

Melise Cristine Lecheta, Ph.D.

Contact Information

Department of Entomology
University of Kentucky
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Professional Experience

Post-Doctoral Scholar

University of Kentucky, Lexington, KY, USA (March 2018 – present)
Department of Entomology
Advisor: Nicholas Teets

Short-term scholar

University of Kentucky, Lexington, KY, USA (March 2015 – June 2015)
Department of Entomology
Advisors: Mauricio O. Moura and Charles W. Fox

Education

Doctoral Degree in Biological Sciences, major in Entomology

Universidade Federal do Paraná, Curitiba, PR, Brazil (March 2012 – February 2016)
Advisors: Mauricio O. Moura and Charles W. Fox

Master's degree Biological Sciences, major in Entomology

Universidade Federal do Paraná, Curitiba, PR, Brazil (March 2010 – February 2012)
Advisors: Mauricio O. Moura and Patrícia J. Thyssen

Specialization in Medical Entomology and Acarology

Fundação Osvaldo Cruz - FIOCRUZ, Rio de Janeiro, RJ, Brazil (September 2009 – February 2011)
Advisor: Margareth M. C. Queiroz

Bachelor degree in Biology

Universidade Federal do Paraná, Curitiba, PR, Brazil (March 2005 – August 2009)

Publications

1. **Lecheta, M.C.**, Corrêa, R.C. and Moura, M.O. 2017. Climate Shapes the Geographic Distribution of the Blowfly *Sarconesia chlorogaster* (Diptera: Calliphoridae): An Environmental Niche Modeling Approach. *Environmental Entomology*, doi: 10.1093/ee/nvx124.

2. Grisales, D., **Lecheta, M.C.**, Aballay, F., and Carvalho, C.J.B. 2016. A key and checklist to the Neotropical forensically important “Little House Flies” (Fanniidae, Diptera). *Zoologia*, 33(6): e20160054.
3. **Lecheta, M.C.**, Thyssen, P.J. and Moura, M.O. 2015. The effect of temperature on development of *Sarconesia chlorogaster*, a blowfly of forensic importance, *Forensic Science Medicine and Pathology*, 11: 538-543.
4. **Lecheta, M.C.** and Luz, D.R. 2015. First record of *Tachinaephagus zealandicus* Ashmead, 1904 (Hymenoptera: Encyrtidae) parasitizing the blowfly *Sarconesia chlorogaster* (Wiedemann, 1830) (Diptera: Calliphoridae) in Brazil, *Brazilian Journal of Biology*, 75: 505-506.
5. Vairo, K.P., Correa, R.C., **Lecheta, M.C.**, Caneparo, M.F., Mise, K.M., Preti, D., Almeida, L.M., Carvalho, C.J.B. and Moura, M.O. 2014. Forensic use of a subtropical blowfly: The first case indicating minimum post-mortem interval (mPMI) in Southern Brazil and first record of *Sarconesia chlorogaster* from a human corpse, *Journal of Forensic Sciences*, 60: S257-S260.
6. Wells, J.D., **Lecheta, M.C.**, Moura, M.O. and LaMotte, L.R. 2014. An evaluation of sampling methods used to produce insect growth models for postmortem interval estimation, *International Journal of Legal Medicine*, 129: 405-410.

