

Center for Depression Research and Clinical Care

Solving Depression, Saving Tomorrows: Early, Precisely, and Now

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CDRC: Solving Depression, Saving Tomorrows

*Transform diagnosis and treatment of depression and bipolar disorder,
Revolutionize understanding of biological causes,
Accelerate discovery, and
Disseminate findings to real practice*



*A future free from the burden of
depression*

*Promote Resilience,
Map Brain Pathology,
Create Biosignature,
Personalized Treatment*



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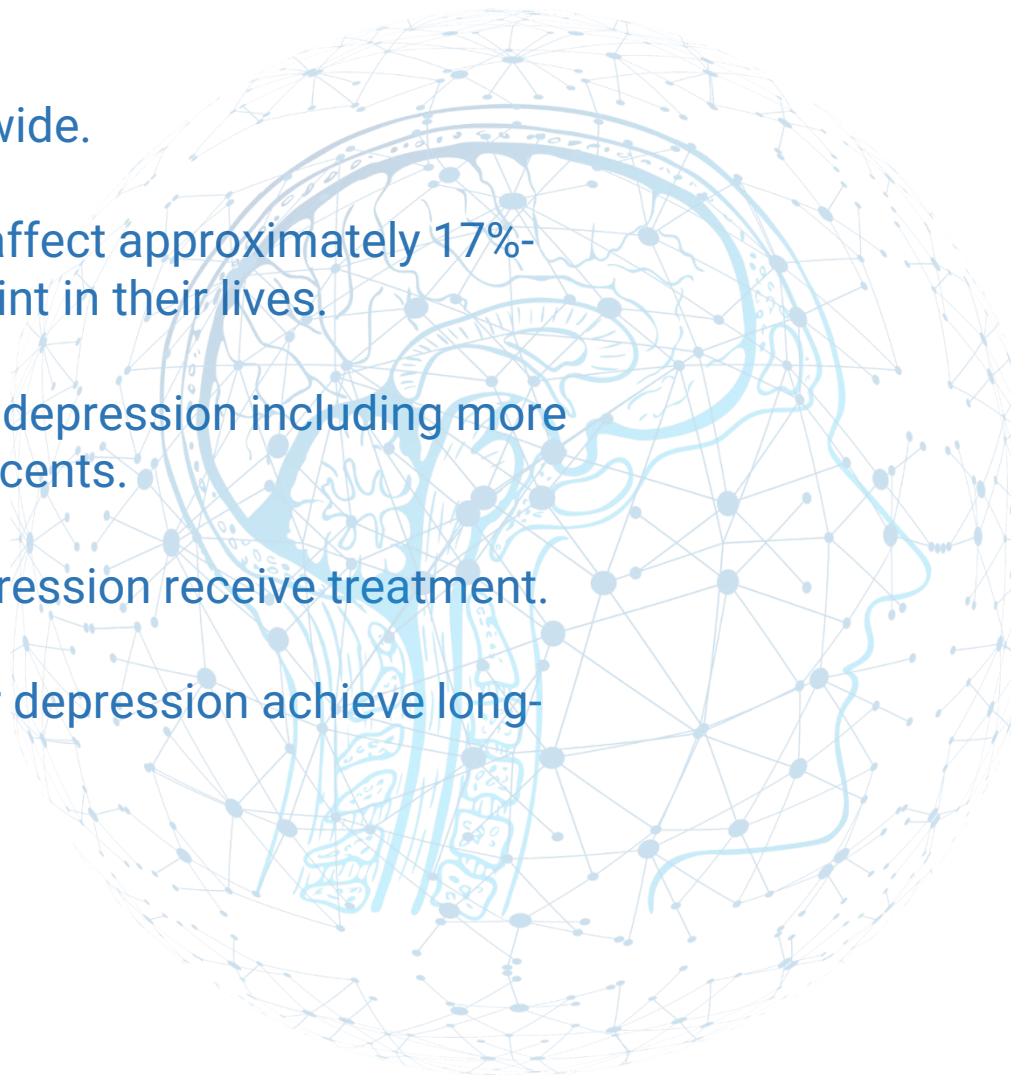
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The Toll of Depression and Bipolar Disorder

- Leading cause of disability worldwide.
- Depression and Bipolar Disorder affect approximately 17%-20% of the population at some point in their lives.
- One in ten Americans suffer from depression including more than 3 million children and adolescents.
- Less than 50% of people with depression receive treatment.
- 6% of patients who are treated for depression achieve long-term remission.



