### Mukund Bhandari, MS, PhD

Bioinformatics, Computational Biology, Cancer Omics, Biostatistics, Machine Learning 2069650745, bhandarim@livemail.uthscsa.edu, www.linkedin.com/in/bhandarim

### **SUMMARY**

I use bioinformatics, computational biology, statistics, machine learning, and cloud computing to decipher biological information from multi-omics sequencing data, clinical data, and other large public databases such as The Cancer Genome Atlas (TCGA). I have investigated different cancer types including sarcomas using transcriptomics, epigenomics, genomics and single-cell sequencing data to investigate tumor profiles and molecular targets, explore tumor heterogeneity and the immune microenvironment, and uncover factors driving metastasis and treatment resistance. Additionally, I have experience and an understanding of basic and translational research in cancer biology, protein biochemistry, drug discovery, and biotechnology.

## **EDUCATION:**

# **Doctor of Philosophy (PhD)**

August 2019- May 2024

Integrated Biomedical Science Program (IBMS)- (Bioinformatics)
Greehey Children's Cancer Research Institute
UTHealth San Antonio, TX

# Master of Science in Biotechnology- (Cancer Research)

August 2013-May 2015

Department of Biology and Biotechnology Stephen F. Austin State University, Nacogdoches, TX

## **Bachelor of Technology in Biotechnology**

August 2007-August 2011

Department of Biotechnology, School of Science Kathmandu University, Dhulikhel, Nepal

# **WORK EXPERIENCE:**

### **Graduate Research Assistant**

August 2019- May 2024

Greehey Children's Cancer Research Institute,

UTHealth San Antonio, TX

- Investigated genomics landscape of 21 patient-derived xenografts sample using RNA, WES and WES data
- Performed mutation analysis, gene fusion identification, immune score using tumor and matched normal.
- Identified and validated cancer subtype using unsupervised clustering using data from TCGA and PDXs
- Investigated molecular and genomic mechanisms of different cancer types for collaborators projects
- Used genomics, computational biology, bioinformatics, predictive modeling and machine learning
- Conducted comprehensive clinical research utilizing diverse data repositories and institutional patient data.
- Wrote custom UNIX scripts to run different applications, algorithms and software
- Employed comprehensive programming, rigorous statistics, and data science methodologies.
- Reviewed new scientific papers, tools and methodologies and present it to colleagues and supervisor *Technical Skills:*

Multi-Omics NGS Analysis (bulk RNA-seq, single-cell RNA-seq, whole exome sequencing, whole genome sequencing, ATAC-sequencing, ChIP-sequencing), Programming (R, Python, Unix), Bioinformatics pipelines, High Performance Computing (In-house/AWS/AZURE), Conda, Docker, Slurm, Git, Statistical Modelling

2016-2019

Department of Pharmacology & Toxicology,

University of Texas Medical Branch, Galveston, TX

- Investigated different proteins involved in neurological and cancer research.
- Studied proteins involved in transcription regulation using biochemical and biophysical techniques
- Used robotics to screen different compound libraries
- Purified protein, developed and optimized compound screening assays and instruments
- Contributed to scientific manuscripts, assisted postdoctoral in laboratory practices
- Trained undergrad, grad students and post-doctoral trainee on scientific protocol and equipment.

#### Other Skills:

Presentation, Report Writing, Project Leadership, Data Analysis, Lab Management

Research Assistant 2013- 2016

Department of Biology and Biotechnology,

Stephen F Austin State University, Nacogdoches, TX

- Conducted research on colorectal cancer, and identified potent natural compound with anticancer-property
- Presented and discussed research findings at various international and regional conferences.
- Provided instruction on experimental concepts in undergraduate biology labs

### **Other Skills:**

Project Planning, Time Management, Literature Review, Data Analysis, Team Management

Industrial Trainee 2010-2010

Quality Control and R&D Department

AstraZeneca Pharma Ltd, Bengaluru, India

- Aided senior scientist in GMP, quality control and R&D department
- Participated in daily and weekly discussions and meetings and wrote reports

