

ATTACHMENT IN THE CLASSROOM: HOW TRUSTING EARLY EXPERIENCES SHAPE BRAIN DEVELOPMENT

Presenter: Jonathan Baylin, PhD

ATTACHMENT AND LEARNING: SAFE TO BE CURIOUS AND EXPLORE THE WORLD



**“THANKS,
MOM FOR
MAKING ME
FEEL SAFE
AND
DELIGHTFUL
SO I CAN GO
TO SCHOOL,
TRUST MY
TEACHERS,
AND LEARN**

**SECURE BASE FROM WHICH TO EXPLORE
THE WORLD, SEEK HELP, AND SHARE THE JOY OF LEARNING
WITH TRUSTWORTHY OTHERS**

ATTACHMENT RESEARCH

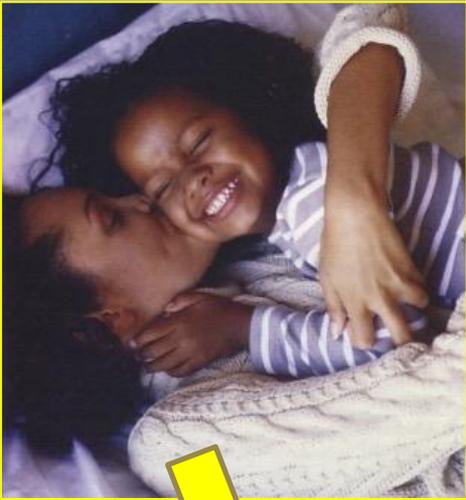
ATTACHMENT STYLES

- ❖ **SECURE**
- ❖ **INSECURE: AVOIDANT**
- ❖ **INSECURE: ANXIOUS, PREOCCUPIED**
- ❖ **DISORGANIZED: WHEN EARLY EXPERIENCES WITH CAREGIVERS ARE FRIGHTENING AND THERE IS NO PREDICTABLE SAFETY**

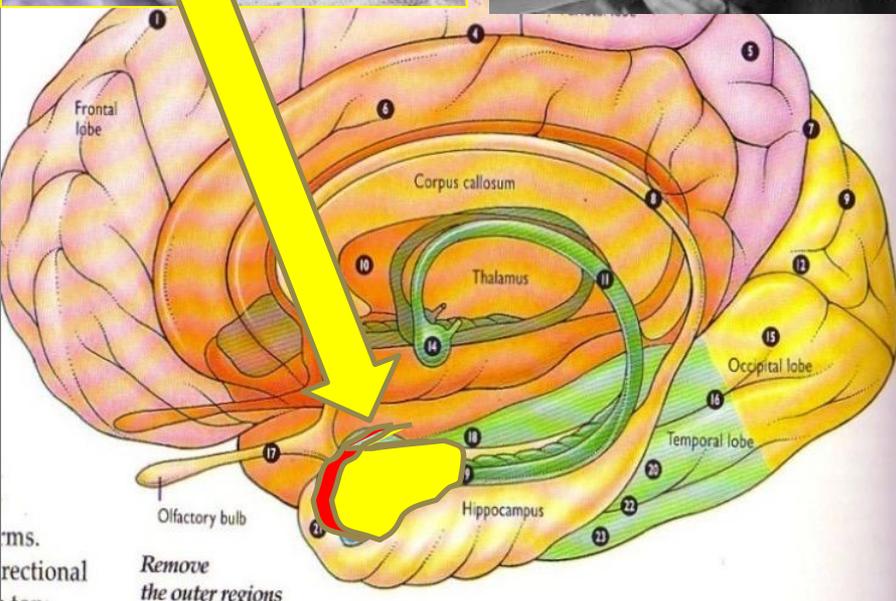
EACH STYLE HAS A DIFFERENT “BRAIN SIGNATURE”

GOOD CARE: SOCIAL BUFFERING AND AMYGDALA WHISPERING

“...the mother acts as a switch for amygdala-mediated fear learning” Nim Tottenham, 2013, p 8



