

## WHAT IS NMT?

The Neurosequential Model of Therapeutics is a neuroscience-informed, developmentally-sensitive, approach to the clinical problem solving process.

It is not a therapy – and does not specifically imply, endorse or require – any single therapeutic technique or method.



Essentially, all models are wrong, but some are useful.

--- George E. P. Box, in Norman R. Draper (1987). Empirical Model-Building and Response Surfaces, p. 424, Wiley. ISBN 0471810339

NEUROSEQUENTIAI

# The Neurosequential Model

The brain mediates our thoughts, feelings, actions and connections to others and the world.

Understanding core principles of neuroscience, including neuroplasticity and neurodevelopment, can help us better understand ourselves and others.



# The Neurosequential Model

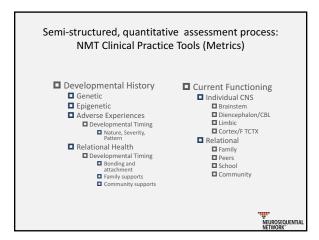
Each person has a unique pathway to the present and deserves individualized care.

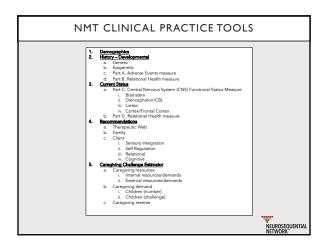
"One-size fits all" approaches rarely meet the needs of the individual – more often they meet a need of the provider (or system).

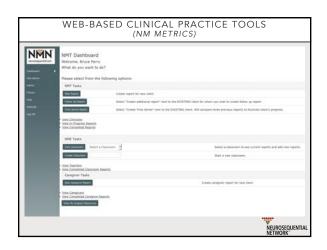




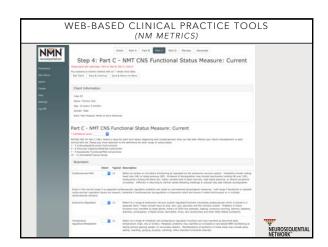


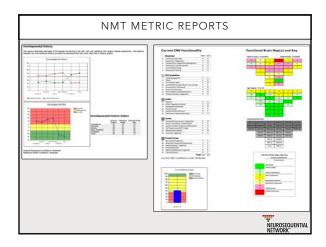






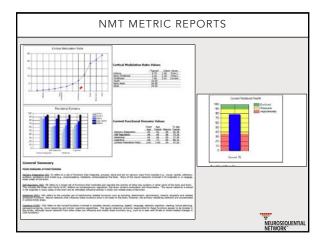


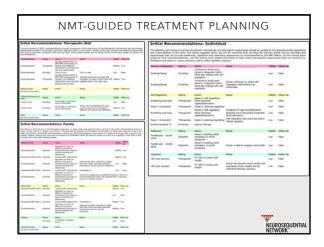


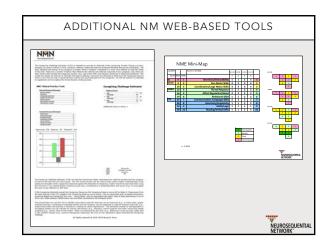


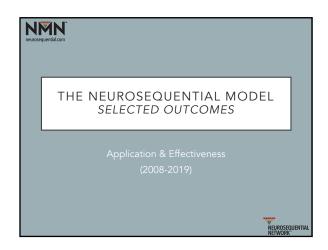




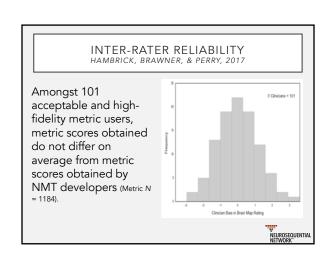
















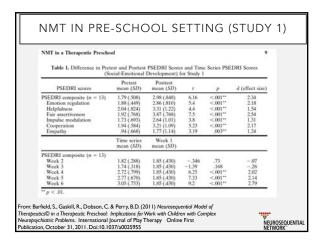
## Youthville: TRC in first year of NMT Certification

- According to Youthville encounter data, between April 23, 2009 and January 26, 2010, the TRC served 28 children. Children and families received between 1 and 257 days of service. With an average of 111 days of service and a median of 118 days of service.
- Findings suggest increased placement stability for children receiving TRC services. Pre-TRC, children in the treatment group had an annualized placement change rate of 2.41.
   Since TRC treatment, that rate has declined to 1.13.
- Among children in TRC, the rate of psychiatric, detention, or other institutional placement declined 33.3%. This compares to a 50% increase in the usual care group.
- Of children in TRC treatment, 42.9% now have a case plan goal of adoption, compared to 30.1% of the usual care group. This suggests that the TRC group was well-selected to achieve permanency and appears to be moving toward that goal.

