

Tissue Chips for Drug Screening

supported by Cures Acceleration Network

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Tissue Chips for Drug Screening Program

View the video:

<https://ncats.nih.gov/tissuechip/about>



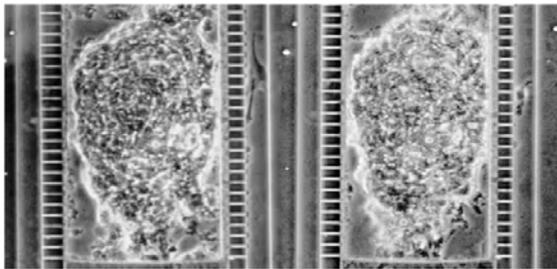
Tissue Chips: Engagement with patient partners

- Tissue Chip Program is working with the Rare Diseases Clinical Research Network (RDCRN) and their Patient Advocacy Groups to develop pre-clinical models of rare diseases
- Examples:
 - Hereditary Hemorrhagic Telangiectasia (Washington U and UC Irvine) – Vascular Malformation Consortium
 - Glycogen Storage Disease III (Duke University) – Lysosomal Diseases Network
 - Tuberous Sclerosis (Vanderbilt University) – Developmental Synaptopathies Consortium
 - Nephrotic Syndrome (U Washington) - Nephrotic Syndrome Study Network
 - Alpers Huttenlocher syndrome (Pittsburgh) – Childhood Liver Disease Research Network; North American Mitochondrial Disease Consortium
 - Congenital Central Hypoventilation Syndrome (Berkeley and Gladstone) – Autonomic Rare Diseases Clinical Research Consortium
 - Rett Syndrome (Morgridge) – Rett, MECP2 Duplications and Rett-Related Disorders Consortium
 - Hutchinson-Gilford Progeria Syndrome (Duke University) – Progeria Research Foundation
 - Timothy Syndrome (Columbia University) - Sudden Arrhythmia Death Syndromes (SADS) Foundation



Tissue-on-Chips: New and Planned Initiatives

**Disease Models for
Efficacy Studies
2017-2022**



**Tissue Chips-in-Space
2017-2021**

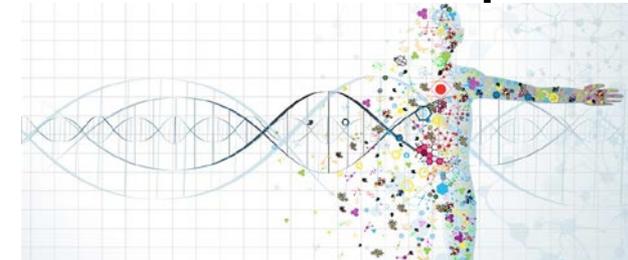


**Human body-on-a-
Chip**

**Clinical Trials-on-
chips**



**Precision Medicine
You-on-chip**



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