



Satellite Symposium “Chitinous structures in Ecdysozoan species”

September 9th, 2024, University of Hohenheim, Stuttgart

Programme

	09:00-09:05	Prof. Dr. Hans Merzendorfer	Welcome and Introduction
Session I: Synthesis, modification and degradation of chitin in Ecdysozoan species			
Chair: Merzendorfer	09:05-09:50	Prof. Dr. Qing Yang , <i>Chinese Academy of Agricultural Sciences, China</i> (Keynote speaker)	A soybean cyst nematode suppresses microbial plant symbionts using a lipochitooligosaccharide-hydrolysing enzyme
	09:50-10:20	Dr. Lin Liu , <i>Dalian University of Technology, China</i>	Structures, catalysis and inhibition of insect and fungal chitin deacetylases
	10:20-10:50	<i>Coffee Break</i>	
	10:50-11:20	Marius Beck/Mario Wegmann , <i>University of Siegen, Germany</i>	Chitin synthesis and modification in different tissues of <i>Tribolium castaneum</i>
	11:20-11:50	Denise Klinkenbuß , <i>Justus-Liebig University Giessen, Germany</i>	Decoding spider molting: The Halloween gene shadow in the development of the spider <i>Parasteatoda tepidariorum</i>
	11:50-12:20	Associate Prof. Mingbo Qu , <i>Dalian University of Technology, China</i>	The cocktail of chitinolytic enzymes for insect cuticular chitin degradation and the interplay among its constituent enzymes
	12:20-12:50	Dhyeykumar Rabadiya , <i>Leipzig University, Germany</i>	Insect GH18 chitinases and their function in cuticle growth and degradation
	12:50-14:00	<i>Lunch Break</i>	
Session II: Chitin-binding proteins and their functions in chitinous matrices			
Chair: Dirks	14:00-14:30	Ayesha Talib (on behalf of Prof. Dr. Yael Politi), <i>TU Dresden, Germany</i>	Spider cuticular proteins
	14:30-15:00	Dr. Yanwei Duan , <i>Chinese Academy of Agricultural Sciences, China</i>	Chitin synthase-interacting proteins are involved in insect cuticle development
	15:00-15:30	Dr. Lei Chen , <i>Chinese Academy of Agricultural Sciences, China</i>	Insect cuticle protein-assisted organized assembly of chitosan
	15:30-16:00	Linxuan Li , <i>Max Planck Institute for Biology Tübingen, Germany</i>	Biophysical and genetic analysis of chitin-protein interactions for the formation of nematode cuticle and mouth structures
	16:00-16:30	<i>Coffee Break</i>	



Session III: Structural and functional principles of cuticles in Ecdysozoan species			
Chair: Toprak	16:30-17:00	Prof. Dr. Wei Chen , <i>Chinese Academy of Agricultural Sciences, China</i>	Structural insight into chitin biosynthesis
	17:00-17:30	Dr. Chuchu Li , <i>Christian-Albrechts-Universität zu Kiel, Germany</i>	How does a delicate insect wing resist damage? Chitin orientation is adapted to the mechanical demands at the nanoscale
	17:30-18:00	Prof. Dr. David G. Heckel , <i>Max Planck Institute for Chemical Ecology Jena, Germany</i>	Probing the activation of chitin synthase 2 using Vip3Aa-resistant mutants
	18:00-18:30	Prof. Dr. Jan-Henning Dirks , <i>University of Applied Science Bremen, Germany</i>	Is the Local Dermal Light Sensor a Trigger for Synchronized Chitin-Fibre Deposition?
	18:30-19:00	Associate Prof. Gustavo Rezende , <i>University of Valencia, Spain // CBB, UENF, Brazil</i>	Protection against water loss: How a chitinized egg cuticle assisted insects conquer land 480 million years ago
	19:00-19:10	<i>Break</i>	
Session IV: Chitin in insects from a historical perspective			
	19:10-19:55	Prof. Dr. Umut Toprak , <i>Ankara University, Turkey</i> <i>(Keynote Speaker)</i>	Insect Equals Chitin: The Story of Wigglesworth, the Young Man, and the Old Man
	19:55-20:00	Closing Remarks	