

Synergy Cluster- Autism and Developmental Disabilities
Tel Aviv University
Cluster leaders: Prof. Moran Rubinstein and Prof. Lidia Gabis





Aims:

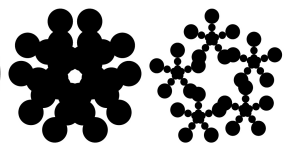
To bring together researchers from Tel Aviv campus, hospitals and community with special interest in autism and developmental disabilities, in order to promote collaborations, knowledge, translational research and multidisciplinary grand proposals.

Recent research advances in the area of brain development and autism are providing valuable insights into the causes, symptoms, and targeted treatments of this complex disorder. Many leading researchers from Tel Aviv University have contributed significantly to these advances. The rapid increase in the prevalence of autism spectrum-related disorders has made the developmental trajectories and neural basis of autism a focus of translational research. This research can inform early detection, early intervention strategies, and more precise treatments. By advancing our knowledge of autism, research can help reduce misconceptions associated with this disorder and promote the function, participation, and acceptance of individuals with autism and related disabilities.



Save the dates of following meetings for synergy members:

Date	Time	Location	Schedule
26/3/2024 	18:00-19:30 Please sign-up	Zoom link Meeting ID: 831 2448 6440 Passcode: 259953	Short introduction of each lab and member of the group, including recent studies and collaboration opportunities Please sign up at the following link
14/4/2024 	12:00- 16:00 Please register at the link .	Faculty of Medicine Room 201 Tel Aviv University	<u>12:00-12:30 Luncheon and mingling</u> <u>12:30- 13:30 Short lectures of Synergy members</u> <u>13:30-14:15 Invited lecture:</u> Developmental genetics and new technologies in autism: current controversies (abstract below). Professor David Cohen, MD, PhD, Sorbonne Université Introduction by Prof. Illana Gozes <u>14:15-14: 30 Coffee Break</u> <u>14:30-15:30 Short lectures of synergy members</u> <u>15:30-16:00 Round table discussions and closing</u>



Lecture Abstract – Tel Aviv University 2024

Developmental genetics and new technologies in autism: current controversies

David Cohen, MD, PhD

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The field of autism is a topic of intense controversies. I will address two of them developmental genetics and new technologies that now interfere with the expansion of Artificial Intelligence. Despite the power of recent AI algorithm, controversies remain. In the field of genetics, how should we prioritize major variant and polygenic scores based on common variations? Is the categorical approach the best way to describe syndromic autism in term of phenotype-genotype relationship? Or in term of therapeutic approach? Is the big data approach really clinically relevant to produce diagnostic measures? Are serious games aiming at training specific skills (e.g. writing; social interaction; literacy) evidence based? And what is the current state of the art of the use of robotic in autism? To illustrate these controversies, I will go back and forth from the literature to project from my group.

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