Guha Dharmarajan

PhD:

Population genetics (Department of Forestry and Natural Resources, Purdue University, Indiana, USA).

Email ID:

guha

Research Interest:

Theoretical and empirical aspects of population biology and disease ecology.

Academic Qualification:

Ph.D. (2008): Department of Forestry and Natural Resources, Purdue University, Indiana, USA.

M.V.Sc. (2000): Department of Wildlife Science, Tamil Nadu Veterinary and Animal Science University, Tamil Nadu, India (2000).

B.V.Sc. (1997): Tamil Nadu Veterinary and Animal Science University (1997).

Positions:

Ramanujan Fellow (Sept. 2012 – Present): Indian Institute of Science Education and Research-Kolkata.

Post-doctoral Visiting Fellow (Feb. 2011- Aug. 2012) Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Rockville, Maryland. USA.

Post-doctoral Research Associate and Member of the Graduate Faculty (Sept. 2008 - Jan. 2011): Department of Forestry and Natural Resources, Purdue University, West Lafayette, Indiana, USA.

Awards and Honors:

Ramanujan Fellowship (Sept. 2012-2017): Dept. of Science and Technology, Govt. of India.

Post-doctoral Visiting Fellow Award (Jan. 2011- 2013): National Institutes of Health, USA.

Kirkpatrick Memorial Graduate Student Award (April 2008): Purdue University, USA.

Bilsland Dissertation Completion Grant (Aug. 2007-Feb. 2008): Purdue University, USA.

Outstanding Graduate Teaching Assistant (April 2007): Purdue University, USA.

Frederick N. Andrews Doctoral Fellowship (Aug. 2002-2006): Purdue University, USA.

Animal Welfare Scholarship (May-Aug. 2000): Social Justice and Empowerment, Govt. of India.

Merit Scholarship for Postgraduate Studies (August 1997-1999): Tamil Nadu Veterinary and Animal Science University.

ICAR Nominee for Undergraduate Studies (August 1991-1997): Indian Council of Agricultural Research, Govt. of India.

Professional Activities:

Member, Editorial Board, *Journal of Genetics*; Nominated December 2012.

Member, Graduate Faculty, Purdue University; Nominated: November, 2008.

Member, PhD Advisory Committee: Zach Olson, Purdue University (Completed November 2010).

Reviewer: *Genetica , Infection Genetics and Evolution*, *Journal of Genetics*, *Journal of Wildlife Management*, *Molecular Ecology* and *Molecular Ecology Resources.*

Professional societies: Tamil Nadu Veterinary Council, Association of Indian Zoo and Wildlife Veterinarians, Indian Society for Veterinary Epidemiology and Preventive Medicine, Mid-Atlantic Mosquito Control Association, Virginia Mosquito Control Association.

Peer Reviewed Articles

Dharmarajan G, Beatty WS and Rhodes OE Jr. (2013) Heterozygote deficits caused by a Wahlund effect: dispelling unfounded expectations. *Journal of Wildlife Management* 77: 226–234

Dharmarajan G, Beasley JC, Fike JA, Raizman EA, Wu CC, Pogranichniy RM and Rhodes OE Jr. (2012) Effects of kin-structure on disease dynamics in raccoons (*Procyon lotor*) inhabiting a fragmented landscape. *Basic and Applied Ecology* 13: 560-567.

Beatty WS, Beasley JC, **Dharmarajan G** and Rhodes OE Jr. (2012) Genetic structure of a Virginia opossum (*Didelphis virginiana*) population inhabiting a fragmented agricultural ecosystem. *Canadian Journal of Zoology* 90: 101-109.

Beasley JC, Olson ZH, **Dharmarajan G**, Eagan TS and Rhodes OE Jr. (2012) Spatio-temporal variation in the demographic attributes of a generalist mesopredator: Are raccoons as successful as they seem? *Landscape Ecology* 26: 937-950.

MacNeil JE, **Dharmarajan G** and Williams RN (2011) A code generator for use of Visible Implant Elastomers. *Herpetological Conservation and Biology* 6: 260-265.

Dharmarajan G, Beasley JC and Rhodes OE Jr. (2011) Heterozygote deficiencies in parasite component populations: An evaluation of interrelated hypotheses in the raccoon tick, *Ixodes texanus*. *Heredity* 106: 253-260.

Dharmarajan G and Rhodes OE Jr. (2011) Evaluating levels of PCR efficiency and genotyping error in DNA extracted from engorged and non-engorged female ticks. *Medical and Veterinary Entomology* 25: 109-112.

Dharmarajan G, Beasley JC and Rhodes OE Jr. (2010) Spatial and temporal factors affecting parasite genotypes encountered by hosts: Empirical data from American dog ticks (*Dermacentor variabilis*) parasitizing a wildlife host. *International Journal for Parasitology* 7: 787-795.

Dharmarajan G, Beasley JC, Fike JA, Rhodes OE Jr. (2009) Population genetic structure of raccoons (*Procyon lotor*) inhabiting a highly fragmented landscape. *Canadian Journal of Zoology* 87: 814-824.

Dharmarajan G, Fike JA, Beasley JC, Rhodes OE (2009) Development and characterization of 12 polymorphic microsatellite loci in the American dog tick (*Dermacentor variabilis*). *Molecular Ecology Resources* 9: 131-133.

