

Chloé Lahondère

Thermal Biology, Eco-Physiology and Neuroethology of Disease Vector Insects

Assistant Professor
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EDUCATION

- 2009-2012 **PhD** in Life Sciences – Entomology
University François Rabelais, Tours, France (*With highest honors*)
- 2007-2009 **Master of Science** in Population Biology and Insect Science
University François Rabelais, Tours, France (*Rank: 1/35, with honors*)
- 2004-2007 **Bachelor of Science** (licence) in Integrative & Evolutive Biology
University François Rabelais, Tours, France (*With honors*)

RESEARCH POSITIONS and EXPERIENCES

- 2020-present **Assistant Professor**
Dept. of Biochemistry, Virginia Tech, Blacksburg, USA
Affiliated Faculty Fralin Life Sciences Institute (2017-present)
Affiliated Faculty Global Change Center (2018-present)
Affiliated Faculty BIOTRANS program (2018-present)
Affiliated Faculty Dept. of Entomology (2020-present)
Affiliated Faculty CeZAP (2020-present)
- 2017-2020 **Research Assistant Professor**
Dept. of Biochemistry, Virginia Tech, Blacksburg, USA
- 2014-2017 **Research Associate**
Advised by Jeffrey Riffell
Dept. of Biology, University of Washington, Seattle USA
- 2014 **Research Assistant**
Advised by Lauren Buckley
Dept. of Biology, University of Washington, Seattle USA
- 2013 **The Company of Biologist Visiting Scholar**
Advised by Jeffrey Riffell
Dept. of Biology, University of Washington, Seattle USA
- 2009-2012 **Graduate Researcher** (PhD degree)
Advised by Claudio Lazzari
University François Rabelais, Tours, France

2008-2009	Graduate Researcher (MSc degree) Advised by Claudio Lazzari Université François Rabelais, Tours, France
2007	Undergraduate Researcher (BSc degree) Advised by Michael Greenfield Université François Rabelais, Tours, France

FUNDING (not highlighting pending grants)

Current grants:

CeZAP The role of <i>Culex territans</i> mosquitoes and their amphibian hosts in the West Nile virus transmission cycle (<i>role</i> : PI - Weger-Lucarelli, Co-PI)	\$19,749	2022-23
CeZAP Employing avian and arthropod surveillance to predict pathogen emergence in Virginia (<i>role</i> : Co-PI - Auguste, PI, Escobar, Co-PI)	\$20,000	2022-23
NSF-MRI Acquisition of a Chemical Ionization Mass Spectrometer for Measuring Organic Compounds at the Interfaces of Earth's Systems (<i>role</i> : Co-PI – Isaacman-VanWertz, PI, Morris, Co-PI, Carey Co-PI, Gohlke Co-PI)	\$501,183	2021-24
NSF-IOS Biomechanical constraints and trade-offs between sugar and blood feeding in mosquitoes (<i>Role</i> : PI - Vinauger, Co-PI, Stremler, Co-PI, Socha Co-PI)	\$1,031,547	2021-24
NIH-NIAID R01 Neural and molecular rules of mosquito olfactory rhythms (<i>Role</i> : Co-I, Vinauger, PI, Tu, Co-I)	\$2,742,882	2021-26
Department of Biochemistry SEED grant (<i>Role</i> : PI)	\$5,000	2021-22
ICAT mini SEAD grant Virtual Reality Scents (<i>Role</i> : Co-PI - Tucker, PI)	\$3,000	2021-22
Faculty mentoring grant (<i>Role</i> : PI)	\$1,500	2021-22
NSF REU-site REU Site: Ecology, Evolution, and Behavior Field Research at Mountain Lake Biological Station (<i>Role</i> : Senior Personnel - Nagy, PI, Brodie Co-PI)	\$371,154	2020-23

Past grants and fellowships:

eLife Travel grant	\$1,000	2019
The Fralin Life Science Institute Evolution of blood-feeding in mosquitoes (<i>Role</i> : PI)	\$10,000	2019
Global Change Center ISCE - Fralin Institute Climate change and the dynamics of mosquito populations in Virginia (<i>Role</i> : PI – Vinauger, Co-PI; Escobar, Co-PI; Patton, Co-PI)	\$17,300	2018-19
MicroFEWHS – Fralin Institute Development of an unmanned aircraft system (UAS) to collect mosquitoes from remote areas (<i>Role</i> : PI – Schmale, Co-PI)	\$3,500	2018-19

