



New Frontiers in Music, Language and Autism

The Help Group Summit 2012
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AMAZING
THINGS
ARE
HAPPENING
HERE



Weill Cornell Medical College

Acknowledgements

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All Music for Autism Volunteers and Musicians

The Australian-American Fulbright Commission, The Rotary Ambassadorial Scholarships Program, Overseas Research Studentships, and The Bailey Thomas Charitable Trust



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Outline of Presentation

- Music and language processing in autism
- Music therapy for those with autism
- The socioeconomic of autism
- Advocacy through Music for Autism

*Explorations of Music and Language
Processing in Individuals with Autism*

Musical Abilities of Those with Autism

- First described by Leo Kanner (1943)
- Rimland's *Infantile Autism* (1964)
- Repetition Study (Applebaum et al., 1979)
- Recent empirical investigations on pitch, interval, and contour processing

Music and Language Processing

- Left hemisphere-language?
- Right hemisphere-music?

- Music *and* language
 - Universal
 - Analogous components processed similarly (Patel, 2003)

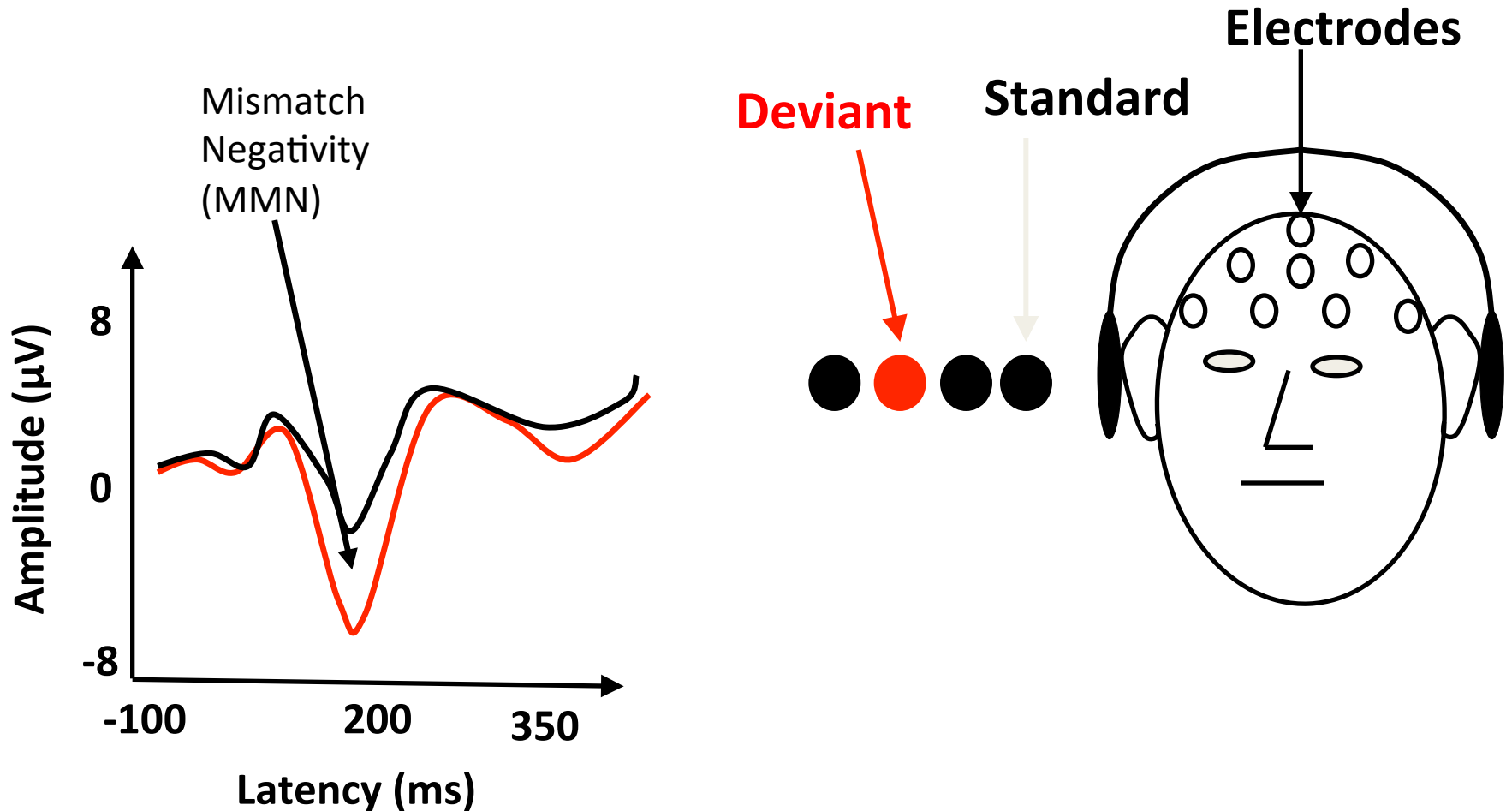
“I can better tell people how I am by playing a song in my mind.”

