

# **New Frontiers in the Treatment and Prevention of Depression**

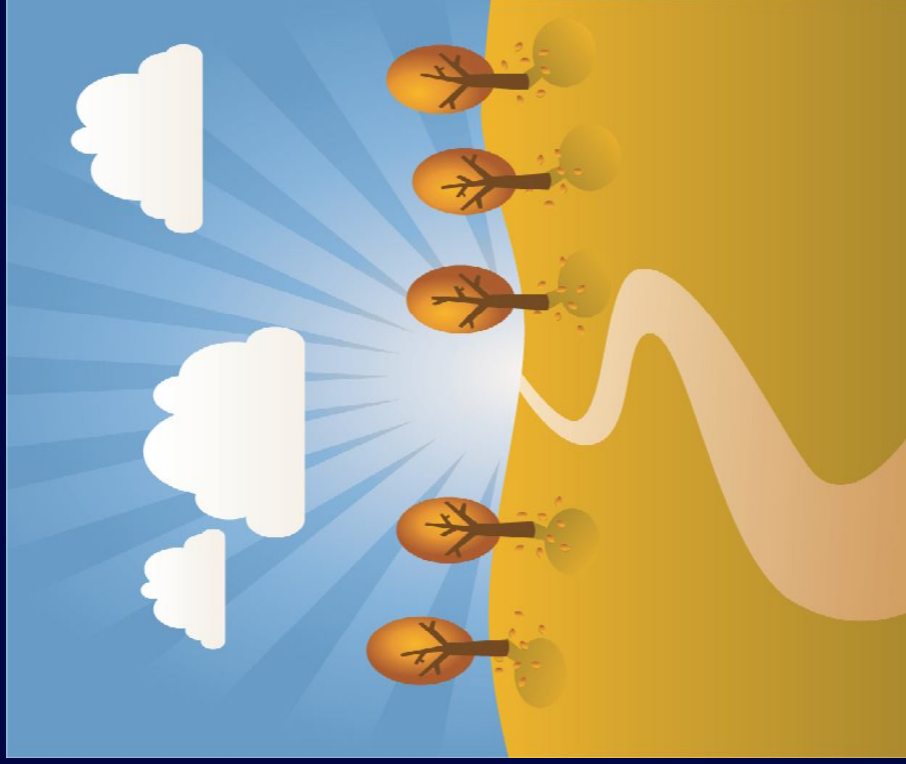
**Sona Dimidjian, Ph.D.**  
**Department of Psychology and Neuroscience**  
**University of Colorado, Boulder**

**November 4, 2010**

# Road Map

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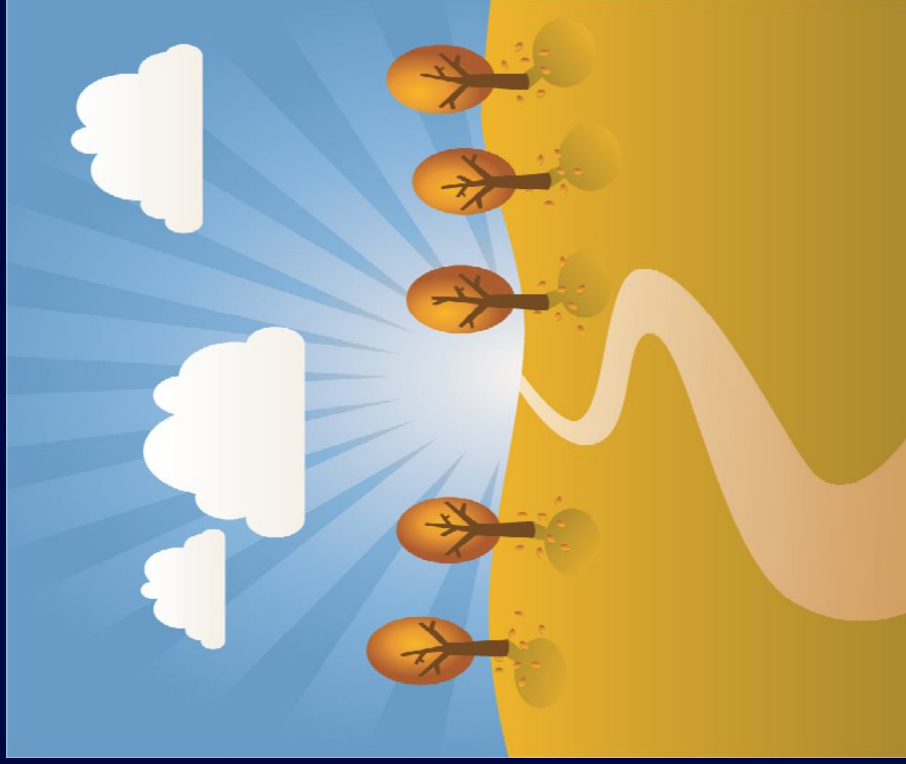
- What is depression?
- How can we treat and prevent depression?
  - Antidepressant medication
  - New frontiers in clinical research creating innovative options
- How to make innovative options widely available?



# Road Map

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- **What is depression?**
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# Why is depression a problem?

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**Common**

**Disabling**

**Costly**

**Many Close Cousins**

**Treatable**

# What is major depression?

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- Major depression requires at least five of the following nine symptoms, including one of the first two:
  - \*Depressed mood
  - \*Loss of interest or pleasure in most activities
  - Significant change in weight or appetite
  - Insomnia or hypersomnia
  - Psychomotor agitation or retardation
  - Loss of energy or fatigue
  - Feelings of worthlessness or excessive guilt
  - Diminished ability to concentrate/make decisions
  - Suicidal thoughts or acts

American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision. Washington, DC, 2000.

What's it like to be depressed?

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# What happens over time?