The Eppley Foundation for Research	\$23,097	2018-19
Sugar feeding in mosquitoes: a neglected aspect of their biology and a potential tool for their control (<i>Role: PI</i>)		
Margaret Walton Fellowship for Mountain Lake	\$493	2018
University of Washington, Department of Biology Travel Grant	\$1,000	2016
The Journal of Experimental Biology Travelling Fellowship	£2,300	2012
Bed bugs physiology and behavior research	8000€	2012
<i>(Role: Co- PI - Lazzari PI)</i>		
Research and career development grant from IRBI / CNRS Tours, France	600€	2012

HONORS and AWARDS

2021 CALS Diversity and Inclusion Service Award	2021
2020 Department of Biochemistry Service / Outreach Award Nominee	2020
Board of Reviewers – MDPI Insects	2020
F1000 recommendation for <i>Current Opinion in Insect Science</i> paper	2019
Sigma Xi - The Scientific Research Honor Society - Full membership	2019
2018 Department of Biochemistry Research Award	2018
"Best presentation" award - UWPA research symposium	2016
University of Washington Undergraduate Research Mentor Nominee	2016
University of Washington Undergraduate Research Mentor Nominee	2015
F1000 recommendation for 2012 <i>Current Biology</i> paper	2012
"Centenary Medal"	2009
<i>International Symposium on the Centenary of the Discovery of Chagas Disease, Rio de Janeiro, Brazil</i>	

PUBLICATIONS (*: undergraduate student **: graduate student)

Journal Articles (Peer-reviewed):

- 28 VanderGiessen M.**, Tallon, A***, Damico B.*, **Lahondère C.** and C. Vinauger. (2023). Soap application alters mosquito-host interactions. *iScience*. (*in press*).
- 27 Roth M.A**, **Lahondère C.** and Gross A.D. (2023) Discovering *Aethina tumida* Responses to Attractant and Repellent Molecules: A Potential Basis for Future Management Strategies. *Pesticide Biochemistry and Physiology*. 192:105386.
- 26 Wolff G.H., **Lahondère C.**, Vinauger C. and J.A. Riffell. (2023). Neuromodulation and Differential Learning Across Mosquito Species. *Proceedings of the Royal Society B*. 290(1990), 20222118.
- 25 Benoit J.B., **Lahondère C.**, Attardo G.M., Michalkova V., Oyen K., Xiao Y. and S. Aksoy. (2022). Warm blood meal increases digestion and milk protein production to maximize reproductive output for the tsetse fly, *Glossina morsitans*. *Insects*. 13(11):997.
- 24 Kuchinsky S., Marano J., Hawks S., Loessberg E., Honaker C., Siegel P., **Lahondère C.**, LeRoith T., Weger-Lucarelli J., and N. Duggal. (2022). North American house sparrows are competent for Usutu virus transmission. *mSphere*. e00295-22.
- 23 **Lahondère C.** (2022). Mosquito electroantennogram recordings. In "Laboratory mosquito rearing, behaviour, physiology, and neuroscience", *Cold Spring Harbor Protocols*. doi:10.1101/pdb.prot107871