### Other Skills:

Quantitative Research, Team Building, QC, Troubleshooting

Industrial Trainee 2009-2010

Quality Control and R&D Department

Carlsberg Group

- Aided senior scientist in GMP, quality control and R&D department
- Participated in daily and weekly discussions and meetings and wrote reports

### **Other Skills:**

Quantitative Research, Team Building, QC, Troubleshooting

# **OTHER RESEARCH INVOLVEMENTS:**

Rotation Student Spring 2020

Lab of Dr. Siyuan Zheng, Greehey Children Cancer Research Institute

**Research Area:** Cancer Genomics in Pediatric Cancer Quantitation of Exon Expression using RNA-seq data.

Rotation Student Fall 2019

Lab of Dr. Mingjiang Xu, South Texas Research Facility

Research Area: Myeloid Malignancies and Epigenetics in Leukemia

Investigate the role of LncRNAs dysregulation and TET2 mutations in the development of myeloid malignancies.

Rotation Student Fall 2019

Lab of Dr. Patrick Sung, UTHealth San Antonio

Research Area: BRCA1 molecular biology and biochemistry in Breast Cancer

Purification of PALB2 and binding partners BRCA1-BARD1-MRG1 to investigate their binding mechanism.

Rotation Student Fall 2019

Lab of Dr. Ann Griffith, UTHealth SA **Research Area:** Cancer Immunity

Catalase deficiency creates oxidative environment in stromal cells for tolerance to tissue-restricted antigens

Research Assistant 2013-2015

Lab of Dr. Beatrice Clack, Stephen F. Austin State University, TX, USA

Research Area: Adenocarcinoma and Natural products

Apoptosis in DLD-1 Colorectal Cancer Cells L-19 compound

Student Researcher 2007-2011

Lab of Dr. Janardhan Lamichhane, Kathmandu University

Research Area: Cancer Biology and Drug Development

Antibacterial and anti-proliferative activity of high-altitude medicinal plants of Nepal

## **OTHER INVOLVEMENTS:**

# **Technology Commercialization Catalyst**

2024-Current

UTHealth San Antonio, TX

- Perform holistic analysis of inventions, such as drugs, biologics, or medical devices.
- Carry out detailed market research, including market size, competitors, and potential barriers to entry.
- Determine the invention's intellectual property potential.
- Identify and communicate with potential industry partners for acquisition and commercialization. **Skills:**

Literature Review, Data Analysis, Report Writing, Market Research

#### Co-founder and President 2020-2021

**BIG Bioinformatics** 

San Antonio, Texas, USA

- Established 'BIG Bioinformatics', a non-profit to address the growing demand for bioinformatics
- Served as a Founding President to structure its mission, goals, and objectives.
- Chaired executive and general meetings to initiate, plan and execute multiple Bootcamp and Workshops
- Organized 'BioInfo Talk Series' by bringing many world-renowned Professors and Research Scientists Skills:

Cross-functional Team Leadership, Entrepreneurship, Public Speaking, Project Leadership

# **EDITOR/REVIEWER BOARD/PEER-REVIEWER:**

ASSOCIATE EDITOR: Journal of Emerging Investigators 2023-Current

**REVIEWER BOARD MEMBER:** BioMedInformatics 2023-Current

**PEER REVIEWER:** 128 peer review, 24 scientific journals

Name of Journals: Journal of Translational Medicine, Translational Medicine Communications, Cancers, Frontiers in Biomedical Sciences, Frontiers in Public Health, PLOS One, PLOS Global Public Health, Medicina, Applied Biochemistry and Biotechnology, BioMedInfomatics, Onco, etc.