Harold Stone, a 52-year-old with high functioning autism

Music and Language Processing

- Psychological Evidence
 - Music and language abilities correlate (Simmons & Baltaxe, 1975)
 - No longer valid
- Neurological Evidence with Event Related Potentials (ERPs)
 - Music and language abilities divergent (Ceponiene et al., 2003)

Event-Related Potentials (ERPs)



Music and Language Processing

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Music and Language Processing

- Children with autism show similar musical processing in the context of poorer language

*Music Therapy for Those With
Autism*

Music Therapy

- Has been used to treat disorders ranging from AIDS to Alzheimer's, depression and cancer and became a formal area of study in the 1950s
- Therapy carried out by a therapist in a controlled and programmed manner, often in collaboration with doctors or other therapists
- The client need not have musical ability to benefit from therapy, and any increase in musical knowledge is a byproduct of therapy and is not a goal

Music Therapy with Individuals with Autism:
Widely Recommended . . .

German postal survey (Evers, 1992):

- 56% of child psychiatrists
- 14.5% of pediatricians

recommended music therapy for individuals with autism

- 25.1% of pediatricians

thought music therapy for individuals with autism might be useful

Music Therapy with Individuals with Autism:

Under Researched...

- Mostly case studies, need for greater systematic research (Accordino et al., 2007)
- Meta-Analysis of music therapy with children and adolescents with psychopathology (Gold et al., 2004)
 - With no studies on those with autism, medium to large effect size of music therapy on those with childhood psychopathology, $d = .61$ ($SE = .14$), $p < .001$

Auditory-Motor Mapping Training as an Intervention to Facilitate Speech Output in Non-Verbal Children with Autism: A Proof of Concept Study

Catherine Y. Wan^{1*}, Loes Bazen¹, Rebecca Baars¹, Amanda Libenson¹, Lauryn Zipse², Jennifer Zuk¹, Andrea Norton¹, Gottfried Schlaug¹

¹ Music and Neuroimaging Laboratory, Department of Neurology, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts, United States of America, ² Department of Communication Sciences and Disorders, MGH Institute of Health Professions, Boston, Massachusetts, United States of America

- September, 2011 study
- 6 nonverbal participants with autism
- At baseline, no intelligible words
- AAMT 5x weekly for 8-week period
- All children with significant improvements in their ability to articulate words and phrases

The Socioeconomics of Autism

The Socioeconomic Picture of Autism

- In 1960s, found higher rates of autism in higher socioeconomic areas
- In 1980s, researchers argued that these findings may be an artefact of the ability of those from lower socioeconomic areas to get an ASD diagnosis and services for the disorder (where study participants were recruited)

The Socioeconomic Picture of Autism

- Larsson et al. (2005) ran a population-based, case-control study in Denmark
 - Has a uniformly organized and comprehensive health care system
 - Showed that socioeconomic status (maternal education and parental wealth) did not associate with an autism diagnosis

Autism does NOT discriminate...

BUT our giving of autism diagnoses and services for those with autism do.



music
for
Autism

ORCHESTRATING STRONGER LIVES

Our Mission

Music for Autism is committed to raising public awareness and improving the quality of life of individuals with autism and their families through music.

Music for Autism: Our History

- Began programming in the US in 2007 with our acceptance as a 501c3, nonprofit organization
- In 2009, established a goal of expanding our programming to many more US cities
 - 2007: New York, New York @ The Mount Sinai Adolescent Health Center
 - 2008: Princeton, New Jersey
 - 2009: Houston, Texas
 - 2010: Washington, DC; Brooklyn; Staten Island
 - 2011: Boston; Los Angeles; Nassau, Suffolk and Westchester Counties

Upon our 5th Anniversary in the UK, we were honored at No. 10 Downing Street by Cherie Blair for our “Service to Individuals with Autism and Their Families”

“The work of Music for Autism touches upon two of my great passions: music and supporting individuals with autism . . . I applaud the work of this charity for not only focusing on young children with autism, but also aiming to improve the lives of young adults with autism . . . I applaud Music for Autism for enabling children with autism the ability to experience quality music — something that we should all be able to experience — and for giving them the opportunity to listen to music in an environment where no one will be embarrassed. . . We should celebrate these young people for what they can do as opposed to what they cannot.”

