

CURRICULUM VITAE

Name: Vinod Kumar
Father's name: (Late) Shri Guru Prasad Dubey
BORN: 14 January 1956, Pratapgarh (U.P.)
EDUCATION: M. Sc. (Zoology); Ph. D. (Zoology, Banaras Hindu University; 1981)

CURRENT POSITION AND ADDRESS:

Professor, Department of Zoology; University of Delhi; Delhi 110 007, India
Cell: 09818875429; 09415532754; Email: drvkumar11@yahoo.com, drvkumar11@gmail.com,

ACADEMIC POSITIONS HELD:

Jan. 1983 - Dec. 1995: Lecturer in Zoology
Jan. 1996 - Dec. 1999: Reader in Zoology
Jan 2000 – Contd.: Professor of Zoology

SUBJECT SPECIALIZATION:

Zoology (Sub-area: Chronobiology; Animal Behaviour; Physiology and Behavioural Neuroscience;)

AREA OF RESEARCH:

Chronobiology; Mechanism of Circadian and Seasonal Behaviour and Physiology of Songbirds

TEACHING AND RESEARCH EXPERIENCE:

Post-doctoral research experience: >39 years
Teaching experience: >37 years (since 01 Jan 1983)
As Professor >20 years (since 01 January 2000)

TEACHING AND RESEARCH EXPERIENCE: ABROAD

Approx. 7 years (5 years research; 1.6 years (20 mo) teaching and research; short visits of 2-10 wks)
2018 Visiting PI under IndoUS at Salk Institute for Biological Studies, USA
2015 Visiting PI under IndoUS at Salk Institute for Biological Studies, USA
2007 JSPS Senior Visiting Fellow, Nagoya University, Japan
2003 Jan - 2004 Aug: Visiting Professor, Dept. of Biology, Texas A & M University, USA.
2002 May - June: Visiting Fellow. MaxPlanck Inst. for Ornithology, Germany.
2001 June - August: Visiting Fellow. MaxPlanck Inst. for Ornithology, Germany.
2000 May - August: Visiting Fellow. MaxPlanck Inst. for Ornithology, Germany
1999 May - August: Visiting Fellow. MaxPlanck Inst. for Ornithology, Germany.
1997 March - 1998 February: Postdoctoral Fellow. Max Planck Institute for Ornithology, Germany.
1995 March - 1996 March: CIDA-NSERC Associate. Dalhousie University, Halifax, Canada.
1992 March - 1993 March: European Community Postdoctoral Fellow, Edinburgh, U.K.
1991 Feb - December: INSA - The Royal Society UK Exchange Fellow. Bristol, UK.

PUBLICATIONS: Research articles: 187 (155 original papers in ~50 Journals; 22 Reviews; 10 Book chapters); **Books: 03** (authored/ edited)

BOOKS AUTHORED/ EDITED (includes special journal volume)

2017 Biological Timekeeping: Clocks, Rhythms and Behavior, edited (Springer)
2017 Special issue on Rhythms, Calendar & Biological Processes. Biological Rhythm Research, 2017
2014 Special volume on Chronobiology, Indian J. Experimental Biology. May 2014.
2002 Biological Rhythms, edited (Narosa Publishing House, New Delhi/ Springer-Verlag, Germany).
1996 Animal Behaviour (Himalaya Publishing House, Bombay).