### **PUBLICATION AND PRESENTATION:**

# Publications available online (13):

- 1. Shaun Trecarten, **Mukund Bhandari**, Ahmad Abdel-Aziz, Onika Noel, Michael Liss, Furkun Dursun, Robert Svatek, Ahmad Mansour "Open versus Minimally Invasive Nephroureterectomy in Octogenarians: An Analysis of Surgical Approach Trends, Outcomes and Survival Analysis with Propensity Matching", 2024, <a href="https://doi.org/10.1016/j.urolonc.2024.02.005">https://doi.org/10.1016/j.urolonc.2024.02.005</a>
- Ahmad Abdelaziz, Mukund Bhandari, Ahmed Elshabrawy, Shaun Trecarten, Emad Eddin Dalla, Kamel A. Samara, Fadi Alsayegh, Michael Liss, Ahmed M.Mansour "Contemporary Trends of Holmium Laser Enucleation of the Prostate (HoLEP) Utilization in the United States: A Comprehensive Analysis Using the National Surgical Quality Improvement Program (NSQIP) Database (2011-2020)", 2024, <a href="https://doi.org/10.1089/end.2023.0612">https://doi.org/10.1089/end.2023.0612</a>
- 3. Geeta Joshi, Aditi Jain, Shalini Reddy Araveeti, Sabina Adhikari, Harshit Garg, **Mukund Bhandari\***, "FDA approved Artificial Intelligence and Machine Learning (AI/ML)-Enabled Medical Devices: An updated landscape", 2024, <a href="https://doi.org/10.3390/electronics13030498">https://doi.org/10.3390/electronics13030498</a>, (\*corresponding Author)
- 4. Sepideh Mohammadhosseinpour, **Mukund Bhandari\***, Dallas Lee, Beatrice Clack, "Anti-Proliferative and Apoptotic Activities of *Rumex crispus*" (Life, 2023) <a href="http://tinyurl.com/mve3m3kz">http://tinyurl.com/mve3m3kz</a> (\*corresponding Author)
- 5. Harshit Garg, **Mukund Bhandari**, Shannon Hall, Onika Noel, Furkan Dursun, Michael Liss, Dharam Kaushik, Mohamad Hassan Fakhreddine, Chethan Ramamurthy, Robert Svatek, Ahmed Mansour. A comparative analysis of radical cystectomy with perioperative chemotherapy, chemoradiation therapy or systemic therapy in patients with clinically advanced node-positive bladder cancer (cN2/N3), Frontiers in Oncology, 2023, <a href="https://tinyurl.com/44tj3yhv">https://tinyurl.com/44tj3yhv</a>
- 6. Muktar Musa Shallangwa, Nathan Isaac Dibal, **Mukund Bhandari**, Shuaibu Saidu Musa, Hassan Muhammad Bello, "Malnutrition and its associated factors among people living with HIV/AIDS (PLHIV) in resource limited settings: A single-centred study" (Clinical Epidemiology and Global Health, 2023) https://tinyurl.com/352y5k3e
- 7. Garg H, Whalen P, Marji H, Cooper R, Dursun F, **Bhandari M**, Khanna L, Jayakumar L, Liss MA, Svatek RS, Rodriguez R, Kaushik D, Pruthi D. "Patency outcomes of primary Inferior vena cava repair in radical nephrectomy & tumor thrombectomy" (Journal of Vascular Surgery, 2023) <a href="https://tinyurl.com/5fr3rwmy">https://tinyurl.com/5fr3rwmy</a>
- 8. Geeta Joshi, Aditi Jain, Harshit Garg, **Mukund Bhandari\***, "Three Decades of Novel Drug Approval: A Comprehensive Analysis", <a href="https://tinyurl.com/w82vexah">https://tinyurl.com/w82vexah</a> (\*corresponding Author)
- 9. Subash Khadka, Deegendra Khadka, Ram Chandra Poudel, **Mukund Bhandari**, Purnima Baidya, Jaishree Sijapati, Jyoti Maharjan, "Production Optimization and Biochemical Characterization of Cellulase from *Geobacillus* sp. KP43 Isolated from Hot Spring Water of Nepal", *BioMed Research International*, 2022 <a href="https://tinyurl.com/3cr3mtem">https://tinyurl.com/3cr3mtem</a>
- 10. Yi Li, Zhiqing Liu, Galina Aglyamova, Jianping Chen, Haiying Chen, **Mukund Bhandari**, Mark A. White, Gabrielle Rudenko, Jia Zhou, "Discovery of phenanthridine analogues as novel chemical probes disrupting the binding of DNA to ΔFosB homodimers and ΔFosB/JunD heterodimers", Bioorganic & Medicinal Chemistry Letters, 2020 <a href="https://tinyurl.com/us27464u">https://tinyurl.com/us27464u</a>
- 11. Zhou Yin, Harikanth Venkannagari, Haley Lynch, Galina Aglyamova, **Mukund Bhandari**, Mischa Machius, Eric J. Nestler, Alfred J. Robison, Gabby Rudenko, "Self-assembly of the bZIP transcription factor ΔFosB", Current Research in Structural Biology, 2020 <a href="https://tinyurl.com/596ssbk5">https://tinyurl.com/596ssbk5</a>