- 22 **Lahondère C.** (2022). Mosquito electroantennography. In “Laboratory mosquito rearing, behaviour, physiology, and neuroscience”, *Cold Spring Harbor Protocols*.doi:10.1101/pdb.top107679
- 21 Wangrawa D.W., Ochomo E., Upshur F.**, Zanré N., Borovsky D., **Lahondère C.**, Vinauger C., Badolo A. and A. Sanon. (2022). Essential oils and their binary combinations have synergistic and antagonistic insecticidal properties against *Anopheles gambiae* s. l. (Diptera: Culicidae). *Biocatalysis and Agricultural Biotechnology*, 42(102347).
- 20 **Lahondère C.** and M. Bonizzoni (2022). Thermal biology of invasive *Aedes* mosquitoes in the context of climate change. *Current Opinion in Insect Science*. (51):100920.
- 19 Reinhold J.M.**#, Chandrasegaran K.#, Oker H.M.**, Crespo J.E., Vinauger C. and **C. Lahondère.** (2022). Species-specificity in thermopreference and CO₂-gated heat-seeking in *Culex* mosquitoes. *Insects*. 13(1), 92 (# Equal contribution)
- 18 Fryzlewicz L.**, VanWinkle A.* and **C. Lahondère.** (2021). Development of an attractive toxic sugar bait for the control of *Aedes. j. japonicus*. *Journal of Medical Entomology*. 59(1): 308-313.
- 17 Lazzari C.R., Fauquet A.**, **Lahondère C.**, Pereira M.H. and R. Araujo. (2021). Ticks perform evaporative cooling during blood-feeding. *Journal of Insect Physiology*, 130(104197).
- 16 **Lahondère C.** (2021). A step-by-step guide to mosquito electroantennography. *JOVE*. e62042.
- 15 Bates T.A, Chuong C., Marano J., Waldman A., Klinger A., Reinhold J.M.**, **Lahondère C.** and J. Weger. (2021). American *Aedes japonicus japonicus*, *Culex pipiens pipiens*, and *Culex restuans* mosquitoes have limited transmission capacity for a recent isolate of Usutu virus. *Virology*. 555: 64-70.
- 14 Reinhold J.M.**, Shaw R.* and **Lahondère C.** (2021). Beat the heat: *Culex quinquefasciatus* regulates its body temperature during blood-feeding. *Journal of Thermal Biology*. 96: 102826.
- 13 Chandrasegaran K., **Lahondère C.**, Escobar L.E. and Vinauger C. (2020) Mosquito ecology, behavior, and disease transmission. *Trends in Parasitology*. 36(4): 393-403.
- 12 **Lahondère C.**, C. Vinauger, R.P. Okubo, G. Wolff, J.K. Chan, O.S. Akbari, J.A. Riffell. (2020). The olfactory basis of orchid pollination by mosquitoes. *Proceedings of the National Academy of Sciences*. 201910589.
- 11 Upshur I.F.**, Bose E.A*, Hart C.* and **C. Lahondère.** (2019). Temperature and sugar feeding effects on *Aedes aegypti* mosquitoes’ activity *Insects*. 10(10): 347.
- 10 Afify A., Betz J.F., Riabinina O., **C. Lahondère**, C.J. Potter. (2019). Commonly used insect repellents hide human odors from *Anopheles* mosquitoes. *Current Biology*. 29:1-12.
- 9 Benoit J.B., Lazzari C.R., Denlinger D.L. and **C. Lahondère.** (2019). Thermoprotective adaptations are critical for arthropods feeding on warm-blooded hosts. *Current Opinion in Insect Science*. (34):7-11. *Recommended by the F1000*.
- 8 Reinhold J.**, Lazzari C.R. and **C. Lahondère.** (2018). Effects of temperature on *Aedes aegypti* and *Aedes albopictus*: a review. *Insects* 9(4), 158.
- 7 Lazzari C.R., Fauquet A.** and **Lahondère C.** (2018). Keeping cool: kissing bugs avoid cannibalism thermoregulating. *Journal of Insect Physiology*. (107):29–33.
- 6 Vinauger C.+ , **C. Lahondère+**, G.H. Wolf, L.T. Locke*, J.E. Liaw*, J.Z. Parrish, O.S. Akbari, M.H. Dickinson and J.A. Riffell (2018). Dopamine modulation of host learning in *Aedes aegypti* mosquitoes. *Current Biology*. 28(333–344). (+: co first authorship)

- 5 **Lahondère C.**, Insausti T., Paim RMM, Luan X., Belev G., Pereira M.H., Ianowski J.P. and C.R. Lazzari (2017). Countercurrent heat exchange and thermoregulation during blood-feeding in kissing bugs. *eLife*. 2017; 6:e26107.
- 4 Lutz E.K.**, **Lahondère C.**, Vinauger, C. and J.A. Riffell (2017). Olfactory learning and chemical ecology of olfaction in disease vector mosquitoes: A life history perspective. *Current Opinion in Insect Science*. 20:75-83.
- 3 Vinauger C., **Lahondère C.**, Cohuet A., Lazzari C.R. and J.A. Riffell (2016). Learning and memory in disease vector insects. *Trends in Parasitology*. 32(10):761–771.
- 2 **Lahondère C.** and C.R. Lazzari (2015). Thermal effect of blood feeding in the telmophagous fly *Glossina morsitans morsitans*. *Journal of Thermal Biology*. 48:45-50.
- 1 **Lahondère C.** and C.R. Lazzari (2012). Mosquitoes cool down during blood feeding to avoid overheating, *Current Biology*, 22(1): 40-45.
Recommended by the F1000.

Under review / in revision / preprints (not including articles in preparation):

- 32 Lahondère C., Vinauger C., Liaw J.E., Joiner J.M., Tobin K.K.S and J. Riffell. The effect of temperature on mosquito olfaction. (*under review*). *Integrative and Comparative Biology*.
- 31 **Lahondère C.** Recent advances in insect thermoregulation. (*under review*). *Journal of Experimental Biology*.
- 30 Wangrawa D.W., Waongo A., Traore F., Ilboudo Z., Upshur F.**, Borovsky D., **Lahondère C.**, Badolo A., Sanon A. Insecticidal and anti-feeding activities of *Cymbopogon schoenanthus*, *Lippia multiflora*, and *Ocimum americanum* essential oils against larvae and pupae of *Spodoptera frugiperda* (Lepidoptera: Noctuidae). (*in revision*). *Phytoparasitica*.
- 29 **Lahondère C.**, Buradino M.** and Lazzari C.R. (2019). Thermoregulation in *Rhodnius prolixus*: heart activity and heterothermy. (*in revision*) *BioRxiv*, 685305.