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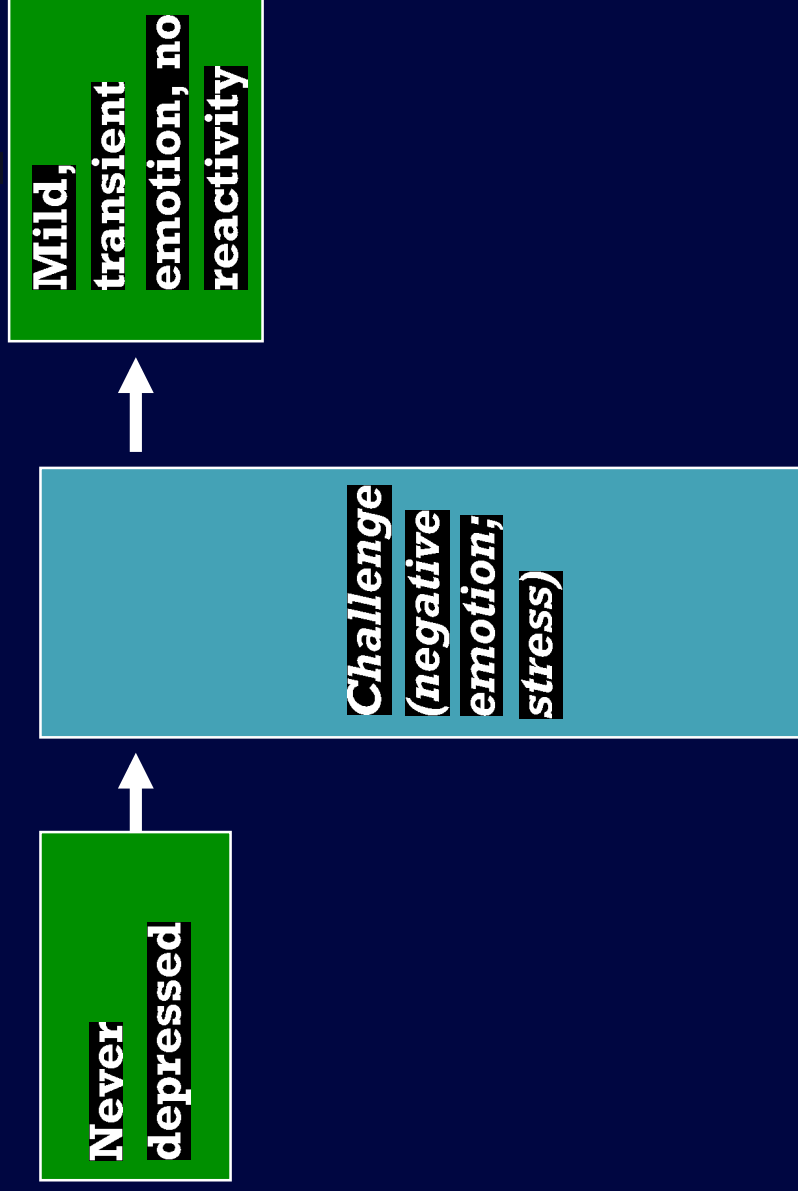
- **Recurrent**
  - **50-60% of those with 1 episode have a 2<sup>nd</sup>**
  - **70% of those with 2 episodes have 3<sup>rd</sup>**
  - **90% of those with 3 episodes have 4<sup>th</sup>**
- **Chronic**
  - **Symptoms present 60% of time**
- **Impairing**
  - **Even at subthreshold levels**