RESEARCH SUPERVISION

15 Ph. D. & 14 M. Phil. students obtained degrees. 08 Ph. D. students are working in the lab.

ADMINISTRATIVE EXPERIENCE

Chairman, Governing Body, Shaheed Bhagat Singh College, Univ. of Delhi (one-and-half term)
Member, Governing Body, Shaheed Bhagat Singh College, University of Delhi (2 terms)
Member, Governing Body, Ramjas College, University of Delhi (3 terms)
Member and Treasurer, ARSD College, University of Delhi (1 term)
Member, Governing Body, Deen Dayal Upadhyay College, University of Delhi (2 terms)
Member, Governing Body, Shaheed Sukhdev College of Buss. Studies, University of Delhi (1 term)
Member, Governing Body, International Student House, University of Delhi (Since 2009)
Member, Committees constituted by University of Delhi for inquiry, purchases etc.
Assistant Provost, Hostel, University of Lucknow
Nodal PI: IndoUS Center for Biological Timing, University of Delhi
Convener: IRHPA Center for Excellence in Biological Rhythm Research
Chairman, SERB Avian Biology School, Dept. of Science and Technology, New Delhi
Director, SERC/ SERB Schools in Chronobiology, Dept. of Science and Technology, New Delhi
Member, Uttar Pradesh Wildlife and Biodiversity board (1 term)
Member, Scientific Committee of the International Ornithological Congress, Hamburg.

AWARDS and HONOURS:

2019 Editorial board member, Journal of Neuroendocrinology, from Wiley
2019 Member, International Committee, V World Congress in Chronobiology, Suzhou, China
2018 Member, Program Committee for Asian Chronobiology Forum meeting, Sapporo, Japan
2018 Convener, Symp. on Avian clocks and calendars, Int. Ornithological Congr., Vancouver,
2017 Review editor, Frontiers in Physiology (Avian Physiology)
2017 Co-chair and Invited speaker at Asia Chronobiology Forum
2017 Convener International Symposium on Biological Timing
2017 Section Editor, Current Science, Bangalore
2017 President, Indian Society for Chronobiology (4 year period from 1 April 2017)
2016 Chair and invited speaker, International conference on Chronobiology, China
2016 Fellowship of Indian Society of Chronomedicine
2015 Invited speaker at the Cold Spring Harbor Symposium on Biological Rhythms, China
2015 Chair, Comparative Clocks, EBRs/ WCC Chronobiology, Manchester, UK.
2014-18 Nodal Principal Investigator, IndoUS Center for Biological Timing.
2012 Co-chair, Session on Photoperiodism, 10th ISAE, Gifu, Japan, June.
2010-2015 Associate member, Integrative and Comparative Biology, USA.
2010 Corresponding member, German Ornithological Society
2010 Member, Indian representative, International Ornithologist's Union
2010 Member, Board of International Society for Chronobiology
2010 Platinum Jubilee Lecture Award, ISCA, SRM University, Chennai
2010 Co-chair, Symposium on Biological Clocks in Birds, IOC, Brazil, August 2010.
2008 Vijay - Usha Sodha Scientific Research Prize, University of Lucknow.
2008 Chair, Session on Biological Clocks and Seasonal Reproduction 4th ICPB, Kenya
2008 Faculty, Multinational School in Chronobiology, Raipur, India
2008 Co-chair, Session on Biorhythms, 9th ISAE, Leuven, Belgium.
2007 Member, Editorial Board, General and Comparative Endocrinology (USA/UK)
2007-14 Member and Faculty SERC School in Neuroscience
2007-11 Member and Faculty SERC School of Herpetology
2006 P. Govindarajulu Gold medal from the Soc. of Reprod. Biology and Comp. Endo., India.
2006 Chair, Plenary lecture 24th Int. ornithological Congress, Hamburg, Germany
2006-2013 Principal Investigator, IRHPA Center for Excellence in Biological Rhythm Research
2005 Visitor, Max Planck Institute for Ornithology, Andechs, Germany.
2004-12 Member, Program Advisory Committee, Animal Sciences, DST, N. Delhi
2004-12 Member, Executive Committee, Intl Society of Avian Endocrinology.

