22nd - 26th March 2021



OIST Mini-Symposia & COLOSS ASIA Okinawa

PROGRAM BOOK

Hosted by the Okinawa Institute of Science and Technology Ecology and Evolution Unit



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OIST Mini-Symposia 22-24 March 2021



PROGRAM OIST Mini-Symposia 22-24 March 2021

Monday 22nd March 2021

Invited talks

[Zoom link]

18:30-18:50 JST	Opening ceremony	
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Live (Alexander) Sasha Mikheyev (OIST – Japan / ANU - Australia)

18:50-19:20 JST Honey bee ecotoxicogenomics

Live Amy Paten (CSIRO – Australia)

19:20-19:50 JST Varroa mite genes interact with its viruses' load

Live Nurit Eliash (OIST - Japan)

19:50-20:10 JST	Spatial Chat or Break
20:10-20:40 JST Live	A holistic view of global honey bee health Peter Neumann (Institute of Bee Health, University of Bern, Switzerland)
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20:40-21:10 JST Would a gene drive work in *Varroa destructor*?

Live Brock Harpur (Purdue University - USA)

21:10-21:30 JST Spatial Chat or Break

21:30-22:00 JST Varroa – challenges in management

Live Dennis vanEngelsdorp (University of Maryland - USA)

22:00 JST CLOSING SESSION

Inv	rite	ed t	alk	S

[Zoom link]

18:30-19:00 JST Live	TBD (Alexander) Sasha Mikheyev (OIST – Japan / ANU - Australia)
19:00-19:30 JST	The current status of beekeeping in Japan, focusing on the influence of bee diseases on Japanese beekeeping Kiyoshi Kimura (NARO - Japan)
19:30-20:00 JST Live	Surveillance and genetic characterization of Varroa mites in Japan Mari Ogihara (NARO - Japan)

20:00-20:20 JST	Spatial Chat or Break
20:20-20:50 JST	An overview of the honeybee genetic diversity and health in the Indian Ocean Islands Hélène Delatte (CIRAD – Reunion Island / Madagascar)
20:50-21:20 JST	The dynamics of Deformed wing virus genotypes in varroa-infested honey
Live	bee colonies Robert Paxton (Martin Luther University Halle-Wittenberg - Germany)
21:20-21:35 JST <mark>Live</mark>	BeeBiome Beta Version Resource Benjamin Dainat (Agroscope – Switzerland)

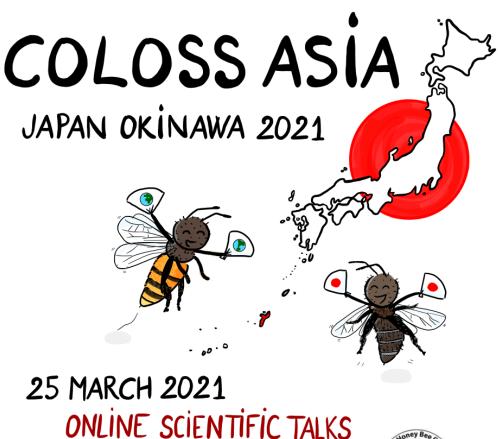
21:30 JST

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[Zoom link]

18:30-19:00 JST Live	Virus silencing in honey bees and their mites Emily Remnant (University of Sydney - Australia)
19:00-19:30 JST	New method of injecting solution into the abdomen to overcome fixation delay of the midgut on making the histological specimens of honeybee worker
Live	Tetsuro Inamoto (Kyoto Prefecture Livestock Division - Japan)
19:30-20:00 JST Live	The gut microbiota affects the social network of honey bees Philipp Engel (University of Lausanne - Switzerland)
20:00-20:20 JST	Spatial Chat or Break
20:20-20:50 JST Live	TBD TBD
20:50-21:30 JST	GENERAL DISCUSSION I

CLOSING OIST Mini-Symposia



26 MARCH 2021

BEEKEEPERS SEMINAR

PROGRAM COLOSS Asia Okinawa 25-26 March 2021

Thursday 25th March 2021

Morning session (Scientific talks)

[Zoom link]

09:40-10:00 JST: Opening session

Live COLOSS Asia Okinawa committee members

10:00-10:30 JST: COLOSS and activities

Live Peter Neumann (President of COLOSS)

10:30-10:50 JST: Perspective of genome editing aiming at building the better strains of the

honey bee Apis mellifera

Live Masatsugu Hatakeyama (NARO - Japan)

10:50-11:10 JST: What have we learnt studying Varroa destructor in Asia?

