# MUSICIANS

## BORN OR MADE ?

SYMPOSIUM

**PUBLIC LECTURE AND CONCERT**
**APRIL 10 2015**
4:00PM TO 6:00PM
CONSERVATOIRE DE MUSIQUE DE MONTRÉAL

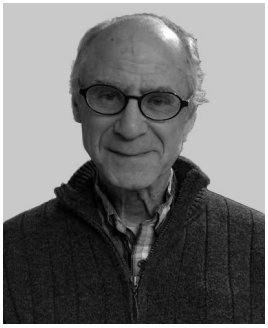
**SYMPOSIUM**
**APRIL 11 2015**
9:00AM TO 6:00PM
UNIVERSITÉ DE MONTRÉAL
CARREFOUR DES ARTS ET SCIENCES


**Leonid NEDIAK**
***CHILD PRODIGY PERFORMER***

*"His ability to mix confident strength with delicate gentleness to convey these dreamy pieces begs the question of how one so young could have the intuition required to achieve this difficult balance." – (The Art Scene)*

## KEYNOTE SPEAKER

**David Henry Feldman**
Eliot-Pearson Department of Child Study and Human Development, Tufts University, Medford, Massachusetts, USA

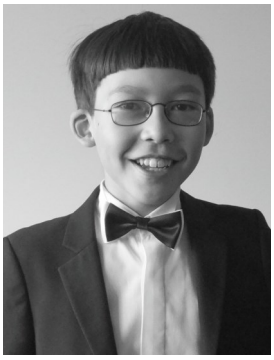


**Musical prodigies: Born, made, and lucky**

Music prodigies, children who perform and/or compose at adult professional levels, are the product of a complex set of coordinated contributions, including their natural talents, personal qualities and abilities to persevere and focus, but also include the devotion of at least one parent, the availability of musical resources such as accessible instruments, exceptional instructors, established musical techniques and an accepted canon. Beyond these, prodigies should be only or first born children, perform to receptive and increasingly sophisticated audiences, gain access to significant material resources, live in a society that values what they do, and secure a cadre of individuals and institutions that devote themselves to the preservation and enhancement of music in general and to this child's music in particular. Finally, the prodigy needs extreme good fortune because all of these contributors to what we call a music prodigy have to function in a coordinated way and sustain themselves over a decade or more of intense activity. Each music prodigy is something of a miracle.

## CHILD PRODIGY PERFORMER

**Leonid Nediak**
Child prodigy pianist, Kingston, Ontario, Canada



11 year old pianist Leonid Nediak has been steadily gaining critical acclaim across Canada. Following his recital at the Place des Arts in Montreal, OSM Virée Classique 2014, "Le Devoir" newspaper described his performance as "Astonishing pianism... possession of a real depth of sound and feel of a future great pianist". Since his orchestral debut with the Montreal Symphony in February 2014 under the baton of Maestro Kent Nagano, within a year, Leonid has performed with four more orchestras: the Toronto Sinfonietta Orchestra, Kindred Spirits Orchestra, Quebec Symphony Orchestra and McGill Chamber Orchestra.

Recognized for his strong musical personality and captivating playing, Leonid has been awarded many prestigious awards. He was the Grand Prize winner of the 2013 and 2014 Canadian Music Competition (CMC) receiving, both times, the highest mark (99%) ever given in this competition. Leonid is also a 1st prize winner of numerous other competitions including the 2014 OMFA (provincial music competition by Ontario Music Festivals Association) in the open piano category, Grand Prize winner in the CCC (Chinese Cultural Centre) Toronto Piano Competition 2014, 1st place winner in Toronto Sinfonietta Concerto Competition 2013 and gold medal winner in International Young Gifted Musicians Festival 2014, which led to an invitation to perform in the Weill recital hall at Carnegie Hall in New York.

Leonid has performed in Canada in more than twenty concerts during the past year. In addition to orchestral performances, highlights of Leonid's last season include solo concerts in CMC gala in Sherbrooke, OSM Virée Classique in Montreal, in the Niagara Music Festival, the Arts and Letters Club in Toronto, CMC fundraising concerts in Oakville, and more. Future engagements include several solo recitals in the United States in 2015, performances of Beethoven's Piano Concerto No. 3 with the Cathedral Bluffs Symphony Orchestra, and Rachmaninoff's Concerto No. 2 with the Kindred Spirits Orchestra.

