Curriculum vitae

Akansha Mishra

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PRESENT STATUS AND POSITIONS HELD:

14 October 2019 – Present Postdoc Associate at Baylor College of Medicine, Houston, Tx, USA 07 August 2017 – 18 July 2019 Postdoc Fellow at University of Iowa, Iowa city, Iowa, USA 07 December 2015 – 30 June 2016 RA at Indiana School of Medicine, Indianapolis, Indiana, USA 04 April 2012 – 30 April 2015 SRF (CSIR), Division of Biochemistry, Central Drug Research Institute, Lucknow, U.P. India

29 July 2009 – 31 March 2012 Project Fellow (CSIR), Division of Biochemistry, Central Drug Research Institute, Lucknow, U.P. India

20 March 2005 – 28 July 2009 Research Scholar, Division of Plant Sciences, M.J.P. Rohilkhand University, Bareilly, U.P. India

ACADEMIC QUALIFICATIONS:

PhD: Life Sciences 2018 CSIR-CDRI, Lucknow, India

FELLOWSHIPS AND AWARDS

Qualified for CSIR-Senior Research Fellowship in Medical Science

MEMBERSHIPS

Annual member of India Science Congress

RESEARCH PUBLICATIONS:

Papers: International/National Full length papers

- 1. S Liu, JA Promes, M Harata, A Mishra, SB Stephens, EB Taylor, AJ Burand Jr, WI Sivitz, BD Fink, JA Ankrum and Y Imai. Adipose triglyceride lipase is a key lipase for the mobilization of lipid droplets in human beta cells and critical for the maintenance of syntaxin1a level in beta cells (communicated to Diabetes).
- 2. Michihiro Kobayashi, Yang Lin, **Akansha Mishra**, Chris Shelly, Rui Gao, Paul Zhiping Wang, Rongwen Xi, Pamela Wenze, Yunlong Liu, Yan Liu and Momoko Yoshimoto. Bmi1 maintains the self-renewal property of embryonic derived mature B-1a cells in cell intrinsic and extrinsic manners. (Manuscript in communication)
- 3. Yang Lin, Michihiro Kobayashi, Nathalia Azevedo Portilho, **Akansha Mishra**, Hongyu Gao, Yunlong Liu, Pamela Wenzel, Brian Davis, Mervin C. Yoder, Momoko Yoshimoto. Long-Term Engraftment of ESC-Derived B-1 Progenitor Cells Supports HSC-Independent Lymphopoiesis. February 7, 2019. doi.org/10.1016/j.stemcr.2019.01.006
- **4.** M Kobayashi, SP Tarnawsky, H Wei, **A Mishra**, NA Portilho, P Wenzel, B Davis, J Wu, B Hadland, M Yoshimoto. Hemogenic endothelial cells can transition to hematopoietic stem cells through a B-1 lymphocyte-biased state during maturation in the mouse embryo. Stem cell reports 13 (1), 21-30
- 5. Kanika Varshney, Amit K. Gupta, Ravi Sonkar, Salil Varshney, **Akanksha Mishra**, Geetika Bhatia, Anil Gaikwad, Arvind Kumar Srivastava, Mridula Saxena, Sudha Jain, Anil K. Saxena. Lipid Lowering Oxopropanylindole Hydrazone Derivatives with Antioxidant and Anti-hyperglycemic Activity. Current Topics in Medicinal Chemistry, January 2019, DOI: 10.2174/1568026619666181220112903
- 6. Kanika Varshney, Amit K Gupta, Arun Rawat, Rohit Srivastava, Akansha Mishra, Mridula Saxena, Arvind K. Srivastava, Sudha Jain, Anil K Saxena. Synthesis, SAR and Docking Studies of Substituted Aryl