Good care buffers the young child's amygdala by triggering release of oxytocin and keeping the amygdala from activating the fear/stress/defense systems



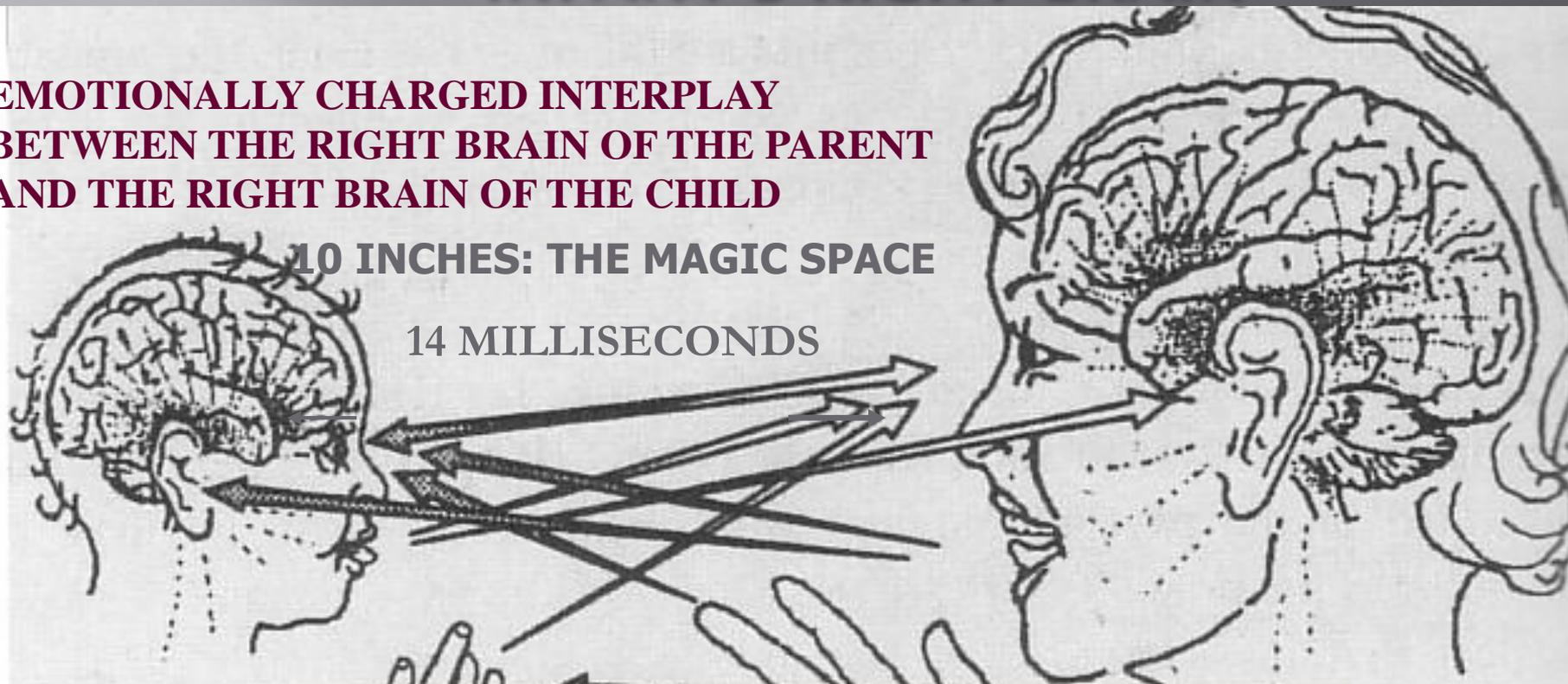
Tottenham, N., Shapiro, M., Telzer, E.H., & Humphreys, K.L. (2012). Amygdala response to mother. *Developmental Science*, 15, 307-319. doi:10.1111/j1467.2011.01128.x

