Moving Forward in 2016

Linda C. Mayes, M.D.
January 5, 2016
Where We Will Go

• What we have done in 2015 (brief tour!)
• Challenges and Opportunities Ahead
  – Meeting Changes in the Health Care Landscape
  – Addressing Systems of Child Mental Health Care Delivery
  – Understanding the Biology Stress/Adversity and of Repair and Growth
  – Adopting Two-Generation Perspectives
  – Making New Partnerships (a “Developmental Hub”)
  – Evolving Understanding of Development and Psychopathology
• Taking a deep breath (thinking about change)
The Center is “Humming”
Ongoing Conversations and Engagement

- Full Time Faculty
- Staff
- Child Psychiatry, Social Work, Psychology Fellows
- Community Faculty
- Postdocs and Postgraduate Fellows
- Partner Departments (Pediatrics, Psychiatry... YSPH, Ob, Medicine)
- Community Agencies
- Partner Institutions (Austen Riggs, Haskins etc.)

YNHCH and YMG/Yale Medicine

Yale School of Medicine
Child Study Center
Productive Workgroups

- Postgraduate / Postdoctoral Fellows’ Experience
- Community Faculty (now standing committee)
- Technology and Health
- Telemedicine
- Web and Social Media Presence
- Clinical Integration including branding, finance, space, standards & operations, research & training
- More to come….
Faculty Growth

New junior research (Basic and clinical) and clinical faculty

Continued process with Marc Brackett in psychology to move to CSC to add to new prevention/intervention efforts in emotional literacy & health

Added secondary appts from psychology, internal medicine, and neurobiology to strengthen our interdepartmental collaborations

Active searches for new ladder faculty on-going; need to grow junior and middle ranks
Clinical “Integration”

- Moving our diverse portfolio of clinical services (41,676 arrived visits in 2014) into one infrastructure, one space to facilitate:
  - Patient access to care
  - Better coordination of care for families
  - Facilitate common quality metrics
  - Collaboration across services
  - Facilitation of clinical research
  - Better training
- In close collaboration with Yale Medical Group and borrowing a brand as metaphor

Erin Warnick, Ph.D., Leader of Clinical Operations
Reengaging “Friends” of the Center

- In-person visits with regular and new donors
- Associates event in November
- Gifts totaling $3,878,707 over last six months
- Programmatic, planned gift of $10M for “parenting center”
- Reconvening associates executive council with new membership
New Grants: Research is Thriving

Eli Lebowitz, Ph.D.: Understanding and Targeting Parent Influences in Child Anxiety

- Parent-Child Interactions
- Oxytocin and Neurobiology of Parent Behavior
- Reducing Parent Accommodation of Child Anxiety

Explanatory Clinical Trial of Parent Based Treatment (K23)
What Works and For Whom?

McPartland Autism Research

The Autism Biomarkers Consortium for Clinical Trials (ABC-CT)

- Public-private partnership to develop treatment biomarkers for ASD using brain electrophysiology and eye-tracking
  - Led by Dr. James McPartland at Yale
  - Sites include Duke, Harvard, U. Washington, UCLA
  - Largest-scale autism research project undertaken in the US

Social Perception in Adults with ASD and Schizophrenia

- Collaboration between Yale Developmental Disabilities Clinic and the Specialized Treatment for Early Psychosis Clinic
- Measure brain activity during simulated social interactions
- Understand specific versus shared neural mechanisms in ASD

Multidisciplinary approach to mechanisms underlying neuropsychiatric disorders

- Genetics, Stanford Univ. Baseline
  - Genetics, Yale Wiseman-Sternley
- Pharmacology
  - Phenotypes, biomarkers
- Neurobiology
  - Stem cells, iPSC
- Pathology
  - Human, mouse

Biomedical Informatics, Mayo Clinic

Fig 1. CBT treatment manual

Cognitive-Behavioral Therapy for Aggression and Irritability in Children across Diagnostic Categories (Denis Sukhodolsky, Ph.D.)

- A randomized controlled study of cognitive-behavioral therapy (CBT) in children with aggressive behavior across diagnostic categories.
- Funded in response to the National Institute of Mental Health Research Domain Criteria (NIMH) project (F31T 11PS143; Sukhodolsky, Parenty P.I.)
- Participants complete MRI scanning and EEG recording before and after 12 weeks of treatment that teachers skills for tolerating frustration and solving social problems.
- The study will test whether reduction in aggressive behavior is paralleled by changes in the brain circuitry of emotion regulation and social perception.

