



# ICP8

## 8<sup>TH</sup> INTERNATIONAL CONFERENCE ON PHTHIRAPTERA

June, 10-13 2025  
Marseille - France

LOCAL ORGANIZING COMMITTEE

Olivier Chosidow  
Bernard Davoust  
Pascal Delaunay  
Pierre-Edouard Fournier  
Émilie Génin  
Arezki Izri

SCIENTIFIC COMMITTEE

Sarah E. Bush  
Kosta Y. Mumcuoglu  
Oleg Mediannikov  
Kevin P. Johnson

LOCATION

IHU Méditerranée Infection, Marseille, France  
19-21 boulevard Jean Moulin, 13005 Marseille  
<https://icp8.org>







## ÉDITO

Dear colleagues, Dear friends,

I am extremely pleased and honored to welcome you in Marseille for the 8th International Conference on Phthiraptera 2025. The adventure began with a first meeting in United States of America in 1972 (ICP1) and the rhythm of meetings from 2002 (ICP2) increased to its current pace of one congress every four years. The 2025 meeting gathers 100 participants from throughout the world, and the program is equally balanced between oral and pos-

ter presentations. I would like to acknowledge the precious help of the members of the ICP8 Organizing and Scientific Committees who have enabled us to build an attractive program.

I hope that you will enjoy your time in Marseille and wish you a fruitful conference.

Pierre-Edouard Fournier  
Directeur of the IHU  
Méditerranée Infection

## EXECUTIVE COMMITTEE

**President: Sarah E. Bush**  
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# General overview

	Tue. June 10	Wed. June 11	Thur. June 12	Fri. June 13
Time				
9:00		Opening remarks	Annoncements nominations	Annoncements nominees
9:15		Keynote : Bret (T1)	Keynote : Dale (T23) (RDP memorial) (T23)	IHU Méditerranée Infection (T31-32)
9:30				
9:45				
10:00				
10:15		Epidemiology & control of lice in humans & domesticated animals (T2-T5)	Morphology, Systematics, Diversity – Part I (T18 - T22)	Human lice: Genetics, Geography & Relationships with Symbionts (T33-T35)
10:30				
10:45				
11:00		Coffee Break	Coffee Break	Coffee Break
11:15				
11:30				
11:45		Continued	Population genetics, genomics & evolution (T28 - T30)	Continued (T36-T39)
12:00				
12:15				
12:30		Lunch	Lunch	Lunch
13:45				
14:00		Continued (T10 - T11)		
14:15				
14:30				
14:45				
15:00		Population genetics, genomics & evolution (T12 - T17)		Ecology & Evolution (T40 - T47)
15:15				
15:30				
15:45				
16:00		Coffee Break	Local excursions	Coffee Break
16:15				
16:30				
16:45				
17:00		Morphology, Systematics, Diversity – Part I (T18 - T22)		Concurrent Roundtables Futur of human head lice control or Updating host-parasite checklists
17:15				
17:30				
17:45		Break		
18:00	Welcome Reception	Poster Session	Gala Dinner	Closing and Farewell
19:00				
20:00				

# Scientific Program

June 10<sup>th</sup>

18:00-20:00

Welcome ceremony

9:00-9:15

Opening Remarks

June 11<sup>th</sup>

## Keynote

Chair: Sarah E. Bush

T1. 9:15-10:00

**Bret Boyd**

Assistant Professor, Center for Biological Data Science,  
Virginia Commonwealth University

**Untangling nature's hidden experiment with lice  
and bacteria provides insights into the evolution of  
symbiosis.**



### Epidemiology & control of lice in humans & domesticated animals

T2. 10:00-10:15

Mattéo Dorvillé, Berthine Toubaté, Foteini Koutroumpa, Claudio Lazzari, Catherine Dupuy, Joël Meunier and [Françoise Debierre-Grockiego](#) – Effect of ivermectin on olfactory receptor expression and behaviour towards repellent molecule of human lice.