Born in 2003, Leonid began his piano studies at age 4 with Debbie Beckman and later with Maria Rost. Since 2012 he has been studying under Dr. Michael Berkovsky.

Leonid also loves composing music. He started to compose when he was 5 years old, and received 1st place in Ontario and 2nd place in the national final of CMFTA (Canadian Federation of Music Teachers' Association) Music Writing Competition 2011. He has received numerous awards since then and performed his own compositions in several recitals. In 2014 he won a Gold Medal in the international 2014 Hal Leonard Carol Klose Composition Competition, together with his brother Alexander Nediak. He has been studying harmony and composition under Dr. John Burge.

Recently Leonid had his acting debut in Montreal with the McGill Chamber Orchestra under the baton of Maestro Boris Brott by acting young Beethoven. Leonid has collaborated with cellist Coenraad Bloemendal and has performed with him in numerous venues. Leonid has appeared on local and national TV, in newspapers and journals, including CBC national news and "Profile" in Kingston.

In addition to music, Leonid enjoys computer science, math and more. As a 6th grader, Leonid is taking grade 12 math and computer science courses in Virtual High School Ontario working towards his high school diploma. His recent academic achievements include: a gold medal in the Canadian Computing Competition 2014, and a bronze medal in the Frontenac, Lennox and Addington Science Fair 2014.

**FRIDAY, APRIL 10, 2015**

## PUBLIC LECTURE/CONCERT

16:00 Opening remarks

16:15 Keynote speaker
David Henry Feldman – Musical prodigies: Born, made, and lucky

17:15 Concert: Leonid Nediak (11 year old child prodigy)
Leonid Nediak piano teacher: Michael Berkovsky

18:30 Reception

# CONCERT PROGRAMME

**by**
**Leonid Nediak, *Child Prodigy Pianist***

| | |
|---|---|
| **Polonaise Op. 44** | **Frédéric Chopin** |
| **Nocturne Op. 48, No. 1** | **(1810-1849)** |
| **Ballade No. 1 Op. 23** | |

***Presentation: A teacher's perspective with Michael Berkovsky***

| | |
|---|---|
| **Sonata Hob: XVI 20** | **Joseph Haydn** |
| **I. Allegro Moderato** | **(1732-1809)** |
| **II. Andante con moto** | |
| **III. Allegro** | |
| **Sonata No. 1 in C Major: I. Moderato** | **Leonid Nediak** |
| | **(b. 2003)** |
| **Sonata No. 3, Op. 28** | **Sergei Prokofiev** |
| | **(1891-1953)** |

**Michael Berkovsky, L. Nediak's current piano teacher**

Canadian/Israeli pianist, Michael Berkovsky, debuted in New York at Avery Fisher Hall, has toured solo in Ireland, Costa Rica, Japan, Italy, Israel and North America, and played numerous festivals. He has degrees from Juilliard and a Doctoral from the Peabody Conservatory of Johns Hopkins (2011). Michael studied with Nataly Litvinova, Alexander Slobodyanik, Yoheved Kaplinsky, Julian Martin and Yong Hi Moon.

Michael received awards in the Yale Gordon Competition (2007) and IBLA, among others; has a grant from the Canadian Arts Council (2007); and scholarships from the America Israel Cultural Foundation and the White Nights Foundation. He performed with Vladimir Feltsman, Stefan Sanderling and Leon Fleisher, and collaborated with the Jupiter Chamber Orchestra, and various artists from the Toronto Opera Company, Juilliard, Peabody and Glenn Gould. He plays in the Juilliard Piano Duo.

**SATURDAY, APRIL 11, 2015**

# ACEDEMIC PRESENTATIONS

8:30 Coffee/tea and croissants

8:55 Opening remarks

9:00 *Defining Music Prodigies*
David Henry Feldman – Introducing the definition

9:15 Gilles Comeau & Isabelle Peretz – The music prodigy: Putting the definition to the test

9:45 *Measures of talent and training in children*
Sandra Trehub – Identifying musical potential in toddlers
Virginia Penhune – What we learn and when we learn it: Behavioral and brain effects of early musical training

10:45 Coffee/tea break

11:00 *Round Table: Does practice make perfect? The role of talent and training*
Participants: Christine Beckett, David Henry Feldman, Sean Hutchins, Lisa McCormick, Caroline Traube, Sandra Trehub
Moderator: Gilles Comeau

12:00 Lunch

13:30 *Measures of talent in adulthood*
Sean Hutchins – Exploring the range of vocal abilities
Caroline Traube – How musicians express their creativity in shaping a musical performance
Lisa McCormick – Are classical music competition winners born or made?

