### Dr. Ashutosh Chauhan

Assistant Professor

Department of Biotechnology, Faculty of Biomedical Sciences Uttarakhand Ayurved University, Dehradun- 248001, Uttarakhand, India.

E-mail: ashutosh\_biotech2006@yahoo.com; Mob: +919675598199



### **EDUCATION**

**Ph.D.** Department of Urology, Post Graduate Institute of Medical Education & Research (PGIMER) Chandigarh, India - 2009-2014.

M.Sc. Biotechnology, HNB Garhwal University, Srinagar, Uttarakhand, India-2004-2006.

**B.Sc.** (Biology), GPGC Agustyamuni, HNB Garhwal University, Srinagar, Uttarakhand, India-2000-2003.

## RESEARCH / TEACHING EXPERIENCE

Senior Research Fellow, Department of Urology, PGIMER, Chandigarh.India.

Junior Research Fellow, Department of Urology, PGIMER, Chandigarh.India.

Research Assistant, Department of Experimental Medicine and Biotechnology, PGIMER, Chandigarh.

Dissertation from Central Salt and Marine Chemical Research Institute (CSMCRI) Bhavnagar, Gujarat Summer training at Forest Research Institute (FRI) Dehradun, India.

Taught Research Methodology and Biostatistics to MD/MS (Ayu) student at Rishikul Ayurved College, Haridwar in 2015.

# **EXPERTISE**

- 1. Animal cell culture
- 2. Microbial culture
- 3. Molecular biology
- 4. Cell signaling
- 5. Cancer biology

### FELLOWSHIPS/ AWARDS

- 1. Research fellowship by Indian Council of Medical Research (ICMR-JRF) Govt. of India in 2009.
- 2. International travel grant by Department of Science and Technology (DST) New Delhi, India in 2012.
- 3. Co- Organizing Secretary of the National Conference on Recent advances in Ayurvedic herbal medicine From source to manufacturing sponsored by NMPB (Ministry of AYUSH) on 15 and 16 September 2017 at CSIR-IIP Dehradun.
- 4. Co-Principal Investigator of NMPB New Delhi funded a research project on exploring plant-derived SGLT2 inhibitors to treat type-2 diabetes and unraveling their structure activity relationship.
- 5. Co-Principal Investigator of NMPB New Delhi funded a project on "Establishment of herbal garden at Uttarakhand Ayurved University for conservation and promotion of medicinal and aromatic plant".

## **GRANT/ ONGOING PROJECT**

- 1. NMPB New Delhi funded a Research project on Exploring plant-derived SGLT2 inhibitors to treat type-2 diabetes and unraveling their structure activity relationship 2017-2020 is ongoing.
- 2. NMPB New Delhi funded a project on "Establishment of herbal garden at Uttarakhand Ayurved University for conservation and promotion of medicinal and aromatic plant". 2018-2022 is ongoing.

#### RESEARCH SUPERVISION

- 1- Junior Research Fellow
- 2- Research Assistant
- 3- Doctor of Medicine (Ayurveda)

### EDITORIAL/REVIEWER EXPERIENCE

- 1. Associate editor of journal "Ayurscientifica" (Uttarakhand Ayurved University).
- 2. Editor of research journal "Current medical and drug research".
- 3. Executive editor of "Brahmkamal Sandesh" (a news letter published by Uttarakhand Ayurved University).
- 4. Reviewer of Journal: Biomedicine & Pharmacotherapy.
- 5. Journal of cancer.
- 6. Journal of Experimental and Clinical Cancer Research.

## RESEARCH FIELDS OF INTEREST

- 1. Molecular approaches in Ayurveda.
- 2. Discovery and development of Herbal Medicines.
- 3. Concepts of Diabetes, Inflammation and aging in Ayurveda.
- 4. Discovery and evaluation of anticancer agents.

#### ADMINISTRATIVE EXPERIENCE

- 1. Hostel secretary in Association of Biomedical Scientist (ABMS), Postgraduate Institute of Medical Education Research (PGIMER) Chandigarh during 2010-12.
- 2. Member of Research Degree Committee (RDC) of Uttarakhand Ayurved University during 2015-16.
- 3. Sports In- charge at Uttarakhand Ayurved University, Dehradun, Uttarakhand, India.
- 4. Library In-charge of Central library at Uttarakhand Ayurved University, Dehradun.
- 5. Observer for various examinations of the University.
- 6. Examiner for Research Methodology and Biostatistics in MD/MS (Ayu) during 2015-17
- 7. Sports -coordinator for Inter University sports at Doon University, Dehradun in 2017
- 8. University coordinator for various event organized by Uttarakhand Government.