2004 Co-Chair, session on Melatonin, clock genes and seasonality, Int. Avian Endoc. Arizona.
2002-14 Faculty, SERC/ SRRB Schools of Chronobiology II: Clocks, Rhythms and Behaviour
2001 Fellowship in Reproduction and Endocrinology (FRE).
2000 Young Investigator Award, Gordon Research Conference in Pineal Cell Biology (Oxford, UK).
1999 Lecturer, Erasmus School of Chronobiology, Ferrara, Italy.
1986 Young Scientist Award from Indian Science Congress Association.
1985 Fellow, Zoological Society of India

MEMBERSHIP OF ACADEMIC BODIES AND SCIENTIFIC SOCIETIES HELD:

Member, Academic Council, University of Lucknow (2002-2009)
Member, University Court, University of Delhi (2010.. contd)
Member, Special Committee, JNU, New Delhi (one term of 3 years)
Member, Departmental Research Committee, University of Delhi (2 terms)
Member, Research Degree Committee at the University of Lucknow (1994 – 2009)
Member, Research Degree Committee at CCS University, Meerut
Member, Research Degree Committee at Amity University
Member, Board of Studies, Kurukshetra University
Member, Board of studies in different Universities
Member, Board of International Society of Chronobiology
Member, Society for Research in Biological Rhythms (SRBR), USA
Life member, Indian Society for Chronobiology
Life member, Indian Society for General and Comparative Endocrinology
Life member, Society for Reproductive Biology and Comparative Endocrinology
Life member, The Ethological Society of India
Life member, Zoological Society of India
Life member, Indian Science Congress Association

LECTURES DELIVERED:

ABROAD

2019 V World congress in Chronobiology, Suzhou, China
2019 JBR-SAGE symposium on Chronobiology, Suzhou, China
2018 27th International Ornithological Congress, Vancouver, Canada
2018 3rd Asian Chronobiology Forum and Sapporo symposium, Sapporo, Japan
2018 The Society for Integrative and Comparative Biology symposium, San Francisco (attended)
2017 2nd Asian Chronobiology Forum, Hohhot, China
2017 International Symposium on Biological Timing and Human Health, India
2016 International conference on Chronobiology, China
2015 Cold Spring Harbor Asia Symposium on Biological Rhythms, China
2015 EBRs/ WCC Chronobiology conference, Manchester, UK
2015 Neuropeptides & Neurotransmitters: Role of Physiology & Pathophysiol., Bhubaneswar
2014 International Congress on Ornithology, Japan
2014 International Congress on Chronobiology, Romania
2012 International Symposium on Avian Endocrinology, Japan
2010 The John Hopkins University, USA
2010 University of Kentucky, Kentucky, USA
2010 Alabama State University, Alabama, USA
2008 IV Intl, Conference in Africa for Comparative Physiology & Biochemistry, Kenya
2007 Nogyoa University, Japan
2007 Waseda University, Japan
2007 Tokyo University, Japan
2006 International Ornithological Congress, Hamburg, Germany
2005 Max Planck Institute for Ornithology, Andechs, Germany March.
2005 Dept. of Func. Genomics & Bioregulation, Inst. Animal Sci. Mar., Neustadt, Germany.
2005 Conference on Optimality in Bird Migration, Wilhelmshaven, Germany.
2004 International Symposium of Avian Endocrinology, Arizona, USA, June.
2004 Texas A& M University (USA), Department of Biology, Seminar series.

- 2000 Gordon Research Conference on Pineal Cell Biology, Oxford (UK).
 1992 Vth International Symposium on Avian Endocrinology; Edinburgh (UK).
 1992 Intl. Symp.on Melatonin and Pineal Gland from Basic Sci. to Clinical Appl.; Paris.