- 12. Janardan Lamichhane, Surya B Chhetri, **Mukund Bhandari**, Sameer Pokhrel, Anaya Pokhrel & Jae Kyung Sohng, "Ethnopharmacological survey, Phyto-chemical screening and Antibacterial activity measurements of high altitude medicinal plants of Nepal: A bioprospecting approach", Indian Journal of Traditional Knowledge, Vol.13 (3), July 2014 https://tinyurl.com/2p8ew47x
- 13. Janardan Lamichhane, Surya B Chhetri, **Mukund Bhandari**, Sameer Pokhrel, Rupak Timilsina and Tirtha Maiya Shrestha, "Antiproliferative bioassay of extremophilic medicinal plants from Langtang Himalayan range of Nepal", J. Biomolecule Reconstruction, 2012, <a href="https://tinyurl.com/453hd4dz">https://tinyurl.com/453hd4dz</a>

# Publications under Review (5):

- 1. Santosh Timilsina, Nourhan Abdelfattah, Daisy Medina, Deepika Singh, Shahad Abdulsahib, Jian Yu Huang, Panneerdoss Subbarayalu, Trong Phat Do, Prabhakar Pitta Venkata, Saif Nirzhor, **Mukund Bhandari**, Siyuan Zheng, Yidong Chen, Robert Hromas, Patrick Sung, Virginia Kaklamani, Ratna Vadlamudi, and Nu Zhang, Majeet Rao, FOXM1 Blockade Promotes Tumor Regression by Inducing DNA Sensing and Stress Ligand-Dependent Antitumor Immunity and Immune Memory (under review)
- 2. Shaun Trecarten, **Mukund Bhandari**, Ahmad Abdel-Aziz, Onika Noel, Michael Liss, Furkun Dursun, Robert Svatek, Ahmad Mansour "An analysis of rates, trends and predictors of conversion to open for robotic and laparoscopic radical nephroureterectomy" (under review)
- 3. Emad Eddin Dalla; **Mukund Bhandari**; Ahmad Abdelaziz; Michael Liss, Ahmed M. Mansour, Safety and Efficacy of Holmium Laser Enucleation of the Prostate (HoLEP) in Octogenarians: A Retrospective Cohort Analysis Using ACS-NSQIP Database (2011-2020) (under review)
- 4. Harshit Garg, **Mukund Bhandari**, Monica Sridhar, Onika Noel, Furkan Dursun, Michael Liss, Dharam Kaushik, Robert Svatek, Chethan Ramamurthy, Ahmed Mansour. "Time trends in systemic treatments and survival in patients with metastatic urothelial bladder cancer: From the era of chemotherapy to immunotherapy" (under review)
- 5. Harshit Garg, Philip Whalen, Akbar Minahil, **Mukund Bhandari**, Michael A. Liss, Ahmed M. Mansour, Robert S. Svatek, Dharam Kaushik, Deepak K. Pruthi, "Urine Analysis: An Often-Overlooked Marker for Renal Function in Kidney Cancer Surgery" (under review)