From: Bryson, S., Akin, B., Moore, T. & O'Brien, M. (2010) Youthville Trauma Recovery Center Evaluation, Year One pp 1-44, Report to Office of Child Welfare and Children's Mental Health, University of Kansas School of Social Welfare.







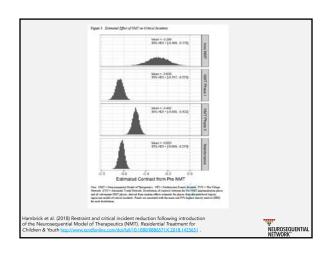


RESIDENTIAL TREATMENT FOR CHILDREN & YOUTH
2018, VOL. 00, NO. 00, 1-22
https://doi.org/10.1080/0886/S71X.2018.1425651

Restraint and Critical Incident Reduction Following
Introduction of the Neurosequential Model of Therapeutics
(NMT)

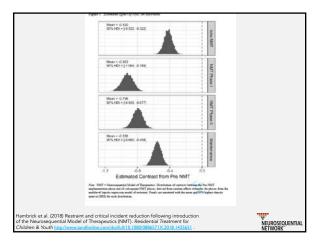
Erin P. Hambrick @^Ab, Thomas W. Brawnerb, Bruce D. Perrybw, Emily Wangd,
Gene Griffinbe, Toni DeMarcob, Cara Capparelli, Tim Grove®, Michelle Maikoetterb,
Dawn O'Malley', Dave Paxton', Lorraine Freedleb, Jeffrey Friedmand, Joan Mackenziem,
Katharine M. Perryb, Pete Cudney', Jerry Hartmand, Elizabeth Kulh', Joseph Morris',
Caroline Polales' and Mark Strother

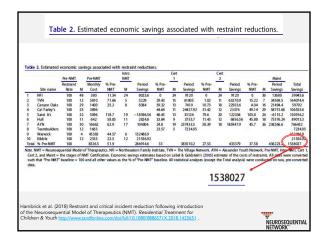
"University of Missouri Kansas City, Department of Psychology, Kansas City, Missouri, USA: "The
ChildTrauma Academy, Houston, Texas, USA: "Northwestern University, Feinberg School of Medicine,
Department of Psychiatry, Chicago, Illinois, USA: "Hull Services, Calgary, Alberta, Canada; "San Mateo
County Behavioral Health, San Mateo, California, USA: "Northeastern Family Institute, South Buffington,
Vermont, USA: "SaintA, Milwaukee, Wisconsin, USA: "Cal Fadey Boy's Ranch, Amarills, Texas, USA;
'Clinical and Neuropsychological Services, Charlotte, North Carolina, USA: The Village Network,
Wooster, Ohio, USA: "Pacific Quest, Hilo, Hawaii, USA: "Warwick Family Services, Bensalem,
Pennsylvania, USA: "Walbel Education and Care Center, Paisley, Scotland, "Administration for Children's
Services, City of New York, New York, USA