INDIA

- 2019 2nd National symposium on Avian Biology, Tirupati
 2019 Sleep conference and workshop, Chennai
 2019 FIPS congress, Faridabad
 2019 Society of Neurochemistry, Delhi
 2019 ICSE conference, Nagpur
 2019 SRBCE conference, Baroda
 2019 Two lectures in IISER, Mohali
 2018 Ethological Society of India meeting and symposium, Calicut
 2018 Association of bird biologists in India symposium, Aizawl
 2017 Indian Academy of Neuroscience conference, Cuttack
 2017 Ethological Society of India meeting and symposium, Bhubaneswar
 2017 SRBCE conference, Hyderabad
 2016 XXVI meeting and National Symposium on Chronobiology, June 2016; Mysuru
 2016 Indian Science Congress Association, January 2016; Mysuru
 2015 XXV meeting and National Symposium on Chronobiology, Raipur
 2014 Society for Comparative Endocrinology and Reproductive Biology, Trichy.
 2013 International conference on Comparative Endocrinology, Nagpur
 2011 4th National Conference on Nanomaterials and Nanotechnology, Lucknow
 2011 International Congress of Indian Ornithology, SACON, Coimbatore
 2011 35th annual conference of Ethological Society of India
 2008 Indian Society for Chronobiology, Raipur
 2008 Thematic workshop in Avian Biology
 2008 Public lecture at IISER, Mohali.
 2008 Lectures, Wild Life Institute, Dehradun.
 2008 Invited lecture at Department of Zoology, Pune University.
 2007 Lecture in SERC School in Herpetology, North-Orissa University, Baripada
 2007 PAC lecture at Delhi University
 2006 Trends and techniques in Molecular Endocrinology
 2006 Lecture in seminar and workshop in University of Delhi
 2006 Invited lecture in Symposium of Indian Society for Chronobiology, Shillong.
 2006 Recent Advance in Appl. Zoology, CCS University, Meerut, (Plenary lecture).
 2006 Gold medal oration, SRBCE meeting, IIT Roorkee, February.
 2006 Refresher Course in Zoology, University of Delhi, Delhi, January.
 2006 93rd session of ISCA (Animal, Veterinary and Fishery Science), Hyderabad, January.
 2005 Refresher Course in Zoology, University of Delhi, Delhi; December.
 2005 National Symposium on Chronobiology; Varanasi.
 2005 National Sym. on Comp. Endo. and Rep. Physiol.: Retrospect and prospect; Delhi,
 2005 Critical appraisal & hands-on training on adv. tech. in endocrine research, Aligarh).
 2005 XXII National Symposium of the SEBCE; Santiniketan.
 2004 National Symposium on Chronobiology; Chidambaram.
 2002 Innovations and Prospects in Life Sciences, Raipur.
 2002 Natl Sem. on Environmental Biology and Fish Biology, Vishwa Bharti, Santiniketan.
 2002 XX National Symposium of SRBCE; Tiruchirappalli.
 2002 Refresher course in Zoology, Gorakhpur University.
 2001 Refresher course in Zoology, Allahabad University.
 2001 Refresher course in Zoology, Lucknow University.
 2001 Refresher course in Zoology, Jiwaji University, Gwalior.
 2000 XIX Natl. Symposium of Soc. for Reprod. Biology and Comp. Endocrinology; Baroda.
 2000 National Symposium on Chronobiology; Gulbarga.
 1999 National Symposium on Recent Advances in Pineal Research; Raipur.
 1994 National Symposium on Ethology; Lucknow.

- 1994 National Symposium on Chronobiology; Lucknow.
 1993 International Symposium on Recent Trends in Life Sciences; Hyderabad (India).
 1990 International Symposium on Current Status of Chronobiology; Raipur (India).
 1990 Seminar on Wildlife and Biotechnology; Ambah (M. P.).
 1985 Second National Convention of Young Scientists; Meerut.

PARTICIPATION IN RESEARCH AND EDUCATIONAL TRAINING

- 2002-15 Faculty, SERB Schools in Chronobiology/ Herpetology/ Neuroscience/ Avian Biology.
 2000 37th Natl Workshop on Radiochemistry and Appl. of Radioisotopes; Pantnagar.
 1995 UGC Refresher Course in Zoology; Ch. Charan Singh University, Meerut.
 1990 Academic Staff Orientation Program; Aligarh Muslim University, Aligarh
 1989 UGC Refresher Course in Zoology; Kashmir University, Srinagar.
 1989 2-week Intl workshop on Methods and Concepts in Chronobiology; Madurai
 1985 Two--week training on Chronobiological techniques; M K University, Madurai.