Fig 2. Increased prefrontal activity after CBT in plot data


Restructuring Our Website

- Website refreshed in fall
- Clear gateways for parents, for researchers, and for referring clinicians
- Active work group with new communications officer
- Partnering with networking and branding in clinical integration
Adoptive Project with YMG

About
Finding the right way forward is a challenge. We start with a step back, investigating possibilities to frame real opportunity. From there, our team of strategists, designers and technologists work together to build brand experiences, products and services that deliver results and drive value. We invest deeply in the work we do, adopting our clients’ challenges as our own – when they succeed, so do we.

OUR PROCESS
Developed over decades of seeing what delivers results and drives the most value, our process guides everything we do.

• In first wave of clinical departments to be a part of the project
• Opportunity to highlight our clinical programs and diversity of our clinical research
• Through short videos and video discussions
• Strength of our YMG collaborations as is a YMG funded initiative

http://www.adoptive.co
New Communications Officer (Rachel Horsting)

- Work closely with Adoptive and YMG team
- Meet with individual faculty and programs to start to build a portfolio of potential articles
- Keep newsfeed on website up to date
- Regular e-newsletter
- Regular internal communications about our many new efforts
- Manage our social media sites and….
Finances

Good news
- Successful NIH grants
- More transparent discussion, partnership with YMG to help us develop more responsible and efficient financial structures
- Reengaging donors around our vision and progress with donations turning upward

Challenging news
- Still projecting a deficit for FY 2017 ($1.3 to $1.5 M with total department budget of $38-$39M
- Reserves still limited though collaborating closely with dean’s office to allow us both to grow and to bridge as we rebuild our reserves
Why the Gap in Revenue and Expenses?

• Main Sources of Income
  • Clinical services (including YNHCH)—starting to recoup more charges
  • Grants – stabilizing/increasing
  • Philanthropy – starting to rise
  • Discretionary reserves (from return on department endowment)—starting to add to

• Use all our annual endowment yield to cover expenses still with gap of $1.3 to $1.5 M

• This has over time depleted our reserves -- will be a slow rebuild

Solutions are multifactorial: More efficient use of resources, clearer spending limits when rebuild reserves, and building new efforts to increase visibility and open up new doors. WE NEED TO INVEST TO GROW.
Opportunities straight ahead
The mission of the Yale Child Study Center is to improve the mental health of children and families, advance understanding of their psychological and developmental needs, and treat and prevent childhood mental illness through the integration of research, clinical practice, and professional training.

- Where do you see yourself in this mission?

- What are the values implied by this statement and what kind of community and department do we want?
Translational Foundation: From Basic Science to Community Service

- Animal models
- Community Implementation
- Human Models
- Clinical problems
- Intervention Development

Basic Science
Policy and Framing
Clinical Applications
Community Implementation
Child Study Center has a broad, interdisciplinary scholarly base:

- Neurogenetics
- Behavioral Genetics
- Molecular Biology
- Stem Cell Biology
- Social and Affective Neuroscience
- Developmental Neuroimaging
- Developmental Neurobiology
- Developmental Pediatrics
- Mental Health Services Research
- Community Based Participatory Research
- Developmental Psychopathology
- Child Psychoanalysis

- Psychiatric Epidemiology
- Clinical Trials
- Psychopharmacology
- Intervention Development & Implementation Science
- School Psychology
- Developmental Psychology
- Social Policy and Communication Science
- Child Psychiatry
- Clinical Psychology
- Clinical Social Work
Drivers of Change/Need for Innovation

- More Sophisticated Understanding of:
  - Neurobiology of Child Mental Health Disorders
  - Interplay of neural processes, genes, and environment in expression of “disorders”
  - Long-term effects of chronic stress on physical and mental health

- Recognition that the majority of mental health problems in children are multifactorial with extensive two & three generation effects and a common history of chronic stress and early adversity
### Drivers of Change/Need for Innovation

- Shifting diagnostic approaches to emphasize more functional commonalities across childhood disorders (e.g., social skills, impulse control, emotional regulation)

- Move toward trans- and interdisciplinary team science

- Understanding the value of partnerships across medical disciplines and with other “centers” of innovation

- Understanding the limitations of “siloed” clinical and research programs
### Drivers of Change/Need for Innovation

- Recognizing the need for prevention as well as intervention programs
- Evolving health care landscape
- Growing disparity in access to child mental health services
- Growing number of children with mental health care needs
What about Finances as Primary Driver of Change?