15:00 Coffee/tea break

15:15 *Role of musical talent in atypical development*
Laurent Mottron – Prevalence of clinically and empirically defined talents and strengths in autism
Arndt Wilcke – Dyslexia, language and music: Linked by genes and brain?

16:15 *Introduction to round table*
Gilles Comeau & Isabelle Peretz – Born or made: From Gagnier to Ericsson

16:30 *Round Table: Does practice make perfect? The role of genetics and practice*
Participants: Laurent Mottron, Virginia Penhune, Arndt Wilcke
Moderator: Isabelle Peretz

17:15 Closing remarks

## SATURDAY, APRIL 11, 2015

**Gilles Comeau**
School of Music
University of Ottawa
Ottawa, Ontario, Canada

**Isabelle Peretz**
Department of Psychology
Université de Montréal
Montreal, Quebec, Canada

**Music prodigy: Putting the definition to the test**

A prodigy is described as "a child who, at a very young age (typically younger than 10 years old) performs at an adult professional level in a highly demanding, culturally recognized field of endeavor" (Feldman & Morelock, 2011). We tested this definition by asking musical experts (professional performers, music teachers and university music students) to evaluate the performances of music prodigies to determine if their abilities are indeed comparable to professionals. The panel of experts listened to randomly distributed audios clips of prodigies and professionals playing the same pieces and identified the performer as either a prodigy or professional. In addition, we compared prodigies' starting age and rate of progress with a large sample of music students to quantify the acquisition of advanced musical skills and determine if those skills can be explained by practice. Preliminary results are consistent with the definition of prodigies; in many cases even musical experts are unable to distinguish the audio recording of a child prodigy from a professional performer above chance. Furthermore, practice alone cannot account for their faster learning.

**Sandra Trehub**
Department of Psychology
University of Toronto
Toronto, Ontario, Canada

**Identifying musical potential in toddlers**

The maxim, "All men are created equal," is not relevant to domains in which biologically based abilities and dispositions make enduring contributions to achievement even after extensive training. Musical performance is one such domain, along with athletic and academic skills. At present, exceptional musical talent or potential is identified only after some years of training. The challenge is to identify musical potential *before* the onset of training so that resources can be deployed effectively to help realize that potential. One candidate skill is singing, which emerges naturally in toddlers after modest exposure to caregivers' singing. Toddlers' singing reveals large individual differences in pitch contour and rhythm reproduction, which are unrelated to their speech production skills. Variation is also evident in the frequency of singing, reflecting toddlers' motivation for musical engagement. Future longitudinal studies could indicate whether toddlers' singing precocity and frequency are predictive of musical achievement in subsequent years.

**Virginia Penhune**
Department of Psychology
Concordia University
Montreal, Quebec, Canada

**What we learn and when we learn it: Behavioral and brain effects of early musical training**

The impact of training or experience is not the same at all points in development. Children who learn to skate, speak a second language or play a musical instrument before the age of 7-8 are typically more proficient as adults. These are examples of possible sensitive periods: developmental windows where maturation and specific experience interact to produce differential long-term effects on behavior and the brain. A wealth of anecdotal evidence suggests that early training is important for musical skill, with Mozart, Pablo Casals and Yo Yo Ma among those who began playing as very young children. However, there has been little evidence directly demonstrating the impact of the age of start of musical training. To address this question, work in my laboratory has compared behavior and brain structure in early- (before age seven) and late-trained (after age seven) adult musicians. Our results show that early-trained musicians outperform late-trained musicians on a variety of musical tasks, and that they show differences in brain structure related to the age of onset of training and task performance. I will discuss this work in the context of the impact of the dual impacts of talent and experience in musical training.