RESEARCH PROJECTS

Current projects

- 2016-2020 Mechanism of food-induced effects on reproduction and metabolism: A study on Zebra finches; funded by **SERB, New Delhi**

Completed projects

- 2013-2019 Anticipation in genes: Molecular, physiological and behavioral correlates of response of circa-annual clocks to seasons in night-migratory songbirds – funded by Department of Biotechnology, Govt. of India.
- 2014 – 2018 Indo-US Center for Biological Timing, funded by IUSSTF, New Delhi
- 2007-2014 Avian circadian seasonal systems: from behaviour to molecules – funded under IRHPA scheme by the Department of Science and Technology (DST), India.
- 2011-2014 Circadian brain photoreceptors in birds I: Localization and functional evaluation- funded by Council of Scientific & Industrial Research, India
- 2011-2014 Neurobiology and Understanding the Circadian System Linkage of Cognitive Performance in an Avian Model System- funded under DST-CSI program
- 2012 – 2014 Mechanism of adaptation to seasonal changes in vertebrates – funded by Department of Science and Technology, India
- 2007-2010 Immunohistochemical study of seasonal system in birds - funded by the Council of Scientific & Industrial Research, India.
- 2005-2009 Role of food in regulation of circadian and seasonal responses in birds- funded by the Department of Science and Technology, India, (Co-PI).
- 2002 – 2005 An immunohistochemical study of the photoperiodic transduction in birds- funded by the Council of Scientific & Industrial Research, India.
- 2000 – 2002 DST- DAAD International Collaboration project with Max-Planck Institute of Biological Rhythm Research, Andechs, Germany.
- 1999 – 2002 Role of melatonin in avian circadian system - funded by the Department of Science and Technology, India.
- 1999 – 2002 Sensitivity of circadian entrainment pathway in the bunting (*Emberiza sp.*) – funded by the Council of Scientific & Industrial Research, India.
- 1996 – 1999 Spectral sensitivity of photoreceptors mediating photoperiodic entrainment and induction in the blackheaded bunting - funded by CSIR, India.
- 1992 – 1995 Light relations of circadian rhythms in the migratory blackheaded bunting, *Emberiza melanocephala* - funded by CSIR, India.
- 1989 – 1992 Strategies of endogenous programming in palaeartic-Indian migratory birds – funded by the University Grants Commission of India.
- 1988 – 1991 Properties of biological clocks underlying photoperiodic phenomena in birds – funded by the Department of Science and Technology, India.
- 1989-1990 Photoperiodic control of timing of gonadal regression (refractoriness) in birds - funded by the University Grants Commission of India.

RESEARCH COLLABORATION (last 5 years)

- Salk Institute for Biological Studies, San Diego, USA (Dr. Satchidananda Panda)
- University of California, San Diego, USA (Prof. Michael Gorman)
- University of Lucknow, India (Prof. Sangeeta Rani, Dr. Shalie Malik)
- National Institute of Science Education and Research, India (Dr. Praful Singru)
- North-Eastern Hill University, Shillong (Prof. A. S. Dixit)
- CCS University, Meerut, India (Prof. S. K. Bhardwaj)
- University of Mangalore, India (Dr. Monika Sadananda)

TEACHING: Both undergraduate and post-graduate teaching since 1983. Have taught many courses in 5 different Indian universities, and in a US university (Texas A&M University, courses marked by an asterisk). Animal Behaviour; Animal Physiology; Biology of Reproduction; Biostatistics; Chronobiology; Comparative Endocrinology*; Endocrine Physiology; Environmental Biology; Neuroendocrinology, Human Anatomy and Physiology*; Regulatory and Behavioral Neuroscience*; General Zoology (Vertebrates and Invertebrates)

SERVICE TO PROFESSION

Advisory member to Special Assistance Program of UGC in various universities; Member of Board of Studies of different Universities; Member of Research Degree committee of different Universities; Member of various University committees.