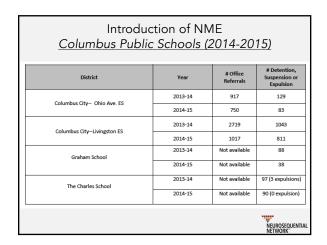


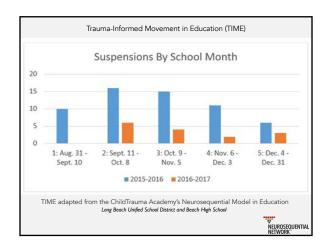


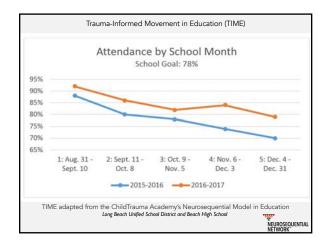


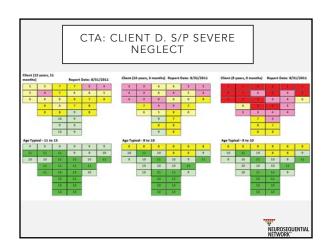






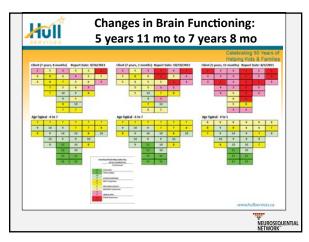


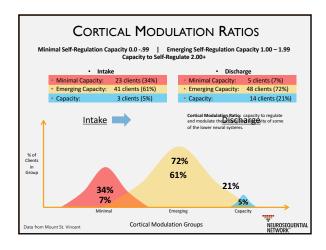


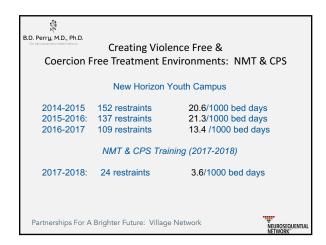


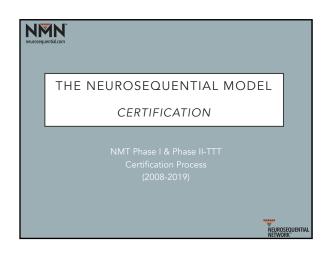




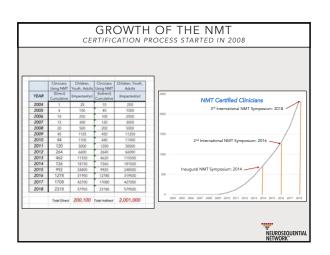






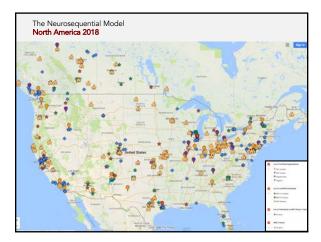


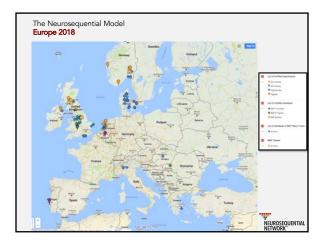




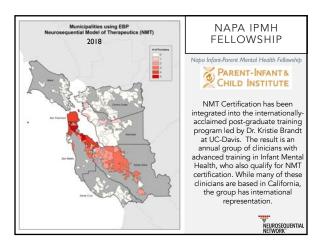




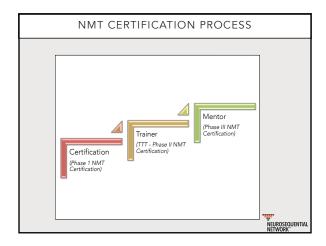








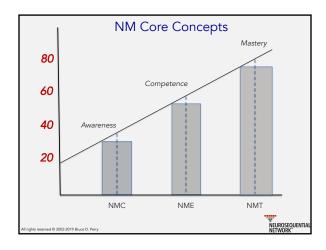


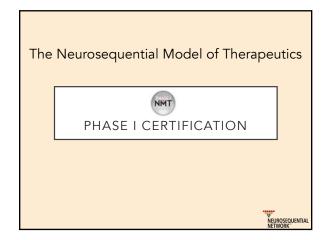


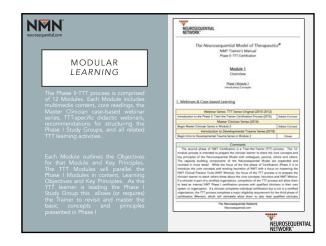


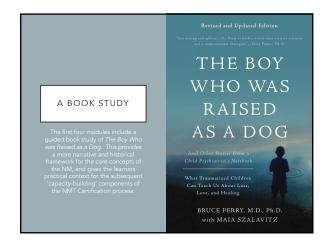


| Neurosequential Model Content and Process Elements   | Awareness  | Comfort    | Mastery    | Leadership |
|--|------------|------------|------------|------------|
| NMT Core Concepts and Principles                     | Certified  | Certified  | Certified  | Trainer    |
| NMT Case Abstract & Clinical Presentation            | Certified  | Certified  | Trainer    | Trainer    |
| NMT Online Resources & Metrics                       | Certified  | Certified  | Trainer    | Trainer    |
| NMT Clinical Practice Tools (NMT Metrics)            | Certified  | Certified  | Trainer    | Trainer    |
| Interpretation of NMT Report                         | Certified  | Certified  | Trainer    | Mentor     |
| NMT-directed Treatment Planning                      | Certified  | Certified  | Trainer    | Mentor     |
| Translate NMT Core Concepts (Carers, Educators)      | Certified  | Certified  | Trainer    | Mentor     |
| Teaching NMT Core Concepts to Peers                  | Certified  | Trainer    | Mentor     | Mentor     |
| Discussant for NMT Case-based staffing               | Trainer    | Trainer    | Mentor     | Mentor     |
| Lead NMT Internal Certification Process              | Trainer    | Trainer    | Mentor     | Mentor     |
| Tile & Grout/Mobius Care Model                       | Trainer    | Trainer    | Mentor     | Consultant |
| Lead NMT Site Implementation Process                 | Trainer    | Trainer    | Mentor     | Consultant |
| NMT Advanced Concepts & Principles                   | Trainer    | Mentor     | Mentor     | Consultant |
| Faculty for NMT Bootcamp (TTT)                       | Mentor     | Mentor     | Consultant | Consultant |
| Outcome Design and Implementation                    | Mentor     | Mentor     | Consultant | Consultant |
| Facile with Models (e.g., CPS, ARC, Sanctuary, TBRI) | Mentor     | Mentor     | Consultant | Consultant |
| NM Academic Engagement                               | Mentor     | Mentor     | Consultant | Consultant |
| Direct Regional NMT Bootcamps                        | Consultant | Consultant | Consultant | Consultant |
| (NM) Consultant to Organizations                     | Consultant | Consultant | Consultant | Consultant |