Book Chapters (Peer-reviewed):

- 2 Pereira M.H., Paim R.M.M., **Lahondère C.** and C.R. Lazzari (2017). Heat shock proteins and blood-feeding in arthropods. *In*: Asea A., Kaur P. (eds) Heat Shock Proteins in Veterinary Medicine and Sciences. Heat Shock Proteins, vol 12. Springer.
- 1 **Lahondère C.** and C.R. Lazzari (2013). Thermal stress and thermoregulation in mosquitoes. *In Anopheles mosquitoes - New insights into malaria vectors*, ed. Sylvie Manguin. IntechOpen. ISBN 980-953-307-550-6.

As editor:

- 1 **Lahondère C.** and Tu Z. (2020). Editorial overview: vectors and medical and veterinary entomology. *Current Opinion in Insect Science*.

Patent:

Patent Application 17/431,869 filed 8/18/2021: Mosquito attractant compositions (Jeffrey A. Riffell, Chloé Lahondère & Clement Vinauger).

INVITED TALKS and PRESENTATIONS (O: oral presentation P: poster) – **does not highlight contributed or students' talks**

2023

Lahondère C. (O) TBD. *CeZAP Distinguished Speaker Seminar Series in Infectious Disease, Blacksburg, VA, USA* (November 2nd – invited talk)

Lahondère C. (O) TBD. *Engineering Mechanics seminar series, Blacksburg, VA, USA* (March 1st – invited talk)

Lahondère C. (O) Species-specificity in thermopreference and CO₂-gated heat-seeking in *Culex* mosquitoes. *SICB+ (January - online)*

2022

Lahondère C. (O). Sugar feeding in mosquitoes: a neglected aspect of their biology and a potential tool for their control *Mountain Lake Biological Station seminar, Pembroke, VA, USA* (July 14th – invited talk)

Lahondère C. (O). Personal care products alter mosquito-host interactions *ISCE-APACE Joint Meeting, Kuala Lumpur, Malaysia* (August 10th – invited talk)

Lahondère C. (O) Species-specificity in thermopreference and CO₂-gated heat-seeking in *Culex* mosquitoes. *Entomological Society of America, Vancouver, BC, Canada* (November – invited talk)

2021

Fryzlewicz L., VanWinkle A. and **Lahondère C.**, (O). Development of an attractive toxic sugar bait for the control of *Aedes. j. japonicus*. *Entomology 2021, ESA, Denver, CO, USA* – presented online (November).

Lahondère C. (O). Development of an attractive toxic sugar bait targeting *Aedes. j. japonicus*. *ACS - Advances in Vector Control and Insecticide Science Symposium, Atlanta, GA, USA* (August 24th – invited talk).

2020

Lahondère C. In cold-blood: deciphering the mechanisms underlying mosquito-frog interactions (O) *OARDC meeting: Integrative mosquito biology: from molecules to ecosystems, Wooster, OH, USA* (Cancelled in May 2020 due to COVID 19 – invited talk)

Lahondère C. The sweet tooth of mosquitoes: leveraging knowledge on sugar feeding for their control (O). *VTLSS Seminar series, Blacksburg, VA, USA* (October 9th – invited talk)

Lahondère C. Mosquito eco-physiology and thermal biology at Virginia Tech (O). *Bennett College Seminar Series, (November 12th – invited talk)*

Fryzlewicz L., VanWinkle A. and **Lahondère C.**, (O). Development of an attractive toxic sugar bait for the control of *Aedes. j. japonicus*. *Entomology 2021, ESA, Denver, CO, USA* – presented online (November).

2019

Lahondère C. Eco-physiology and neuroethology of disease vector insects (O). *Entomology Departmental Seminar series, Blacksburg, VA, USA* (March 28th – invited talk)

Lahondère C., Hanlon R. and D. Schmale. Development of an unmanned aircraft system (UAS) to collect mosquitoes from remote areas. *2019 Micro FEWS mini symposium, Blacksburg, VA, USA* (May 6th – invited talk).