T3. 10:15-10:30

[Marina Eremeeva](#), Lance A. Durden, Jonathan Eisenstat, Brian C. Hargrove and Edward B. Mondor – Severe *Pediculus humanus capitinis* infestation and neglect: pathology, morphological and genetic features.

**T4. 10:30-10:45**

Carl Boodman – The changing epidemiology of louse-borne diseases in Canada.

**T5. 10:45-11:00**

Ian Burgess – Innovations and failures of treatments for head lice in the 21st century.

**11:00-11:30      Break**

**T6. 11:30-11:45**

Ian Burgess – The long view of Covid-19 and head lice.

**T7. 11:45-12:00**

Birgit Habedank – Control of head louse infestations: Updated recommendations in Germany.

**T8. 12:00-12:15**

Joanna Shu – Novel mechanical approaches to head lice: Clinical and lab data from a medical device startup.

**T9. 12:15-12:30**

Nambininiavo Marianne Ranorohasimanana, Mohammad Akhoudi, Sedera Radoniaina Rakotondrasoa, Masy Nasandratra Razafindrakotosoa, Yannick Sonjah Raveloarisaona, Ourida Chebbah, Sophie Brun, Philippe Parola, Arezki Izri, and Lala Rasoamialy-Soa Razanakolona – A cross-sectional study of human lice infestations in Antananarivo, Madagascar: Epidemiological and clinical insights.

**12:30-14:00      Lunch**

**T10. 14:00-14:15**

Merel Jacobs, Jennifer Ketzis, Andreea Iani, Clara Camargo, Christian-Olimpiu Martonos, Bart Rossel and Laurens De Schepper – The efficacy of a novel lice product was assessed based on its ability to reduce lice infestation, using chickens as a model.

**T11. 14:15-14:30**

Camille Gamblin – Efficacy of (es) afoxolaner (NexGard®/NexGard® Combo) against natural infestations with lice in dogs and cats under field conditions.

**Chair: Jan Štefka**

**T12. 14:30-14:45**

Andrew Sweet, Kevin Johnson, Tomas Nájer and Stephen Cameron – Extreme variation in the structure and organization of mitochondrial genomes in parasitic lice.

**T13. 14:45-15:00**

Renfu Shao and Nan Song – Loss of mitochondrial single stranded DNA-binding protein (mtSSB) gene is associated with mitochondrial genome fragmentation in Psocodea (bark lice, book lice and parasitic lice).

**T14. 15:00-15:15**

Jana Martinů, Lenka Kotěborská and Jan Štefka – Different patterns of admixture in mitochondrial and nuclear DNA across *Polyplax serrata* hybrid zone in central Europe.

**T15. 15:15-15:30**

Tomas Nájer, Jorge Doña, Aleš Buček, Andrew D. Sweet, Oldřich Sychra and Kevin P. Johnson – High-throughput sequencing reveals the timescale of evolution in Amblycera.

**T16. 15:30-15:45**

Juliana Soto-Patiño, Jorge Doña and Kevin P. Johnson – Tracking host evolution through parasites: Myrsidea lice in suboscines and the puzzling case of *Sapayoaaenigma*.

**T17. 15:45-16:00**

Andrew Sweet, and Kevin P. Johnson, Stephany Virrueta Herrera, and Jorge Doria. Estimating effective population size from a single louse genome: Case studies.

**16:00-16:30      Break**

## Morphology, Systematics, Diversity – Part I

**T18. 16:30-16:45**

Kayce C. Bell, Priscilla A. San Juan, Jana Martin Říhová, Lance A. Durden, Jessica E. Light and Julie M. Allen – New insights into sucking louse (Anoplura) relationships.

**T19. 16:45-17:00**

Lance A. Durden, Kayce C. Bell, Priscilla A. San Juan, Julie M. Allen and Jessica E. Light – Systematics of sucking lice (Phthiraptera: Anoplura): morphological or molecular classification?