TUNING IN: PREVERBAL TUNING OF THE INFANT'S RIGHT BRAIN

**EMOTIONALLY CHARGED INTERPLAY
BETWEEN THE RIGHT BRAIN OF THE PARENT
AND THE RIGHT BRAIN OF THE CHILD**

10 INCHES: THE MAGIC SPACE

14 MILLISECONDS

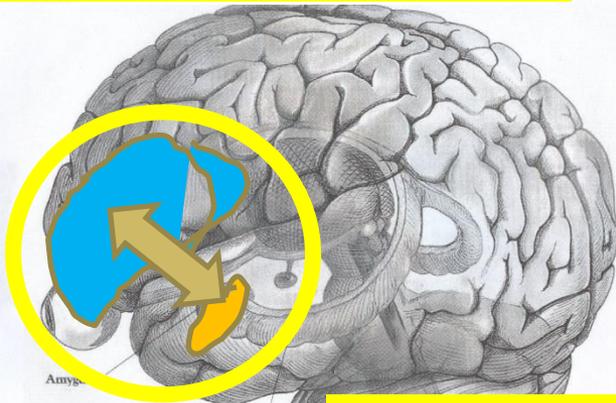


SOCIAL BUFFERING

- ❖ **EYES**
- ❖ **VOICE (PROSODY)**
- ❖ **TOUCH:**
- ❖ **NON-VERBAL SAFETY MESSAGES**

Divergent Developmental Pathways in Response to the Quality of Early Care

THE TRUSTING BRAIN

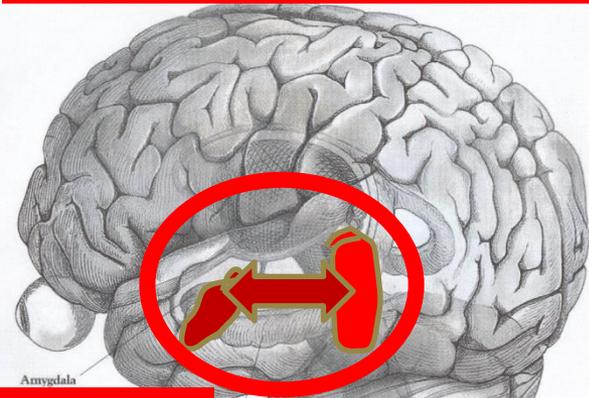


- ❖ FEELINGS
- ❖ COGNITIONS
- ❖ BEHAVIOR



GOOD CARE

THE MISTRUSTING BRAIN



- ❖ FEELINGS
- ❖ COGNITIONS
- ❖ BEHAVIOR



