

KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN

Academy Colloquium Deciphering the biology of human musicality through state-of-the-art genomics

Academy Colloquium on Musicality and Genomics

Date: 20-21 June 2019

Venue: KNAW, The Trippenhuis, Kloveniersburgwal 29, 1011 JV Amsterdam (route description)

Programme

Thursday 20 June 2019 (Colloquium day 1)

9:00 a.m. Registration and Coffee 9:30 a.m. Introduction Henkjan Honing / Simon Fisher Topic 1: Phenotypes of musicality, and how to measure them Chair/ Moderator: Bruno Gingras 9:50 a.m. Title t.b.a. Ani Patel 10:20 a.m. The cognitive psychometrics of music and the development of musical abilities Daniel Müllensiefen 10:50 a.m. Coffee/ tea break 11:10 a.m. Cross-cultural perspectives on nature and nurture in human music Patrick Savage 11:40 a.m. Psychology of music in genomic imprinting disorders Sam Mehr 12:10 a.m. Discussion [Focus: What is the most promising means of carving musicality into components? How can these constituent components be effectively probed in humans?] 1:00 p.m. Lunch

Topic 2: Genetic approaches for studying human variation

Chair/Moderator: Simon Fisher

2:00 p.m. Title t.b.a.

Dorret Boomsma



2:30 p.m. Title t.b.a.

Miriam Mosing

3:00 p.m. Title t.b.a.

Beate St Pourcain

3:30 p.m. Coffee/ tea break

3:50 p.m. The extraordinary genetic variations of musical pitch

Isabelle Peretz

4:20 p.m. Discussion

[Focus: How can studies of interindividual variation yield insights into the genetic architecture underlying human musicality? What are the strengths & limitations of diverse approaches, from focused analyses of extreme traits through to large-scale

investigations of epidemiological cohorts.]

5:30 p.m. Reception

Friday 21 June 2019 (Colloquium day 2)

9:00 a.m. Registration and coffee

Topic 3: Uncovering biological connections between musicality and other

traits

Chair/ Moderator: Reyna Gordon

9:30 a.m. The genetic contribution to the human capacity for rhythm

Lea Davis

10:00 a.m. Genomics approaches for studying musical aptitude and related traits

Irma Järvelä

10:30 a.m. Genetic determinants of timing and auditory sensitivity

Sonja Kotz

11:00 a.m. Coffee/ tea break

11:20 a.m. The genetic architecture of associations between musical training, musical aptitude

and psychological traits

Fredrik Ullén

11:50 a.m. Discussion

[Focus: What will pleiotropy with other traits tell us about the evolutionary origins of musicality? If discovered, how can we put to use new knowledge generated from genomic studies regarding shared genetic architecture for musicality, health, and

the brain?]

12.40 a.m. Lunch



Topic 4: Towards an international consortium integrating musicality & genomics

Chair/ Moderator: Henkjan Honing

1:40 p.m. Title t.b.a.

Bruno Gingras

2:10 p.m. Towards the genomic basis of rhythm: Building blocks of a research program

Reyna Gordon

2:40 p.m. Musicality and the shifting landscape of 21st century genomics

Simon Fisher

3:10 p.m. Coffee/ tea break

3:30 p.m. Pitfalls, prospects & plans

Henkjan Honing

4:00 p.m. Final discussion

[Focus: Could coordinated activities of leading experts across the world offer substantive new opportunities for uncovering the biological bases of musicality? What are the most effective ways for establishing an international consortium; what should be the overarching goals & major points of focus? What are the prospects &

pitfalls of such an endeavour?]

5:00 p.m. Close