- phenylthiazolyl phenylcarboxamide as potential Protein Tyrosine Phosphatase 1B Inhibitors. November 2018 doi: https://doi.org/10.1101/472670.
- 7. Patel Om*, Mishra Akansha*, Maurya Ranjani, Saini Deepika, Pandey Jyotsana, Taneja Isha, Raju Kanumuri, Kanojiya Sanjeev, Shukla Sanjeev, Srivastava Mahendra, Wahajuddin Muhammad, Tamrakar Akhilesh, Srivastava Arvind, Yadav Prem. Naturally Occurring Carbazole Alkaloids from Murraya koenigii as Potential Antidiabetic Agent. Journal of Natural Products 4/2016; 79 (5). (Equally contributed).
- 8. Arha Deepti, Pandeti Sukanya, Mishra Akansha, Swayam Prakash Srivastava Swayam Prakash, Srivastava Arvind K, Narender Tadigoppula and Tamrakar Akhilesh Kumar. Deoxyandrographolide promotes glucose uptake through glucose transporter-4 translocation to plasma membrane in L6 effect vivo. European myotubes exerts antihyperglycemic in Pharmacol 11/2015; DOI:10.1016/j.ejphar.2015.10.055.
- 9. Kaur Kirandeep, Vig Saurabh, Srivastava Rohit, Mishra Akansha, Srivastava Arvind K and Datta Malabika. Elevated hepatic miR-22 expression impairs gluconeogenesis by silencing the Wnt-responsive transcription factor, Tcf7". Diabetes 07/2015; DOI: 10.2337/db14-1924.
- 10. Srivastava Swayam Prakash, Mishra Akansha, Lakshmi Vijai, Tamrakar Akhilesh Kumar, Srivastava Mahendra Nath and Srivastava Arvind Kumar. Antidiabetic and antidyslipidemic activity of ethyl acetate fractions of Xylocarpus granatum and Xylocarpus molluccensis on high fructose high fat and high sucrose high fat fed-low dosed streptozotocin treated diabetic rats. Int J Pharm Pharm Sci 02/2015; 7(2):537-543. 11. Mishra Arvind, Gautam Sudeep, Pal Savita, Mishra Akansha, Rawat Arun Kumar, Maurya Rakesh and Srivastava Arvind Kumar. Effect of Momordica charantia fruits on streptozotocin-induced diabetes mellitus and its associated complications. Int J Pharm Pharm Sci 01/2015; 7(3):356-363.
- 12. Mishra Arvind, Gautam Sudeep, Pal Savita, Mishra Akansha, Rawat Arun Kumar, Maurya Rakesh and Srivastava Arvind Kumar. Effect of Azadirachta indica leaves on streptozotocin-induced diabetes mellitus and its associated complications. World J Pharm Sci 2015; 3(3): 500-511.
- 13. Thakur Ravi Kumar, Mishra Akansha*, Ramakrishna K. K. G, Mahar Rohit, Shukla Sanjeev K, Srivastava A. K. and Tripathi R.K. Synthesis of novel pyrimidine nucleoside analogues owning multiple bases/sugars and their glycosidase inhibitory activity. Tetrahedron, 11/2014; 70(45):8462-8473. (Equally contributed)
- 14. Ram Najar Kushwaha, Rohit Srivastava, Akansha Mishra, Arun Kumar Rawat, Arvind K. Srivastava, Wahajul Haq, Seturam B. Katti. Design, Synthesis, Biological Screening and Molecular Docking Studies of Piperazine-Derived Constrained Inhibitors of DPP-IV for the Treatment of Type 2 Diabetes. Chemical Biology & Drug Design 09/2014; DOI:10.1111/cbdd.12426 ·
- 15. Dighe Shashikant U, Yadav Veena D, Srivastava Rohit, Mishra Akanksha, Gautam Sudeep Srivastava Arvind K, Balaramnavar Vishal M, Saxena Anil K and Batra Sanjay. Reinvestigations into synthesis of allyldithiocarbamates and their intramolecular cyclization: synthesis and antihyperglycemic activity of 2-thioxothiazolidine-4-alkanoates. Tetrahedron, 2014, 70 (38): 6841-6850.
- 16. Khan M F, P. Mishra D P, Ramakrishna E, Rawat A K, Mishra A, Srivastava A K and Maurya R. Design and synthesis of lupeol analogues and their in vitro PTP-1B inhibitory activity. Med Chem Res, 2014, DOI 10.1007/s00044-014-0984-2.
- 17. Srivastava Arvind K, Tiwari Priti, Srivastava Swayam Prakash, Srivastava Rohit, Mishra Akansha, Rahuja Neha, Pandeti Sukanya, Tamrakar A K, Narender T, Srivastava Mahendra Nath, Lakshmi Vijai. Int J Pharm Pharm Sci, 2014, 6 (1): 809-826.
- 18. Mishra Akansha, Srivastava Rohit and Srivastava Arvind K. Comparative Antidiabetic Profile of Ayurvedic Herbo-mineral Formulation and its Constituents on Normal and Streptozotocin-induced Diabetic Rats. Int J Pharm Sci Rev Res, 2013, 22(2), 46: 252-263.
- 19. Mishra Akansha, Srivastava Rohit, Srivastava Swayam P, Sudeep Gautam, Maurya Rakesh, Tamarkar A K and Srivastava Arvind K. Antidiabetic activity of heart wood of Pterocarpus marsupium Roxb. and analysis of phytoconstituents†. Indian J Exp Biol, 2013, 51(5): 363-374.
- 20. Rahuja Neha, Mishra Akansha, Gautam Sudeep, Tamrakar A K, Maurya Rakesh S K Jain and Srivastava Arvind K. Antidiabetic activity in flowers of Nymphea rubra. Int J Pharm Sci Rev Res, 2013, 22(1), 24: 121-133.

