# 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>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**

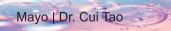
## Project Coordination & Data Management

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



#### **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. Yong Chen

The DCC ("U24") is responsible for coordinating 8 subaward grantees of U01 grants. **These 13 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		Developing Data-Driven Clinical Signatures for People Who Experience Hallucinations ( <b>HALO</b> )	U01MH135901
Dr Amy Bohnert		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	Science University	Person-Centered Diagnostics and Prediction for Child Dysregulatory Psychopathology Using Novel Phenotypes	U01MH135970
Dr Roy Perlis		JASPer-MH: Jointly Assessed Scalable Phenotypes for Mental Health	U01MH136059
Dr Chris Pittenger	,	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	Duke University	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
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Yujia Zhou	yujia.zhou@yale.edu

### **DCC Point People**



- ix. Small Groups (Taskforces and Working Groups|Deliverables)
- x. <u>Seminar Series</u>: Natasia Jacko
- b. Core 2 PI Tao Cui, Fang Li (Mayo) | RDoC
- 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	<u>Justin Tauscher</u>	University of Washington	<u>U01MH135901</u>	HALO
	Anna Larsen	Offiversity of Washington		
Amy Bohnert	Elizabeth Mills	University of Michigan at Ann Arbor	<u>U01MH136025</u>	COMPASS
Rene Kahn	<u>Justin Baker</u>	Icahn School of Medicine at Mount Sinai/MGB	<u>U01MH136535</u>	PREDICTOR
Ronnie Nagel	Nicole Weiskopf	Oregon Health & Science University	U01MH135970	[Child-Dys-Psych]

	<u>Tosha Zaback</u>			
Roy Perlis	<u>Pieter Vuijk</u>	Mass General Hospital/Harvard	<u>U01MH136059</u>	JASPeR
<u>Chris Pittenger</u> <u>Theresa Babuscio</u> Yale U		Yale University	<u>U01MH136497</u>	IMPACT-Y
Adriane Soehner	<u>Maria Jalbrzikowski</u>	Boston Children's Hospital	U01MH136020	PPSN
Aunane Soenner	Meredith Wallace	University of Pittsburgh at Pittsburgh	<u>0011411 1130020</u>	
Leanne Williams	Hyun-Joon (Jack) Yang	Stanford University	U01MH136062	ACE-D
	Andrea Ellsay	Stamord Offiversity	<u>0011411 1130002</u>	
Dr. Jonathan Posner	<u>Bipina Sigdel</u>	Duke University	<u>UF1MH141631</u>	DUKE-PMA
Dr. Jessica Turner	<u>Canada Keck</u>	Ohio State University	<u>UF1MH136537</u>	ARTEMIS
Dr. Moriah Thomason	<u>TBD</u>	NYU Langone (Child Study Center)	<u>UF1MH141129</u>	REACH
Dr. Laura Germine	<u>TBD</u>	Albert Einstein College of Medicine	<u>UF1MH135991</u>	TRACC-MH
Dr. Andrea Edlow	<u>Pieter Vuijk</u>	Massachusetts General Hospital	<u>UF1MH141632</u>	SPARC-XP

## **DCC Data Harmonization Process**

Step 1	Step 2a	Step 2b	Step 3
Data Discovery: Collect and aggregate U01 data plans	Data Structure Collection: Collect U01 data structures and elements	Standards Development: Address unmet needs in data representation by current NDA	Mapping: Map and standardize data
Priorities: Research focus, Data types, Data collection tools and platforms	Priorities:  ■ NDA required variables, data structures and data elements  ★ Must be aligned with NDA standards	Priorities:  Develop new data structures  Incorporate other terminologies  RDoC ontological representation	Priorities:  • Develop mapping tool and harmonization platform  • Element mapping  • Value normalization  • Metadata standardization
	Prospective data harmoniz	ation Re	trospective data harmoniz