Lahondère C. Eco-physiology and neuroethology of disease vector insects (O) *Le Studium Conference: New avenues for the behavioral manipulation of disease vectors, Tours, France* (May 22nd – invited talk)

Lahondère C. Climate change and the dynamics of mosquito populations in Virginia (O) *Carilion Climate Change Conference, Roanoke, VA, USA (October 5th – invited talk)*

Lahondère C. “Some like it hot”... and sweet (O) *Seminar series, JMU, VA, USA (October 25th – invited talk)*

Lahondère C. From pollinator to disease vector: a journey through the life of mosquitoes (O) *Promotion Seminar, Department of Biochemistry, Virginia Tech, Blacksburg, VA, USA (November 7th – invited talk)*

Upshur I., Bose E., Hart C. and **Lahondère C.** Temperature and sugar feeding effects on *Aedes aegypti* mosquitoes' activity (O) *Entomological Society of America, Saint Louis, MO, USA (November)* (+ 3 student presentations)

2018

Lahondère C. Eco-physiology and neuro-ethology of disease vector insects (O) *OARDC meeting: Integrative mosquito biology: from molecules to ecosystems, Wooster, OH, USA (April 13th – invited talk)*

Lahondère C. Eco-physiology and neuro-ethology of disease vector insects (O) *Mountain Lake Biological Station seminar, Pembroke, VA, USA (June 5th – invited talk)*

Lahondère C. Effects of temperature on olfactory behavior in mosquitoes (O) *ECRO XXVIII Congress, Würzburg – Germany (September 8th – invited talk)*

Lahondère C. Some like it hot: thermal biology of disease vector insects (O) *Entomology 2018, ESA's 66th Annual Meeting, Vancouver, BC, Canada (November 14th – invited talk, MUVE Section Symposium: Arthropod Genomics and Molecular Biology: What's New!)*

2017

Lahondère C. Thermal Biology of disease vector insects (O) *Biochemistry Departmental Seminar, Virginia Tech, Blacksburg, VA, USA (July 20th – invited talk)*

Lahondère C., Vinauger C., Okubo R. and J.A. Riffell. Orchid pollination by snow mosquitoes (O) *Entomology 2017, ESA's 65th Annual Meeting, Denver, CO, USA*

Lahondère C., Liaw J.E., Tobin K., Joiner J.M., Vinauger C. and J.A. Riffell. Effect of temperature on olfactory behavior in mosquitoes (**Highlighted P**) *Entomology 2017, ESA's 65th Annual Meeting, Denver, CO, USA*

Lahondère C. Effect of temperature on olfactory behavior in mosquitoes (O) *Post-doctoral Symposium – Seattle, WA, USA*

2016

Lahondère C. What makes mosquitoes attracted to *Platanthera* orchids? (O) *UWPA Annual Symposium 2016 - Seattle, WA, USA*

Lahondère C., Vinauger C., Okubo R. & J.A. Riffell. The pollination ecology of *Platanthera* orchids by snow mosquitoes (O) *ICE 2016 – XXV International Congress of Entomology, Orlando, FL, USA*

Vinauger C., **Lahondère C.**, Locke L.T., Liaw J.E. & J.A. Riffell. Aversive learning in the disease vector mosquito *Aedes aegypti* (O) *ICE 2016 – XXV International Congress of Entomology, Orlando, FL, USA*

Liaw J.E., **Lahondère C.**, Vinauger C. & J.A. Riffell. Aversive learning in *Aedes aegypti* mosquitoes (O) *19th Annual Undergraduate Research Symposium, Seattle, WA, USA*

Lahondère C., Vinauger C., Wolff G., Locke L.T., Liaw J.E., Parrish J.Z., Akbari O., Dickinson M.H. & J.A. Riffell. Neuromodulation of olfactory learning in *Aedes aegypti* mosquitoes (P) *NIFTI (Nature Inspired Flight Technologies and Ideas) – SOAR meeting, Baltimore, MA, USA*

Lahondère C. What makes mosquitoes attracted to *Platanthera* orchids? (O) *Post-doctoral Symposium – PechaKucha, Seattle, WA, USA*

Lahondère C., Vinauger C., Okubo R. & J.A. Riffell. What makes mosquitoes attracted to *Platanthera* orchids? (P) *SICB Annual Meeting, Portland, OR, USA*

C. Vinauger, **Lahondère C.**, Lutz E.K., Locke L.T & J.A. Riffell. Olfactory learning in the vector mosquito *Aedes aegypti* (O) *SICB Annual Meeting, Portland, OR, USA*

2015

Liaw J.E., **Lahondère C.**, Vinauger C. & J.A. Riffell. Exploring learning abilities of disease vector mosquitoes (P) *18th Annual Undergraduate Research Symposium, Seattle, WA, USA*

Joiner J., **Lahondère C.**, & J.A. Riffell. Mosquito olfaction: effects of ambient temperature (P) *18th Annual Undergraduate Research Symposium, Seattle, WA, USA*

2014

Lahondère C., Insausti T., Ianowski J. & C.R. Lazzari. Keeping cool: Thermoregulation during feeding in kissing bugs (O). *Entomology 2014, ESA's 62nd Annual Meeting, Portland, OR, USA. (November 16th – invited talk, Symposium: MUVE SS: Triatominae from Genes to Populations: The Road to New Insights and Challenges on the Horizon of Vector Ecology)*