Grants, Scholarships and Awards

- 2012-2016** Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq). Respostas adaptativas na formação da distribuição geográfica de *Sarconesia chlorogaster* (Diptera, Calliphoridae) [Adaptive responses in the formation of geographical distribution of *Sarconesia chlorogaster* (Diptera, Calliphoridae)]. **R\$ 124,512 [~USD \$31,200].**
- 2015-2015** Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) - Sandwich Doctorate. Respostas adaptativas na formação da distribuição geográfica de *Sarconesia chlorogaster* (Diptera, Calliphoridae) [Adaptive responses in the formation of geographical distribution of *Sarconesia chlorogaster* (Diptera, Calliphoridae)]. **USD \$8,500.**
- 2010-2012** Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). Efeitos da temperatura no desenvolvimento de *Sarconesia chlorogaster* (Wiedemann, 1830) (Diptera, Calliphoridae) e sua possível utilização na entomologia forense [Effects of temperature on development of *Sarconesia chlorogaster* (Wiedemann, 1830) (Diptera, Calliphoridae) and its use in forensic entomology]. **R\$ 28,800 [~USD \$7,200].**
- 2009-2009** Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq). Ocorrência e chave pictórica para as espécies de Fanniidae (Diptera) de interesse forense no Paraná, Brasil [Occurrence and pictorial key of forensically important Fanniidae (Diptera) species in Paraná, Brazil]. **R\$ 4,320 [~USD \$1,100].**
- 2007-2008** Universidade Federal do Paraná. Projeto Licenciar: “Uma nova célula: RPG na Biologia Celular” [Licenciar Project: “A new cell: RPG in Cell Biology”]. **R\$ 1,260 [~USD \$315].**

Presentations

Oral Presentations

1. **Lecheta, M.C.**, Phenotypic plasticity in life-history traits among populations of a South American blowfly, Center for Ecology, Evolution and Behavior Spring Research Symposium, University of Kentucky, Lexington, KY, USA. 2015.
2. Moura, M.O. and **Lecheta, M.C.**, *Sarconesia chlorogaster* (Wied.)(Diptera, Calliphoridae): Uma espécie modelo para estudos em entomologia forense no Sul do Brasil, XXIV Congresso Brasileiro de Entomologia, Curitiba, PR, Brazil. 2012.
3. **Lecheta, M.C.**, Experimentação em Entomologia Forense: Métodos e Aplicações, XXI Congresso Nacional de Criminalística, Gramado, RS, Brazil. 2011.
4. **Lecheta, M.C** and Carvalho, C.J.B., Chave pictórica para os machos das espécies de Fanniidae (Diptera) de interesse forense ocorrentes em carcaça de coelho em Curitiba, Paraná, XXII Congresso Brasileiro de Entomologia, Uberlândia, MG, Brazil. 2008.
5. **Lecheta, M.C** and Carvalho, C.J.B., Importância de *Fannia pusio* (Diptera) para a estimativa do intervalo pós-morte (IPM), II Congresso Militar de Criminalística, Rio de Janeiro, RJ, Brazil. 2008.

Poster Presentations

1. Vairo, K.P., Costa, M., **Lecheta, M.C** and Moura, M.O., Post embryonic development of the carrion breeding flesh fly *Oxysarcodexia paulistanensis*, 9th Meeting of European Association for Forensic Entomology, Torun, Poland. 2012.
2. Vairo, K.P., **Lecheta, M.C.**, Mise, K.M., Correa, R.C., Caneparo, M.F., Carvalho, C.J.B., Almeida, L.M., Preti, D., and Moura, M.O, First Case using entomological evidence to estimate post-mortem interval (PMI) in southern Brazil, 9th Meeting of the European Association for Forensic Entomology, Torun, Poland. 2012.
3. **Lecheta, M.C** and Moura, M.O., Efeito da temperatura no comprimento das larvas de *Sarconesia chlorogaster* (Diptera: Calliphoridae): uma espécie de importância forense na América do Sul, XXIV Congresso Brasileiro de Entomologia, Curitiba, PR, Brazil. 2012.
4. **Lecheta, M.C** and Luz, D.R., Primeiro registro de *Tachinaephagus zealandicus* Ashmead (Hymenoptera: Encyrtidae) em pupas de *Sarconesia chlorogaster* (Wiedemann) (Diptera: Calliphoridae), XXIV Congresso Brasileiro de Entomologia, Curitiba, PR, Brazil. 2012.
5. Caneparo, M.F., Mise, K.M., Correa, R.C., Vairo, K.P., **Lecheta, M.C.**, Lara, A.G., Pimenta, C.J.C., Carvalho, C.J.B., Almeida, L.M. and Moura, M.O. Estimativa de intervalo pós-morte (IPM) por meio da análise da fauna de Coleoptera em cadáveres no Paraná, XXIV Congresso Brasileiro de Entomologia, Curitiba, PR, Brazil. 2012.
6. Correa, R.C., Caneparo, M.F., Mise, K.M., Vairo, K.P., **Lecheta, M.C.**, Machado, F.S., Carvalho, C.J.B., Almeida, L.M. and Moura, M.O. *Chrysomya albiceps* (Wiedemann) (Diptera: Calliphoridae) e *Dermestes peruvianus* Laporte (Coleoptera: Dermestidae) em um caso de entomologia forense, XXIV Congresso Brasileiro de Entomologia, Curitiba, PR, Brazil. 2012.

