



FRONTIERS in GENETICS XIV

The Weizmann institute of Science: Lopatie hall

February 20th, 2024

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08:30-09:00: Registration

9:00-9:10: Opening remarks

09:10-10:30: Session I : the genetics of communications

Asya Rolls (Technion): Using the brain to control immunity

Maya Bar (ARO – Volcani institute): Hormonal control and translational regulation of organ patterning determine disease resistance in tomato

Tal Yardeni (Sheba Med center): Mitochondrial DNA as a regulator of the immune system

Yaron Antebi (WIS): Deciphering the cellular integration of contradictory BMP and TGF β signals

10:30-11:00: Coffee break

11:00-12:20: Session II : Chromosomal organization and regulation

Itay Onn (Safed, BIU): Yeast chromatin- a new insight into a classical structure

Ofer Shoshani (WIS): Chromosome catastrophes in cancer

Assaf Bester (Technion): Unveiling lncRNA Roles in Hematopoiesis and Leukemia via Machine Learning and Perturbation screening

Barak Akabayov (BGU): Exploring specific DNA-protein interactions using a simplified model, microarray technology, and machine learning approaches

12:20-12:30: Business meeting (obligated GSI meeting)

12:30-14:20 Lunch+posters

14:20-15:00: Keynote - honorary membership (Batsheva Kerem, HUJI)

Genetics of diseases – from basic research to translational medicine

15:00-16:20: Session III - Genetic variation in evolution and disease

Nitzan Gonen (BIU): Male development fully relies on two SRY/SOX binding motifs within Enhancer 13 of the Sox9 gene

Debbie Toiber (BGU): Aging, Neurodegeneration, from chromatin conformation to changes in metabolism and behavior

Shai Carmi (HUJI): DNA of 14th-century German Jews demonstrates genetic heterogeneity and founder event in late medieval Ashkenazi Jews

Yaara Oren (TAU): Beyond Darwin: understanding cancer persister cells

16:20-16:40: Poster prizes and concluding remarks