Peer review of research proposals: Department of Science and Technology; Council of Scientific and Industrial Research; Department of Biotechnology; National Science Foundation (USA); Rufford Sarratt Grant (UK); Israel Science Foundation (Israel), Polish Science Academy

Peer review of scientific journals: Cell and Tissue Research, Journal of Comparative Physiology, Naturwissenschaften; Hormones and Behaviour; Journal of Circadian Rhythms, Comparative Biochemistry and physiology; General and Comparative Endocrinology, Physiology and Biochemical Zoology; PLoS One, Journal of Experimental Biology, Journal of Ornithology, Photochemistry and Photobiology; Comparative Biochemistry and Physiology; Chronobiology International; Theriogenology; Current Science; Indian J. Experimental Biology

Scientific activity organized

- 2019** Workshop on Time, Brain and Behaviour (Joint)
- 2017** International Symposium on Biological Timing and Human Health
- 2012** International Congress on Chronobiology
- 2011** Meeting of Bird Biology core group.
- 2010** Ninth SERC School in Chronobiology
- 2002** First SERC School in Chronobiology.
- 1994** National Symposium of Indian Society for Chronobiology.

RESEARCH PUBLICATIONS

Publications Matrix	
Category	Number
Original Research Articles	155
Reviews	22
Book Chapters	10
Books edited/ authored	03

Special volume of Journals edited	02
SCIENTIFIC ACHIEVEMENT INDEX	
Total Impact Factor Accrued	427
Average impact factor	2.75
<i>h</i> -index	27
RG Score (Research Gate score)	40.18
Total citations	2539
Research Interest	1700
i-10 index (Google Scholar)	80

LIST OF JOURNALS IN THAT ARTICLES HAVE APPEARED

S. No	Journal Name	Publisher	Impact Factor	No. of Papers	Total Impact factor
1	Journal of Pineal Research	Wiley	11.6	3	34.8
2	Proceedings of the National Academy of Sciences USA	National Academy of Sciences USA	9.4	1	9.4
3	Experientia (Cellular and Molecular Life Sciences)	Birkhäuser Verlag AG	6.7	1	6.7
4	Environmental Pollution	Elsevier	5.7	1	5.7
5	The FASEB Journal	FASEB	5.6	1	5.6
6	Proceeding of Royal Society B	Royal Society, UK	4.8	4	19.2
7	Hormones and Behaviour	Elsevier Publ. House	4.4	3	13.2
8	Frontiers in Physiology	Frontiers Journals	4.1	1	4.1
9	BMC Genomics	BMC	3.9	1	3.9
10	Journal of Biological Rhythms	SAGE Publications	3.9	3	11.7
11	BMC Frontiers in Zoology	BMC	3.6	1	3.6
12	Molecular and Cellular Endocrinology	Elsevier	3.6	4	14.4
13	Journal of Neuroendocrinology	Wiley	3.4	5	17.0
14	Behavioral Brain Research	Elsevier	3.3	2	6.6
15	Journal of Comparative Neurology	Wiley	3.3	2	6.6
16	Neurobiology of Learning and Memory	Elsevier	3.3	1	3.3
17	Journal of Photochemistry and Photobiology B	Elsevier	3.2	1	3.2
18	Animal Behaviour	Elsevier	3.1	1	3.1
19	Molecular Brain Research	Elsevier	3.1	1	3.1
20	Molecular reproduction and development	Wiley	3.1	1	3.1
21	Neuroscience	Elsevier	3.1	1	3.1
22	Cell and Tissue Research	Springer	3.0	1	3.0