Live Huoqing Zheng (Zhejiang University - China)

11:10-11:30 JST: The untold story of Varroa mite successful invasion unravelled by worldwide

population genomics

Live Maeva Techer (OIST - Japan)

11:30-11:50 JST: Establishment of a simple method for ex vivo honey bee cell culture capable

of gene expression analysis

Recorded Kazuyo Watanabe (NARO - Japan)

11:50-12:10 JST: Application of thiamethoxam in mustard adversely affects honey bee colonies

Live Amit Choudhary (Punjab Agricultural University - India)

Afternoon sessions (Scientific talks)

[Zoom link]

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14:00-14:20 JST: Ecological treatment of Varroosis: Brood interruption techniques and

application of oxalic acid

Recorded Frías-Álvarez Ariadna (Spain)

14:20-14:40 JST: Study of the main causes of mortality of honey bee colonies Apis mellifera

intermissa in Algeria

Live Noureddine Adjlane (Mhamed Bougara University - Algeria)

14:40-15:00 JST: Removal of veterinary treatments and other residues from beeswax

Recorded Alba Luna (INIA - Spain)

15:00-15:20 JST: Toxicity Effect of Five Essential Oils and their Components Derived from

Cymbopogon citratus, Eucalyptus globulus, Rosmarinus officinalis, Thymus schimperi, Trachyspermum ammi against Varroa destructor in Laboratory

Tests

Unconfirmed Daniel Bisrat (Andong National University, Addis Ababa University –

Korea & Ethiopia)

15:20-15:40 JST:	Spatial	Chat	or Break
13.20-13.40 131.	Spauai	Ullat	or Dieak

15:40-16:00 JST: Beekeeping industry in Iran: Current status and future directions

Recorded Alireza Arab (University of Tehran - Iran)

16:00-16:20 JST: THERE AND BACK AGAIN – Deciphering the host specificity of *Varroa* spp.

with population genetics

Live Alexis Beaurepaire (University of Bern, Switzerland)

16:20-16:40 JST: Beekeeping in the meeting point of continents: From Asia to Europe

Live Aslı Özkırım (Hacettepe University - Turkey)

16:40-17:00 JST: Polymorphism of COI gene in honey bees from different regions of Ukraine

Recorded Roman A. Volkov (Yuriy Fedkovych Chernivtsi National University -

Ukraine)

Afternoon sessions (Scientific talks)

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14:00-14:20 JST: Observation of monthly metabolic changes in honey bee workers using ¹H

NMR

Live Saetbyeol Lee (Czech University of Life Sciences Prague - Czech

Republic)

14:20-14:40 JST: Combined effects of temperature and nutritional stress on TBARS level in

Apis mellifera

Recorded Liudmyla Yazlovytska (Yuriy Fedkovych Chernivtsi National University,

Ukraine)

14:40-15:00 JST: The INSIGNIA project: a citizen science protocol for honeybee colony as bio-

sampler for pesticides

Recorded Jozef van der Steen (Alveus AB Consultancy - The Netherlands)

15:00-15:20 JST: Do novel insecticides and viral pathogens interact to harm honey bees?

Live Yahya Al Naggar (Martin Luther University Halle-Wittenberg – Germany)

15:20-15:40 JST:	Spatial Chat or Break
15:40-16:00 JST:	Determination of some heavy metals and elements in honeybee and honey samples from Saudi Arabia
Recorded	Dalal M. Aljedani (University of Jeddah - Saudi Arabia)
16:00-16:20 JST:	Bridging bee research and Asian beekeeping practice: how do beekeepers gain knowledge about good beekeeping practices?
Recorded	Lotta Fabricius Kristiansen (Swedish University of Agricultural Sciences - Sweden)
16:20-16:40 JST:	Honey Bee Watch: Using Citizen Science for the First Global Monitoring of
Live	Free-Living Colonies of all <i>Apis</i> Species Raffaele Dall'Olio (BeeSources – Beekeeping Consultancy - Italy)