# What processes are impaired?

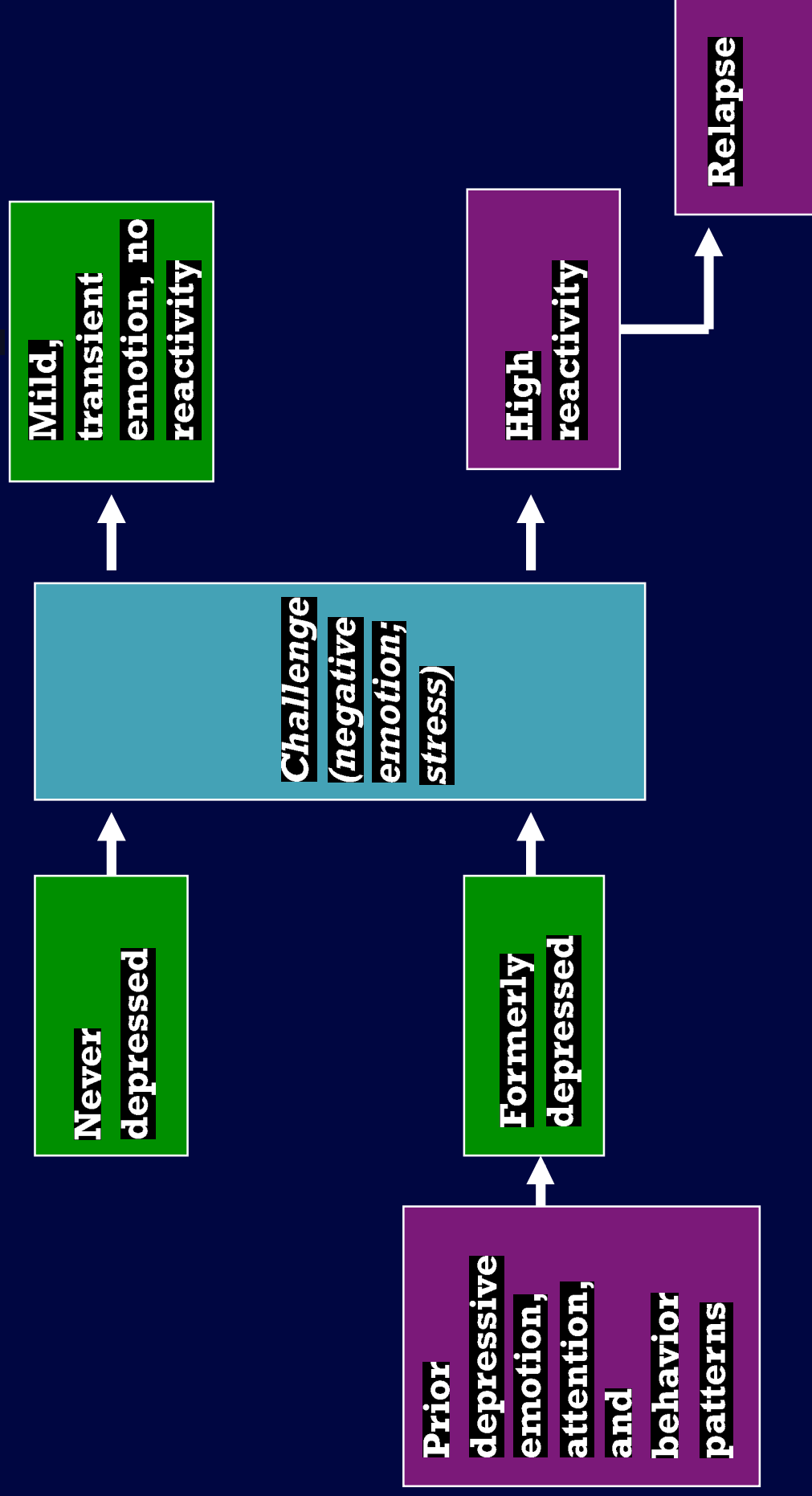
**Never  
depressed**

**Formerly  
depressed**

# What processes are impaired?



# What processes are impaired?



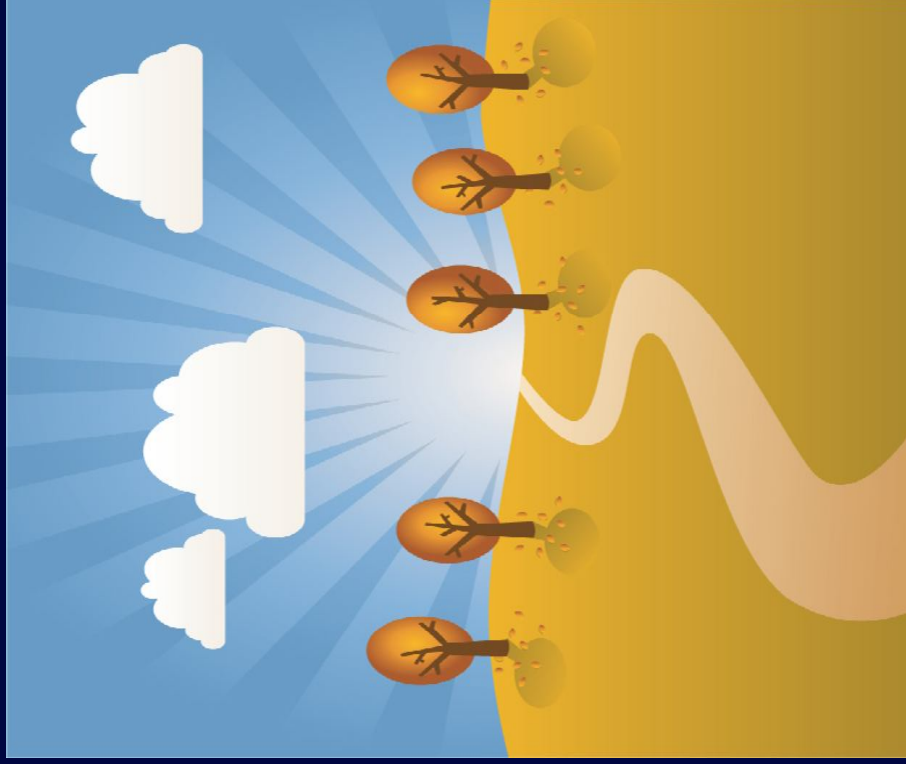
**What's it like to have been depressed?**



# Road Map

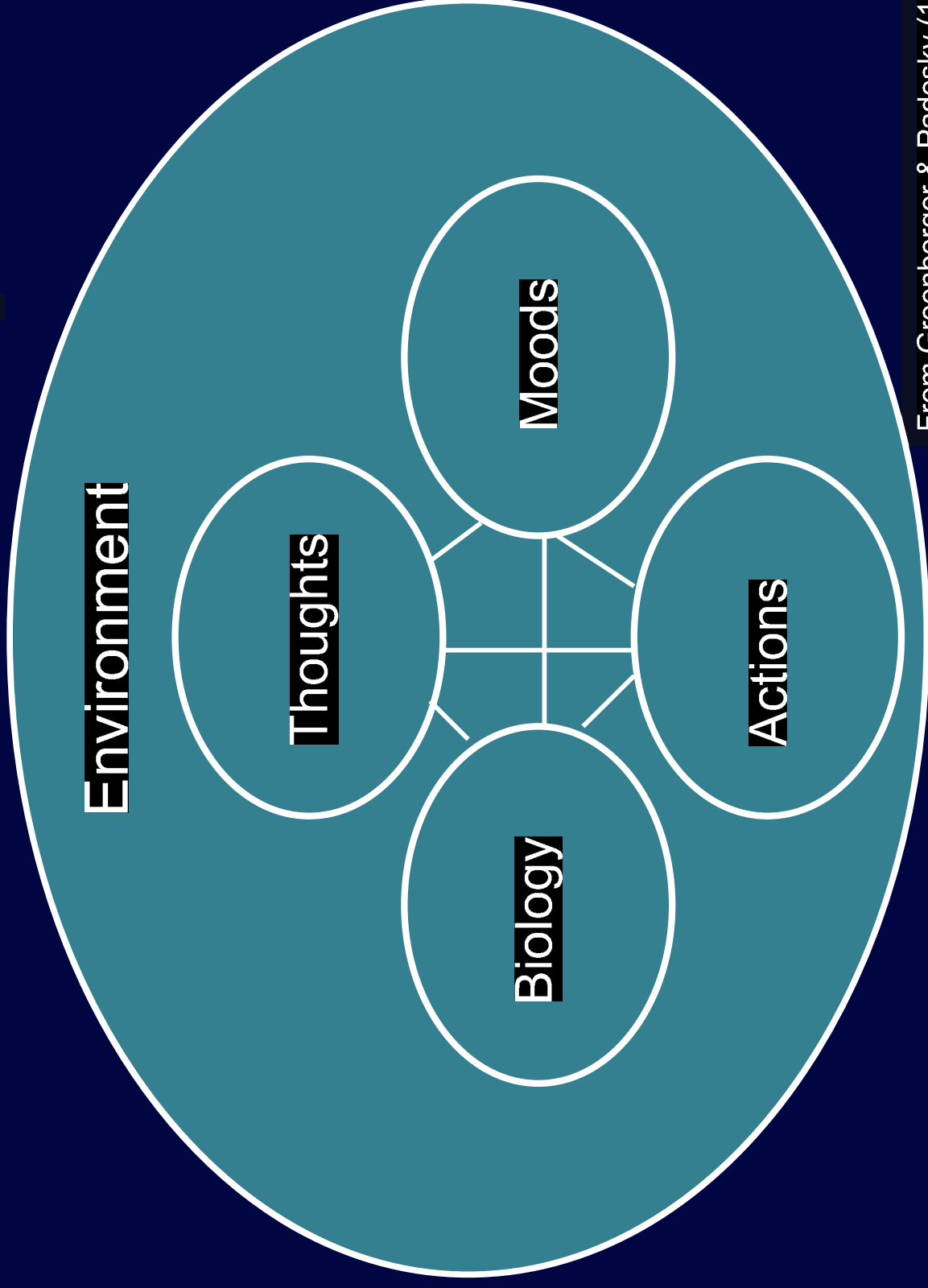
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# Many paths out of depression