**T20. 17:00-17:15**

Priscilla A. San Juan, Lance A. Durden, Julie M. Allen, Anna J. Phillips and Kayce C. Bell – Combining morphology with genomics to shed light on chipmunk sucking louse systematics (genus *Hoplopleura*).

**T21. 17:15-17:30**

Marek Schneider, Stanislav Kolencik, Kevin P. Johnson, Jason D. Weckstein, Mohamed F. Sallam, Julie M. Allen and Oldrich Sychra – Diversity, host associations and geographical distribution of lice of the genus *Myrsidea* (Amblycera: Menoponidae).

**T22. 17:30-17:45**

Therese ("Rese") A. Catanach, Kiana Habersham, Kevin P. Johnson, Jason D. Weckstein – Integrating legacy data and whole genome sequencing on both sides of the tanglegram uncovers unexpected cospeciation in *Degeeriella*.

**18:00-20:00      Poster Session (cover page 12)**

June 12<sup>th</sup>

**9:00-9:15 Announcements**

## Keynote

**Chair: Kosta Y. Mumcuoglu**

**T23. 9:15-10:00**

**Dale H. Clayton**

Professor, School of Biological Sciences, University of Utah - **Mighty oaks from humble acorns grow: Roger Price and the emergence of coevolutionary biology.**



**Chairs: Jason D. Weckstein, Alexandra Grossi**

**T24. 10:00-10:15**

Jason D. Weckstein, Therese A. Catanatch, Michel P. Valim, Matthew Soesanto, Lukas Musher, Sarah E. Bush, Matthew E. Kinney, Armand M. Kuris, Chelsea L. Wood and Kamila M. D. Kuabara – Parasites lost no more: rediscovery, description, and comparative genomic diversity of California Condor lice.

**T25. 10:15-10:30**

Daniel R. Gustafsson, Alexandra A. Grossi, Leshon Lee and Fasheng Zou – Biodiversity and biogeography of Asian and Australo-Papuan *Guimaraesiella* Eichler, 1949 (Phthiraptera: Ischnocera).

**T26. 10:30-10:45**

Oldrich Sychra, Marek Schneider, Kevin P. Johnson, Jason D. Weckstein, Mohamed F. Sallam, Julie M. Allen and Stanislav Kolencik – The parasitic louse genus *Myrsidea* (Amblycera: Menoponidae): a comprehensive review.

**T27. 10:45-11:00**

Annabella Maria Schmiedová, Oldřich Sychra, Miroslav Capek and Ivan Literák – Morphometric study of the genera *Trochiliphagus* and *Trochiloectes* in hummingbirds.

**11:00-11:30      Break**

**T28. 11:30-11:45**

Alexandra A. Grossi, Daniel R Gustafsson, Wenyi Zhou and Fasheng Zou – Diversity of chewing lice infesting birds in Western Yunnan, China.

**T29. 11:45-12:00**

Julie M. Allen, Masoud A. Rostami, Behnaz Balmaki, Stanislav Kolencik, Daniel R. Gustafsson, Jason D. Weckstein, John Gausas, Ricardo L. Palma, Oldrich Sychra, Andrew D. Sweet, Kamila M. D. Kuabara, Katja Seltman, Nicolas J. Dowdy, Jennifer M. Zaspel, Jessica E. Light, Rob Guralnick and Sarah E. Bush – The promise and impediments of artificial intelligence for species identification in Phthiraptera.

**T30. 12:00-12:30**

Ricardo Palma. Collecting lice in “Las Islas Encantadas”

**12:45-18:30** Local excursions

**From 19:00** Gala Dinner

**June 13<sup>th</sup>**

**9:00-9:15 Announcements**

## **Highlights of Research at IHU Méditerranée Infection**

**Chair: Olivier Chosidow**

**T31. 9:15-9:45**

Pierre-Edouard Fournier – Louse-borne infections in the 21st century: Forgotten diseases but current threats.

