Curriculum Vitae
Dr. Roshan Kumar Vijendravarma

Department of Ecology and Evolution
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Nationality- Indian

Education

Ph.D. - Evolutionary Biology, March 2008.
NERC-Centre for Population Biology, Imperial College London, UK.
Advisor: Prof. Charles Godfray (now Oxford).

M.Sc. - Biotechnology, May 2002.
Bangalore University, Bangalore, India.
Advisor: Prof. Raman Sukumar, Indian Institute of Science (IISc), Bangalore.

B.Sc. - Microbiology, Zoology and Chemistry, May 2000.
Bangalore University, Bangalore, India.

B.Sc. - Honors in Genetic Engineering, May 1999.
Jain Institute of Vocational Studies, Bangalore, India.

Professional appointments

2013 - : SNF senior research associate, Department of Ecology and Evolution, University of Lausanne, Switzerland.

2008-13 : Post-doctoral fellow, Department of Ecology and Evolution, University of Lausanne, Switzerland.

2004-08 : BP-NERC-DHPA fellow, NERC-CPB, Imperial College London, UK.

Grants

- **BP-NERC-Dorothy Hodgkin Postgraduate Award,** UK (2004): GBP 75,000.
- **ESEB Outreach fund** (2014): Euro 1000 for organizing a symposium on "Evolution of antibiotic resistance" for Indian medical graduates.
- **Gordon Research Conference- fellowship** US (2014): USD 800 for GRC and GRS registration.
- **UNIL-Foundation du 450ème**, Switzerland (2012): CHF 3,500 for conference registration and travel.
- **IISc Postgraduate Scholarship**, India (2002): INR 10,000 for research costs of M.Sc. thesis.

Teaching Experience as TA

2008-13: Zoology, Insect Physiology - Undergraduate course at UNIL, Switzerland.

2008-12: Experimental design- Undergraduate course at UNIL, Switzerland.

2006-07: Insect physiology- Undergraduate course at Imperial College, London, UK.

Publications Published Articles: 12; Times Cited: 159; Average Citations per Article: 11.75; h-index: 6.

In press Narasimha S., Kolly S., Sokolowski M.B., Kawecki T.J., **Vijendravarma R.K.** Prepupal building behavior in *Drosophila melanogaster* and its evolution under resource and time constraints. ***PLOS ONE.***

2013 **Vijendravarma, R. K.**, Narasimha, S. & Kawecki, T. J. Predatory cannibalism in *Drosophila melanogaster* larvae. ***Nature Communications*** 4 p. 1789.

Vijendravarma R. K. & Kawecki T. J. Epistasis and maternal effects in experimental adaptation to chronic nutritional stress in *Drosophila*. ***Journal of Evolutionary Biology***. 26**,** 2566-2580.

2012 **Vijendravarma, R. K.**, Narasimha, S. & Kawecki, T. J. Evolution of foraging behaviour in response to chronic malnutrition in *Drosophila melanogaster*. ***Proceedings of the Royal Society B*** 279(1742) pp. 3540-3546.

Vijendravarma, R. K., Narasimha, S. & Kawecki, T. J. Adaptation to abundant low quality food improves the ability to compete for limited rich food in *Drosophila melanogaster*. ***PLOS ONE*** **7**(1) pp. e30650.

Vijendravarma, R. K., Narasimha, S. & Kawecki, T. J. Chronic malnutrition favours smaller critical size for metamorphosis initiation in *Drosophila melanogaster*. ***Journal of Evolutionary Biology*** 25, 288-292.

2011 **Vijendravarma, R. K.**, Narasimha, S. & Kawecki, T. J. Plastic and evolutionary responses of cell size and number to larval malnutrition in *Drosophila melanogaster*. ***Journal of Evolutionary Biology*** 24, 897-903.

Vijendravarma, R. K., Narasimha, S. & Kawecki, T. J. Adaptation to larval malnutrition does not affect fluctuating asymmetry in *Drosophila melanogaster*. ***Biological Journal of the Linnean Society*** 104, 19-28.

2010 **Vijendravarma, R. K.**, Narasimha, S. & Kawecki, T. J. Effects of parental larval diet on egg size and offspring traits in *Drosophila*. ***Biology Letters*** 6, 238-241.

2009 **Vijendravarma, R. K.**, Kraaijeveld, A. R. & Godfray, H. C. J. Experimental evolution shows *Drosophila melanogaster* resistance to a microsporidian pathogen has fitness costs. ***Evolution*** 63, 104-114.

Kolss, M., **Vijendravarma, R. K.**, Schwaller, G. & Kawecki, T. J. Life-history consequences of adaptation to larva nutritional stress in *Drosophila*. ***Evolution*** 63, 2389-2401.

2008 **Vijendravarma, R. K.**, Godfray, H. C. J. & Kraaijeveld, A. R. Infection of *Drosophila melanogaster* by *Tubulinosema kingi*: Stage-specific susceptibility and within-host proliferation. ***Journal of Invertebrate Pathology*** 99, 239-241.