Cherie Blair, QC, Wife of Former Prime Minister Tony Blair, on Music for Autism

Web Site Concert Calendar

MUSIC for Autism

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CONCERT CALENDAR

Click on the map below to see the upcoming concerts in your area.

LOS ANGELES **HOUSTON** **WASHINGTON, D.C.** **NEW HAVEN** **NEW YORK** **PRINCETON** **BOSTON**

[Click here](#) for UK concerts or [here](#) to see all US concerts.

Commencement of Linda Rodgers Emory Concert Series

Generously underwritten
by the Richard and
Dorothy Rodgers Fund of
the UJA-Federation.

New York City

Manhattan:

1 - The Mount Sinai Adolescent Health Center

3 - The McCarton School

1 - 92nd Street Y

2 - Reel Abilities Film Festival at the JCC in Manhattan

Brooklyn:

4 - Brooklyn Heights Public Library

5 - Edith & Carl Marks JCH of Bensonhurst (coming in 2012)

Staten Island:

7 - JCC of Staten Island

Queens:

6 - Central Queens Y (coming in 2012)



Map found at NYCtheatrespaces.org

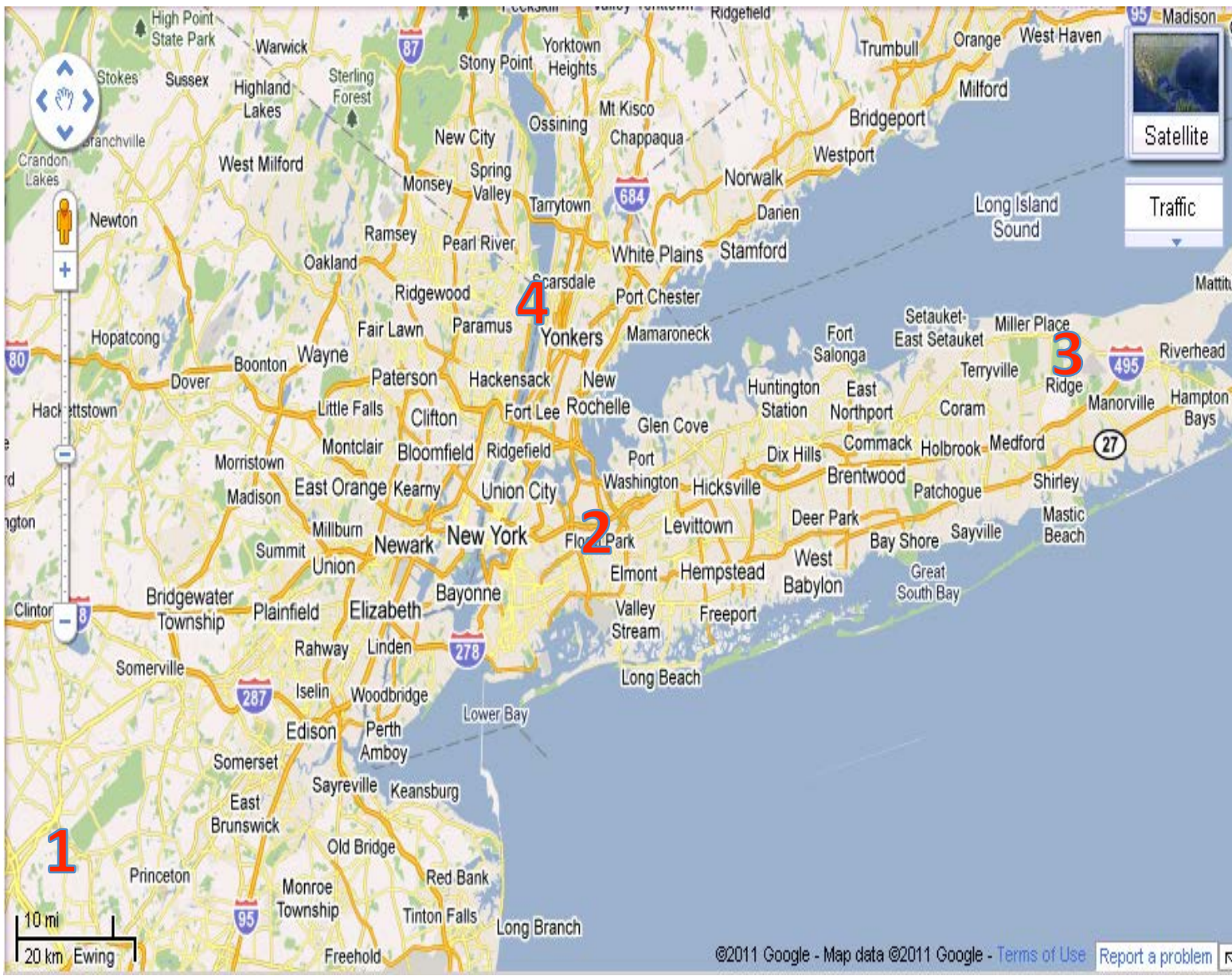
New York / New Jersey

New Jersey
1 – Princeton – The Eden Institute

New York
2 – Mid-Island Y – JCC

3 – Suffolk Y JCC

4 – JCC of Mid-Westchester



Map courtesy of Google Maps

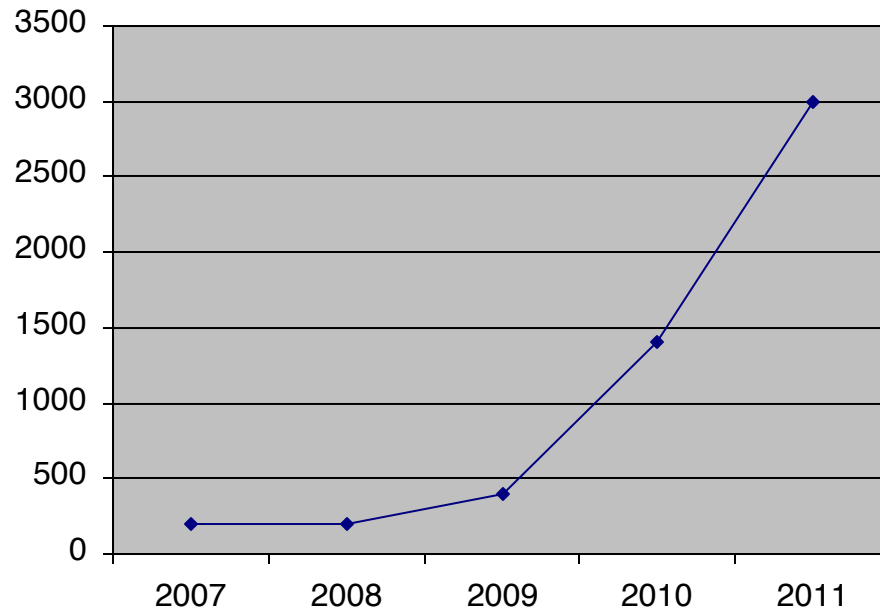


Growth from 2007-2011


In 2011:

- 13 cities
- 7 states
- Over 30 concerts

Music for Autism's Growth in Individuals Served



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Music for Autism sends monthly messages with information on its free, interactive concerts and fundraising events in the United States.

If you're using a spam filter of any kind, please make sure robert@musicforautism.org is on your approved mailing list.

Music for Autism does not share its email list with other organizations.

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* = Required Field



“I had the great pleasure of bringing my son Connor to the concert at the Help Group in Los Angeles on Sunday. I was astounded and thrilled at how the children were moved by the music and how I was moved by the spirit of acceptance. As a parent of a child with Autism, I am used to being on guard for behaviors which require me to remove Connor from situations. At the Music for Autism concert, I didn't have to do this...Connor was allowed, encouraged even to express himself and I was able to relax at a public event for the first time in 5 years. Thank you for that.”

Kathleen Kitts, mother of Connor, age 6
Los Angeles, California



www.MusicForAutism.org

THE HUFFINGTON POST
THE INTERNET NEWSPAPER: NEWS BLOGS VIDEO COMMUNITY

www.HuffingtonPost.com/Robert-Accordino-MD-MSc

THANK YOU!

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