**T32. 9:45-10:15**

Oleg Mediannikov, Alissa Hammoud, Florence Fenollar and Pierre-Edouard Fournier – Human head lice as vectors of *Bartonella quintana*.

### **Human lice: Genetics, Geography & Relationships with Symbionts**

**Chair: Ariel Toloza**

**T33. 10:15-10:30**

Marina S. Ascunce, Ariel C. Toloza, Angélica González-Oliver and David L. Reed – Genetic footprints of the treks of human lice around the globe.

**T34. 10:30-10:45**

Parisa Sharafi, Ayca Ozsipahi, Bengu Akgok, Fatma Gufran Suleyman, Kosta Y. Mumcuoglu and Aysegul Taylan-Ozkan – Detection of human louse DNA in different soil samples.

**T35. 10:45-11:00**

Kosta Y. Mumcuoglu, Parisa Sharafi and Aysegul Taylan-Ozkan – Microbiota of the human head louse, *Pediculus humanus capitis*, and the human body louse, *Pediculus humanus humanus* (Anoplura: Pediculidae) in Israel.

**11:00-11:30 Break**

**T36. 11:30-11:45**

Emily Dunn and Renfu Shao – Transcription of the fragmented mitochondrial genomes of human head and body lice.

**T37. 11:45-12:00**

Saima Naz, Maria Rebecca, Nazir Ahmed Brohi, Aziz Ahmed Ujjan, Shaila Khaskheli and Farooque Ali Hattar - First report of crab louse, *Pthirus pubis* (L. 1758) and the fungal association of head louse, *Pediculus humanus capitis* De Geer, 1767 in people of low socioeconomic status of Hyderabad, Sindh, Pakistan.

**T38. 12:00-12:15**

Gholizadeh Saber – Molecular detection of novel glutamate channel mutations in field collected human head lice (Phthiraptera: Pediculidae) from Iran.

**T39. 12:15-12:30**

Anthony Marteau, Sophie Brun, Arezki Izri and Mohammad Akhouni - Prevalence and genetic diversity of heritable bacterial symbionts in human lice.

**12:30-14:00 Lunch**

## Ecology & Evolution

**Chair: Saima Naz**

**T40. 14:00-14:15**

Jana Martinů and Jan Štefka – Prevalence differences between closely related louse species occurring in sympatry: specialist and 'generalist' lineages of *Polyplax serrata*.

**T41. 14:15-14:30**

Sarah E. Bush, Matthew M. Waller, Kyle M. Davis, Sonora F. Clayton and Dale H. Clayton – Birds in arid regions have depauperate louse communities: Climate change implications?

#### **T42. 14:30-14:45**

Stephany Virrueta Herrera and Kevin P. Johnson – Extensive host switching between orders of birds by *Rallicola* lice.

#### **T43. 14:45-15:00**

Matthew M. Waller, Sarah E. Bush, Nicole A. Amedee and Dale H. Clayton – Does the length of the bill overhang correlate with the abundance of lice on birds?

#### **T44. 15:00-15:15**

Yoshika Oniki-Willis, Edwin O. Willis, Oldrich Sychra, Terry Galloway and Lajos Rozsa – Adaptive sex-ratio patterns in hummingbird lice (Ricinidae: Trochiloectes, Trochiliphagus).

#### **T45. 15:15-15:30**

Jessica E. Light, Conrad A. Matthee, Nina du Toit-Heunis, Sonja Matthee and Lance A. Durden – Host associations, host switching, geographic location and potential reticulate evolution shape the systematics of sucking lice (Psocodea: Anoplura) belonging to the genera *Hoplopleura* and *Polyplax*.

#### **T46. 15:30-15:45**

Saima Naz, Ahmed Madani, Oldrich Sychra, Shaila Khaskheli, Mohammad Awais Memon, Farooque Ali Hattar and Aziz Ahmed Ujjan – New data on genus *Coloceras* (Ischnocera: Philoperidae) infesting birds of Family Columbidae (Columbiformes) with an updated list of columbid chewing lice from Pakistan.