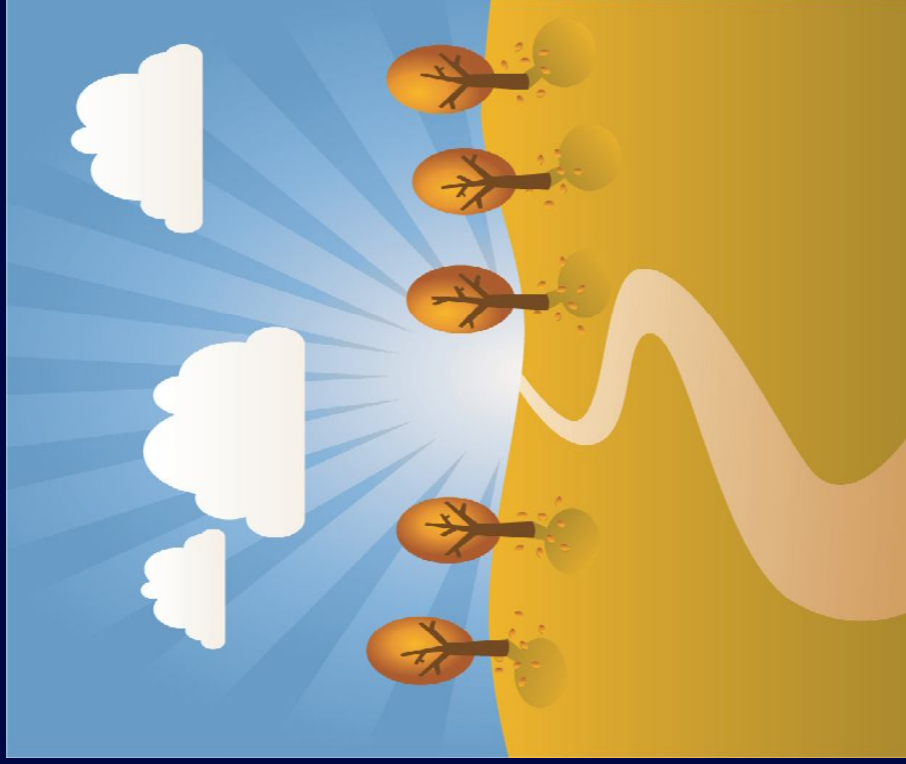
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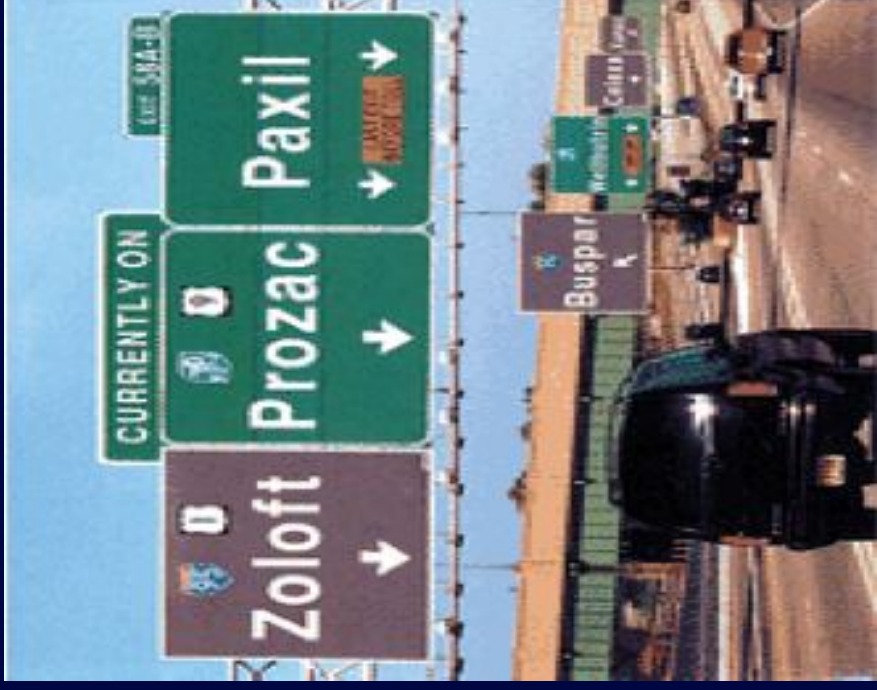
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- What is depression?
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  - **New frontiers in clinical research are creating innovative options**
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# **“You can change how you feel by changing your biology”**

- Antidepressants are the most commonly provided treatment for depression
- Important limitations



ANNA QUINDLEN'S ADVICE FOR AMERICA: LET'S GROW UP, PEOPLE!