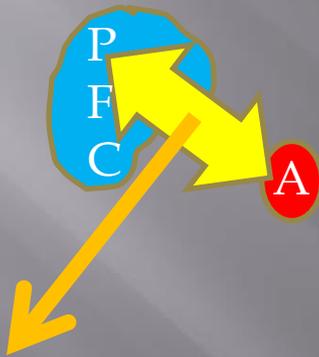
POOR CARE

EFFECTS OF GOOD AND POOR CARE ON THE DEVELOPING BRAIN

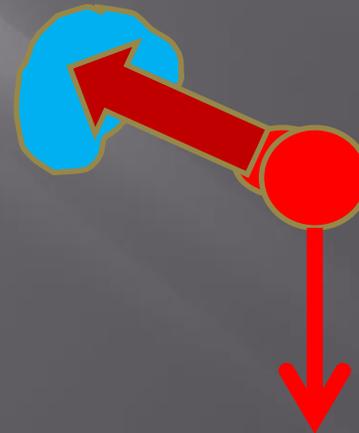
GOOD CARE

POOR CARE

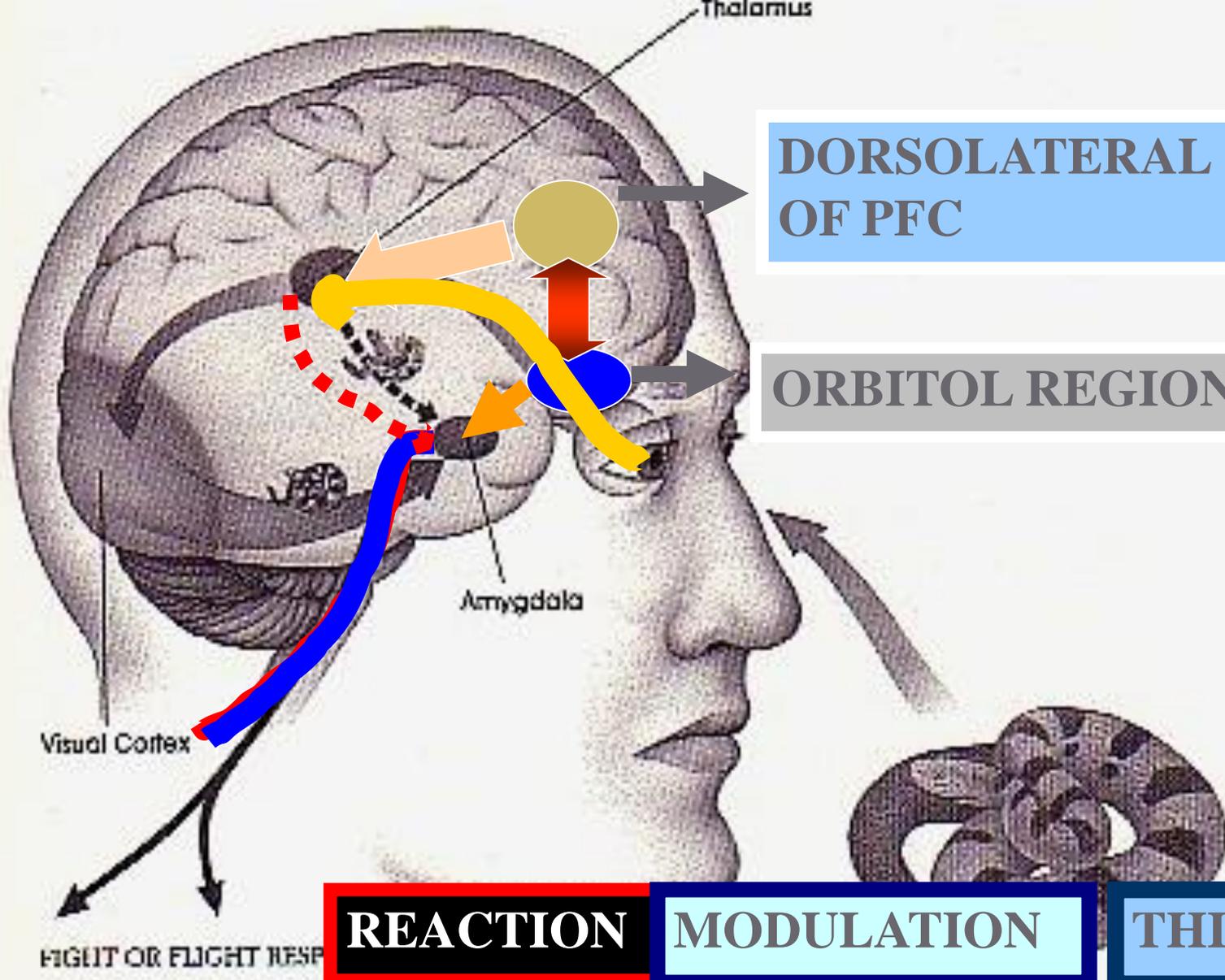
PFC = Prefrontal Cortex
A = Amygdala



REGULATED EMOTIONS
MORE MINDFUL BEHAVIOR



BIG, UNREGULATED EMOTIONS
AUTOMATIC DEFENSIVE BEHAVIORS



DORSOLATERAL REGION OF PFC

ORBITOL REGION OF PFC

REACTION

MODULATION

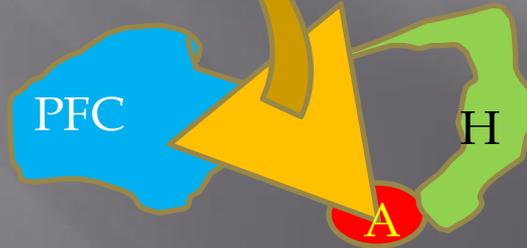
THINKING

BRAIN TIME

0ms 100ms 200-300ms 4-500ms

Integrated information processing vs cue-based processing: contextualizing social experiences