16:40-17:00 JST: Disrupting Varroa – honeybee host interaction: A focus on chemosensory

proteins

Live Victoria Soroker (Volcani Institute - Israel)

Morning session (Scientific talks)

[Zoom link]

09:50-10:00 JST: Live	Opening session COLOSS Asia Okinawa committee members
10:00-10:20 JST:	Dynamics of Temporal Transcriptomic and Epigenomic in Response to Lethal Viral Infection Hongmei Li-Byarlay (Agricultural research and development program, Central State University, Wilberfoce Ohio, USA)
10:20-10:40 JST:	Draft genome sequences of the Japanese honey bee, Apis cerana japonica and comparative genomic analysis for honey bee health Kakeru Yokoi (NARO - Japan)
10:40-11:00 JST: Live	A potential probiotic, Leuconostoc sp. TBE-8 for honey bee, Apis mellifera Ming-Cheng Wu (National Chung Hsing University - Taiwan)
11:00-11:20 JST:	Spatial Chat or Break
11:20-11:40 JST:	Evaluation of hygienic behaviour of <i>Apis mellifera</i> Linnaeus colonies by pinkilled brood method Bharathi Mohindru (Punjab Agricultural University - India)
11:40-12:00 JST:	Formulated Neonicotinoid Insecticides influence the Sugar Responsiveness and Orientation Behavior of Honey Bees (<i>Apis Mellifera</i>) Under Laboratory Condition Muhammad Shoaib Saleem (University of Karachi - Pakistan)
12:00-12:20 JST:	The effect of dynamic diluted compounds in controlling Varroa mite population in honey bee colonies (<i>Apis mellifera</i>) Fatemeh Ghaziani (University of Tehran – Iran)

Afternoon Beekeeper Seminar (Japanese/English)

Language spoken -> Language translated

[Zoom link]

13:30-13:45 JST: Recorded EN -> JP	Bridging bee research and Asian beekeeping practice: how do beekeepers gain knowledge about good beekeeping practices? Lotta Fabricius Kristiansen (Swedish University of Agricultural Sciences - Sweden)
13:45-14:00 JST:	Honey Bee Watch: Using Citizen Science for the First Global Monitoring of Free-Living Colonies of all <i>Apis</i> Species

Recorded EN -> JP Raffaele Dall'Olio (BeeSources - Beekeeping Consultancy - Italy) & Steve Rogenstein (The Ambeessadors)

14:00-14:30 JST: 日本の養蜂場におけるミツバチへギイタダニの浸潤状況及びその特性解析 Live JP -> EN Mari Ogihara 荻原 麻理 (NARO – Japan)

14:30-14:50 JST:	Break
14:50-15:20 JST:	An example of SDGs honey bee research bridging with local community: Honey and Coral Project
Live JP -> EN	Kirino Ryo 桐野龍 (Onna Village Public Office – Okinawa 恩納村役場)
15:20-15:40 JST:	What genome sequencing has taught us on beekeeping pests spread and evolution? A perspective on the Varroa mite problem
Live EN -> JP	マエヴァテシェル Maeva Techer (OIST – Japan)
15:40-16:00 JST:	Beekeeping and management in tropical island: the example of Reunion Island in Indian Ocean
Recorded EN -> JP	オリヴィエ・エスノー Olivier Esnault (衛生防御グループ GDS – Reunion Island, France)
16:00-17:00 JST:	Open questions and discussion among beekeepers and researchers

Code of Conduct

- By participating in the OIST Mini-symposia (22nd to 24th March 2021) and COLOSS Asia Okinawa (25th to 26th March 2021), you agree to abide to this code of conduct
- If you do not agree or do not meet expected, collaborative, respectful behavior, your participation will be immediately revoked on all virtual platforms. In addition, your misconduct can be reported for future related conferences participation.