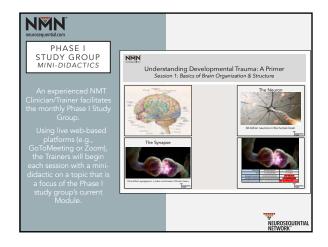


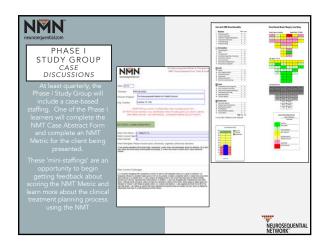




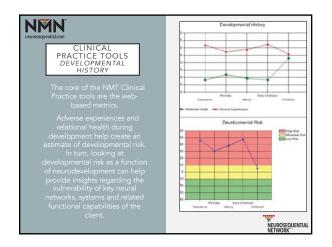


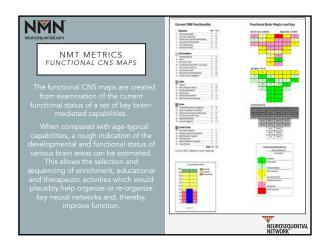










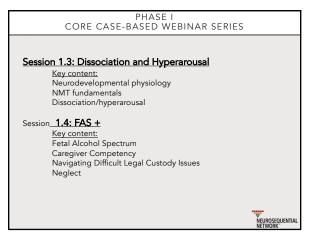


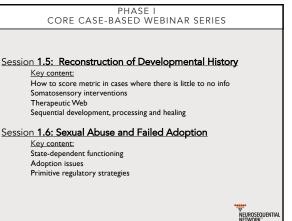












PHASE I
CORE CASE-BASED WEBINAR SERIES

Session 1.7: Severe Neglect and Institutionalization

Key content:
Institutionalization
Neglect in multiple forms
Transgenerational trauma
Pediatric psychopharmacology and irrational prescribing practices

Session 1.8: Dissociation, Reward, and Relational Poverty
Key content:
Neurodevelopmentally informed work in clinical & school settings
The biology of reward
Primary relational associations

Session 1.9: Chaos, Neglect, and Adoption

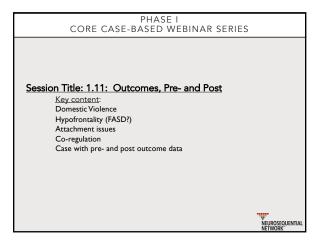
Key content:
Brief overview of NMT neurodevelopmental perspective
State-dependency of intimacy barrier
Development of primary associations
Cortical Modulation

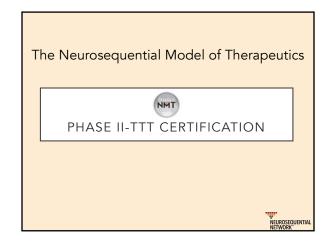
Session 1.10: State-Dependence & Toxic Relational Milieu

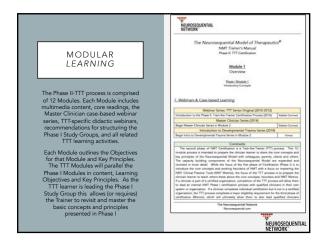
Key content:
State-dependence
The Therapeutic Web & key relational environments
Court system
Parental arousal and co-dysregulation