OR

Innovation
Areas for Innovation & New Initiatives in 2016

- Meeting Changes in Health Care Landscape
- Addressing Systems of Child Mental Health Care Delivery
- Evolving Understanding of Development and Psychopathology
- Understanding the Biology Stress/Adversity and of Repair and Growth
- Adopting Two-Generation Perspectives
- Making New Partnerships (a “Developmental Hub”)
Areas for Innovation & New Initiatives in 2016

Meeting Changes in Health Care Landscape

Addressing Systems of Child Mental Health Care Delivery

Evolving Understanding of Development and Psychopathology

Understanding the Biology Stress/Adversity and of Repair and Growth

Adopting Two-Generation Perspectives

Making New Partnerships (a “Developmental Hub”)

Yale SCHOOL OF MEDICINE
Child Study Center
Evolving Health Care Landscape

- Availability of care for all but…..
- Insufficient number of mental health clinicians to serve needs
- Insufficient support for mental health services

- Value versus Volume (or fee for service) based care with need for clear quality standards for child mental health care
- Move toward “population health” with attendant shift toward preventative care
Ongoing Clinical Integration Effort

CSC OUTPATIENT SERVICES

- Responsibilities for setting policy, overseeing budget, etc.
- Developing quality metrics

Yale School of Medicine
Child Study Center
Further Efforts To Expand & Restructure Our Clinical Practice

- Co-location in Pediatric Practices with care coordinator model
- School-Based Mental Health Clinics
- Closer collaboration with Children’s Hospital ambulatory pediatric sites to embed child mental health services

Michele Goyette-Ewing, Ph.D., Director, Outpatient Clinic

David Grodberg, M.D., Medical Director, Outpatient Clinic
Evidence-Based Practice Unit

- Limited evidence base for effectiveness of child mental health interventions. There is a need to:
  - Define what are the various types of ‘evidence’ for the effectiveness of child mental health interventions
  - Accumulate/monitor and report on the evidence to the field, referral sources, and parents (setting “value/quality” standards)
  - Train and disseminate effective interventions

Erin Warnick, Ph.D., Denis Sukhodolsky, Ph.D.
Implementation Science

• How we take programs from research and development into practice and what predicts success or failure?

(Commonly high failure rates with translation of programs into general practice)

Pam Ventola, Ph.D.

Yale School of Medicine
Child Study Center
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Yale School of Medicine
Child Study Center
Meeting Children’s Mental Health Care Needs

- 80% of children in the US with mental health and/or developmental needs do not have access to appropriate services
  - Shortage of services
  - Insufficient number of adequately trained individuals
  - Inefficient models of service delivery (e.g., clinic based)
  - Professional barriers (e.g., fewer developmentally trained pediatricians; few effective school-based collaborations)
  - Barriers to diagnosis and recognition of need for help
  - Parents economic needs/ time at work
  - Education about mental health needs in childhood
  - Stigma of “mental health” needs
Consequences of Unmet Mental Health Needs

- Chronic, unmet mental health needs
- Early involvement in criminal activity and in juvenile justice system
- Family stress with often removal from home
- Poor access to jobs and thus, likelihood of chronic poverty
- Poor access to positive peer support and adult mentorship
- Poor school performance and school drop-out
- Risks for early parenthood and intergenerational transmission of similar risks
Meeting the “Mental Health Care Equity” Challenge

- Understanding the complex, interlinking causes
- Innovation in systems of care
- Employing technology
- Preventative care
- More effective communication to reduce stigma
- And.....
Two fellows supported annually to develop scholarship in this area to begin in 2016.

Annual symposium involving multiple disciplines (business, law, public health) around topics central to child mental health care equity.

Innovation prize for partnership between child mental health professional and business/non-profits for new model to deliver child mental health care.