Expected behavior

- Similarly, to any regular in-person meeting, you are required to treat everyone with respect, regardless of race, age, culture, ability, ethnicity or nationality, gender identity and expression, sexual orientation, marital status, religious affiliation, and socioeconomics status, etc.
- Provide your true professional identity, affiliation, and contact information at the registration and during sessions.
- Turn off your microphone and videos during Zoom session unless you are the speaker or asked to do so (to avoid technical issues with the high number of participants)

Photos / Recording / Social Media Policy

- Many talks and virtual collaborative exchange will likely include unpublished data; you are required to ask the presenter or fellow participant before sharing with others and on social media.
- Live tweeting of presentations is allowed unless the speaker explicitly opts out by stating so at the start of his/her/their talk. Taking or sharing photos, videos are not permitted unless the presenter stated his/her/their consent be considerate.





Unacceptable Behaviors

taken from GSA conferences https://genetics-gsa.org/tagc-2020/conference-code-of-conduct Unacceptable behaviors include, but are not limited to:

- Intimidating, harassing, abusive, discriminatory, derogatory, or demeaning speech or actions by any participant and at all related events
- Harmful or prejudicial verbal or written comments or visual images related to gender, gender expression, gender identity, marital status, sexual orientation, race, religion, political orientation, socioeconomic, disability or ability status, or other personal characteristics, including those protected by law
- Inappropriate use of nudity and/or sexual images (including presentation slides, posters, Slack channels, or Zoom chat)
- Deliberate intimidation or stalking
- Violating the rules and regulations of the online provider, Zoom
- Sustained disruption of scientific sessions or other events
- Unwelcome and uninvited attention or contact
- Real or implied threat of physical harm
- Real or implied threat of professional or financial damage or harm
- Photographing or reproducing slides of oral presentations and posters without permission
- Recording of scientific and other sessions without permission

Report

In case of doubt or report need, contact the committee at colossasia2021@gmail.com