- 21. Rahuja Neha, **Mishra Akansha**, Tamrakar A K, Maurya Rakesh S K Jain and Srivastava Arvind K. Antidiabetic and antihyperlipidemic activity in stem of *Jatropha gossypifolia*. Int J Pharm Pharm Sci, 2013, 5 (4): 706-715.
- 22. Mishra Akansha, Jaitly A K and Srivastava Arvind K. Antihyperglycemic activity of six edible plants in validated animal models of diabetes mellitus. Indian J of Science and Technology, 2009, 2(4), 80-86.
- 23. Srivastava Swayam Prakash, **Mishra Akansha**, Bhatia Vikram, Narender T and Srivastava Arvind K. *Acacia catechu* hard wood: Potential anti-diabetic cum antidyslipidemic. Med Chem Res, 2011, 20(9): 1732-1739.
- **24.** Srivastava Rohit, Srivastava Swayam Prakash, Jaiswal Natasha, **Mishra Akansha**, Maurya Rakesh, Srivastava Arvind K. Antidiabetic and antidyslipidemic activities of *Cuminum cyminum* L. in validated animal models. Med Chem Res, 2011, 20(9): 1656-1666.
- **25.** Bhatia Vikram, Srivastava Swayam Prakash, Srivastava Rohit, **Mishra Akansha**, Narender T, Maurya Rakesh, Srivastava Arvind K. Antihyperglycaemic and aldose reductase inhibitory potential of *Acacia catechu* hard wood and *Tectona grandis* leaves. Med Chem Res, 2011, 20(9): 1724-1731.
- **26.** Jaiswal Natasha, Srivastava Swayam P, Bhatia Vikram, **Mishra Akansha**, Sonkar Amit K, Narender T, Srivastava Arvind K and Tamarkar A K. Inhibition of alpha-glucosidase by Acacia nilotica prevent hyperglycemia along with improvement of diabetic complications via aldose reductase inhibition. J Diabetes Metab, 2012, S: 6 http://dx.doi.org/10.4172/2155-6156.S6-004

2. Oral Presentation:

- 1. Oral presentation entitled "Antihyperglycemic activity in marketed herbal formulations Madhuhari and Madhusunya" in the CSIR-ICMR-TNSCST sponsored national conference on diabetes mellitus and cancer (Dia-can' 09) dated 19-20 December 2009 organized by Department of Biochemistry and Biotechnology, Annamalai University, Annamalai Nagar, Tamilnadu.
- **2**. Oral presentation entitled "**PLIN2 deficiency in beta cells impairs beta cell function**" in the MIC 2018 hosted by school of medicine dated 14-15 May 2018 organized by Washington University in St. Louis.
- **3**. Oral presentation entitled "**lipid droplet protein PLIN2 deficiency in beta cells impairs beta cell function through mitochondrial dysfunction**" dated 25 Feb 2019 on research day organized by University of IOWA.
- 4. Selected for Oral presentation entitled "lipid droplet protein PLIN2 deficiency in beta cells impairs beta cell function via mitochondrial dysfunction" in the MIC dated 19-20 May 2019 organized by University of Michigan Medical School.