#### **MEMBERSHIP**

- 1. Life time member of Association of Biomedical Scientist (ABMS), Postgraduate Institute of Medical Education Research (PGIMER) Chandigarh.
- 2. Lifetime member of Vijnana Bharti.

### LIST OF SELECTED PUBLICATION

- 1. Semwal DK, Mishra SP, **Chauhan A** Semwal RB. Adverse health effects of tobaco and role of ayurvda in their reduction. *Journal of Medical Sciences*. 2015, 15 (3), 139-146.
- 2. Mishra SP, Semwal DK Chauhan A. Scenario of Ayurveda Education in India: Some recommendations for development. *University News- Association of Indian Universities*. 2015, 53 (42), 3-8.
- 3. **Chauhan A,** Semwal DK, Mishra SP, Semwal RB. Ayurvedic research methodology: Present status and future strategies. *Ayu*, 2015. 36,(4), 364-69.
- 4. Semwal DK, Chauhan A Mishra SP, Semwal RB. Recent Development in Yoga A Scientific Perspective. *Journal of Ayush.* 2016, 5 (1), 14-20.
- 5. Semwal DK, Semwal RB, **Chauhan A,** Mishra SP. Treatment of type 2 diabetes with Ayurveda: A case report. *Pharmacologia*. 2016. 7, (4), 239-242.
- 6. **Chauhan A,** Semwal DK, Mishra SP, Semwal RB. Speckle-type POZ protein acts as a predictive biomarker for mTOR target therapy in renal cell carcinoma. *Current Science*. 2016, 111, 1-7.
- 7. **Chauhan A,** Semwal DK, Mishra SP, Goyal S, Marathe R, Semwal RB. Combination of mTOR and MAPK inhibitors A potential way to treat renal cell carcinoma. *Medical Sciences*. 2016, *4* (4), 1-16.
- 8. **Ashutosh Chauhan,** Deepak Kumar Semwal, Satyendra Prasad Mishra, Ruchi Badoni Semwal. Yoga practice improves the body mass index and blood pressure A randomized controlled trial *International Journal of Yoga*. 2017, 10 (2) 103-106.
- 9. **Ashutosh Chauhan,** Deepak Kumar Semwal, Satyendra Prasad Mishra, Ruchi Badoni Semwal. Ayurvedic concept of shatkriyakala: a traditional way to diagnose cancer. *Journal of Integrative medicine*. 2017, 15(2): 88-94.
- 10. **Ashutosh Chauhan,** Deepak Kumar Semwal. Integration of medical systems can improve healthcare Possibilities and challenges. *Ayurscientifica*. 2017, 1(1) 1-3.
- 11. **Ashutosh Chauhan,** Deepak Kumar Semwal, Ruchi Badoni Semwal and Saudan Singh. Ayurvedic approaches used in prevention and treatment of Type 2 Diabetes Mellitus. *Journal of Conventional Knowledge and Holistic health.* 2017, 1 (1), 1-15.
- 12. **Ashutosh Chauhan**. Cancer diagnosis with biomarker: status and challenges. *Current Medical and Drug Research*. 2017, 1 (1),1-2.
- 13. **Ashutosh Chauhan**, Rani Ojha , Deepak Kumar Semwal, Satyendra Prasad Mishra, Semwal RB. Combined treatment with CCI779 and SB203580 induces cellular senescence in renal cell carcinoma cell line via p53 pathway, *Anticancer Agents Med Chem*. 2017; 17(11):1545-1554.
- 14. Ankit Kumar, Sonali Aswal, Ruchi Badoni Semwal, **Ashutosh Chauhan** and Deepak Kumar Semwal. Insights on the pharmacological, phytochemical and ethnobotanical aspects of Artemisia roxburghiana: a rather less explored but therapeutically important species of lower Himalayas. Phytochem Rev. 2018; https://doi.org/10.1007/s11101-018-9589-6.
- 15. **Chauhan A**, Bhattacharyya S, Ojha R, Mandal AK, Singh SK. Speckle type POZ protein as a diagnostic biomarker in renal cell carcinoma. J Can Res Ther. 2018;14: 977-82

### SELECTED PUBLISHED ABSTRACT

1. **Chauhan A,** Ganesamoni R, Bhattacharyya S, Kanduja KL, Mandal AK, Singh SK. Changes in the peripheral blood ROS levels in patients undergoing surgery for renal cell carcinoma. 31<sup>st</sup> Annual Conference of Indian Association of Biomedical Scientists (IABMS). Swami Vivekanand College of Pharmacy, Tiruchengode, Tamil Nadu, India. 01 November 2010. Abstract book.