FEBRUARY 8, 2010  
**Newsweek**

**ANTIDEPRESSANTS  
DON'T  
WORK**

THE DEBATE OVER  
THE NATION'S  
MOST POPULAR PILLS

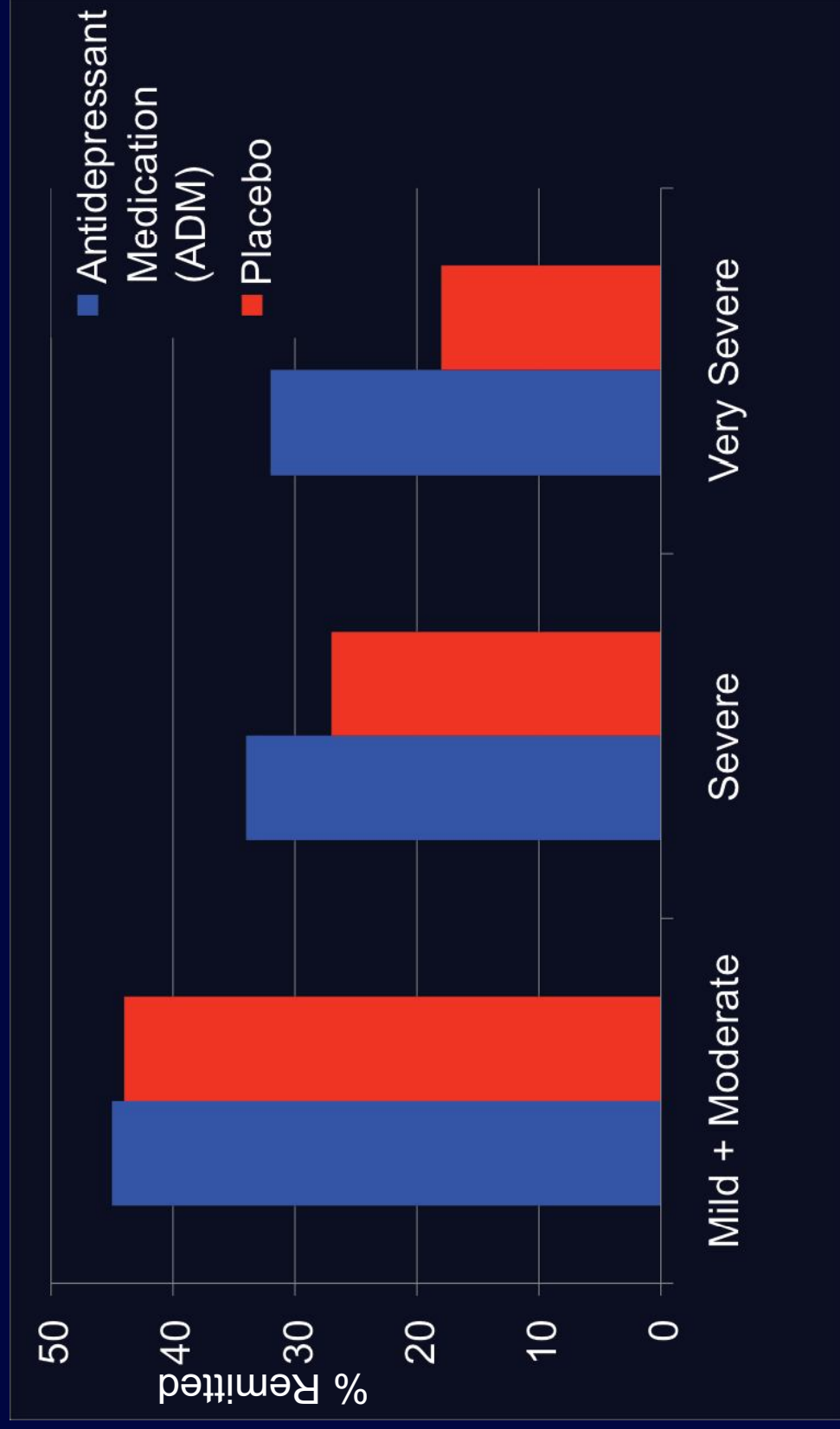
BY SHARON BEGLEY



**ANTIDEPRESSANTS  
DO  
WORK**

**Newsweek**

# Remission rates of ADM



Fournier, DeRubeis, Hollon, Dimidjian, et al., *JAMA*, 2010

# Do antidepressants work?

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- It depends...
- Efficacy varies as a function of severity
  - True drug effects are negligible for mild, moderate, and severe depression
  - True drug effects are large for very severe depression
- Only works as long as you take it

# Do antidepressants work?

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Does not mean that all patients should stop taking medication or refuse to start medication if recommended



Does suggest importance of careful examination of possible benefits and costs in consultation with one's physician