**Sean Hutchins**
Royal Conservatory of Music Research Centre
Toronto, Ontario, Canada

**Exploring the range of vocal abilities**

For most people, the voice is the single most important medium of communication. In order for effective vocal communication—such as speech or singing—to occur, we need to be able to both perceive and produce many types of vocal signals. However, recent evidence suggests that conscious perception and production abilities are not as closely linked as we might originally suspect. In this talk, I will present some of my work examining how good people are at perceiving and producing vocal sounds, and show some surprising dissociations between the two abilities. I will discuss research covering a broad range of musical abilities, from absolute pitch to congenital amusia, and present a model that can help to explain the range of abilities in music perception and performance.

## SATURDAY, APRIL 11, 2015

**How musicians express their creativity in shaping a musical performance**

In most performance studies, musical expression is related to expressive timing and dynamic deviations. Less attention has been given to how it relates to timbre. This is probably due to the difficulty of defining the features of timbre, which are related to the physical aspects of sound in very complex ways. When examining timbre at the level of the sound colors and textures that can be produced on an instrument, the paramount importance of the performer is suddenly brought forth. The control of timbre is in fact one area where performers can express their creativity.

**Caroline Traube**
Faculty of Music
Université de Montréal
Montreal, Quebec, Canada

**Are classical music competition winners born or made?**

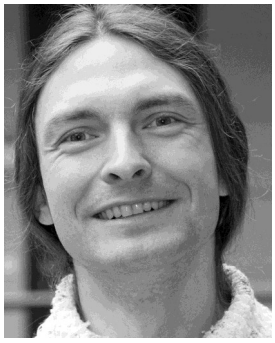
While composers are usually portrayed as geniuses in the history of Western classical music, competitions provide an excellent opportunity to examine enduring cultural notions of "performing genius". Drawing from a decade of ethnographic research, I will identify the symbolic resources that competitors use to embody musical genius, discuss how these intersect with gender norms, and explain why these self-presentations are so easily undermined in this performance environment. I will argue that competitions do not simply identify musicians who were "born to win", however prevalent this discourse might be in promotional materials and newspaper coverage. Rather, competitions "make" musicians by changing how they play and providing an interactional structure where talent can emerge to receive acclaim and attention.

**Lisa McCormick**
Department of Sociology
Haverford College
Haverford, Pennsylvania, USA

**Prevalence of clinically and empirically defined talents and strengths in autism**

Outstanding skills, including Special Isolated Skills (SIS) and Perceptual Peaks (PP) are frequent features of autism. However, their reported prevalence varies between studies and their co-occurrence is unknown. We determined the prevalence of SIS in a large group of 254 autistic individuals and searched for PP in 46 of these autistic individuals and 46 intelligence and age-matched controls. The prevalence of SIS among autistic individuals was 62.5% and that of PP was 58%. The prevalence of SIS increased with intelligence and age. The existence of an SIS in a particular modality was not associated with the presence of a PP in the same modality. This suggests that talents involve an experience-dependent component in addition to genetically defined alterations of perceptual encoding.

**Laurent Mottron**
Department of Psychiatry
Université de Montréal
Montreal, Quebec, Canada



**Dyslexia, language and music – Linked by genes and brain?**

Dyslexia is a common developmental disorder characterized by severe problems in the acquisition of reading and writing skills. There is profound evidence for a clear neurobiological basis. Genetic influence is estimated at 50-70%. Several genes could be identified to play a role in dyslexia, some of them, like *FOXP2* or *DCDC2*, are also involved in general language or reading skills. A potential neurobiological basis could be the planum temporale, i.e. the asymmetry between the plania temporalia of both brain hemispheres. While dyslexics show a strong tendency towards symmetry, normal reading controls exhibit a left>right asymmetry that is even stronger in musicians with absolute pitch. Given these neurobiological similarities of music and language, the question arises: Is there also a partly overlap in the genetic background? And can this overlap help to early identify musically gifted children?

**Arndt Wilcke**
Fraunhofer Institute for Cell Therapy and Immunology
Leipzig, Saxony, Germany

**Round table participants include the presenters listed above as well as Christine Beckett.**

**Christine Beckett**
Department of Music
Concordia University
Montreal, Quebec, Canada

## NOTES

# SYMPOSIUM

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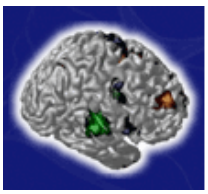

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