#### **T47. 15:45-16:00**

Kristýna Plšková, Stanislav Kolenčík, Mario A. Loaiza-Muñoz, Gustavo A. Londono, Julie M. Allen and Oldřich Sychra – Understanding the life history characteristics of bird lice: Amblycera versus Ischnocera.

### **16:00-16:30 Break**

### **16:30-18:00 Round Table Discussions**

- **Updating host-parasite checklists**  
Chairs: Sarah E. Bush, Daniel Gustafsson
- **Future of human head lice control**  
Chairs: Pierre-Edouard Fournier, Kosta Y. Mumcuoglu

### **18:00-19:30 Closing and Farewell**

# Poster Presentations

## Human lice

**P1.** [Sandra Leverenz](#), Anikó Fuhrmann, Lana Sawicki, Hans Dautel and Kerstin Büchel - Artificial membrane feeding for in vitro rearing of body lice *Pediculus humanus humanus* and development of a rapid lice repellent screening assay.

**P2.** [Bouthaina Hasnaoui](#), Zaina Amirat, Noelle Masotii, Dikra Hamadouche, Rim Bouledroua, Basma Ouarti and Philippe Parola - Unlocking lice science: Breeding *Pediculus humanus humanus* on rabbits for research.

**P3.** [Basma Ouarti](#), Maureen Laroche, Ahmed Benakhla, Khaoula Ouarti and Philippe Parola - The introduction of mass spectrometry in medical entomology and its application in lice identification.

**P4.** [Françoise Debierre-Grockiego](#), Dimier-Poisson Isabelle and Debierre-Grockiego Françoise - Repellent effects of essential oils on human lice.

**P5.** [Ariel C. Toloza](#), Eunice Sosa-Quiroga, Agustina Fañani, Ana Puente-Santamaría, Eduardo Guzmán, Emilia Martínez and Alejandro Lucia - Chemical interaction and pediculicidal activity of binary nanomicelles loaded with monoterpenes against head lice.

**P6.** [Ariel C. Toloza](#), Marina Ascunce and David Reed - Understanding the movements of permethrin-resistant head lice in schools from a genetic perspective.

**P7.** Joshua Kamani, Shimon Harrus, Bukar Laminu, Yaarit Nachum-Biala, Mike Shand, Gonzalo Roca-Acevedo and [Ariel C. Toloza](#) - First report of kdr alleles T917I and L920F in head and body lice from Nigeria.

**P8.** [Elisabeth Yawa Diawara](#), Alpha Kabinet Keita, Alissa Hammoud, Adama Zan Diarra, Basma Ouarti, Coralie L'ollivier and, Stéphane Ranque - Pediculosis: an epidemiological survey of schoolchildren in the Republic of Guinea.

**P9.** [Noureddine Rabah Sidhoum](#), Mehdi Boucheikhchoukh, Bouthaina Hasnaoui, Noureddine Mechouk, Lobna Dib, Hamza Leulmi, Ahmed Benakhla and [Philippe Parola](#) - Synopsis of lice species associated with humans, domestic, and wild animals in Algeria.

**P10.** [Boukehila Chahinez](#), Dib Loubna, Philippe Parola and Basma Ouarti - Human lice control: Morphological characterization of *Pediculus humanus capitis* populations.

**P11.** [Younes Laidoudi](#), Samia Bedjaoui, Sébastien Meige, Julien Renaud, Nicolas Grelaud and Bernard Davoust - Spatio-temporal and economic analysis of pediculosis in France (2021–2024): Prevalence, seasonality, and public health burden.

**P12.** [Rym Bouledroua](#), Adama Zan Diarra, Remy Amalvict, Jean-Michel Berenger, Ahmed Benakhla, Philippe Parola and Lionel Almeras - Assessment of MALDI-TOF MS for arthropod identification based on exuviae spectra analysis.