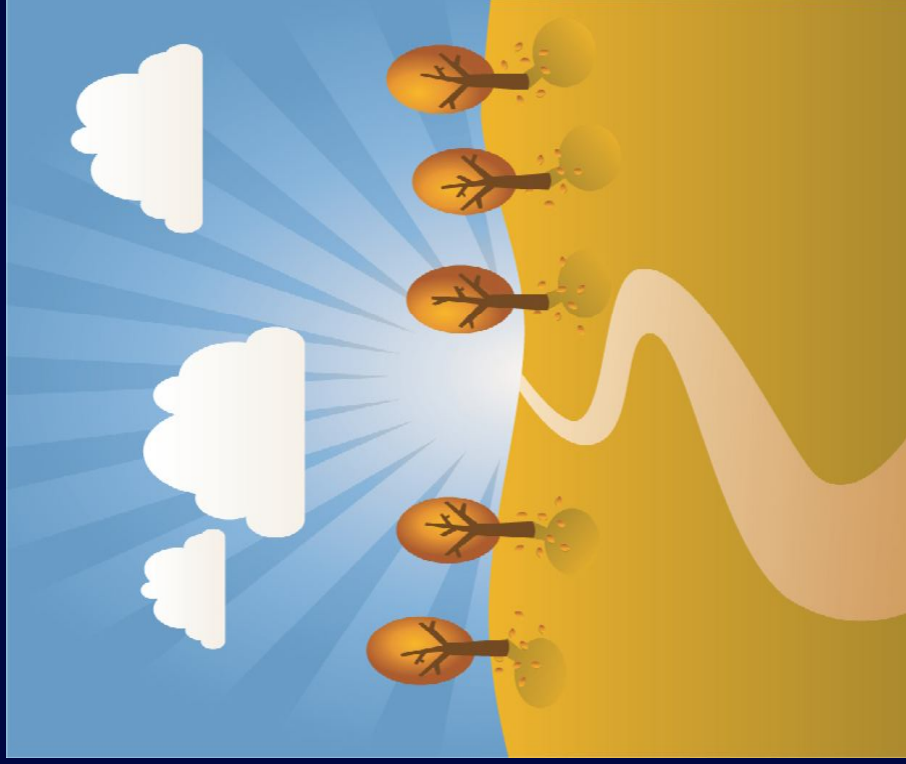


Does suggest value of considering other non-pharmacological options

# Road Map

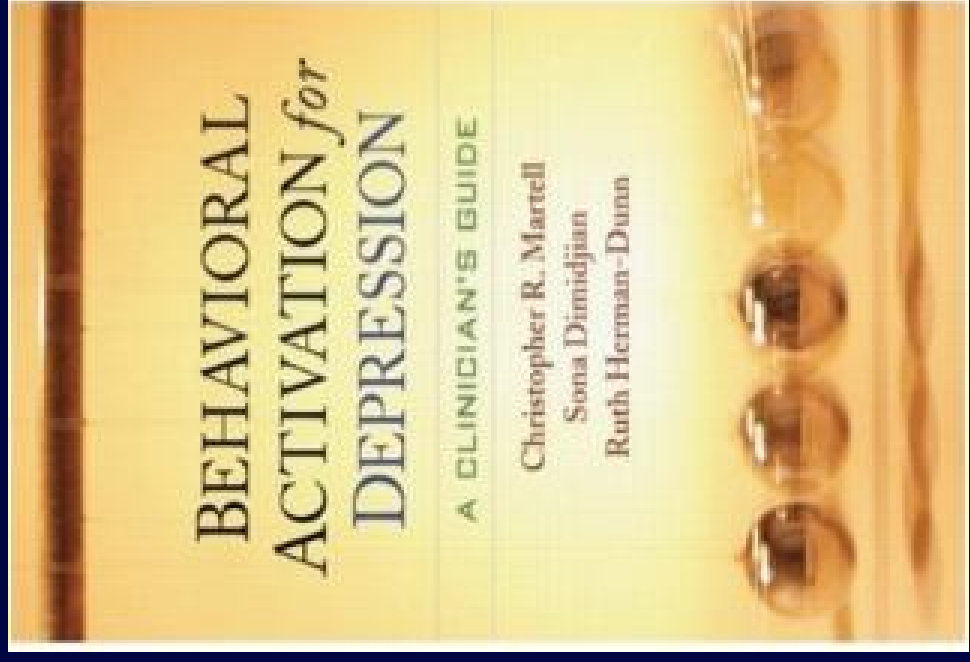
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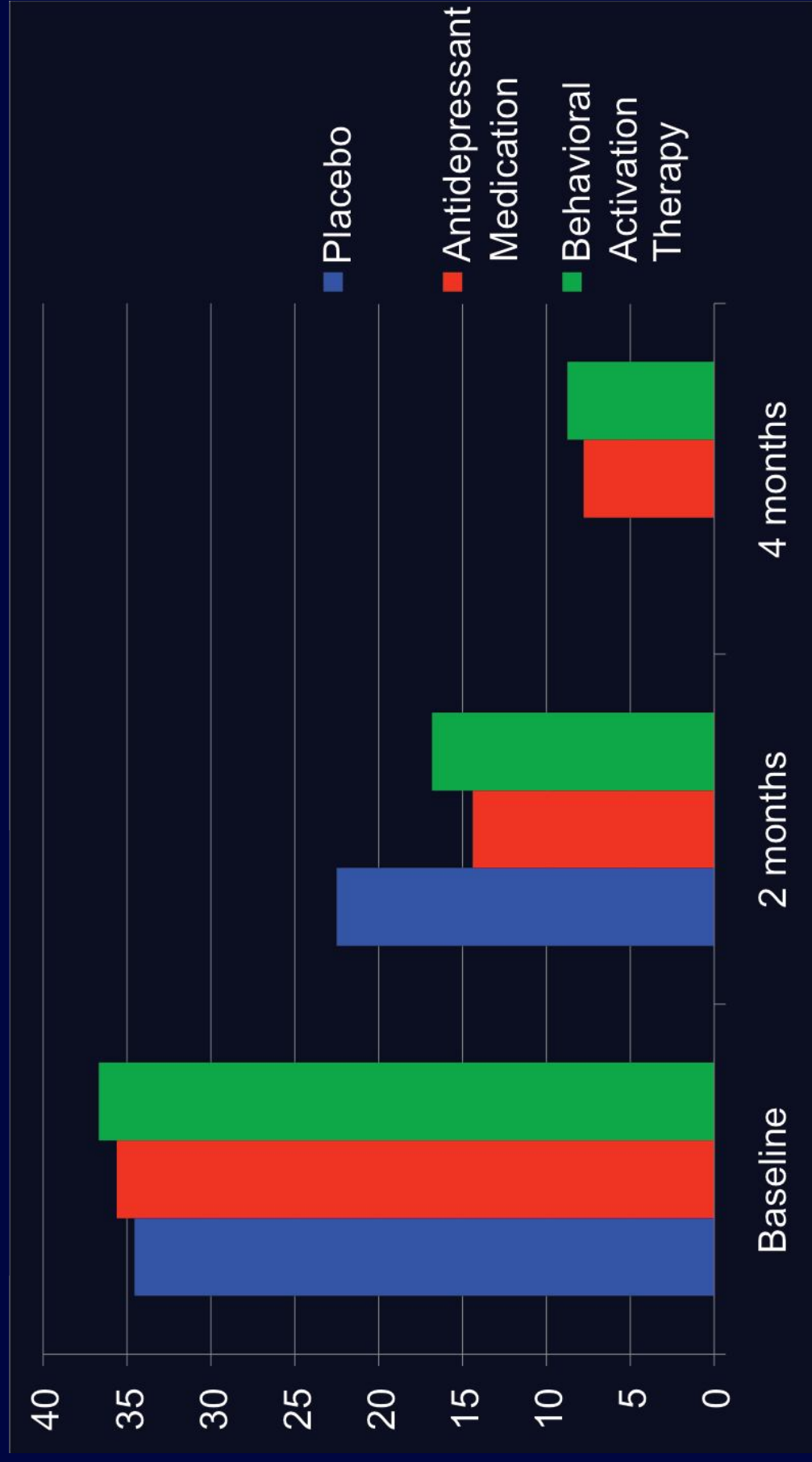


**“You can change how you feel by changing what you do”**

- Renewed interest as primary treatment for depression
- Practical and accessible; widely studied, including across the lifespan



# Does Behavioral Activation Work?



Dimidjian, Hollon, Dobson, et al., *JCCP*, 2006

# Key Ideas

- **Approach**

- **Mastery Activities**

- **Pleasure Activities**

# Key Ideas

- **Outside → In vs. Inside → Out**
- **Guided activation**

**Behavioral Activation  
Activity Chart - Monitoring Activity/Mood**

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Instructions: Record your observable activity for each hour of the day (what were you doing, with whom, where, etc.). Record a rating for mastery and pleasure associated with each activity, between 0-10, with "0" indicating "least" and "10" indicating "most." Record entries at least every 3-4 hours each day.

	Sun.	Mon.	Tues.	Weds.	Thurs.	Fri.	Sat.
5am-7am							
7:00am							
8:00am							
9:00am							
10:00am							
11:00am							
12:00pm							
1:00 pm							
2:00pm							
3:00pm							

# “You can change how you feel by changing how you think”

- Innovative approach to long term wellness
- Combines cognitive behavior therapy with mindfulness meditation



# What is meditation?

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- “Meditation can be conceptualized as a family of complex emotional and attentional regulatory training regimens developed for various ends, including the cultivation of well-being and emotional balance.”

**Lutz et al., 2008, *Trends in Cognitive Science***

Lutz, A., Slagter, H. A., Dunne, J. D., & Davidson, R. J. (2008). Attention regulation and monitoring in meditation. *Trends in Cognitive Science*, 12(4), 163-169.