# Publications under Preparation (4):

- 1. **Mukund Bhandari**, Funan He, Anna Rogojina, Abhik M Bandyopadhyay, Zhao Lai, Gail Tomlinson Siyuan Zheng, Yidong Chen, Peter Houghton, Xiaojing Wang, "Benchmarking Mouse Contamination Removing Protocols in Patient-Derived Xenografts Genomic Profiling" (in-preparation)
- 2. Saif Nirzhor, Panneerdoss Subbrayalu, Prabhaar Pitta Venkata, Santosh Timilsina, Shahad Abdulsahib, **Mukund Bhandari**, Siyuan Zheng, Majeet Rao, "SKP2: a critical facilitator of Medulloblastoma growth and progression (in-preparation)
- 3. Deepika Singh, Santosh Timilsina, Daisy Medina, Shahad Abdulsahib, Panneerdoss Subbarayalu, Trong Phat Do, Prabhakar Pitta Venkata, Saif Nirzhor, **Mukund Bhandari**, Siyuan Zheng, Yidong Chen, Majeet Rao, "Role of SCUBE3 in breast cancer growth and progression (in-preparation)
- 4. Ahmad Abdelaziz, **Mukund Bhandari**, Ahmed Elshabrawy, Shaun Trecarten, Emad Eddin Dalla, Kamel A. Samara, Fadi Alsayegh, Michael Liss, Ahmed M.Mansour, "Factors Influencing Overall Survival in Metastatic Upper Urinary Tract Urothelial Tumors: A Retrospective Analysis Using NCDB Data" (inpreparation)

### **Conference Abstracts Published (19):**

- Shaun Trecarten, Anand Iyer, Mukund Bhandari, Chethan Ramamurthy, Deepak Pruthi, Financial toxicity and quality of life post chemotherapy for testicular germ cell tumors, https://doi.org/10.1097/01.JU.0001009376.16371.fb.02
- 2. Ahmad Abdelaziz, Mukund Bhandari, Shaun Trecarten, Emad Eddin Dalla, Onika Noel, Deepak Pruthi, Michael Liss, Furkan Dursan, Ahmed M.Mansour, Assessing the impact of renal mass biopsy on the outcomes of active surveillance for small renal masses, <a href="https://doi.org/10.1016/S0302-2838(24)01044-3">https://doi.org/10.1016/S0302-2838(24)01044-3</a>
- 3. Onika Noel, Tej Desai, **Mukund Bhandari**, Harhist Garg, Furkan Dursan, Michael Liss, Robert Svatek, Ahmed M.Mansour, Utilization of palliative care in bladder cancer: Delineating patterns of care and associated disparities, <a href="https://doi.org/10.1016/S0302-2838(24)00282-3">https://doi.org/10.1016/S0302-2838(24)00282-3</a>
- 4. Harshit Garg, **Mukund Bhandari**, Onika V. Noel, Furkan Dursun, Michael Liss, Dharam Kaushik, Robert S. Svatek, Chethan Rammamurthy, Ahmed M. Mansour, "Adjuvant immunotherapy for patients with renal cell carcinoma at increased risk of recurrence following resection: A National Cancer Database Analysis", Journal of Clinical Oncology, 2023, <a href="https://tinyurl.com/2hztk8mn">https://tinyurl.com/2hztk8mn</a> (**Received best poster award for ASCO 2023**)
- 5. Onika Noel, Harshit Garg, Kennedy E Okhawere, Mukund Bhandari, Indu Sinai, Laura Zuluaga, Ronney Abaza, Daniel D. Eun, Akshay Bhandari, Ashok K. Hemal, James Porter, Michael D Stifelman, Jihad Kaouk, Simone Crivellaro, Craig Rogers, Philip Pierorazio, Ketan K Badani, Ahmed Mansour, "A Comparative Analysis of Robot-assisted Retroperitoneoscopic Partial nephrectomy (RARPN) for Anterior vs Posterior Renal tumors: A Propensity Score Matched Analysis in a Multi-Institutional Cohort ", The Journal of Urology, 2023, <a href="https://tinyurl.com/2wha57rm">https://tinyurl.com/2wha57rm</a>
- 6. Geeta Joshi, Aditi Jain, Sabina Adhikari, Harshit Garg, **Mukund Bhandari**, "AI and Machine Learning (AI/ML)-Enabled Medical Devices in Health Care: Trends in Cardiology", 6<sup>th</sup> Cardio Renal Connection, San Antonio, 2023, https://www.cardiorenalconnections.org
- 7. Geeta Joshi, Aditi Jain, Harshit Garg, **Mukund Bhandari**, "Comprehensive analysis of the last 3 decades in novel drug approval by FDA", 6<sup>th</sup> Cardio Renal Connection, San Antonio, 2023, https://www.cardiorenalconnections.org
- 8. Harshit Garg, **Mukund Bhandari**, Gilda Digman, Onika Noel, Furkan Dursun, Dharam Kaushik, Deepak Pruthi, Michael Liss, Chethan Ramamurthy, Ahmed Mansour, "Open versus minimal invasive retroperitoneal lymph node dissection: a National Cancer Database analysis", The Journal of Urology, 2023, <a href="https://tinyurl.com/bddstjaj">https://tinyurl.com/bddstjaj</a>
- 9. Harshit Garg, **Mukund Bhandari**, Monika Gasiorek, Onika Noel, Furkan Dursun, Michael Liss, Dharam Kaushik, Chethan Ramamurthy, Ahmed Mansour, "Role of adjuvant immunotherapy for patients with renal cell carcinoma at increased risk of recurrence following resection", The Journal of Urology, 2023, https://tinyurl.com/ap2hphkb
- 10. Harshit Garg, **Mukund Bhandari**, Monica Sridhar, Onika Noel, Furkan Dursun, Michael Liss, Dharam Kaushik, Robert Svatek, Chethan Ramamurthy, Ahmed Mansour, "Time trends in systemic treatments and survival in patients with metastatic urothelial bladder cancer: From the era of chemotherapy to immunotherapy", The Journal of Urology, 2023, <a href="https://tinyurl.com/bdh3z9f4">https://tinyurl.com/bdh3z9f4</a>