2013

Lahondère, C. Thermal stress and thermoregulation in haematophagous insects (O) *Max Planck Institute of Neurobiology, Martinsreid, Germany*

2012

Lahondère, C. Thermal stress and thermoregulation in haematophagous insects (O) *“Kikikose”, Tours, France*

Lahondère, C. Thermal stress and thermoregulation in haematophagous insects (O) *University of Washington, Seattle, WA, USA*

2011

Lahondère, C. Rocking behavior in Phasmatodea (P) *Colloque SFECA (Société Française pour l'Etude du Comportement Animal), Tours, France*

Fresquet N., **Lahondère C.** & C.R. Lazzari. Modulation de la réponse d'extension du proboscis par l'interaction des températures de la cible et de l'environnement chez un insecte hématophage (P) *Colloque SFECA (Société Française pour l'Etude du Comportement Animal), Tours, France*

Fresquet N., **Lahondère C.** & C.R. Lazzari. Role of the thermal background on the response to heat in *Rhodnius prolixus* (P) *The Sixth International Symposium on Molecular Insect Science, Amsterdam, the Netherlands*

Lahondère C., Insausti T. & C.R. Lazzari. Handling of thermal stress associated with feeding in haematophagous insects (O + P) *European PhD Network « Insect Science » Tours, France*

2010

Lahondère, C. & C.R. Lazzari. Stress thermique et thermorégulation chez les insectes hématophages (P) *16ème Colloque de Biologie de l'Insecte, Lyon, France*

Lahondère, C. & C.R. Lazzari. Thermal stress and thermoregulation in haematophagous insects (P) *Sensory Ecology: an international course for postgraduate students. Lund, Sweden*

2009

Lahondère, C. How haematophagous insects avoid excessive heating during feeding? (O) *INRA Versailles, France*

Lazzari, C.R., **Lahondère, C.**, Amino, R. & T.C. Insausti. Keeping cool: how blood-sucking insects avoid excessive warming during feeding. (P) *International Symposium on the Centenary of the Discovery of Chagas Disease, Rio de Janeiro, Brazil*

Lahondère, C. Stress thermique et thermorégulation chez les insectes hématophages (O) *Journée de l'IRBI (annual meeting), Tours, France*

STUDENTS and POST-DOC MENTORING (*current lab members in bold*)

Laboratory and Field Technicians

2022-present **Seyed jalil pasha Mirlohi** (Lab Specialist, Virginia Tech)
 2021-2022 Shajaesza Diggs (Lab Tech, Virginia Tech) Co-mentored with C. Vinauger
 2021 Darren Dougharty (Lab Tech, Virginia Tech)
 2020 Zachary Baker (Summer Lab Tech, Virginia Tech)

Post-doctoral Scholars

2021-2022 Anaïs Tallon (Post-doc, Virginia Tech)

Graduate students

2021-present Brittany Hart (PhD, Biochemistry, Virginia Tech – GTS mentor)
 2021-present **Helen Oker** (BS-MS, Biochemistry, Virginia Tech)
 2020-2021 Silvère Giraud (MSc, Université de Tours, France, co-mentored with C. Lazzari)
 2020-present **Forde Upshur** (PhD, Virginia Tech)
 2019-2021 Lauren Fryzlewicz (BS-MSc, Virginia Tech)
 2019-2021 Morgen VanderGiessen (MSc, Virginia Tech) Co-mentored with C. Vinauger
 2018-present **Joanna Reinhold** (PhD, Virginia Tech)
 2018-2020 Forde Upshur (MSc, Virginia Tech)

Undergraduate students

2023-present **Helle Aronson** (Biochemistry, Virginia Tech)
 2022-present **Katelyn Domke** (Biochemistry and Chemistry, Virginia Tech)
 2022 Taj Valliani (Biochemistry and Chemistry, Virginia Tech)
 2022 Aqsa Fazal (Summer GCC / SURF student, Hollins College)
 2022 Ella Halbert (Summer MLBS REU, Oberlin College)
 2022 Rachel Porter (Biological Systems Engineering / Entomology, Virginia Tech)
 2022-2022 Danielle David (Biochemistry and Chemistry, Virginia Tech)
 2021-2022 Louna Abdalla (Biochemistry, Virginia Tech)
 2021-2022 Vansh Parikh (Biochemistry, Virginia Tech)
 2021-2022 Christopher Logan (Biological Sciences, Virginia Tech)
 2021-2022 Sydney Fogleman (Biological Sciences, Virginia Tech)
 2021 Megan Roark (Summer MLBS REU student, UWise)
 2021 Mik Felhman (Summer VT REEL REU student, Penn State University)
 2020-2021 Ashlynn VanWinkle (Biochemistry, Virginia Tech)
 2020 Ross Choate (Biological Sciences, Virginia Tech)
 2019-2020 Aley Savory (Chemical engineering, Virginia Tech)
 2019-2020 Ryan Shaw (Biological Sciences, Virginia Tech)
 2018-2020 Sarah Tartabini (BioChem, Virginia Tech)
 2018-2019 Elizabeth Bose (BioChem and Clinical Neuroscience, Virginia Tech)
 2018-2019 Cameron Hart (BioChem, Virginia Tech)
 2016-2017 Kennedy Tobin (Neurobio, UW Biology, Seattle)
 2015-2017 Korosh Moosavi (BioChem, UW Biology, Seattle)
 2015-2017 Assel Shardarbekova (Neurobio, UW Biology, Seattle)
 2014-2017 Jessica E. Liaw (Biology, UW Biology, Seattle)
 2014-2016 Lauren T. Locke (Neurobio, UW Biology, Seattle)
 2014-2015 Jillian M. Joiner (Biology, UW Biology, Seattle)