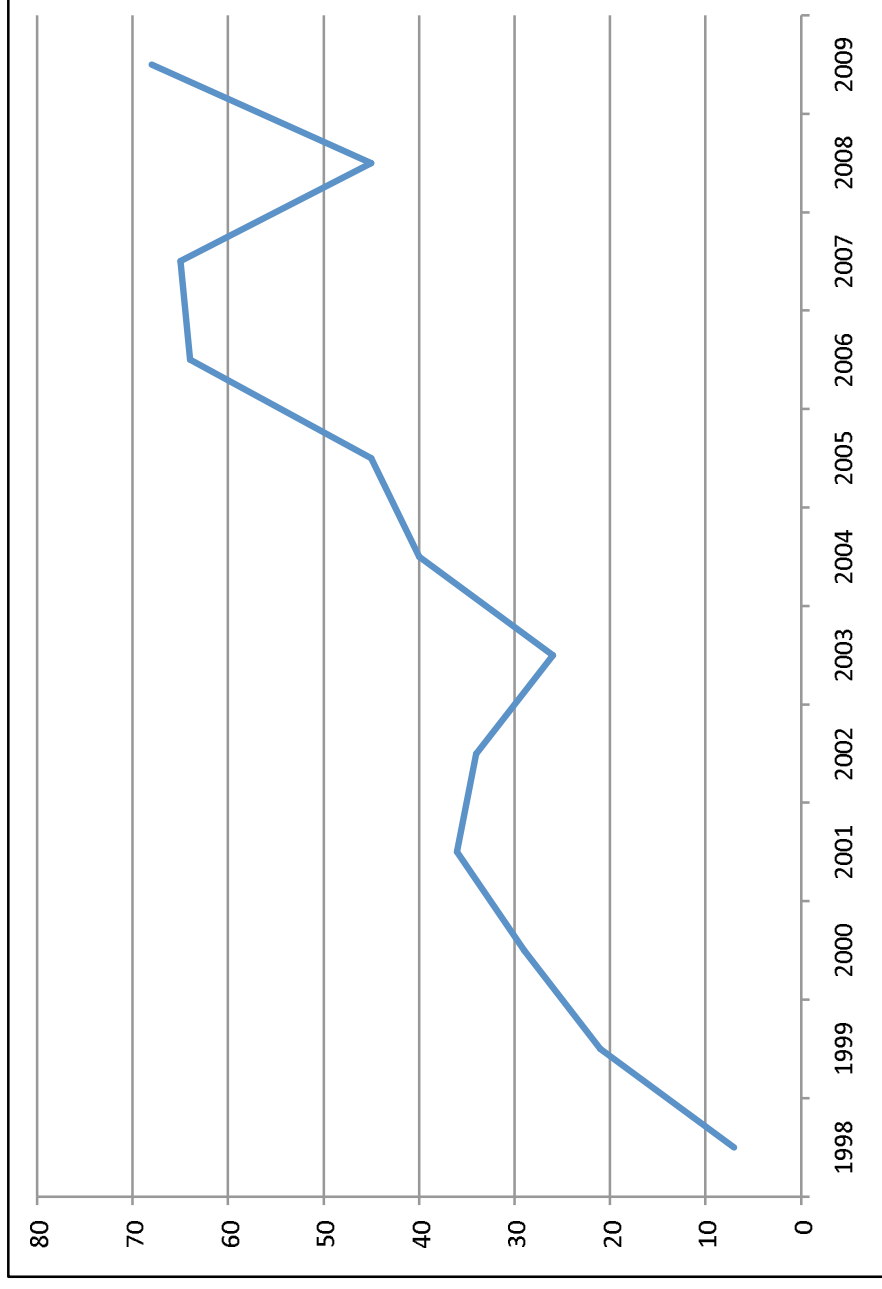
# What is mindfulness meditation?

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**“Mindfulness means paying attention in a particular way: on purpose, in the present moment, and non-judgmentally.”**

**Jon Kabat-Zinn, 1990**

# Federally Funded Research Studies: 1998-2008



Studies listed on the NIH CRISP database

# Wide Range of Health Care Applications

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## Physical Health:

- **CHD/Hypertension**
- **HIV/AIDS**
- **Cancer**
- **Hot flashes/  
menopause**
- **Irritable bowel  
syndrome**
- **Organ transplant**
- **Chronic pain**

## Mental Health:

- **Depression**
- **Anxiety**
- **Substance abuse**
- **PTSD**
- **Eating disorders**
- **Obesity**
- **Personality  
disorders**

# Core Components

**Mindfulness  
Meditation**



- **Formal practice**
- **Informal practice (eating)**
- **Movement practice (walking; yoga)**
- **(Poetry)**

**Cognitive  
Behavior  
Therapy**



- **Awareness of warning signs**
- **Development of "action plan"**
- **Engagement of social network**

**Group format**



- **Education**
- **Support**
- **Motivation**

# Key Ideas

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- Stepping out of automatic pilot
  - Less hijacked by thoughts
  - Less mental stickiness
    - Acceptance

# Key Ideas

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## ○ A new relationship to thinking

- “It is remarkable how liberating it feels to be able to see that your thoughts are just thoughts and they are not “you” or “reality”

Kabat-Zinn, 1990

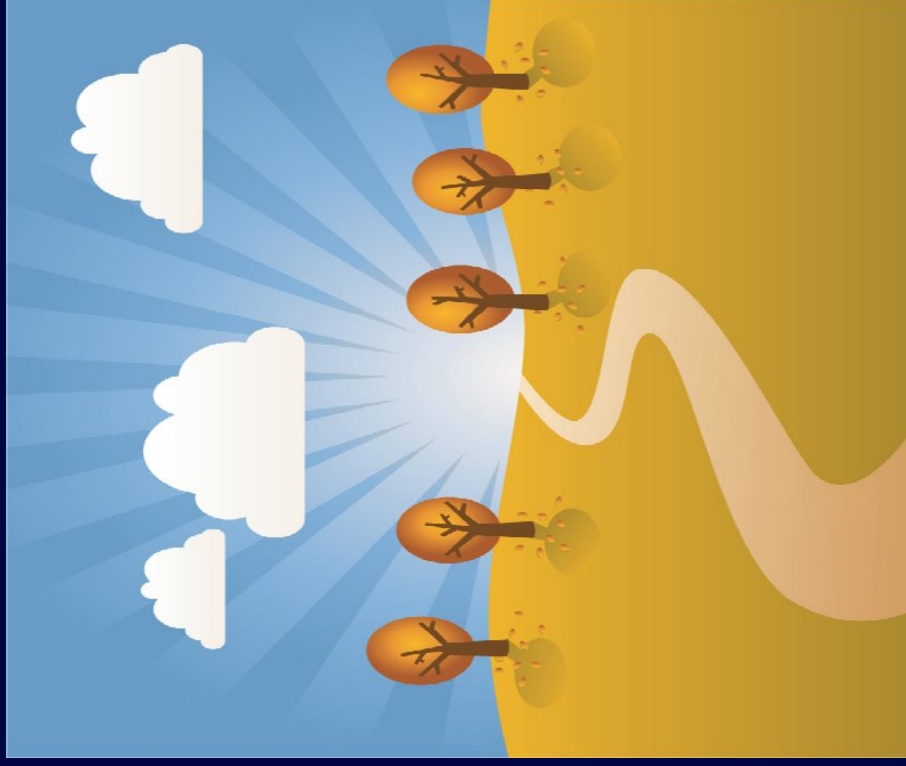
- “The simple act of recognizing your thoughts as thoughts can free you from the distorted reality they often create and allow for more clear sightedness and a greater sense of manageability in your life.”

