# FILIP RUZICKA

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25/02/2019 -	Research Fellow with Dr Tim Connallon	Monash University	
present		Melbourne, Australia.	
	EDUCATION		
01/01/2015—	<b>PhD:</b> "The genetics and evolutionary	University College London	
28/12/2018	dynamics of sexually antagonistic polymorphisms in <i>Drosophila melanogaster</i> ".	United Kingdom.	
	Supervisors: <b>Prof. Max Reuter</b> and <b>Prof. Kevin Fowler</b> .		
01/09/2012-	MRes Biodiversity, Evolution & Conservation	University College London,	
01/11/2013		Institute of Zoology and London Natural History Museum	
		United Kingdom.	
01/09/2009-	Bsc Biological Sciences	University College London	
01/08/2012		United Kingdom.	

### **PUBLICATIONS**

2022

**Ruzicka, F.**, Holman, L., Connallon, T. (2022). Polygenic signals of sex differences in selection in humans from the UK Biobank. *PLOS Biology*, 20:e3001768.

**Ruzicka**, F., Reuter, M. (2022). Evolutionary Genetics: Dissecting a sexually antagonistic polymorphism. *Current Biology (Dispatch)*, 35:PR828-R830

Connallon, T., Beasley, I.J., McDonough, Y., **Ruzicka, F.** (2022). How much does the unguarded X contribute to sex differences in lifespan? *Evolution Letters* 6:319–329.

**Ruzicka**, F., Connallon, T. (2022). An unbiased test reveals no enrichment of sexually antagonistic polymorphisms on the human X chromosome. *Proceedings of the Royal Society B: Biological Sciences* 289:202123142

2021

**Ruzicka, F.**, Connallon T., Reuter, M. (2021). Sex differences in deleterious mutational effects in *Drosophila melanogaster*: combining quantitative and population genetic insights. *Genetics* 219:iyab143

Jardine, M., **Ruzicka, F.**, Diffley, C., Fowler, K., Reuter, M. (2021). A non-coding indel polymorphism in the *fruitless* gene of *Drosophila melanogaster* exhibits

antagonistically pleiotropic effects. *Proceedings of the Royal Society B: Biological Sciences* 288:20202958.

2020

**Ruzicka, F.\***, Connallon, T.\* (2020). Is the X chromosome a hot spot for sexually antagonistic polymorphisms? Biases in current empirical tests of classical theory. *Proceedings of the Royal Society B: Biological Sciences* 287:20201869.

**Ruzicka, F.\***, Dutoit, L.\*, Czuppon, P., Jordan, C.Y., Li, X-Y, Olito, C., Runemark, A., Svensson, E.I., Yazdi, H.P., Connallon, T. (2020). The search for sexually antagonistic genes: Practical insights from studies of local adaptation and statistical genomics. *Evolution Letters* 4:398-415.

2019

**Ruzicka, F.\***, Hill, M.S.\*, Pennell, T.M.\*, Flis, I., Ingleby, F.C., Mott, R., Fowler, K., Morrow, E.H., Reuter, M. (2019). Genome-wide sexually antagonistic variants reveal long-standing constraints on sexual dimorphism in fruit flies. *PLOS Biology* 17:e3000244.

2018

Connallon, T., Olito, C., Dutoit, L., Papoli, H., **Ruzicka, F.**, Yong, L. (2018). Local adaptation and the evolution of inversions on sex chromosomes and autosomes. *Philosophical Transactions of the Royal Society B: Biological Sciences* 373:20170423.

2017 and previous

Reuter, M., Camus, M. F., Hill, M.S., **Ruzicka, F.**, Fowler, K. (2017). Evolving plastic responses to external and genetic environments. *Trends in Genetics (Forum)* 33:169-170.

Davies, T., **Ruzicka, F.**, Lavery, T., Walters, C.L., Pettorelli, N. (2016). Ultrasonic monitoring to assess the impacts of forest conversion on Solomon Island bats. *Remote Sensing in Ecology and Conservation* 2:107-118.

Andujar, C., Arribas, P., **Ruzicka, F.**, Crampton-Platt, A., Timmermans, M.J.T.N., Vogler, A.P. (2015). Phylogenetic community ecology of soil biodiversity using mitochondrial metagenomics. *Molecular Ecology* 24:3603-3617.

### PRIZES & AWARDS

2020	ECR Award, Australasian Evolution Society.	
2018	Runner-up, ECR Talk, the Genetics Society's Autumn Symposium 'Genotype to Phenotype to Fitness'	
	Winner, Final Year Talk, UCL GEE Postgraduate Symposium.	
2017	Winner, Second Year Poster, UCL GEE Postgraduate Symposium.	
2013	Darwin Prize for Best Student, UCL MRes.	

#### **FUNDING**

2020

A\$1,000, ECR Award; the Australasian Evolution Society.