2012 Cindy Laurence (B.Sc. level: Licence 3rd year, IRBI, Tours)
 2010-2011 Maurane Buradino (B.Sc. level: Licence 3rd year and M.Sc. level: Master 1st year, IRBI Tours)

National and International Visitors

2023 (Spring) Ayda Khorrarnnejad (Post-Doc, Bonizzoni lab, University of Pavia, Italy)
 2021 (Fall) Martina Carlassara (PhD student, Bonizzoni lab, University of Pavia, Italy)
 2021 Dimitri Wangrawa (Fulbright Scholar, University Norbert Zongo, Burkina Faso)

GRADUATE COMMITTEES (*current in bold*)

2022-present **Yifan Feng** (PhD student – Entomology, Advisor: Maria Sharakova)
 2022-present **Shajaesza Diggs** (MS student - Biochemistry, Advisor: Clément Vinauger)
 2022-present **Lan Lou** (PhD student - Biochemistry, Advisor: Clément Vinauger)
 2021-present **Suzanne Pinar** (PhD student, Entomology, Advisor: Scotty Yang and Roger Schuerch)
 2021-present **Helen Oker** (BS-MSc student, Biochemistry - Committee Chair)
 2021-present **Lindsey Faw** (PhD student - Entomology, Advisor: Gillian Eastwood)
 2020-2022 Tam NGuyen (PhD student - Biochemistry, Advisor: Daniel Slade)
 2020 Amadou Sékou Traoré (PhD student – AgroParisTech, Advisor: Frédéric Simard) – “*Rapporteur de thèse*”
 2020 Tahmina Ahmed (PhD student - Biochemistry, Advisor: Jinsong Zhu)
 2019-2021 Morgen VanderGiessen (MSc student, Biochemistry) Co-mentored with C. Vinauger
 2019-2021 Lauren Fryzlewicz (BS-MSc student, Biochemistry - Committee Chair)
 2019-2022 Morgan Roth (PhD student – Entomology – Advisor: Aaron Gross)
 2018-present **Nicole Wynne** (PhD student – Biochemistry – Advisor: Clément Vinauger)
 2018-present **Joanna Reinhold** (PhD student - Biochemistry - Committee Chair)
 2018-present **Forde Upshur** (MSc & PhD student- Biochemistry - Committee Chair)
 2018-2020 Megan Richardson (PhD student - Biochemistry - Advisor: Jinsong Zhu)
 2018-2019 Chris Yoo (MSc student - Biochemistry - Advisor: Daniel Slade)

Preliminary exam Chair

2023 Laura Gil Pineda (PhD student – Biochemistry – Advisor: Justin Lemkul)
 2022 Brittany Hart (PhD student – Biochemistry – Advisor: Brandon Jutras)
 2019 Caitlin Cridland (PhD student – Biochemistry – Advisor: Glenda Gillaspay)

TEACHING EXPERIENCE

Virginia Tech

2022 ENT 6354 Insect Behavior and Ecology (guest lecture)
 2021-present BCHM 2984/2364 (lab course designer, Instructor of record)
 2019-2020 BCHM 2024 (guest lecture)
 2019 Biochemical Communication (guest lecture)
 2018 Disease Ecology & Ecosystem Management, FiW 3414 (guest lecture)

University of Washington

2016 Chemical Communication (Instructor of record)

University of Tours (France)