3. Abstract: National/International conference

1. Submitted the abstract entitled "Antidiabetic Polyherbal Formulation and its constituents: Comparative Profile" in the International conference held on January 2012 organized by ISBC at Solapur University, Solapur, Maharashtra.

Mishra Akansha, Srivastava Rohit, Gautam Sudeep, Tamrakar Akhilesh K and Srivastava Arvind K.

2. Submitted the abstract entitled "Antihyperglycemic activity in marketed herbal formulations Madhuhari and Madhusunya" in the CSIR-ICMR-TNSCST sponsored national conference on diabetes mellitus and cancer (Dia-can' 09) dated 19-20 December, 2009 organized by Department of Biochemistry and Biotechnology, Annamalai University, Annamalai Nagar, Tamilnadu.

Mishra Akansha, Srivastava Rohit, Srivastava Swayam P, Maurya Rakesh and Srivastava Arvind K.

3. Submitted the abstract entitled "Antihyperglycaemic and antidyslipidemic activity of *Coccinia indica* leaves" in the CSIR-ICMR-TNSCST sponsored national conference on diabetes mellitus and cancer (Diacan' 09) dated 19-20 December, 2009 organized by Department of Biochemistry and Biotechnology, Annamalai University, Annamalai Nagar, Tamilnadu.

Srivastava Rohit, Srivastava Swayam Prakash, **Mishra Akansha**, Maurya Rakesh and Srivastava Arvind K.

- **4.** Submitted the abstract entitled "Antidiabetic, Antidyslipidemic and aldose reductase inhibitory effects of the *Tectona grandis* leaves" in the CSIR-ICMR-TNSCST sponsored national conference on diabetes mellitus and cancer (Dia-can' 09) dated 19-20 December, 2009 organized by Department of Biochemistry and Biotechnology, Annamalai University, Annamalai Nagar, Tamilnadu.
- Srivastava Swayam Prakash, Bhatia Vikram, Srivastava Rohit, **Mishra Akansha**, Narender T., Srivastava Arvind K.
- **5.** Submitted the abstract entitled "*Pterocarpus marsupium*: A Promising antidiabetic plant" in the International conference on current trend in drug development and research (CTDDR) held on February 2010 organized by CSIR-Central Drug Research Institute, Lucknow.

Mishra Akansha, Srivastava Swayam Prakash, Maurya Rakesh, Srivastava Arvind K.

6. Submitted the abstract entitled "Antidiabetic, Antidyslipidemic and anticataract activity of the *Cuminum cyminum* in validated animal model of diabetes mellitus" in the International conference on current trend in drug development and research (CTDDR) held on February 2010 organized by CSIR-Central Drug Research Institute, Lucknow.

Srivastava Rohit, Srivastava Swayam Prakash, Jaiswal Natasha, **Mishra Akansha**, Maurya Rakesh, Srivastava Arvind K.

- **7.** Submitted the abstract entitled "Acacia catechu hard wood: Potential anti-diabetic cum antidyslipidemic" in the International conference on current trend in drug development and research (CTDDR) held on February 2010 organized by CSIR-Central Drug Research Institute, Lucknow.
- Srivastava Swayam Prakash, Mishra Akansha, Bhatia Vikram, Narender T and Srivastava Arvind K.
- **8.** Submitted the abstract entitled "Antihyperglycemic and aldose reductase inhibitory potential of *Acacia catechu* hard wood and *Tectona grandis* leaves" in the International conference on current trend in drug development and research (CTDDR) held on February 2010 organized by CSIR-Central Drug Research Institute, Lucknow.

Bhatia Vikram, Srivastava Swayam Prakash, Srivastava Rohit, **Mishra Akansha**, Narender T, Maurya Rakesh and Srivastava Arvind K.