7. Vairo, K.P., **Lecheta, M.C.**, Mise, K.M. and Correa, R.C., Um Novo Protocolo de coleta de evidência entomológica em local de crime, III Congresso Militar de Criminalística, Rio de Janeiro, RJ, Brazil. 2010.
8. **Lecheta, M.C** and Carvalho, C.J.B., Chave pictórica para os machos das espécies de Fanniidae (Diptera) de interesse forense em Curitiba, Paraná, 1º Simpósio Nacional de Taxonomia e Biodiversidade, Rio de Janeiro, RJ, Brazil. 2009.
9. Kosmann, C., Silveira, B.E., **Lecheta, M.C.** and Vairo, K.P., Fauna de Calyptratae (Diptera) em carcaça de coelho em Curitiba, Paraná, XXII Congresso Brasileiro de Entomologia, Uberlândia, MG, Brazil. 2008.

Short Courses Taught

1. **Lecheta, M.C.**, Caneparo, M.F., Castro, C.F., Ferreira, M.A.L., Bioecologia e criação de insetos. 2015.
2. Caneparo, M.F., **Lecheta, M.C.** and Castro, C.F., Bioecologia. 2014.
3. **Lecheta, M.C.** and Mise, K.M., Entomologia Forense. 2011.

Courses organization

1. **Lecheta, M.C.**, Curso de Ciências Forenses e Perícia criminal. Universidade Federal do Paraná. 2008.

Undergraduate final project committee

1. Sirlei Rosimeri Rothe, Dept. Entomology, Universidade Federal do Paraná, Brasil.
2. Thaysa Carolina Krüger, Dept. Entomology, Universidade Federal do Paraná, Brasil.
3. Raquel D. R. Rodrigues, Dept. Entomology, Universidade Federal do Paraná, Brasil.
4. Anyelly Marrye Luvizott, Dept. Entomology, Universidade Federal do Paraná, Brasil.
5. Weslly Franco, Dept. Entomology, Universidade Federal do Paraná, Brasil.
6. Aline M. De Oliveira, Dept. Entomology, Universidade Federal do Paraná, Brasil.
7. Isadora L. S. Souza, Dept. Entomology, Universidade Federal do Paraná, Brasil.
8. Sabrina M. da Silva, Dept. Entomology, Universidade Federal do Paraná, Brasil.
9. Lucas R. P. Gomes, Dept. Entomology, Universidade Federal do Paraná, Brasil.

Manuscripts Reviews for:

1. Revista Brasileira de Criminalística.

Technical Works

Technical report

1. Identification of insects sent by Police from Paraná state, Brazil (crimes against persons unit). 2012-2013.

Volunteer Outreach Events

- 2016** Insect Safari at the UK-LFUGC Arboretum: Moonlit Edition: Present insect-themed games, activities, displays and night walk in the trails to observe the insects (Lexington, KY, USA).

- 2011** Association between the university and police: Talk about how to use insects to obtain more information in crimes against person (Curitiba, Brazil).
- 2008** Bio na Rua [Biology in the street]: This event was held in a public square and reached people from all ages. With an accessible language, the aim was to bring to the community our knowledge and to show the everyday of a biology student (Curitiba, Brazil).
- 2005** Guided tour to the Anatomy Museum of Universidade Federal do Paraná (Brazil): Internship for four months to guide children from different ages in the museum.

References

1. **Dr. Mauricio Osvaldo Moura**
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2. **Dr. Charles W. Fox**
University of Kentucky, USA
Email: cfox@uky.edu / callomac@gmail.com
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3. **Dr. Jeffrey D. Wells**
Florida International University, USA
Email: jedwell@fiu.edu
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