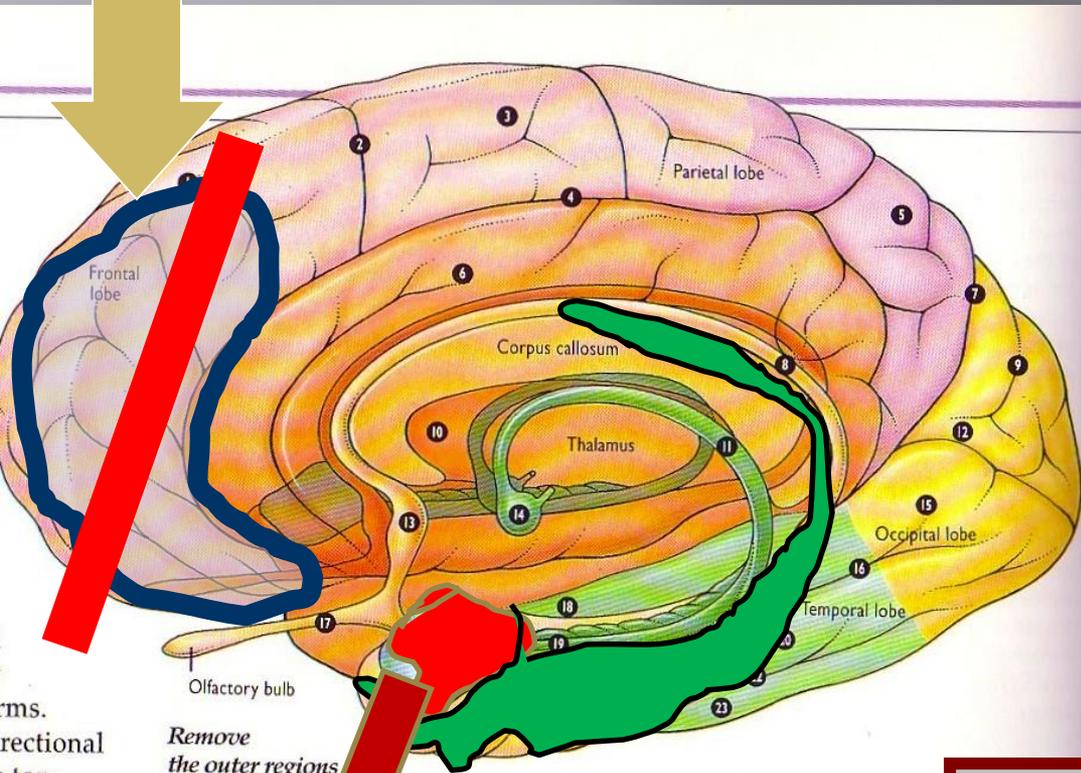
**WHO-WHAT-
WHERE-WHEN:
CONTEXTUALIZED
INFORMATION
PROCESSING**



**PFC = Prefrontal cortex
A = amygdala
H = hippocampus**

THE BRAIN ON "EXECUTIVE FUNCTIONS": PREFRONTAL POWERS

CHRONIC STRESS



- PAY ATTENTION TO "BORING" STUFF
- TOLERATE FRUSTRATION
- THINK BEFORE ACTING
- DELAY IMMEDIATE GRATIFICATION
- CONTROL STRONG EMOTIONS LIKE ANGER AND FEAR
- SEE AND CORRECT YOUR OWN MISTAKES
- KEEP TRACK OF TIME
- STICK WITH HARD TASKS
- STAY ON TRACK WITH LONG TERM GOALS
- CHANGE OLD HABITS
- DEAL WITH COMPLICATED SITUATIONS