Launched the symposium series in 2015 with Peter Edelman from the Georgetown Center on Poverty and Inequality.
Access Mental Health

State-funded mental health initiative for all pediatric primary care providers to:

- Provide mental health education for pediatric providers
- Ensure screening and improved access to MH treatment for children via coordination with community resources
- Support care of children, youth and families within the medical home
  - Telephone consultation
  - Psychiatric evaluation with recommendations, if needed
- Have served 1,234 children/families last year (across 3 Hubs)
Telemental Health

- Provide direct service to families otherwise unable to access care
- Train providers remotely

Laine Taylor, DO
Pam Ventola, Ph.D.

Rural or Remote Location
Patient
Local Health Provider
Student

Telehealth Network
Audio
High-Resolution Images & Video

Consultation
Direct Patient Care
Case Reviews
Education
Training
Health Information Exchange
Community-Based Research

Specialty Medical Center
Medical Specialist
Prevention Efforts with Vulnerable Populations

MTB certified by HomVEE/DHHS as evidence-based home visiting program

Charles Carl Program for Students and Faculty From Native American Colleges and Universities

Families in Rural Settings
Partnering with Schools

Partnership in Education (PIE)
The Child Study Center partners with leadership and professional staff of schools using scientifically-based methods to help optimize the mental health, educational and overall developmental potential of all students.

Mary Gunsalus, M.S.

James Comer, M.D.
Communicating and Framing Child Mental Health

Developing a curriculum for child mental health professionals on effective communication about child mental health to parents, other professionals, and policy makers.
## Areas for Innovation & New Initiatives in 2016

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*Yale School of Medicine*  
*Child Study Center*
The Childhood Roots of Physical and Mental Health Disparities: How Adversity is Built Into the Body

- Low Income
- Physiological Disruption
  - Neurodevelopmental
  - Immune
  - Metabolic
  - Neuroendocrine
  - Cardiovascular
- Early Death
- Early Adversity
- Conception
- Biological Embedding during Sensitive Periods
- Early Childhood
- Middle Childhood
- Adolescence
- Adulthood
- Disease/Disorder
- Health-Threatening Behavior
- Low Educational Achievement
- Cumulative Burden over Time
- Toxic Stress
- Environmental Exposures
- Malnutrition
Studies/Programs on Stress/Trauma at Yale

CSC Trauma Program

VA-Yale Clinical Neurosciences PTSD Research Program

National Center for PTSD

Yale Stress Research Clinic
Neurobiology of Stress/Adversity in Childhood

- Opportunity to build stronger core in developmental models of chronic stress and adversity in childhood
- Combining basic science in developing models with clinical samples
- Including prenatal (in collaboration with Obstetrics)

Early Adversity Impacts Neural Response to Stress Scripts

(Elsey, Coates, Lacadie, McCrory, Sinha, Mayes, Potenza, Neuropsychopharmacology, 2015)
Understanding Biology of Repair and Growth

- Critical to our field to know how the brain repairs itself and when those opportunities for repair are most open?
- Can we keep windows of repair open or reopen across development?
- What treatments most facilitate repair and regeneration?
The Childhood Roots of Health and Parenting Disparities:
How Adversity is Built Into the Body and Transmitted Intergenerationally

- Low Income
- Physiological Disruption
  - Neurodevelopmental
  - Immune
  - Metabolic
  - Neuroendocrine
  - Cardiovascular
- Early Death
- Disease/Disorder
  - Health-Threatening Behavior
  - Educational
- Dysfunctional Parenting
- Cumulative Burden over Time

- Conception
- Early Adversity
  - Toxic Stress
  - Environmental Exposures
  - Malnutrition
- Biological Embedding during Sensitive Periods
- Middle Childhood
- Adolescence
- Adulthood

Two Generation Perspectives
Translational Parenting Center

- Explicit focus on adult development as a parent
- Brings together community services for parents and their children in New Haven in a collaborative hub permitting more effective service delivery for families
- Services for parents escalated based on need
- Facilitates training across clinical models
- Translational combining basic social neuroscience and epigenetics of parenting with intervention development, implementation, refinement, and evaluation
Areas of Innovation in 2016

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Opportunities for “Cross-Diagnosis” Collaboration

- Autism/Developmental Disabilities
- Anxiety Disorders
- TS/OCD
- PTSD
- ADHD/Learning Disabilities

Skills:
- Social/Relationship Skills
- Emotion Regulation
- Stress Reactivity
- Impulse Control
- Attention/Learning
Partnerships & Collaborations in YSM

Emergency Medicine  
Ob-Gyn  
Pediatrics  
Internal Medicine  
Public Health  
Psychiatry  
Genetics  
Neurobiology  
School of Nursing  
Department of Psychology
Families of children with neurodevelopmental needs often go to many different clinics/specialists.