23	European Journal of Neuroscience	Wiley	2.9	2	5.8
24	Journal of Experimental Biology	The Company of Biologists	3.2	7	21.4
25	PLoS One	PLoS	2.8	2	5.6
26	Chronobiology International	Taylor & Francis	2.7	11	29.7
27	Experimental Physiology	Wiley	2.7	2	5.4
28	General and Comparative Endocrinology	Elsevier	2.7	9	24.3
29	Journal of Comparative Physiology B	Springer	2.5	2	5
30	Physiology and Behaviour	Elsevier	2.5	9	22.5
31	Comparative Biochemistry Physiology A Molecular & Integrative Physiology	Elsevier	2.3	1	2.3
32	Journal of Chemical Neuroanatomy	Elsevier	2.2	1	2.2
33	Journal of Zoology (London)	Wiley	2.2	2	4.4
34	Neuroscience Letters	Elsevier	2.2	1	2.2
35	Photochemistry and Photobiological Sciences	Royal Society of Chemistry	2.9	2	5.8
36	Physiological and Biochemical Zoology	University of Chicago Press	2.2	2	4.4
37	BMC:Reproductive Biology and Endocrinology	BMC	2.1	1	2.1
38	Naturwissenschaften	Springer	2.1	2	4.2
39	Environmental Control in Biology	JASBEES	2.0	2	4
40	Journal of Ornithology	Springer	2.0	4	10
41	Journal of Comparative Physiology A	Springer	1.9	4	7.6
42	Reproduction, Nutrition and Development		1.9	4	7.6
43	Ibis	Wiley	1.8	2	3.6
44	Animal Reproduction Science	Elsevier	1.4	4	5.6
45	Condor	American Ornithological Society	1.4	2	2.8
46	Journal of Biosciences	Indian Academy of Science	1.4	5	7
47	Indian Journal of Experimental Biology	NISCAIR	1.5	13	19.5
48	Journal of Experimental Zoology	Wiley	1.2	6	7.2
49	Animal Biology	Brill	1.1	1	1.1
50	Acta Physiologica Hungarica	Hungarian Academy of Sciences	1.0	1	1.0
51	Current Science	Current Science Association	1.0	7	7
52	Biological Rhythm Research	Taylor & Francis	0.7	6	4.2

ORIGINAL RESEARCH ARTICLES

2020

1. T. Batra, I. Malik, A. Prabhat, S. K. Bhardwaj and **V. Kumar** (2020). Sleep in unnatural times: Illuminated night negatively affects sleep and associated hypothalamic gene expressions in diurnal zebra finches. *Proceedings of Royal Society B.* (Accepted). **IF 4.8**
2. A. Sharma, S. das, R. Komal, S. Malik, S. Rani and **V. Kumar** (2020) Seasonal reproductive state determines gene expression in the hypothalamus of a latitudinal migratory songbird during the spring and autumn migration. *Molecular and Cellular Endocrinology* doi.org/10.1016/j.mce.2020.110794. **IF 3.6**
3. I. Mishra, N. Agarwal, A. Prabhat, T. Batra, S. K. Bhardwaj and **V. Kumar** (2020) Changes in brain peptides associated with reproduction and energy homeostasis: Putative roles of GnRH-II and TH in determining the reproductive performance in response to daily food availability times in diurnal zebra finches. *Journal of Neuroendocrinology* doi: 10.1111/jne.12825. **IF 3.04**
4. I. Mishra, A. Sharma, A. Prabhat, T. Batra, I. Malik and **V. Kumar** (2020) Changes in DNA methylation and histone modification gene expression in response to daily food times in zebra finches: Epigenetic implications. *Journal of Experimental Biology* doi: 10.1242/jeb.217422. **IF 3.02**
5. I. Mishra, T. Batra, A. Prabhat, N. Agarwal, S. K. Bhardwaj and **V. Kumar** (2020) Developmental effects of daily food availability times on song behaviour and neuronal plasticity of song-control system in male zebra finches. *Behavioural Brain Research* doi.org/10.1016/j.bbr.2020.112497 **IF: 3.3**