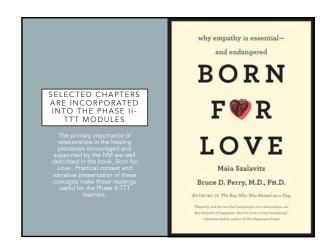




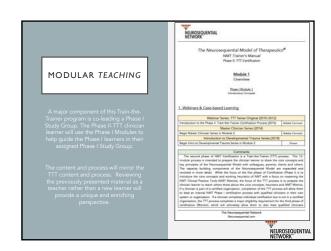






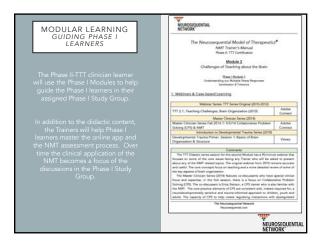






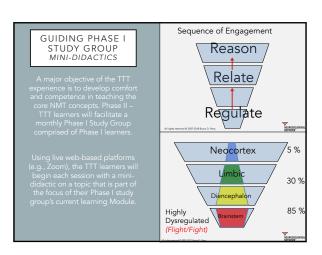


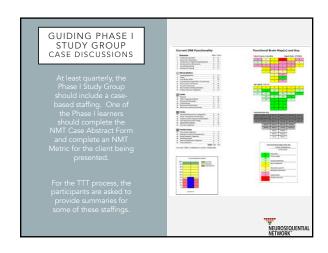


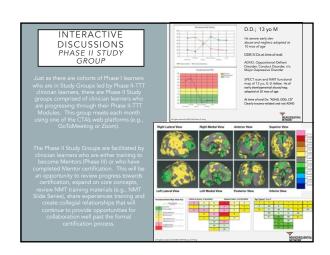






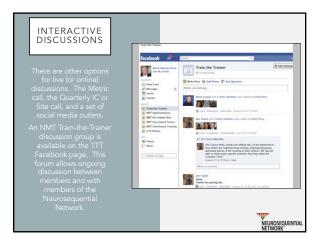














#### NMT TTT PRIMARY TRAINING MATERIALS

The Phase II-TTT clinician learner will have access to a host of materials that can support their teaching and training efforts. A major component of the Trainer learning process is a set of web-based didactic presentations (Adobe Connect or Vimeo). These presentations were originally archived in 2010-2011. While the majority of this content continues to be accurate and useful, the working heuristics and emerging research and experience of the CTA and other in the field require ongoing updates to the training materials. In 2018, an updated didactic series, the Developmental Trauma Primer, was created for all advanced NM Trainers. This series is a core requirement for Phase II-TTT.

A completely new set of supporting slides was created in 2019. These are in the provided as two main files (Intro to the NMT and NM Core Concepts). As new findings and updated heuristics are developed, updated slides and other support materials will be posted in the webbased Resource Support Section.



#### PHASE II CORE DIDACTIC WEBINAR SERIES

## Session 1: Brain Organization

<u>Key challenge</u>: Volume of content: "factoids" vs principles; recognition of the regional mediation of function – and the network distribution of neural systems mediating function

## Session 2: Neurodevelopment

Key challenge: Volume of content: language; appreciation of the nature and timing of the multiple micro-processes of neurodevelopment

#### Session 3: Memory

Key challenge: appreciation of the broader concept of memory; early experience and the creation of templates

### Session 4: Relational and Reward Neurobiology

Key challenge: complex inter-relationships stress response, relational and reward neurobiology



#### PHASE II CORE DIDACTIC WEBINAR SERIES

## Session 5: Neglect

<u>Key challenge</u>: recognition of the various "forms" of neglect, appreciation of the key role of timing of experience

## Session 6: Stress, Distress and Trauma

 $\underline{\text{Key challenge}}\text{:}$  complex interplay between hyperarousal and dissociation

## Session 7: Special Topics: Sensitization, Tolerance

 $\underline{\text{Key challenge}} : \text{appreciation of key role of patterns of experience,} \\ \text{relationship to the rapeutic approaches}$ 

## Session 8: Special Topics: Neurosociology

Key challenge: appreciating concepts of group dynamics and influence on neurobiology



#### PHASE II CORE DIDACTIC WEBINAR SERIES

## Session 9: State-dependent functioning

<u>Key challenge</u>: appreciation of the pervasive role of statedependent functioning, arousal continuum, intimacy barrier

## Session 10: Advanced Clinical Topics

 $\underline{\text{Key challenge}}\textsc{:}$  Sleep, physical hygiene, patterns, timing and duration of experience

Session 11: NMT Metrics: Patterns and Integration to Practice Key challenge: appreciation of most common patterns

## Session 12: Introduction to the NMT

Key challenge: sample brief overview for trainers to model