Kabat-Zinn, 1990

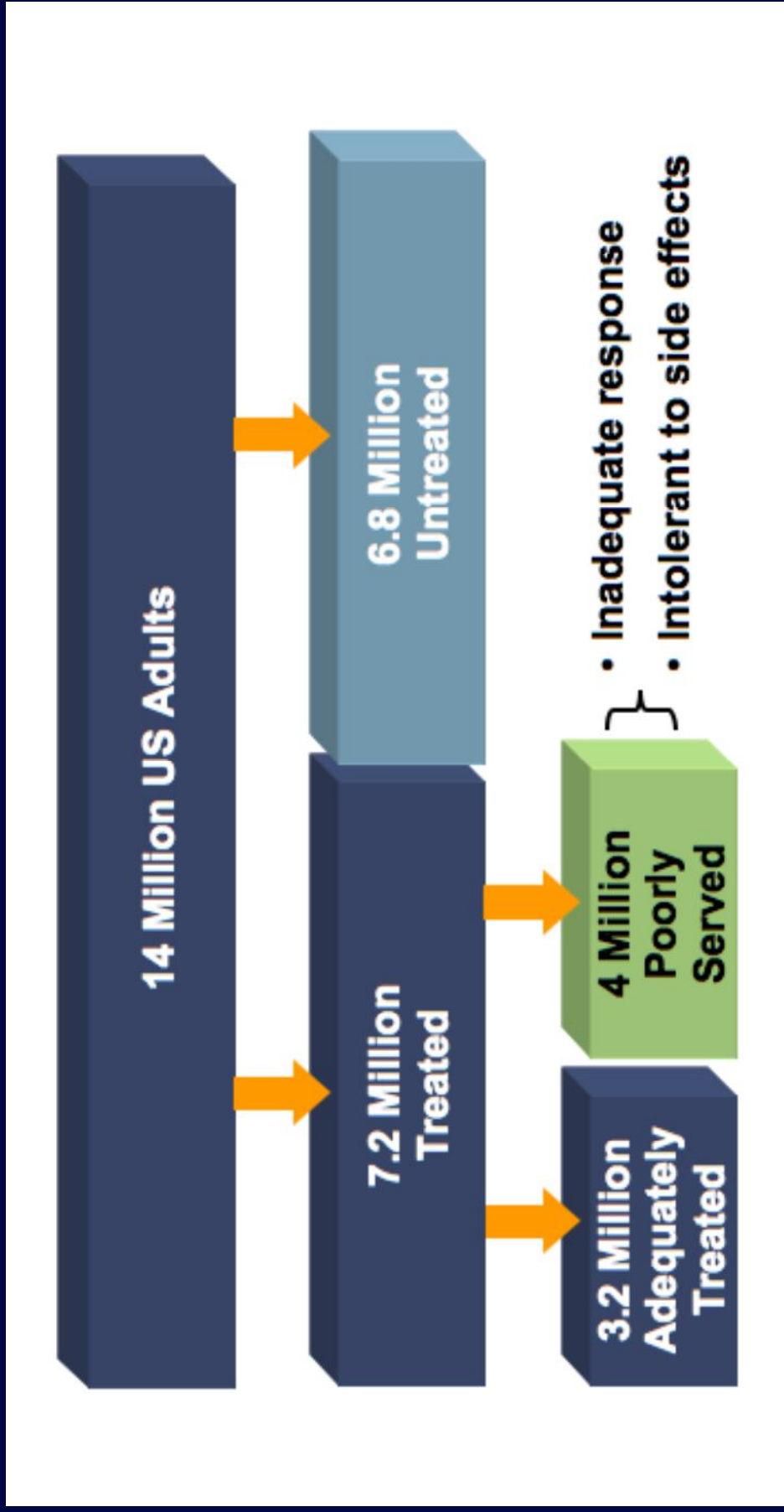
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# Most people with depression are not well treated



Kessler RC et al. *JAMA*. 2003

# Reaching Out in Medical Settings



## Preventing Perinatal Depression

NIMH #1R34MH083866

# Using technology

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NIMH R34MH087723

Morris et al., (2010). Mobile Therapy: Cell phone application for emotional self-awareness. *J Medical Internet Research*



# CREST

Clinical Research, Education, Services, and Treatment

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**About**

**Research**

**Education**

**Women's Clinic**

**Location**

**Clinical Team**

**Services**

**FAQ**

**Other Resources**

**MBCT Training**

Under the direction of Sona Dimidjian, Ph.D., the Clinical Research, Education, Services, and Treatment (CREST) program at the University of Colorado, Boulder focuses on developing, investigating, and providing evidence based treatments to reduce problems that cause suffering in people's lives and to promote sustained well-being.

We focus on the problem of depression generally and specifically on the mental health needs of women, with an emphasis on helping women and their loved ones navigate important transitions throughout the life cycle, including pregnancy and the postpartum.

Our clinical research addresses a broad range of topics, including examining the clinical benefit of psychological interventions, such as cognitive and behavior therapies, and contemplative practices, such as mindfulness meditation and yoga. In the context of such clinical research studies, we apply the most rigorous and careful methods to learn what interventions work, for whom, and how. We also seek to understand the causes of depression and its impact on the lives of women, children, and families so that we can develop more effective interventions. [Click here](#) to learn more about our clinical research.

We also are committed to translating our science into practice by providing specialized education,

# Summary

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- Depression is a major public health problem AND can be treated
- Antidepressant medication has limitations
- New frontiers of clinical research provide important treatment options
  - Behavioral Activation Therapy
  - Mindfulness Meditation Cognitive Therapy
- We want to make these options available to more people

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# Thank You!

For additional information or future  
questions...

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