### Ecology, evolution & diversity

**P13.** [Younes Laidoudi](#), Samia Bedjaoui, Stéphanie Watier-Grillot, Anthony Levasseur and Bernard Davoust - Microbial community and zoonotic potential of wild boar lice (*Haematopinus apri*) in France.

**P14.** [Austin R. Clayton](#), Sarah E. Bush, Matthew M. Waller and Dale H. Clayton - Galápagos mockingbirds that groom more have fewer lice.

**P15.** [Alexandra A. Grossi](#), Daniel R. Gustafsson and Oldrich Sychra - How many endangered species of chewing lice are there?

**P16.** [Jake Jacobsen](#), Ethan X. Kahn, Amanda Leyel, Mia C. Rosati, Graham A. Montgomery, Jessie F. Salter and Morgan W. Tingley - Island of lice: Comparing range competition of chewing lice across three avian hosts.

**P17.** [Noureddine Rabal Sidhoum](#) - Epidemiological and ecological patterns of lice (Phthiraptera) populations in Algeria.

**P18.** [Abir Adjroud](#), Habiba Saadi-Idouhar, Bouthaina Hasnaoui, Diarra Zan Adama, Faiza Marniche and Philippe Parola - Contribution to the knowledge of chewing lice of the wild Gambra partridge in Algeria.

**P19.** [Olga St-Onge \(in absentia\)](#) - Hangers-on: An overview of the current state of Phthiraptera conservation.

**P20.** [Boukehila Chahinez](#), Dib Loubna, Philippe Parola and Basma Ouarti - Prevalence of lice infestation in domestic mammals in northeastern Algeria.

**P21.** [Alex Sutherland](#) and Colin Dale - Going deeper: In-depth sequencing of the endosymbiont of *Columbicola columbae*.

**P22.** [Chaoqun Yao](#) - Molecular characterization of *Heterodoxus spiniger* from dogs on St. Kitts.

**P23.** [Oldřich Sychra](#), Lajos Rózsa, János Podani, Vojtěch Sychra, Ivan Literák, Annabella Maria Schmiedová and Miroslav Capek - Multivariate study of lice (Insecta: Psocodea: Phthiraptera) assemblages hosted by hummingbirds (Aves: Trochilidae).

**P24.** [Oldřich Sychra](#), Annabella Maria Schmiedová, Lajos Rózsa and Leonor Guardia Claps - Occurrence of chewing lice (Phthiraptera: Ricinidae) on Red-tailed comet (*Sappho sparganurus*).

**P25.** [Saima Naz](#), Farooque Ali Hattar, Aziz Ahmed Ujjan, Shaila Khaskheli and Sajid Siyal - Epidemiology of the goat louse, *Linognathus africanus* Kellogg and Paine, 1911 (Anoplura: Linognathidae) and its new association with fungal flora.

**P26.** [Saima Naz](#), Mohammad Awais Memon, Oldrich Sychra, Aziz Ahmed Ujjan, Shaila Khaskheli, Ahmed Madani and Sajid Siyal - New data on chewing lice (Psocodea: Phthiraptera) of *Corvus splendens* Vieillot (Corvidae) from Pakistan.

**P27.** [Daniel R. Gustafsson](#), Fasheng Zou, Zhu Li and Xiuling Sun – Descriptions of five new genera in Goniodidae (Ischnocera).

**P28.** [Daniel R. Gustafsson](#), Zhengzhen Wang, Alexandra A. Grossi and Fasheng Zou - New species in the Resartor-group complicate genus limits further.

**P29.** [Daniel R. Gustafsson](#) - Host association patterns of *Brueelia*-complex lice (Phthiraptera: Ischnocera) parasitizing starlings (Passeriformes: Sturnidae).

**P30.** [Noureddine Mechouk](#), Bouthaina Hasnaoui, Noureddine Rabah sidhoum, Mehdi Boucheikhchoukh, Andrei Daniel Milhalca, Philippe Parola - MaxEnt model-based prediction of potential distributions of *Pidiculus humanus* capitulus in Algeria.