- 2. Chauhan A, Bhattacharyya S, Mandal AK, Singh SK. Speckle type POZ protein (SPOP) expression in renal cell carcinoma: Role in cancer detection. 2012 Union for International Cancer Control World Cancer Congress (UICC). Palais des Congres Montreal, Canada. 27-30 August 2012. Abstract book.
- 3. **Chauhan A,** Bhattacharyya S, Mandal AK, Singh SK. CCI-779 (mTOR inhibitor) alone is more effective than combination with SB203580 (p38 MAPK inhibitor) in RCC cell line, 34<sup>th</sup> Congress of the Societe Internationale d'Urologie (SIU), Scottish Exhibition and Conference Centre (SECC), Glasgow, United Kingdom, 12-15 October 2014, Urology 84 (4 Supplement 1), October 2014.
- 4. Semwal RB, Semwal DK, **Chauhan A** Mishra SP, Antimicrobial activity and synergistic effect of essential oil from Artemisia, Citrus, Cymbopogon, Hedychium and Ocimum species, National Conference on Ayush in the lap of Himalaya. Ministry of Ayush, Government of India, PHD Chamber of Commerce, Uttarakhand, India. 17 June 2016. Souvenir.
- 5. **Chauhan A**, Semwal DK, Semwal RB Mishra SP, Research methodology of Ayurveda a Need of further development and strategy, Uttarakhand Ayurved sammelan, World Ayurveda Foundation, Science City, Kolkata, 1st July 2017, Souvenir
- 6. **Chauhan A**, Semwal D. K, Chauhan A, Semwal R. B, Mishra S. P. Ayurvedic Rasayanas The immunity boosters for cancer patients. II Uttarakhand Ayurveda Conference organized by Ayush health India at Doon University, Dehradun, India on 1 July, 2017. Souvenir
- 7. Navin Chandra Suman, D. K. Semwal. **Ashutosh Chauhan**. Clinical trial for the effeicacy of Carica papaya leaf extraction on platelet count. National Conference on Recent advances in Ayurvedic herbal medicine From source to manufacturing sponsored by NMPB (Ministry of AYUSH) on 15 and 16 September 2017 at CSIR-IIP Dehradun.
- 8. Semwal D. K, **Chauhan A**, Semwal R. B. Scope of plant-derived SGLT2 inhibitors to treat type 2 diabetes. National conference on conservation and sustainable utilisation of high altitude medicinal and aromatic plants of Uttarakhand Himalayas, organised by SMPB, Uttarakhand and HRDI, Gopeshwar, Dehradun, India on 10-11 November 2017. Souvenir.
- 9. **Ashutosh Chauhan**, Swapnil Singhai, Deepak Kumar Semwal and Ruchi Badoni Semwal. Treatment of hyperglycemia through modulation of associated gut microbiota in type 2 diabetic patients with Ayurvedic diet and life style. Presented at 1st National BiomedicaL Research Competition-2018 at AIIMS Rishikesh on 15 October 2018.
- 10. Deepak Kumar Semwal, **Ashutosh Chauhan** and Ruchi Badoni Semwal. Ayurvedic concept of shatkriyakala in cancer diagnosis and its correlation with modern science. Traditional Medicine, Phytochemistry and Medicinal Plants on 15-17 October at Japan.
- 11. Sonali Aswal, Ankit Kumar, **Ashutosh Chauhan** and Deepak Kumar Semwal. Phytochemical and Therapeutical Significance of Drimia indica an Ayurvedic Herb on 15-17 October at Japan.
- 12. Ankit Kumar, Sonali Aswal, **Ashutosh Chauhan** and Deepak Kumar Semwal. *Artemisia roxburghiana* An Indian Medicinal Plant with Ethnobotanical and Pharmacological Importance on 15-17 October at Japan.

## **BOOK PUBLISHED**

Traditional medicinal flora of Mauritius: Published by Pravek Kalp Private Limited, ISBN 978-3-16-148410-0.

## WORKSHOP ATTENDED

- 1. Attended 1<sup>st</sup> National symposium cum workshop on experimental research and alternative on 3<sup>rd</sup> March 2012 at PGIMER, Chandigarh.
- 2. Attended two days National workshop on research methodology for Ayurveda on 7<sup>th</sup> and 8<sup>th</sup> October 2017 organized by Vishwa Ayurved Parishad at New Delhi.