SELF DEFENSE AND STRESS REACTIONS

MAY TAKE TWENTY-FIVE YEARS TO BECOME FULLY FUNCTIONAL

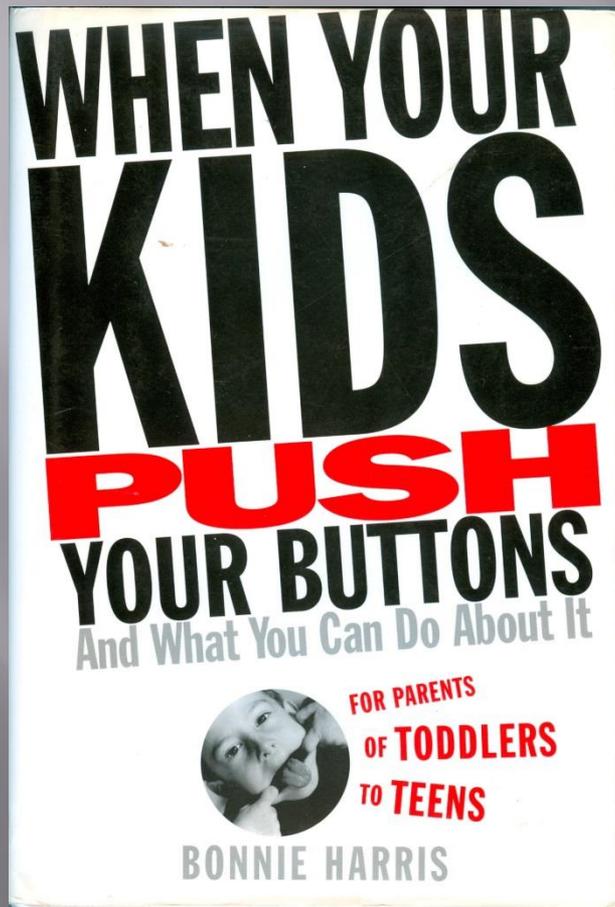
FACIAL EXPRESSIONS TRIGGER THE
AMYGDALA WITHIN 20 MILLISECONDS

TRUSTBUILDING IN SCHOOL

- ❖ **BRAIN WHISPERING: SEND NONVERBAL SAFETY SIGNALS TO THE CHILD'S EMOTIONAL BRAIN**
- ❖ **CONNECTION BEFORE INSTRUCTION: SAFETY FIRST**
- ❖ **PACE: PLAYFUL, ACCEPTING, CURIOUS, EMPATHIC**
- ❖ **STORY TELLING: DISARMS THE DEFENSE SYSTEM**
- ❖ **SCAFFOLDING SUCCESS EXPERIENCES: ACTIVATES THE REWARD SYSTEM AND DISARMS DEFENSE SYSTEM**
- ❖ **EMBRACE THE ROLE OF TRUSTBUILDING ADULT: JUST TAKES ONE.....**
- ❖ **SELF CARE**
- ❖ **SHARED GOALS: PROVIDING AN EMOTIONALLY SAFE ENVIRONMENT AND BUILDING TRUST**
- ❖ **PACE FOR EACH OTHER: CREATING A CIRCLE OF SECURITY**

TEACHER'S HOT BUTTONS

From Bonnie Harris: *When Your Kids Push Your Buttons and What You Can Do About It*, 2003, Warner Books



TEACHER BUTTONS

- 1) THE APPROVAL BUTTON
- 2) THE CONTROL BUTTON
- 3) THE APPRECIATION BUTTON
- 4) THE FIX-IT BUTTON
- 5) THE RESPONSIBILITY BUTTON
- 6) THE INCOMPETENCE BUTTON
- 7) THE GUILT BUTTON
- 8) THE RESENTMENT BUTTON

Jonathan Baylin, PhD
Co-author with Daniel Hughes,
Brain-based Parenting (2012) Norton

*The Neurobiology of Attachment-focused
Therapy* (2016) Norton

jbaylin@verizon.net