Dharmarajan G, Fike JA, Beasley JC, Rhodes OE (2009) Development and characterization of 14 polymorphic microsatellite loci in the raccoon tick (*Ixodes texanus*). *Molecular Ecology Resources* 9: 296-298.

Raizman EA, **Dharmarajan G**, Beasley JC, Wu CC, Pogranichniy RM and Rhodes OE Jr. (2009) Serologic survey for selected infectious diseases in raccoons (*Procyon lotor*) in Indiana, USA. *Journal of Wildlife Diseases* 45: 531-536.

Anderson SJ, Fike JA, **Dharmarajan G**, Rhodes OE (2007) Characterization of 12 polymorphic microsatellite loci for eastern chipmunks (*Tamias striatus*). *Molecular Ecology Notes* 7: 513-515.

Barr KR, **Dharmarajan G**, Rhodes OE, Lance RL, Leberg PL (2007) Novel microsatellite loci for the study of the black-capped vireo (*Vireo atricapillus*). *Molecular Ecology Notes* 7: 1067-1069.

Fike JA, Drauch AM, Beasley JC, **Dharmarajan G**, Rhodes OE (2007) Development of 14 multiplexed microsatellite loci for raccoons *Procyon lotor*. *Molecular Ecology Notes* 7: 525-527.

Latch EK, **Dharmarajan G**, Glaubitz JC, Rhodes OE Jr. (2006) Relative performance of Bayesian clustering software for inferring population substructure and individual assignment at low levels of population differentiation. *Conservation Genetics* 7: 295-302.

Beheler AS, Fike JA, **Dharmarajan G**, Rhodes OE, Serfass TL (2005) Ten new polymorphic microsatellite loci for North American river otters (*Lontra canadensis*) and their utility in related mustelids. *Molecular Ecology Notes* 5: 602-604.

Dharmarajan G, Raman M, John MC (2005) Effect of season on helminth loads of wild herbivores and cattle in the Mudumalai Wildlife Sanctuary, southern India. *Zoos' Print Journal* 20: 1766-1769.

Dharmarajan G, Raman M, John MC (2004) Are worms affected by host ecology? A perspective from Mudumalai Wildlife Sanctuary, southern India. *Journal of the Bombay Natural History Society* 101: 399-402.

Dharmarajan G, Raman M, John MC (2003) Effect of cattle and habitat on helminth community structure of chital. *Indian Veterinary Journal* 80: 984-987.

Dharmarajan G, Raman M, John MC (2003) The effects of cattle grazing and habitat on helminth loads of chital (Axis axis) in the Mudumalai Wildlife Sanctuary, southern India. *Journal of the Bombay Natural History Society* 100: 58-64.

Nambi AP, Jayathangaraj MG, Thirunavakarasu PS, Raman M, **Dharmarajan G** (1989) Strongyloidosis in a bonnet macaque (*Macaca radiata)*- A case report. *Indian Journal of Veterinary Medicine* 13: 64-65.

Articles in Review/Preparation

Dharmarajan G, Beasley JC, Fike JA and Rhodes OE Jr. (In Review) Fine-scale patterns of kin-structure in a generalist mesopredator inhabiting a fragmented landscape. *Animal Conservation.*

Dharmarajan G, Beasley JC, Beatty WS, Olson ZH, Fike JA and Rhodes OE Jr. (In Review) Genetic co-structuring in host-parasite systems: Empirical data from raccoons (*Procyon lotor*) and raccoon ticks (*Ixodes texanus*). *Oikos,*

Beasley JC, Olson ZH, Beatty WS, **Dharmarajan G** and Rhodes OE Jr. (In Review) Effects of culling on mesopredator population dynamics: implications for disease management in fragmented landscapes. *Plos One.*

Tan CG, **Dharmarajan G**, Beasley JC, Rhodes OE Jr., Moore GE, Wu CC, Lin TL (Submitted) Isolation and identification of leptospires from raccoons (*Procyon lotor*) in Indiana, USA.

Dharmarajan G, Dieter K and Lehmann T (In Prep.) Are mosquitoes in disease "hot-spots" more efficient vectors? Insights on spatial variation in disease resistance and tolerance in a natural vector-parasite system.

Beasley JC, Olson ZH, **Dharmarajan G**, Eagan TS and Rhodes OE Jr. (In Prep.) Source-sink dynamics in a generalist mesocarnivore.

Reports and Popular Articles

Sukumar R, Venkatraman A, Cheeran J, Mujumdar PP, Baskaran N, **Dharmarajan G**, Roy M, Madhivanan A, Suresh HS, Narendran K (2003) A study of elephants in Buxa Tiger Reserve and adjoining areas of Northern West Bengal and preparation of a conservation action plan. Submitted to West Bengal Forest Department

Dharmarajan G. Jazz and Conservation. *Rock Street Journal*, November 2001.

Dharmarajan G. Wildlife health: are we missing the forest for the trees? *Sanctuary*, October, 2001.

Dharmarajan G. Editorial: The good earth, Part II. *The Statesman*, July 17, 2001.

Dharmarajan G. Editorial: The good earth, Part I. *The Statesman*, July 16, 2001.