2019

6. A. Sharma and **V. Kumar** (2019) Metabolic plasticity mediates differential responses to spring and autumn migrations: Evidence from gene expression patterns in migratory buntings. *Experimental Physiology* doi:10.1113/EP087974 **IF: 2.7**
7. A. Buniyaadi, S. K. T. Taufique and V. Kumar (2019) Self-recognition in corvids: Evidence from the mirror-mark test in Indian house crows (*Corvus splendens*). *Journal of Ornithology*. DOI: 10.1007/s10336-019-01730-2 **IF: 2.0**
8. T. Batra, I. Malik and V. Kumar (2019) Illuminated night alters behaviour and negatively affects physiology and metabolism in diurnal zebra finches. *Environmental Pollution* doi.org/10.1016/j.envpol.2019.07.084 **IF. 5.71**
9. S. Sur, A. Sharma, A. K. Trivedi, S. K. Bhardwaj and **V. Kumar** (2019) Temperature affects liver and muscle metabolism in photostimulated migratory redheaded buntings (*Emberiza bruniceps*). *Journal of Comparative Physiology B.* doi: 10.1007/s00360-019-01229-5. **IF: 2.5**
10. N. Agarwal, R. Komal, Y. Kumari, S. Malik, S. Rani and **V. Kumar** (2019) Development of vernal migration in redheaded buntings: Concurrent behavioral, physiological and neural changes under stimulatory photoperiods. *Photochemical & Photobiological Sciences* doi: 10.1039/C9PP00273A. **IF: 2.9**
11. A. Prabhat, N. A. Jha, S. K. T. Taufique and **V. Kumar** (2019). Dissociation of circadian activity and singing behavior from gene expression rhythms in the hypothalamus, song control

- nuclei and cerebellum in diurnal zebra finches. *Chronobiology International* doi.org/10.1080/07420528.2019.1637887 **IF: 2.7**
12. A. Sharma, S. Das and **V. Kumar** (2019) Transcriptome-wide changes in testes reveal molecular differences in photoperiod-induced seasonal reproductive life-history states in migratory songbirds. *Molecular Reproduction and Development*, DOI: 10.1002/mrd. 23155 **IF: 3.1**
 13. A. K. Trivedi, S. Sur, A. Sharma, S. K. T. Taufique, N. J. Gupta and **V. Kumar** (2019) Temperature alters the hypothalamic transcription of photoperiod responsive genes in induction of seasonal response in migratory redheaded buntings. *Molecular and Cellular Endocrinology* **IF: 3.6**
 14. A. K. Trivedi, I. Mishra and **V. Kumar** (2019) Temporal expression of genes coding for arylalkamine-N-acetyltransferase and melatonin receptors in circadian clock tissues: Circadian rhythm dependent role of melatonin in seasonal responses. *Physiology and Behavior*, doi.org/10.1016/j.physbeh.2019.05.009. **IF: 2.5**
 15. I. Mishra and **V. Kumar** (2019) The quantity-quality trade-off: Differential effects of daily food times on reproductive performance and offspring quality in diurnal zebra finches. *Journal of Experimental Biology*. doi: 10.1242/jeb. 196667. **IF: 3.3**
- 2018**
16. D. Singh, V. Swarup, Hiep Le and **V. Kumar** (2018) Transcriptional signatures in liver reveal metabolic adaptations to seasons in migratory blackheaded buntings. *Frontiers in Physiology*, doi: 10.3389/fphys. 2018. 01568. **IF: 4.1**
 17. S. K. T. Taufique, A. Prabhat and **V. Kumar** (2018) Illuminated night alters hippocampal gene expressions and induces depressive-like response in diurnal corvids. *European J. Neuroscience*. 48: 3005-3018. doi: 10.1111/ejn. 14157. **IF: 2.9**
 18. S. K. T. Taufique, A. Prabhat and **V. Kumar**. Light at night affects hippocampal and nidopallial cytoarchitecture: Implication for an impairment of brain function in diurnal corvids. *J. Experimental Zoology A* doi: 10.1002/jez. 2238. **IF: 1.3**
 19. A. Sharma, D. Singh, S. Malik, N. J. Gupta, S. Rani and **V. Kumar** (2018) Difference in control between spring and autumn migration in birds: Insight from seasonal changes in hypothalamic gene expression in captive buntings. *Proceedings of Royal Society B*. 285: 20181531. doi: 10.1098/rspb. 2018. 1531. **IF: 4.8**
 20. I. Mishra, N. Agarwal, S. Rani and **V. Kumar** (2018) Scotostimulation of reproductive neural pathways and gonadal maturation are not correlated with hypothalamic expression of deiodinases in subtropical spotted munia. *Journal of Neuroendocrinology*. doi: 10.1111/jne.12627. **IF: 3.4**
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