List of registered participants	
	Speakers

First Name	Last Name	Country	Email	Institute	OIST Mini- Symposia	COLOSS ASIA Okinawa
Raied	Abou Kubaa	Italy	Raied.aboukubaa@ipsp.cnr.it	Reasearcher at Italian National Center, IPSP-Bari	Х	
eonora	Adamchuk	Ukraine	leonora.adamchuk@gmail.com	National University of Life and Environmental Sciences of Ukraine		X
Noureddine	Adjlane	Algeria	adjlanenoureddine@hotmail.com	University of Boumerdes, Department of Agronomy	Х	Х
bdessamad	Aglagane	Morocco	abdessamad.agl15@gmail.com	University Ibn Zohr, Faculty of science Agadir	X	X
Daniel	Aguado	Spain	daguadol@jccm.es	CIAPA	X	
Dlogundudu	Akinbode Foluso	Nigeria	akinbodefoluso@gmail.com	Department of biology, federal university of technology Akure	X	
Kayode	Akinwande	Nigeria	akinkay20032001@yahoo.com	-	X	
′ahya	Al Naggar	Germany	yehia.elnagar@science.tanta.edu.eg	Martin Luther University Halle-Wittenberg	Х	Х
Dalal	Aljedani	Saudi Arabia	dr.daljedani@gmail.com	University of Jeddah	Х	X
Esmaeil	Amiri	USA	e.amiri79@gmail.com	University of North Carolina at Greensboro	X	
Alireza	Arab	Iran	alirezaarab83@gmail.com	University of Tehran	Х	X
Rajini	Arjun	India	rajitox@gmail.com	International Institute of Biotechnology and Toxicology (IIBAT)		X
Jigyasa	Arora	Japan	jigyasa-arora@oist.jp	OIST	Х	
Sara	Bariselli	United Kingdom	smba94@live.com	Bangor University		Х
Marilina	Basso	Argentina	basso@cae.cnea.gov.ar	National Atomic Energy Commission		Х
Alexis	Beaurepaire	Switzerland	Alexis.Beaurepaire@vetsuisse.unibe.ch	Institute of Bee Health, University of Bern	Х	X
Suzan	Benedick	Malaysia	suzanben@ums.edu.my	Universiti Malaysia Sabah	X	Х
Maria	Benito Murcia	Spain	Mbmurcia@ucm.es	-	Х	
Alicia	Bertolotti	France	alicia.bertolotti@anses.fr	ANSES	X	
Danilo	Bevk	Slovenia	danilo.bevk@nib.si	National Institute of Biology		X
Daniel	Bisrat	Ethiopia	-	Addis Ababa University		Х
Maria	Bouga	Greece	mbouga@aua.gr	Agricultural University of Athens		Х
Nohad	Boujawdeh	Lebanon	nohadboujawdeh@gmail.com	NBJ Apiculture Consultancies	Х	X
María	Buendía-Abad	Spain	mbuendia92@gmail.com	-	X	
Vatalia	Bulacio Cagnolo	Argentina	bulacio.natalia@inta.gob.ar	National Institute of Agricultural Technology (INTA)	X	
Vargot	Camoin	New caledonia	resa@adecal.nc	New Caledonia honey bee health surveillance network	X	
David	Carlson	United States	dacarls@gmail.com	USDA/ U. Florida		Х
Dayson	Castilhos	Brazil	dayson.castilhos@yahoo.com.br	UFERSA - Universidade Federal Rural do SemiÃjrido		X
Panuwan	Chantawannakul	Thailand	panuwan@gmail.com	University of Chiang Mai	Х	X
Vadine	Chapman	Australia		University of Critarig Mail University of Sydney	X	^
vagine Jean-Daniel	Charriere	Switzerland	nadine.chapman@sydney.edu.au jean-daniel.charriere@agroscope.admin.ch	-	X	
Marie-Pierre	Chauzat	France	marie-pierre.chauzat@anses.fr	European Reference Laboratory of honeybee health - ANSES	X	
	Cherevatov	Ukraine		Yuriy Fedkovych Chernivtsi National University		X
Alexandr		India	o.cherevatov@chnu.edu.ua	Punjab Agricultural University		X
Amit	Choudhary		amitento@pau.edu			X
Joe	Colgan	Germany	tcolgan@uni-mainz.de	JGU Mainz		
Cristina Amaro	Costa	Portugal	amarocosta@esav.ipv.pt	Polytechnic Institute of Viseu	Х	X
Raffaele	Dall'Olio	Italia	raffaele.dallolio@gmail.com	BeeSources - Beekeeping Consultancy, Council for Agricultural Research and Economics (CREA)	X	X
Anne	Dalmon	France	anne.dalmon@inrae.fr	INRAE - National Research Institute for Agriculture, Food and	X	X
				Environment		
Miray	Dayroğlu	Turkey	miray.gur@gmail.com	-	Х	
Grecia	de Groot	Argentina	grecia.degroot@gmail.com	CONICET		X
Neville	Dearden	United Kingdom	n.dearden@sheffield.ac.uk	University of Sheffield		X
Helene	Delatte	Reunion, Madagascar	helene.delatte@cirad.fr	CIRAD, Reunion Island	X	
Vincent	Dietemann	Switzerland	vincent.dietemann@agroscope.admin.ch	Swiss Bee Research Centre (Agroscope)	Х	X
Tobias	Dittmann	Germany	t.dittmann@tskmv.de	Tierseuchenkasse Mecklenburg Vorpommern		X
Greg	Dojchinov	Australia	Greg.Dojchinov@csiro.au	Research Projects	X	
Rusznak	Dora Veronika	Hungary	dora.rusznak@mfa.gov.hu	Agricultural affairs, Embassy of Hungary	X	
Vincent	Doublet	Germany	vincent.doublet@uni-ulm.de	University of Ulm	Х	
	du Rand	South Africa	ezette.durand@up.ac.za	University of Pretoria		X
Ezette		France	veronique.duquesne@anses.fr	ANSES	Х	
Veronique	Duquesne		delobeid@gmail.com	Faculty of Agriculture - Lebabese University		X
/eronique Dany	El-Obeid	Lebanon			V	V
Veronique Dany Nurit	El-Obeid Eliash	Israel	norikachan@gmail.com	OIST	X	Х
Veronique Dany Nurit Philipp	El-Obeid Eliash Engel	Israel Switzerland	philipp.engel@unil.ch	University of Lausanne, Switzerland	X X	
Veronique Dany Nurit Philipp Sonia	El-Obeid Eliash Engel Eynard	Israel Switzerland France	philipp.engel@unil.ch sonia.eynard@inrae.fr	University of Lausanne, Switzerland INRA		Х
Veronique Dany Nurit Philipp Sonia Lotta	El-Obeid Eliash Engel Eynard Fabricius Kristiansen	Israel Switzerland France Sweden	philipp.engel@unil.ch sonia.eynard@inrae.fr lotta.fabricius@slu.se	University of Lausanne, Switzerland INRA Swedish University of Agricultural Sciences		X X
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List of registered participants	
	Speakers

