## Programme

## Israeli Society for Evolutionary Biology 2019

## Wednesday 11 December 2019

Hour		Hall	Room 1	Room2
08:0	09:0	Registration		
0	0	_		
09:0	09:1	Opening remarks		
0	5			
09:1	10:0		Plenary 1 = Douglas Erwin	
5	0	Developmenta	al novelties in the early history	of complex life
10:0	10:2		Coffee Break	
0	0			
		Genome Evolution	Population Genetics	Experimental Evolution
		(Chair: Tal Pupko)	(Chair:Yoav Ram)	(Chair: Tzachi Pilpel)
10:2	10:4	EINAT HAZKANI-COVO	ILAN GRONAU	RUTH HERSHBERG
0	5	The evolution of short inverted	The case for genetic genealogies in	Recovery from costs associated
		repeats	population genomics	with adaptation will often lead to
				loss of adaptive alleles once
10.1				selection in their favor stops
10:4	11:0	JOACHIM SURM	SHIRLI BAR-DAVID	ORNA DAHAN
5	0	The draft genome of <i>Actinia</i> <i>tenebrosa</i> reveals insights into	Impact of human-dominated sites on the fine-scale genetic structure	Exploring the balance between mutations and horizontal gene
		toxin evolution	of the Nubian Ibex in Israel	transfer during bacterial
			of the Nublan ibex in Islael	adaptation
11:0	11:1	RONI RAK	AYELET SALMAN-MINKOV	ABRAHAM KOROL
0	5	A shift in tRNA modifications and	Inference of complex scenarios of	Evolution of recombination
		abundance during T-cell activation	adaptive evolution during rapid	features: numerical models and
			species radiation	experiments with Drosophila
11:1	11:3	HADAR MEDINI	PNINA COHEN	SARAH LEDUC
5	0	Metabolic heterogeneity in	Demographic history of invasive	An ecological tragedy: The
		pancreatic Beta cells: Single cells	fire ants	collection of pre-parasitized prey
		Mitochondrial transcript		by a potter wasp
11:3	11:4	heterogeneity as a model TATIANA ORLI SANDBERG	GAD DEGANI	ODED RECHAVI
11:3 0	11:4 5	RAILEANU	GAD DEGANI Genetic variation of the	Transgenerationally inherited
	5	Insights into the evolution of	distribution of various species of	information regulates reproductive
		Myxozoa mitochondrial genomes	amphibians in Israel	strategies in <i>Caenorhabditis</i>
		,		elegans
11:4	12:0	TALIA KUSTIN	OREN AVRAM	ANNA MELLUL
5	0	Biased Evolution in RNA Viruses	Bacterial adaptations – NOT what	Establishing an experimental-
			you thought	evolution-based method for
				understanding an incomplete
				penetrance mechanism in a model
				of C. elegans

12:0	13:0	Lunch Break
0	0	

Hour		Hall	Room 1	Room2
13:0	13:4			
0	5	Explaining species wide variation:		
		What shapes phenotypic and genotypic diversity?		
13:4 5	14:0 5		Coffee Break	
5	5	Human Evolution &	Evolution of Behaviour	Virus & Mobile Elements
		Paleobiology	(Chair: Lilach Hadany)	(Chair: Yehu Moran)
		(Chair: Dan Mishmar)		
14:0	14:3	OREN KOLODNY	ARNON LOTEM	ADI STERN
5	0	Why did Moderns replace	Crowd wisdom enhanced by costly	Mechanistic insights into the
		Neanderthals and not vice versa?	signaling in a virtual rating system	evolutionary dynamics of
		And what took them so long?!?		competing cheater RNA viruses
14:3 0	14:4 5	<b>YOEL RAK</b> The Neandertal's Place in Nature	<b>ERAN TAUBER</b> Nocturnal and diurnal Drosophila:	MAGDA LEWANDOWSKA
0	Э	The Neardertal's Place in Nature	insights into the genetics of diurnal	dsRNA sensing and antiviral immune response in a non-
			preference	bilaterian model animal
				Nematostella vectensis
14:4	15:0	DOR SHILTON	YAEL GUREVICH	SHAI PILOSOF
5	0	Human Social Evolution: Self-	The evolution of paternal care: a	Network structure of CRISPR
		domestication or self-control?	role for microbes?	immunity shapes the co-
				evolutionary dynamics between
15:0	15:1	YUVAL TABACH	KEITH D HARRIS	hosts and viruses TZACHI HAGAI
13.0	13.1 5	Comparative genomics of 1600	Using cellular automata to study	Caught between pathogens and
U	5	species reveal new insights about	genome evolution	autoimmunity: The evolution of
		"super-traits", Breast cancer, and	5	the mammalian immune system
		human diseases		
15:1	15:3	YOAV RAM	SIMCHA LEV-YADUN	EREZ LEVANON
5	0	Evolution of non-vertical social	Anti-herbivory plant coloration	Purifying selection of long dsRNA
		learning		bounds the layout of mobile
15:3	16:4		Bostor cossion	elements in metazoan genomes
15.5	10.4 5	Poster session		
16:4	17:3	Plenary 3 = Hanna Kokko		
5	0	Gentlemanly males? Always, sometimes, never?		
17:	30	End		

