko
- b. Core 2 PI Tao Cui (Mayo) | RDoC
  - i. Fang Li
  - ii. Rakesh Kumar
- c. Core 3 PI Yong Chen (UPenn)
  - i. Natasia Jacko, Project Director
  - ii. Data Analytics Working Group (DAWG) seminar series

#### d. U01 Data Managers: each U01 has a point person for communication

PI	Data Representative	Affiliation	Grant	[Short name]
Dror Ben-Zeev Trevor Cohen	Justin Tauscher	University of Washington	<u>U01MH135901</u>	HALO
Biol Ben 2007 Hevol Gollen	Anna Larsen	Oniversity of Mashington		
Amy Bohnert	Elizabeth Mills	University of Michigan at Ann Arbor	U01MH136025	COMPASS
Rene Kahn	Justin Baker	Icahn School of Medicine at Mount Sinai/MGB	U01MH136535	PREDICTOR
Bonnie Nagel	Nicole Weiskopf	Oregon Health & Science University	<u>U01MH135970</u>	[Child-Dys-Psych]
Donnie Nager	Tosha Zaback			
Roy Perlis	<u>Pieter Vuijk</u>	Mass General Hospital/Harvard	<u>U01MH136059</u>	JASPeR
Chris Pittenger	Theresa Babuscio	Yale University	<u>U01MH136497</u>	Yale IMPACT-MH
Address Octobered	<u>Maria Jalbrzikowski</u>	Boston Children's Hospital		[PPSN Pediatric precision sleep network]
Adriane Soehner	Meredith Wallace	University of Pittsburgh at Pittsburgh	<u>U01MH136020</u>	
Leanne Williams	Hyun-Joon (Jack) Yang	Stanford University	<u>U01MH136062</u>	ACE-D
Learne Williams	<u>Andrea Ellsay</u>	Staniord Oniversity		
Dr. Jonathan Posner		Duke University	<u>UF1MH141631</u>	Leveraging Artificial Intelligence to Predict Mental Health Risk among Youth Presenting to Rural Primary Care Clinics
Dr. Jessica Turner		Ohio State University	<u>UF1MH136537</u>	ARTEMIS
Dr. Moriah Thomason		NYU Langone (Child Study Center)	<u>UF1MH141129</u>	REACH
Dr. Laura Germine		Albert Einstein College of Medicine	<u>UF1MH135991</u>	TRACC-MH
Dr. Andrea Edlow		Massachusetts General Hospital	<u>UF1MH141632</u>	SPARC-XP

## **DCC Data Harmonization Process**

Step 2a	Step 2b	Step 3
<u>Data Structure Collection</u> : Collect U01 data structures and elements	Standards Development: Address unmet needs in data representation by current NDA	Mapping: Map and standardize data
Priorities:  • NDA required variables, data structures and data elements	Priorities:  • Develop new data structures • Incorporate other terminologies	Priorities:  • Develop mapping tool and harmonization platform • Element mapping
Must be aligned with NDA standards	<ul> <li>RDoC ontological representation</li> </ul>	Value normalization     Metadata     standardization
	Data Structure Collection: Collect U01 data structures and elements  Priorities:  ■ NDA required variables, data structures and data elements  ★ Must be aligned with	Data Structure Collection: Collect U01 data structures and elements  Priorities:  NDA required variables, data structures and data elements  Must be aligned with  Standards Development: Address unmet needs in data representation by current NDA  Priorities:  Develop new data structures Incorporate other terminologies  RDoC ontological

**Prospective** data harmonization

Retrospective data harmonization