				Speakers		
First Name	Last Name	Country	Email	Institute	OIST Mini- Symposia	COLOSS ASIA Okinawa
Hongmei	Li-Byarlay	U.S.A	hli-byarlay@centralstate.edu	Agricultural research and development program, Central State University		Х
Zheguang	Lin	China	z.lin@yzu.edu.cn	Yangzhou University		Х
Alba	Luna	Spain	albalunajimenez@gmail.com	National institute for research in agricultural and food		X
Jennifer	Lund	United States	jennifer.lund@maine.gov	technology (INIA) State of Maine	Х	Х
Kannan	Mani	Israel	ahilkannanbdu@gmail.com	ARO-Volcani Research Center	X	
				Graduate School of Life and Environmental Sciences,	X	
Shigeru	Matsuyama	Japan	matsuyama.shigeru.fu@u.tsukuba.ac.jp	University of Tsukuba		
Ewa	Mazur	Poland	ewa_mazur@sggw.pl	Warsaw University of Life Sciences	Х	Х
Daniel	McGhee	United Kingdom	danielmcghee@hotmail.com	Glasgow and District Beekeepers Association		X
John	Mclean	New Zealand	jands.mclean@gmail.com	Apiculture New Zealand Science and Research Focus Group	X	X
	Mikheyev	Australia	sasha@homologo.us	ANU, OIST	X	X
Hlaing	MinOo	Myanmar	drhminoo@gmail.com	Provide Androids and Hair contin	Х	Х
Bharathi Giulia	Mohindru Molinatto	India Italia	bharathiento@pau.edu giulia.molinatto@gmail.com	Punjab Agricultural University	X	X
Linde	Morawetz	Austria	linde.morawetz@ages.at	University of Torino Austrian Agency for Health and Food Safety (AGES)	^	Х
Alele	Moses Okello	Uganda	alelem21@gmail.com	District Entomology Officer, Otuke District Local Government	Х	^
Peter	Neumann	Switzerland	peter.neumann@vetsuisse.unibe.ch	Institute of Bee Health, Vetsuisse Faculty, University of Bern	X	Х
Mari	Ogihara	Japan	ogiharam590@affrc.go.jp	NARO, Tsukuba	X	
Tugce	Olgun	Turkey	tugce.olgun@tarimorman.gov.tr	Aegean Agricultural Research Institute	,,	Х
Erkay	Ozgor	Cyprus	erkayozgor@gmail.com	Cyprus International University		Х
Asli	Özkırım	Turkey	asli.ozkirim@gmail.com	Hacettepe University		X
Taskiran	Ozsoy	Turkey	neslihn@gmail.com	-	Х	
Ostap	Palamar	Ukraine	palamar.ostap@chnu.edu.ua	Chernivtsi National University		Х
Delphine	Panziera	Netherlands	delphine.panziera@wur.nl	Wageningen University and Research	Х	X
Melanie	Parejo	Spain	melanieparejo@ehu.eus	University of the Basque Country	Х	
Ana	Park	USA	Minhae81@gmail.com	-	Х	
Amy	Paten	Australia	amy.paten@csiro.au	CSIRO, Australia	X	
Robert J.	Paxton	Germany	robert.paxton@zoologie.uni-halle.de	Martin Luther University Halle-Wittenberg, Germany	X	
Valizadeh	Pegah	Iran	valizadehpegah@gmail.com	- ADIMOV	Х	
Benjamin Dotsha	Poirot Raheem	France	benjamin.poirot@apinov.com	APINOV		X X
Emily	Remnant	Iraq Australia	dotsha.raheem@su.edu.krd emily.remnant@sydney.edu.au	Salahaddin University-Erbil University of Sydney	Х	^
Muhammad	Rizwan	Pakistan	rizwan_entomologist@yahoo.com	University of Sydney University of Agriculture Faisalabad Pakistan	X	
Miguel Angel	Rodriguez	Spain	miguelangel.rodriguez@vetopharma.com	UCM	^	X