WORKSHOPS AND SYMPOSIA ATTENDED

Place: Houston, USA

- **1.** Participated in "101th Indian Science Congress Association, International Conference held at Jammu University, from February 3 to 7, 2014.
- **2.** Participated in workshop on 13th Annual Conference of Indian Society of Hospital Waste Management "Table Talk to Bin' Side-A Practical Solution" organized by: Biomedical Waste Management Cell King George's Medical University. UP., Lucknow dated 6th December 2013.
- **3. Participated in the seminar** "Optimization Techniques for Immunohistochemistry (IHC) and Optimization Techniques for Western Blotting (WB) held at CDRI Lucknow on 2nd December 2013 conducted by Abcam and NuLife Company.
- **4.** One day Indo-UK symposia on "Genomic medicine" at Dr Ram Manohar Lohiya Institute of Medical Sciences, Lucknow

Akaniha Milihra

(Akansha Mishra)

EDITOR AGREEMENT

THIS AGREEMENT is made effective as of 22nd February, 2020 between <u>Dr Akansha</u>

Mishra ("ASSISTANT EDITOR") and JOURNAL OF EXPERIMENTAL BIOLOGY AND

AGRICULTURAL SCIENCES, with its principal office located at DIDWANA, NAGAUR,

RAJASTHAN, INDIA.

WHEREAS, Journal of Experimental Biology and Agricultural Sciences is a NON PROFITABLE and NONGOVERNMENTAL organization, which publishes professional journals and desires to appoint Editor to serve as the <u>ASSISTANT EDITOR</u> of Journal of Experimental Biology and Agricultural Sciences ("Journal"), and Editor is willing to serve in accordance with the terms and conditions of this Agreement. Now therefore both the parties agree for:

- 1. **Tenure(s)**: This appointment is initially for two years which begins with the Volume 6 issue II, later on this will be automatically renew for next year and it will be continues maximum of four (4) years. This Agreement may also be terminated as provided in Section 07.
- **2. Responsibilities of the Editor:** The <u>ASSISTANT EDITOR</u> works for maintaining editorial policies. <u>ASSISTANT EDITOR</u> will have full right to evaluate the manuscripts and accept them for publication. This will be a remunerative work.
- **3. Non-Competition and Conflicts of Interest**: Publisher expect from the **ASSISTANT EDITOR** that he/she shall not engage in actions which may constitute an actual, apparent or potential conflict of interest with the mission and activities of the Journal or Publisher, will follow applicable policies and procedures related to the Journal, and will disclose to the Publisher any such conflicts of interest and any business, financial, and organizational interests and affiliations which are or could be construed to be a conflict of interest.
- **4.** Compensation: This is an honorary position and Publisher shall not provide any annual honorarium to the Editor for editorial work.

- **5. Editorial Control and Content:** <u>ASSISTANT EDITOR</u> shall be responsible for the educational content of journal. The Publisher as the owner of copyright in the Journal and all editorial content published in the Journal shall have the right of prior review and consultation, if it desires, on any editorial content to be published in the Journal.
- **6. Name and Likeness**: Editor does not have any problem if Publisher uses Editor's name, photograph, and biographical information in the Journal and in advertising and promotional materials related to the Journal.
- **07. Termination**: Both Publisher and <u>ASSISTANT EDITOR</u> have equal right to terminate this Agreement without any further obligation upon thirty days prior written notice.
- **08.** Entire Agreement and Amendment: This Agreement constitutes the entire agreement between the parties and supersedes any other agreement in any form between the parties, and it may not be amended except by a written amendment signed by both parties.

IN WITNESS WHERE OF, the parties agree to all of the foregoing terms and conditions on the effective date of this Agreement first above written.

Journal of Experimental Biology

ASSISTANT EDITOR

Aronsh Mish

and Agricultural Sciences

Signature __

Signature

Name/Title: Dr Kamal Kishore Chaudhary

Managing Editor - JEBAS

Date:

22/02/2020

Name: Dr Akansha Mishra

Baylor College of Medicine

Date: 22/02/2020