EVOLUTIONARY BIOLOGY RESEARCH IN INDIA

Although evolutionary biology is a field of active research in many developed countries, it remains sadly neglected in India and is poorly represented in both curricula and research programmes. Much like other areas in biology that are more often in the news, evolutionary biology has also undergone tremendous change in the past few decades, in terms of the degree of sophistication with which research problems can be posed as well as with regard to the methodology and rigour that can be brought to bear on those problems. In this issue of Resonance we honour Theodosius Dobzhansky, one of the greatest experimental evolutionary biologists of the twentieth century. We felt it apt, therefore, to provide students who may be interested in pursuing research in evolutionary biology with some information about some of the institutions in India carrying out research and teaching in various areas of evolutionary biology. We stress that this is not a comprehensive list, and that we have focussed on institutions where the emphasis is on evolution as a dynamic process rather than the study of static patterns in space and time. We have, therefore, not included institutions/departments whose primary thrust is on subjects like palaeontology or biodiversity. We would also like to mention that evolutionary biology is an ‘area of biology’ whose foundation rests upon a very well developed and mathematically rigorous body of theory, and there are great opportunities in both theoretical and experimental evolutionary research for students with a background in the physical or mathematical sciences.

Centre for Ecological Sciences, Indian Institute of Science, Bangalore (PhD, Int.PhD)

The Centre is engaged in empirical and theoretical research in a variety of areas including social behaviour, cooperation and altruism with special reference to bees and wasps, sexual selection, life history strategies and ant-plant interactions, animal communication, etc.

Contact: Prof. Raghavendra Gadagkar, Centre for Ecological Sciences, Indian Institute of Science, Bangalore 560 012, email: ragh@ces.iisc.ernet.in, URL: http://ces.iisc.ernet.in/hpg/ragh

Evolutionary and Organismal Biology Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore (PhD)

Empirical and theoretical research in evolutionary genetics esp. evolution of life-histories, developmental rates and rates of ageing in Drosophila, evolution of ecological specialization, evolutionary aspects of biological rhythms and the evolutionary maintenance of sexual reproduction; evolution of altruism and selfishness in insect societies.

Contact: Dr. Amitabh Joshi, EOBU, JNCASR, PO Box 6436, Jakkur, Bangalore 560 064, email: ajoshi@jncasr.ac.in.
Department of Studies in Zoology, University of Mysore (MSc, PhD)

Empirical research in evolutionary cytogenetics esp. the role of karyotypic changes in mediating the evolution of reproductive isolation in situations of incipient race formation and speciation in Drosophila.

Contact: Prof. H A Ranganath, Department of Studies in Zoology, University of Mysore, Manasagangotri, Mysore 570 006, email: drosrang@bgl.vsnl.net.in

Department of Zoology, University of Pune (MSc, PhD)

Empirical research in evolutionary cytogenetics esp. study of mechanisms maintaining chromosomal polymorphisms in wild populations of midges; estimating genetic divergence between Indian and European midges.

Contact: Dr. Bimalendu B Nath, Department of Zoology, University of Pune, Pune 411 007, email: bbnath@unipune.ernet.in

Department of Zoology, Banaras Hindu University (MSc, PhD)

Empirical research in population genetics esp. patterns of distribution of genetic variation for morphological, behavioural, cytogenetic and fitness associated characters in different geographical populations of Indian species of Drosophila.

Contact: Prof. B N Singh, Genetics Laboratory, Department of Zoology, Banaras Hindu University, Varanasi 221 005, email: bnsingh@banaras.ernet.in

Department of Biosciences, Maharishi Dayanand University, Rohtak (MSc, PhD)

Empirical research in population genetics esp. patterns of distribution of genetic variation for morphological traits and allozymes in different geographical populations of Indian species of Drosophila.

Contact: Prof. Ravi Parkash, Department of Biosciences, MD University, Rohtak 124 001.

University of Agricultural Sciences, Bangalore (MSc, PhD)

Empirical and theoretical research in evolutionary ecology esp. evolution of mutualistic species interactions; evolution of parent-offspring conflict.

Contact: Prof. R Uma Shaanker, Department of Crop Physiology, UAS, GKVK Campus, Bangalore 560 064, email: rus@vsnl.com, ushankar@atree.frlht.ernet.in, or Prof. K. N. Ganeshaiah, Department of Genetics and Plant Breeding, UAS, GKVK Campus, Bangalore 560 064, email: kng@vsnl.com, ganesh@atree.frlht.ernet.in.
Anthropology and Human Genetics Unit, Indian Statistical Institute, Calcutta (MSc, PhD)

Theoretical and empirical research in population genetics esp. use of molecular data for assessing genetic divergence among populations, human population genetics and evolution.

Contact: Prof. Partha P Majumder, Anthropology and Human Genetics Unit, Indian Statistical Institute, 203, B T Road, Calcutta 700 035, email: ppm@isical.ac.in

Department of Zoology, Dayalbagh Educational Institute, Agra (MSc, PhD)

Population genetics esp. allozyme variation within and among populations of fishes and amphibians.

Contact: Dr. Sant Prakash, Biochemical Genetics Laboratory, Department of Zoology, Dayalbagh Educational Institute, Agra 282 005, email: santprakashdei@nde.vsnl.net.in

The above is of course only a partial list. We may publish additional lists in future issues of Resonance. We also welcome requests from institutions engaged in teaching and research in evolutionary biology for inclusion in future lists.

********

NCBS SYMPOSIUM ON CELL AND DEVELOPMENTAL BIOLOGY
9th-12th January 2001

Organizers: Satyajit Mayor, K Vijayraghavan

Contact us: National Centre for Biological Sciences,
Tata Institute of Fundamental Research,
UAS-GKVK Campus, Bangalore 560 065, India
Phone: 91-80-8561657 (Ext 2241), FAX: 8561675, 8561662
e-mail: celldev@ncbs.res.in

Visit http://www.ncbs.res.in/~events/celldev.html for more details.

Last date for registration and abstract submission: 30th October 2000.