2003 Vidya, T. N. C., **Kumar, V. R.**, Arivazhagan, C. & Sukumar, R. Application of molecular sexing to free-ranging Asian elephant (*Elephas maximus*) populations in southern India. ***Current Science*** 85, 1074-1077.

Submitted Papers

Vijendravarma R.K., Narasimha S., Chakrabarti S., Babin A., Kolly S., Lemaitre B., Kawecki T.J. Infection-mediated intestinal barrier dysfunction as an evolutionary cost of adaptation to chronic malnutrition. ***PNAS.***

Vijendravarma R.K. Kawecki T.J. Idiosyncratic evolution of maternal effects in response to juvenile malnutrition in *Drosophila*. ***Journal of Evolutionary Biology***.

Invited Talks

2014 Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India
2012 University of Toronto, Department of Ecology and Evolutionary Biology, Toronto, Canada
University of Konstanz, Department of Biology, Germany
Global Health Institute-EPFL, Lausanne, Switzerland
2009 Indian Institute of Science, Bangalore, India
2008 University of Zurich, IEU, Switzerland
2007 University of Lausanne, Department of Ecology and Evolution, Switzerland
CNRS, Centre de Génétique Moléculaire, Gif-sur-Yvette, France.

Conference Presentations

2014 Nutrition, Behavior and Life History Symposium, ISBE 2014, New York, U.S (*Invited*)
Swiss *Drosophila* meeting, Fribourg, Switzerland
Genes and Behavior (Gordon Research Conference), Galveston, U.S.
Genes and Behavior (Gordon Research Seminar), Galveston, U.S.
2013 Lausanne Fly meeting, Lausanne, Switzerland
ESEB Congress, Lisbon, Portugal
2012 Joint Evolution Meeting, Ottawa, Canada
Swiss *Drosophila* meeting, Lausanne, Switzerland
2011 ESEB Congress, Tubingen, Germany
2010 Lausanne Fly meeting, Lausanne, Switzerland

Professional Service

Manuscripts reviewed since 2009: Biological Journal of the Linnean Society (3), Evolution (1), Frontiers: Ecology and Evolution (1), Functional Ecology (1), Gene, Genomics, Genetics (1), Journal of American Aging Association (1), Journal of Biosciences (2), Journal of Evolutionary Biology(3), Limnology & Oceanography (1), Malaria Journal (1), Molecular Ecology (1), PLOS ONE (2), Turkish Journal of Zoology (1). Grants reviewed for the Portuguese Foundation for Science and Technology (FCT) (2).

Honorary Research Associate: Captive Elephants of India, a project jointly investigated by Asian Nature Conservation Foundation (ANCF), World Society for Protection of Animals (WSPA), Compassion Unlimited Plus Action (CUPA) and Wildlife Rescue and Rehabilitation Centre (WRRC).

Memberships in professional societies (Past and Present)

ESEB (European Society for Evolutionary Biology), SSE (Society for the Study of Evolution), ASN (American Society of Naturalists), SZS (Swiss Zoological Society) and CPCSEA (Committee for the Purpose of Control and Supervision of Experiments on Animals -India)

Selected media attention

2013 Featured article by Victoria Gill, "Cannibal fruit flies: Lab maggots hunt one another", BBC (http://www.bbc.com/news/science-environment-22345811)
Article by Bob Holmes, "Mild-mannered flies turn cannibal when short of food", New Scientist (http://www.newscientist.com/article/dn23463-mildmannered-flies-turn-cannibal-when-short-of-food.html#.VKwzyXubHO8)
Article by Alex Reis, "Why do some animals turn cannibalistic?", The Munich Eye (http://www.themunicheye.com/news/Why-do-some-animals-turn-cannibalistic%3F-2721)
"Fruit Flies Have Cannibalistic Tendencies", French Tribune (http://www.frenchtribune.com/teneur/1317784-fruit-flies-have-cannibalistic-tendencies)

2012 Featured Article by Susan Milius, "Young fruit flies go cannibalistic", Science News,

Academic Referees:

Prof. Tadeusz J Kawecki - Associate Professor
Department of Ecology and Evolution, University of Lausanne, Lausanne -1015, Switzerland.
Tel: +41-(0)21- 6924161; Tadeusz.kawecki@unil.ch

Prof. Charles H Godfray- Hope Chair of Zoology (Entomology)
Department of Zoology, University of Oxford, South Parks Road, Oxford OX1 3PS, UK.
Tel: +44-(0)18-65 271176; charles.godfray@zoo.ox.ac.uk

Prof. Marla B Sokolowski - Professor
Department of Ecology and Evolutionary Biology, University of Toronto, 25 Willcocks Street, Room 2070, Toronto, Ontario, Canada M5S 3B2
Tel: +1 416-946-0007; marla.sokolowski@utoronto.ca

Prof. Bruno Lemaitre - Professor
Global Health Institute, EPFL, EPFL-SV-GHI UPLEM, SV 3838, Lausanne-1015, Switzerland.
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