

Curriculum vitae-Atul Pandey, 01st July 2021

Research Experience:

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- ✦ **March 2021-continuing, Postdoc research fellow** at Department of Ecology, and Evolutionary Biology, University of Michigan, Ann Arbor, Michigan, USA.
 - ✦ **Oct 2017-Feb 2021, Postdoc research scientist** at Department of Ecology, Evolution, and Behavior, The Alexander Silberman Research Institute of Life Sciences, The Hebrew University of Jerusalem, Edmond J. Safra Campus, Givat Ram, Jerusalem, Israel.
 - ✦ **Oct 2014-Sept 2017, The Planning and budgeting Committee (PBC), postdoctoral fellowship** for outstanding post-doctoral researchers from China and India in Israeli universities at Department of Ecology, Evolution, and Behavior, The Alexander Silberman Research Institute of Life Sciences, The Hebrew University of Jerusalem, Edmond J. Safra Campus, Givat Ram, Jerusalem, Israel.
 - ✦ **Oct 2013 - March 2014, Research Associate (RA)**, National Institute of Immunology (NII), Aruna Asaf Ali Marg, New Delhi-110067, India.
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Education:

Doctor of Philosophy, (Biotechnology) 2008- 2013, School of Biotechnology, Jawaharlal Nehru University, New Delhi-110067, India, Title of thesis: "Effect of rapid eye movement sleep deprivation on the liver of rats" Supervisors: Prof. Santosh K. Kar & Prof. Rajiv Bhat

Awards, Prizes, and Society memberships:

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- ✦ **The Planning and budgeting Committee (PBC), postdoctoral fellowship (2014-2017) for outstanding post-doctoral researchers from China and India in Israeli universities at Hebrew University, Israel.**
 - ✦ **Ph.D. Research Fellowship (2008-2013), University Grant Commission (UGC), New Delhi, India**
 - ✦ **Annual member of "The Society for Experimental Biology" for the year 2017-2018.**
 - ✦ **Annual Student member of "Indian Immunology Society", New Delhi, India- For the year 2008-2009.**
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Research Bibliography: Articles published:

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- ✦ **Pandey A, Oliver R., Kar S.K., Differential Gene Expression in Brain and Liver Tissue of Wistar Rats after Rapid Eye Movement Sleep Deprivation, *Clocks & Sleep*, 2020, 2(4), 442-465;**

<https://doi.org/10.3390/clockssleep2040033>, ISSN: 2624-5175, (citations: 2, Journal IF: NA, ranking: NA).

- ✚ [Pandey A, Motro U, Bloch G](#); Juvenile hormone affects the development and strength of circadian rhythms in young bumble bee (*Bombus terrestris*) workers, **Neurobiology of Sleep and Circadian rhythms**, 2020, <https://doi.org/10.1016/j.nbscr.2020.100056>, ISSN: 2451-9944, (citations: 2, Journal IF predicted: 3.12, ranking: NA).
- ✚ [Pandey A, Motro U, Bloch G](#); Juvenile hormone interacts with multiple factors to modulate aggression and dominance in groups of orphan bumble bee (*Bombus terrestris*) workers, **Hormones and Behavior**, 2020, 117; <https://doi.org/10.1016/j.yhbeh.2019.104602>, ISSN: 0018-506X, (citations: 4, Journal IF: 3.587, ranking: 12/53 in Behavioral Sciences).
- ✚ [Kothari A, Singh V, Nath UK, Kumar S, Rai V, Kaushal K, Omar BJ, Pandey A, Jain N](#); Immune dysfunctions, and multiple directive treatment modalities for SARS-CoV-2 pandemic: races of uncontrolled running sweat? **Biology**, 2020, 9(9), 243, <https://doi.org/10.3390/biology9090243>, ISSN: 2079-7737, (citations: 2, Journal IF: 5.079, ranking: 29/112 in Biology).
- ✚ [Pandey A; Kar SK](#); “Rapid Eye Movement sleep deprivation of rat generates ROS in the hepatocytes and makes them more susceptible to oxidative stress.” **Sleep Science**. 2018; 11(4):245-253, <https://doi.org/10.5935/1984-0063.20180039>, ISSN: 1984-0063, (citations: 11, Journal IF: 1.59, ranking: 215/255 in Clinical Neurology).
- ✚ [Pandey A; Bloch G](#); Juvenile Hormone and ecdysteroids as major regulators of brain and behavior in bees, **Current Opinion in Insect Science**, 2015, 12, Pages 26–37, <https://doi.org/10.1016/j.cois.2015.09.006>, ISSN: 2214-5745, (citations: 19, Journal IF: 5.186, ranking: 4/102 in Entomology, 15/112 in Biology, 27/166 in Ecology).
- ✚ [Pandey AK; Kar SK](#); REM sleep deprivation of rats induces acute phase response in the liver, **Biochemical and Biophysical Research Communications**, 2011, 410(2):242-6; <https://doi.org/10.1016/j.bbrc.2011.05.123>, ISSN: 0006-291X, (citations: 20, Journal IF: 3.575, ranking: 173/298 in Biochemistry and Molecular Biology, 30/72 in Biophysics).
- ✚ [Pandey AK; Jain N; Akhtar F; Ray G](#); Chitosan microparticle based oral delivery system for DNA immunization, **Advances in life sciences**, 2008, Vol-2, 12-15, ISSN: 0974-4649, IF=N.A.