## Thursday 12 December 2019

Hour		Hall	Room 1	Room2
08:00	09:00	Registration		
09:00	09:45	PLENARY 4 = DAN GRAUR		
		Mutational load and the functional fraction of the human genome: It's complicated		
09:45	10:05	Coffee Break		
		Evolutionary Ecology 1	Systems Biology	Microbial Evolution
		(Chair: Eran Tauber)	& EvoDevo 1	(Chair: Adi Stern)
			(Chair: Ariel Chipman)	
10:05	10:30	ARIEL NOVOPLANSKY	NAAMA BARKAI	SARIT AVRANI
		Metaplasticity: fine tuning and	Regulatory evolution: massive	Micro and macro diversity are
		curbing the costs of plasticity	variations in gene abundances	both important for bloom-forming
			contrasts a largely invariant gene-	cyanobacteria interactions with
			regulatory network	their phages
10:30	10:45	MICHAL GRUNTMAN	TAMAR LOTAN	URI OBOLSKI
		Evolution of plant defenses along	Signaling via GABAB receptors	Vaccination affects selection for
		an invasion chronosequence	regulates early development and	antibiotic resistance in
			neurogenesis in the basal	Streptococcus pneumoniae
			metazoan Nematostella vectensis	
10:45	11:00	ACHIK DORCHIN	SMADAR BEN-TABOU DE-LEON	EUGENE ROSENBERG &
		The evolution of floral host	Hypoxic conditions distort sea	ILANA ZILBER-ROSENBERG
		preference in longhorn bees of the	urchin skeletal patterning through	The hologenome concept of
		genus <i>Eucera</i> (Hymenoptera,	the BMP and VEGF signaling but	evolution after 12 Years
		Apidae, Eucerini): is association	not Hif1α, demonstrating	
		with pollen from bee-flowers	divergent and convergent	
		advantageous?	evolution modes	
11:00	11:15	EYALZINGER	ARSENIY MOROV	
		Less fit Lamium amplexicaule	Asymmetrical distribution of	
		plants produce more dispersible	maternal nodal mRNA in	
		seeds	amphioxus embryos by means of	
44.45	11.00		Arp2/3 complex	
11:15	11:30	NETTA DORCHIN	NOA AHARON-HEFETZ	EHUD LAMM
		Evolution of feeding modes and	The role of tRNAs in the cellular	How can holobionts evolve?
		diversification rates in the	proliferation state regulation	
		megadiverse gall midges (Diptera: Cecidomyiidae)		
11:30	11:45	MONICA A MOWERY	ARIE FRIDRICH	OHAD LEWIN-EPSTEIN
		Newly-established brown widow	Evolution and recurrent	Host-microbiome coevolution and
		spiders are more dispersive and	subfunctionalization of	cooperative behavior
			Argonautes in Metazoa revealed	

		less fecund across multiple invasion fronts	by a functional study in sea anemones	
11:45	12:45	Lunch Break		

Hour		Hall	Room 1	Room2	
12:45	13:30		Plenary 5 = Joanna Masel		
		De novo genes and th	De novo genes and the long-term direction of their subsequent evolution		
13:30	13:50	Coffee Break			
		Evolutionary Ecology 2 (Chair: Oren Kolodny)	Systems Biology & EvoDevo 2 (Chair: Smadar Ben Tabou de Leon)	Phylogeny (Chair: Dorothee Huchon)	
13:50	14:05	ALLY HARARI Male effects on the evolution of monandrous mating strategy in moths	HAGAI SHPIGLER The evolution of extreme fertility in advanced eusocial bees and modifications in gonadotropic hormone signaling to reduce brain cost	<b>KSENIA JURAVEL</b> Sequence-independent phylogeny for resolving the non-bilaterian animals relationships	
14:05	14:20	MICHAL SEGOLI The combined effect of host and food availability on optimized parasitoid life history traits based on a three-dimensional trade-off surface	GAT KRIEGER Comparative analysis of yeast species reveals transcriptional rewiring in cis and in trans	<b>KEREN HALABI</b> A codon model for associating phenotypic traits with altered selective patterns of sequence evolution	
14:20	14:35	FRANKLIN SARGUNARAJ Stress as an adaptation: Does experimental cortisol supplementation affect predation risk assessment in foraging gerbils?	JUDY WEXLER Hemimetabolous insects elucidate the origin of sexual development via alternative splicing	SHIRAN ABADI ModelTeller: machine-learning based model selection for optimal phylogenetic reconstruction	
14:35	14:50	LEE KOREN Testosterone is associated with male and female copulation success in opposite ways in wild rock hyrax	AMIR SAPIR Metabolic reconfiguration facilitates widespread sterol auxotrophy during the evolution of the animal kingdom	ANNA RICE Model adequacy for likelihood models of chromosome-number evolution	
14:50	15:05	AMIYAAL ILANY Social inheritance shapes spotted hyena social networks and influences offspring longevity	ARIEL CHIPMAN Developing an integrated understanding of the evolution of arthropod segmentation using fossils and evo-devo	ASHER MOSHE Probabilistic models for genome rearrangements	
15:05	15:20	<b>ROI HOLZMAN</b> Using performance landscapes to understand adaptive diversification within fish	OREN LEV Anterior Segmentation in Arthropods	DANA AZOURI The phylogenetic tree reconstruction game: developing reinforcement-learning algorithms for fast and accurate inference of evolutionary trees	
15:20	15:35	VICTOR CHINA Hydrodynamic constraints shape the performance landscape of the feeding mechanism of fish larvae during the critical period	YONAT GURVICH Evolution through reverse transcription: a potential means to employ Lamarckian-like adaptations	<b>BENJAMIN YAKIR</b> Estimating relatedness in ancient DNA samples	
15:35	16:50	Poster session			
16:50	17:30	Society meeting + Poster prizes			
17	:30		End		