Goal is to provide more comprehensive screening, assessment, and training in neurodevelopmental problems.

Patient need: preterm infants, genetic and/or congenital disorders, developmental delays, etc.

Locate neurodevelopmental coordinators in pediatric practice serving to screen, triage, and treat.

Expert multidisciplinary team comes to practice as needed.

Facilitates clinical research by building a “population” database of neurodevelopmental needs.
Partnerships Outside YSM

New Haven Schools

Haskins Laboratories

Austen Riggs Center

Anna Freud Centre/UCL

Western New England Psychoanalytic Inst.

Scholastic Publishers

Pediatric Practices

Frameworks Institute
Center as a Translational Developmental Science Hub

Education & Training

Policy

Community Programs

Clinical Programs

Developmental Research (Basic and Clinical)

Public Health

Internal medicine

Epidemiology

Clinical Trials

Developmental Psychology

Behavioral Genetics

Social/Behavioral Neuroscience

Drug Development

Drug Development

Psychiatry

Ob-Gyn

Molecular Biology

Genetics

Stem Cell Biology

Systems Biology

Neurobiology

Neuroimaging

Electrophysiology

Emergency Medicine

Pediatrics

Psychiatry

Ob-Gyn

Yale School of Medicine
Child Study Center
Summary: Thematic Directions for 2016 and Beyond

- Health Care Equity and Systems of Care
- Implementation Science
- Neurodevelopment Program with Pediatrics
- Evidence based Practice Unit
- Prevention
- Adversity, Damage, and Compensation
- Plasticity, Repair, and Growth
Summary: Continued Development Areas in 2016

- Clinical Integration project
  - One clinical space
  - Building clinical operations standards and quality metrics
  - Contracting with commercial carriers

- Growing YNHCH Partnership
  - Embedding mental health services in YNHCH ambulatory sites
  - Specialized service lines
  - Telemedicine
The Work Ahead: Other Areas to Address

Other workgroups: community relations, nomination and faculty review, equity/diversity, (and others) and also revisit charge and goal of donor

Consider how best to optimize our communications and opportunities for participation and ownership

Clearer alignment of what we want to do best/lead the field in and then how to bring together goals and strategies

Rethink our governance and committee structures to facilitate participation and leadership opportunities
LOTS OF CHANGE!!!!!

change
Pause, Deep Breath
“What if we don’t change at all ... and something magical just happens?”
Change Requires Risk
Engaged in More than New Program Development

**HOW WE**

- Work together…
- Communicate…
- Manage our **shared** clinical practice…
- Set standards of practice…
- Speak about and manage our fiscal health…..
- Govern and build a department together…..
Facilitating Change

1) Increase Urgency
2) Build Coalitions
3) Vision
4) Communication
5) Enable Action
6) Quick Wins
7) Don’t Let-Up
8) Make it Stick

Changing and Succeeding Under Any Conditions

Our Iceberg Is Melting

Their home is not safe. What about yours?

Retold of the story by Chulathip Sirivongsi
Understanding the Cycle of Change

Growth occurs when you go through the discomfort of change; shedding the old, to make way for the new.

Real change takes time and persistence
Working Through the Process and Through

- Communication, communication, communication
- Asking again and again the hard questions about our values, what is the gain (or loss), why we should (or should not) change?
- Constructive critique and dissent
- Office hours (Monday/Thursday) and confidential website for comments
Caring For Our Place

Belong to your place by knowledge of the others who are Your neighbors in it: the old man, sick and poor.... and by your caring for it as you care for no other place.....

(Wendell Berry, Leavings, 2011)

How do you see your place in the Center, what kind of place do you want the Center to be, and how will you join all of us in caring for it?
Closing/Opening Thoughts

• Change is challenging......... (but change we must in order to flourish and we are well on our way)
• Building effective, sustainable organization takes time.....
• Sustainability is not just doing what has “always” worked....
• Perfect consensus never possible but nearly total engagement in process is....... 
• Find your place in the Center....
Thank you for a great 2015 and looking ahead to a “blooming, buzzing” 2016.

Let’s Talk.