In Review/Revision/BioRxiv:

- ✚ [Pandey A; Devesh Kumar; Gopesh Ray; Kar SK](#); The flower pot method of REM sleep deprivation causes apoptotic cell death in the hepatocytes of rat, (**BioRxiv**: <https://doi.org/10.1101/375717>).

Manuscripts under preparation:

- ✚ [Pandey A, Bloch G.](#), The transcription factor Krüppel-homologue 1 mediates juvenile hormone effects related to aggression and dominance in social bumble bee, *Bombus terrestris*. (Manuscript under preparation for *Insect molecular biology and biochemistry*).

- ✚ [Pandey A, Bloch G.](#), Juvenile hormone affects the learning and memory of social bumble bee, *Bombus terrestris* (Manuscript under preparation)
 - ✚ [Kumar, P; Gopalakrishnan, S.G.; Pandey, S.K.; Singh, A.K.; Pandey A.; Kar, S.K.; Kumar, G.K.](#), Genetically Engineered probiotic Escherichia coli CFR16 implicates anti-lipidemic and anti-inflammatory effects in rats fed with high sucrose diet. (Manuscript under preparation).
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Patents and Technology transfer:

- ✚ [Feroz Akhtar, Gopesh Ray, Atul Kumar Pandey Santosh Kumar Kar](#) (2011) *Curcumin nanoparticles and methods of producing the same*. (<https://patents.google.com/patent/US20110190399A1/en>) (citations: 19).
 - ✚ Patent (PCT/IB 09/53342) transferred to [IPCA Laboratories](#) Mumbai in 2010.
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Book/Chapter & Abstracts Published:

- ✚ [Atul Kumar Pandey, F. Akhtar, G. Ray, Santosh Kar](#), “Rapid Eye Movement sleep deprivation in the rat causes apoptosis of hepatocytes and PBMC's and inflames the liver” *International Immunology*, Volume 22 Suppl 1 Pt 2 August 2010 (ISSN 0953-8178).
 - ✚ [Pandey AK](#), Reaction oxygen species: The brief summary. “Current trends in life sciences” *Vayu Education of India*, ISBN No. 978-93-81558-980, 2013.
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Scientific/Reviewing Contributions:

- ✚ In reviewers' panel of “[Clock and Sleep](#)” an international, peer-reviewed Open Access journal. Reviewed total 34 manuscripts for “[International Journal of Molecular Sciences](#), [Frontiers of physiology](#) “[Insects, Animals, Molecular Biology Reports](#), [International Journal of Environmental Research and Public Health](#), [Bioscience Reports](#), [Clocks and sleep and Medicina](#) journals.
 - ✚ Publons profile: <https://publons.com/researcher/1609883/atul-pandey/>
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School/ Workshop attended:

- ✚ Minerva School 2018: [New Frontiers in Sociobiology and Sociogenomics](#), July 15-20, 2018 Ha-Goshrim, Israel.
- ✚ Attended a workshop Titled “[RNA interference and bee health workshop](#)” organized by Super B from 15-18th April 2015 at Ghent University, Belgium.

- ✦ *Attended a workshop Titled “Applications of mass spectrometry for proteomics” at Advance Instrumentation Research Facility, Jawaharlal Nehru University, New Delhi, held on 30th April -2nd May 2012.*
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Recent Conference/Seminar/symposium:

- ✦ ***Atul Pandey and Guy Bloch, 2021, Biology & Genomics of Social Insects**, poster presentation titled “**The transcription factor Krüppel-homologue 1 mediates juvenile hormone effects on aggression and dominance in a social bumble bee**” from 30th March-1st April 2021, CHS Cold Spring Harbor Laboratory, New York, USA.*
- ✦ ***Atul Pandey and Guy Bloch, 2019, Annual meeting conference of “Israel zoological society”** Oral talk on “**The transcription factor Krüppel-homologue 1 mediates effects of juvenile hormone on aggression and dominance in a social bumble bee, Bombus terrestris**” 29th December 2019, Department of Ecology, Evolution and Behavior, The Hebrew University of Jerusalem, Israel.*
- ✦ ***Atul Pandey and Guy Bloch, 2019, Annual meeting conference of “Entomological society of Israel,”** Oral talk on “**The transcription factor Krüppel-homologue 1 mediates effects of juvenile hormone on aggression and dominance in a social bumble bee, Bombus terrestris**” 23rd October 2019, Agricultural Research Organization. The Volcani Center. Bet-Dagan. Israel.*
- ✦ ***Atul Pandey and Guy Bloch, 2019, “The transcription factor Krüppel-homologue 1 mediate juvenile hormone effects on aggression and dominance in a social bumblebee”.** The Jerusalem Brain Community (JBC) organized 6th Annual Retreat, 2-4th June 2019, Mitzpe Ramon, Israel.*
- ✦ ***Atul Pandey and Guy Bloch, 2018, “Juvenile hormone affect the strength and ontogeny of circadian rhythms in locomotor activity in the bumble bee (Bombus terrestris)”**, Student organized scientific conference on Circadian Rhythms titled “**Timelines in Biology: From a solo recital to a full orchestra**”, December 11-13, 2018, Weizmann Institute of Science, Rehovot, Israel (Poster presentation).*
- ✦ ***Atul Pandey and Guy Bloch, 2018, Annual meeting conference of “Entomological society of Israel,”** Oral talk on “**Effects of juvenile hormone on aggression and dominance in the bumblebees (Bombus terrestris)**” November 2018 Faculty of Agriculture, Food and Environment Robert H. Smith, The Hebrew University of Jerusalem, Rehovot Israel.*
- ✦ ***Atul Pandey & Guy Bloch, 2017, “Effect of juvenile hormone on aggression and dominance in bumblebees (Bombus terrestris),”** “Behavior 2017 conference”, 30th April-4th May 2017, Lisbon, Portugal (Oral presentation).*
- ✦ ***“Timelines in Biology,” December 8-11, 2014**, Student organized a scientific meeting on Circadian Rhythms and Element of Time in various Biological Processes. Weizmann Institute of Science, Rehovot, Israel (Participated).*
- ✦ *The student-organized “**The annual ecology, evolution & behavior student conference & symposium,**” 26-27 November 2014, Hebrew University of Jerusalem, Israel (Participated).*
- ✦ ***Kumar P., Garg S.G., Pandey S.K., Singh A, Kumar N.G., Pandey A.K., Kar S.K.** “Genetic Engineering of Probiotic Escherichia coli CFR16 to Alleviate the Risk of Fructose Induced Dietary Disorders” DOI: 10.13140/2.1.4758.9446 Conference: Probiotics and Microbiome: Gut and Beyond, (Co-author).*

- ✚ Feroz Akhtar, [Atul Pandey](#), Gopesh Ray, Santosh Kar. Participated and presented our innovation at [India Innovation Initiative –i3 2011](#), National fair held in New Delhi with an objective “Opportunity to harness innovations for wealth generation and social benefit” 16-17th November 2011. (Stall presentation).
- ✚ [Atul Pandey](#), F. Akhtar, G .Ray, Santosh Kar; “Rapid Eye Movement sleep deprivation in the rat causes apoptosis of hepatocytes and PBMC's and inflames the liver,” [14th International Congress of Immunology, Kobe, Japan, 2010](#) (Abstract published).
- ✚ [Atul Pandey](#), Devesh Kumar, Feroz Akhtar, Santosh Kar. “Rapid eye movement sleep deprivation causes apoptosis of hepatocytes of rats” 2nd “[BIOEPOCH](#)” symposium, School of Biotechnology, Jawaharlal Nehru University New Delhi, 2009-10, (Poster presentation).
- ✚ [Atul Pandey](#), Devesh Kumar, Feroz Akhtar, Santosh Kar, “Rapid eye movement sleep deprivation causes inflammation in liver” [33rd Indian Immunology Conference, AIIMS, New Delhi, 2006-2007](#), (Poster presentation).
- ✚ Feroz Akhtar, Neeraj Jain, [Atul Pandey](#), S.K. Kar. “Chitosan nanoparticles based oral delivery system for DNA immunization”.[33rd Indian Immunology Conference, AIIMS, New Delhi, 2006-2007](#), (Poster presentation).

Social Profile:

ResearchGate: https://www.researchgate.net/profile/Atul_Pandey

LinkedIn: <https://www.linkedin.com/in/atul-pandey-ph-d-320a8064/>

Publons: <https://publons.com/researcher/1609883/atul-pandey/>

Google Scholar: <https://scholar.google.co.il/citations?user=KdWw60oAAAAJ&hl=en>