Steve	Rogenstein	Germany	ambeessadors@gmail.com	The Ambeessadors		X
Lee	Saetbyeol	Czech Republic	lees@af.czu.cz	Czech University of Life Sciences Prague		X
Shoaib	Saleem	Pakistan	shoaibsaleemkhan@gmail.com	University of Karachi		X
Violeta	Santrac	Bosnia & Herzegovina	vsantrac@yahoo.com	Public Veterinary Institute of the Republic of Srpska "Dr Vaso Butozan" Banaj Luka	х	
Thomas	Sawe	Tanzania	tcorodius87@gmail.com	Tanzania Forestry Research Institute Consejo Nacional de Investigaciones Cientificas y Tecnicas	X	Х
Alejandra	Scannapieco	Argentina	alejandrascannapieco@gmail.com	(CONICET) - Instituto Nacional de tecnologia Agropecuaria (INTA)		Х
Rya	Seltzer	Israel	rya3683@gmail.com, ryaseltzer@gmail.com	School of Zoology George S. Wise Faculty of Life Sciences, Tel Aviv University	X	X
Tetiana	Senchuk	Ukraine	Senchuktanya.bee@gmail.com	National Research Center "Institute of Beekeeping"	Х	
Muhammed	Shoaib Saleem	Pakistan	shoaibsaleemkhan@gmail.com	University of Karachi		X
Peter	Šima	Slovakia	psima@koppert.sk	Koppert s.r.o. (Koppert Biological Systems)	X	
Suzana	Skerbis	Slovenia	Suzana.Skerbis@vf.uni-lj.si	University of Ljubljana		X
Victoria	Soroker	Israel	sorokerv@volcani.agri.gov.il	Volcani Institute		X
Martin	Staron	Slovakia	martin.staron@nppc.sk	-	X	
Jevrosima	Stevanovic	Serbia	rocky@ver.bg.ac.is,	University of Belgrade	X	X
Maeva	Techer	Japan	maeva.angelique.techer@gmail.com	OIST	X	X
Juraj	Toporcak	Slovakia	toporcaktoporcak@gmail.com	University of Veterinary Medicine and Pharmacy	Х	X
Peter	Tornow	Germany	petertornow@web.de	University of Halle-Wittenberg	Х	
Amjad	Ullah	Pakistan	amjadullah609@gmail.com	Kohat University of Science and Technology Kohat Pakistan	Х	X
Mustafi	Valon	Germany	valon.mustafi@outlook.de	-	X	
John	Van den wildenberg	Netherlands	degroeneimkerij@gmail.com	-	Х	
Jozef	van der Steen	The Netherlands	alveusab@outlook.com	Alveus AB Consultancy	V	Х
Dennis	VanEngelsdorp	U.S.A	dvane@umd.edu	University of Maryland University of Sussex	X X	Х
Oliver Roman	Visick Volkov	United Kingdom Ukraine	ov32@sussex.ac.uk r.volkov@chnu.edu.ua	Dept. of Molecular genetics and biotechnology, Yuriy Fedkovych Chemiytsi National University, Chemiytsi	×	^
Kazuyo	Watanabe	Japan	kazuwata@affrc.go.jp	NARO		X
Anthony	Williams	United Kingdom	anthony.williams@dmu.ac.uk	De Montfort University		X
Luke	Woodford	United Kingdom	lw86@st-andrews.ac.uk	University of St Andrews	Х	**
Ming-Cheng	Wu	Taiwan	mcwu12@gmail.com	Department of Entomology, Nation Chung Hsing University	X	Х
Venkatesh	YN	India	venkateshyn27@gmail.com	ICAR- Central Agroforestry Research Institute		X
Liudmyla	Yazlovitska	Ukraine	l.yazlovitska@chnu.edu.ua	Yuriy Fedkovych Chernivtsi National University		X
Kakeru	Yokoi	Japan	yokoi123@affrc.go.jp	Institute of Agrobiological Sciences (NIAS), National Agriculture and Food Research Organization		X
Huoqing	Zheng	China	hqzheng@zju.edu.cn	Zhejiang University		Х