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The Challenge of Diagnosis and Treatment

The causes of depression remain unknown.

There are no reliable laboratory tests to diagnose it – diagnosis of depression focuses exclusively on symptom reports.

People who suffer from depression are placed in a single, broad category.

Choosing effective treatments is imprecise and largely based on a trial-and-error approach - patients must try multiple therapeutics before finding what works for them.



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The Problem

We do not detect and treat depression until it is too late.

- Nearly 4,000 Texans die each year from suicide even though **depression treatments are over 60% effective**
- **Less than 1 in 15** of the 1.5 million Texans suffering from depression each year **receive sufficient care to recover**
- **Suicide** is the 2nd leading cause of death among **15–24-year-olds**

COVID-19 is making this problem worse (CDC, 2021)

- ✓ The symptoms of depression nationwide are up four-fold
- ✓ The number of people seriously considering suicide has doubled
- ✓ Mental health-related emergency department visits increasing for adolescents



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Adults in Tarrant County

23 %

of adults have mental health needs
= 340,000 individuals

32 %

of those suffer from depression or bipolar disorder
= 108,000 individuals

Meadows Mental Health Policy Institute's Tarrant County Prevalence Estimates (2016)



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Youth in Tarrant County

38

of children and youth (ages 6-17) have behavioral health needs =

140,000
14%

of those (ages 12-17) suffer from depression or bipolar disorder =

19,000
10%

of high school students in Fort Worth attempted suicide
(one or more times during past 12mo) *compared to 7.4% of youth in the U.S.*

43%

of children and youth are living in poverty



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Meadows Mental Health Policy Institute's Tarrant County Prevalence Estimates (2016); *High School Youth Risk Behavior Survey (2017)*

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CDRC at the Forefront of Research

 **Pharmacological**  **Psychosocial**  **Neurostimulation**  **Exercise**

Other non-pharmacological treatments for mood disorders in adults, adolescents, and peripartum women

- STAR*D: First study examining effectiveness of treatments for treatment-resistant depression
- COMED: First study examining combination of medication and monotherapy
- TrEAD, DOSE, STRIDE: Major Exercise Studies
- TORDIA and TADS: Pivotal studies in adolescent depression
- EMBARC: First Large Scale Biomarker Evaluation Study



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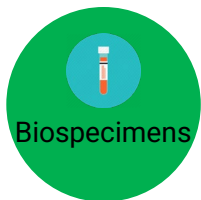
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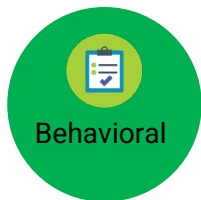
Next? Development and Validation of Biomarkers



Clinical



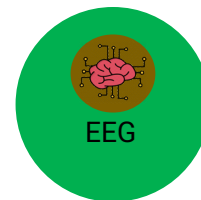
Biospecimens



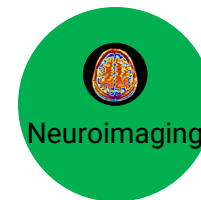
Behavioral



mHealth



EEG



Neuroimaging

Depression and Bipolar 2.5K (D2K)

Tracking individuals
with depression

To understand disease course and improve treatment outcome

Recruiting 2,500 individuals (≥ 10 yrs)
with depression or bipolar disorder

Resilience in Adolescent Depression 2.5K (RAD)

Tracking adolescents and young adults
without depression

To understand disease onset, risk, and resilience

Recruiting 2,500 youth (ages 10-24)
without and/or at-risk for depression

Obtain
clinical, behavioral, physiological, biological, neuroimaging, and physical activity data
quarterly for 10 years

Trivedi MH et al., 2019. Journal of Psychiatric Research.



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Questions?



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