<sup>\*</sup>Denotes co-first authorship

2019	A\$5,000, for initiatives as ECR Theme Leader; <b>Monash School of Biological Sciences</b> .					
	A\$10,000, ECR Career Development Award; Monash School of Biological Sciences.					
2017	£800, to attend 26 <sup>th</sup> ESEB Congress and ESEB Special Topics Network; UCL Graduate School Fund.					
2016	£3,000, CEE Summer Symposium organisation; Centre for Ecology & Evolution and the Genetics Society.					
2015	CHF450, 'Evolutionary Biology in Guarda' Summer School; University of Basel. £7,500, Supporting funds for PhD research; NERC.					
2014–18	£64,000, PhD Studentship; <b>NERC</b> London Doctoral Training Partnership.					
	NATIONAL & INTERNATIONAL TALKS					
2023	56th Population Genetics Group (London, UK).					
	Invited departmental talk, Lund University (Lund, Sweden).					
	Invited departmental talk, ISTA (Vienna, Austria).					
2021	Australasian Evolution Society (Melbourne, Australia).					
2020	Invited plenary, Australasian Evolution Society (online).					
2019	Australasian Evolution Society (Sydney, Australia).					
	Genetics Society of Australasia (Melbourne, Australia).					
	52 <sup>nd</sup> Population Genetics Group (Oxford, UK).					
2018	The Genetics Society's Autumn Symposium 'Genotype to Phenotype to Fitness' (Exeter, UK).  51st Population Genetics Group (Bristol, UK).					
2017	26 <sup>th</sup> Congress of the European Society for Evolutionary Biology (Groningen, Netherlands).					
2015	<b>European Meeting of PhD Students in Evolutionary Biology</b> (Stirling, UK).					
	ORGANISATION & LEADERSHIP					
2022–23	Co-organiser, <b>SMBE Everywhere Symposium</b> "Genetics and Evolution of Sex Differences" (online)					
2020–21	Co-organiser, School of Biological Sciences Seminar Series (Monash).					
2019–21	ECR representative, School of Biological Sciences "Evolution Theme" (Monash).					
2016	Co-organiser, Centre for Ecology & Evolution Summer Symposium (London): "War & Peace: The Dynamics of Evolutionary Conflict".					
2016–18	Co-organiser, UCL GEE Friday Seminars for Young Researchers (London).					
	SUPERVISION & MENTORSHIP					
2022	Bovingdon, N. (Honours, Monash)					
2021	McDonough, Y. (Honours, Monash), Schmiedl, N. (Undergraduate, Monash)					
2020	Cyza, J. (Undergraduate, Monash)					
2019	Beasley, I.J. (Undergraduate, Monash)					

2018	Davidson, O. (MRes, UCL).				
2016	Pawar, H. (Undergraduate, UCL), Snaith, D. (Undergraduate, UCL),				
Houghton, M. (MRes, UCL).					
2015	Bates, S. (Msci, UCL).				
	REVIEWING				
2019–present	<b>Journals</b> : Nature Ecology and Evolution, PNAS, Molecular Biology and Evolution,				
2019 present	The American Naturalist, Proceedings of the Royal Society B: Biological Scienc Evolution Letters, Genetics, Evolution, Journal of Evolutionary Biology, Behavioural Ecology and Sociobiology. Heredity.				
	<b>Fellowships</b> : Human Frontiers Science Program, The Austrian Academy of Sciences.				
	TEACHING				
2020–21	Co-coordinator, "Foundations of Evolutionary Biology" PhD course in population				
	and quantitative genetics (Monash)				
2019–21	Guest lecturer, Evolutionary & Ecological Genetics (Monash), Genomics & Population Genetics (Monash)				
2020	Undergraduate tutor, Genomics & Population Genetics (Monash), Evolutionary & Ecological Genetics (Monash)				
2015–18	Undergraduate tutor, Sex, Genes & Evolution (UCL), Computational Biology (UCL), Evolutionary Genetics (UCL).				
	TRAINING				
2019–20	GENETICS Peer Review Training Programme (online).				
2017–19	ESEB Special Topics Network "Linking local adaptation to the evolution of sex differences" (Montpellier, France; Lund, Sweden)				
2015	Guarda Summer School (Guarda, Switzerland).				
	PUBLIC ENGAGEMENT				
2020	Evolution Letters research blog.				
2018	Scientific expert for 'Agonism/Antagonism' art exhibition at UCL Grant Museum				
_010	of Zoology.				
2016–17	The Genetics Society Summer newsletter.				
2014–17	Tutor, "Generating Genius" programme for STEM secondary students from deprived backgrounds				

# REFEREES

Dr Tim	Lecturer, School of Biological Sciences (Monash University, Melbourne),		
Connallon	tim.connallon@monash.edu		
Prof. Max	Professor of Evolutionary Genetics, Dept. of Genetics, Evolution & Environment		
Reuter	(UCL, London), <u>m.reuter@ucl.ac.uk</u> , +4420 3108 2210		
Prof. Kevin	Professor of Evolutionary Biology, Dept. of Genetics, Evolution & Environment		
Fowler	(UCL, London), k.fowler@ucl.ac.uk, +4420 3108 2279		