2022 Medical Entomology - France (guest lecture)

2020	Medical Entomology - France (guest lecture)
2012	Ecology (4h) <i>B.Sc. level: Licence 1st year</i>
2012	Ecology-Ethology (62h) <i>B.Sc. level: Licence 1st year</i>
2011	Insects mounting (4h) <i>M.Sc. level: Master 2nd year</i>
2011	Behavioral Ecology (14h) <i>Master 1st year</i>
2011	Ecology-Ethology (25h) <i>B.Sc. level: Licence 2nd year</i>
2010	Neuroethology (4h) <i>Master 1st year</i>
2010	Animal Biology (12h) <i>B.Sc. level: Licence 3rd year</i>

Other

2019	Medical Parasitology - University of Cincinnati (guest lecture)
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OUTREACH (selected)

2021	Master Naturalists of Virginia invited speaker
2020	Kids' Tech guest invited speaker
2019	MLBS open house organizer
2019-present	Hokie Bug Fest, Blacksburg, VA participant
2019-present	Virginia Tech Science Festival participant
2018-present	"Skype a Scientist" participant

MEDIA COVERAGE (selected)

- [ScienceNews](#) 11/27/2017
- [CNRS](#) 11/24/17
- [In Defense of Plants](#) 08/14/2017
- [The Stranger](#) 05/11/2016
- [Science Daily](#) 01/04/2016
- [Le Point](#) 01/17/2012
- [Pour la Science](#) 01/12/2012
- [Science et Avenir](#) 01/12/2012
- [F1000](#) 01/10/2012
- [CNRS](#) 01/10/2012
- [New York Times](#) 12/19/2011
- [Scientific American](#) 12/15/2011
- [Science Daily](#) 12/15/2011

PROFESSIONAL ACTIVITIES & SERVICE

Departmental Committees and University Service

2021-present	Advisory committee – Global Change Center (Virginia Tech)
2018-present	Graduate committee (member) – Dept of Biochemistry (Virginia Tech)
2018-present	Diversity and Inclusion Committee (Founder and Chair) – Dept of Biochemistry (Virginia Tech)
2016-2017	Graduate Program Committee Post-doctoral representative (UW)
2012	Member of the administrative committee at the IRBI (University of Tours)

Conference / symposium organization

2019 Symposium co-organizer for the ESA Eastern Branch Meeting – March 2019 – Blacksburg VA

Editorial work

2020-present Member of the Review Editorial Board – *Frontier in Insect Science*

2020-present Member of the Review Editorial Board – MDPI *Insects*

2019-2020 Co-guest editor of a *COIS* section on Vector and medical and veterinary entomology

2018 Co-guest editor of a special issue on mosquito biology and ecology for the journal *Insects*

2014-present *Frontiers in Ecology and Evolution* / Chemical Ecology Editorial board member

Manuscript reviews

2010-present Bulletin of Entomological Research, Current Biology, Frontiers in Microbiology, African Journal of Biotechnology, Frontiers in Public Health, PloS One, Journal of Insect Physiology, Insect Science, Biology Letters, Insects, Parasites and Vectors, Biologia, Plos NTDs, Medical and Veterinary Entomology, Royal Society Open Science, IJERPH, Chemoecology, Journal of Insect Science, eLife, Journal of Thermal Biology, Journal of Medical Entomology, Scientific Reports, Nature Ecology and Evolution

Proposal reviews

2014-present Graduate Student Awards (UW), Graduate Student Awards (VT), NSF CAREER award (*Ad hoc*), USDA NIFA HATCH, NIH R13

Professional memberships

2021-present American Mosquito Control Association

2019-present AAAS

2019-present Sigma Xi

2018-present Virginia Mosquito Control Association

2014-present Entomological Society of America

2014-present Society of Integrative and Comparative Biology

DIVERSITY AND INCLUSION

As a 1st generation student, immigrant and woman in science, I am dedicated to promoting DEI and to support under-served and minoritized students, colleagues and friends. I listed below some of my efforts and actions to contribute to improve DEI in my lab, my department and beyond.

Service

2020-2022 Member of the Diversity and Inclusion Committee of ESA

2018-present Diversity and Inclusion Committee (Founder and Chair) – Dept of Biochemistry

Event participation / coordination (selected)

2020 Theater Delta Workshop

2018-present Black College Institute (lab host)

Trainings and workshops

2021 Creating an Inclusive Climate

2021 Cultural Competency Development

2021 Inclusive Pedagogy pathway

2021 Anti-racist Teaching
2021 What is Privilege and Why Does it Matter?
2020 Reducing Implicit Bias in the Classroom
2020 Inclusive pedagogy: How student Identities matter
2019-present Summer Diversity Summit (yearly)
2019-present Advancing diversity (yearly)

Publications

2021 Gillaspay, G., Thorpe, C., **Lahondère, C.**, Meenan, A., & Ahmed, T. Increasing the Sense of Belonging by Students in a Department of Biochemistry. *The FASEB Journal*, 35. (published abstract, ASBMB meeting).