- 11. Harshit Garg, **Mukund Bhandari**, Furkan Dursun, Michael Liss, Dharam Kaushik, Mohamad Hassan Fakhreddine, Chethan Ramamurthy, Robert Svatek, Ahmed Mansour, "A comparative analysis of outcomes of radical cystectomy, concurrent chemoradiation or systemic therapy in patients with urothelial bladder cancer and advanced lymph nodal (cN2/N3) disease", Society of Urologic Oncology, SUO 2022 https://tinyurl.com/msx2dnep
- 12. Harshit Garg, Philip Whalen, Minahil Akbar, **Mukund Bhandari**, Michael Liss, Ahmed Mansour, Robert Svatek, Dharam Kaushik, Deepak Pruthi, "Urine analysis: An often-over-looked marker for renal function in kidney cancer surgery, Society of Urologic Oncology, SUO 2022" <a href="https://tinyurl.com/yttfs9tx">https://tinyurl.com/yttfs9tx</a>
- 13. Harshit Garg, **Mukund Bhandari**, Onika Noel, Furkan Dursun, Michael Liss, Dharam Kaushik, Chethan Ramamurthy, Ahmed M. Mansour, Utility of adjuvant immunotherapy in high-risk non-metastatic renal cell carcinoma: A real-world experience using National Cancer Database Analysis, European Urology 2023, <a href="https://tinyurl.com/mrxuexax">https://tinyurl.com/mrxuexax</a>
- 14. Harshit Garg, Philip Whalen, Minahil Akbar, **Mukund Bhandari**, Michael Liss, Ahmed Mansour, Robert Svatek, Dharam Kaushik, Deepak Pruthi, "Urine analysis: A convenient and strong indicator for renal function assessment in surgery for renal cancer", <a href="https://tinyurl.com/79xaumut">https://tinyurl.com/79xaumut</a>
- 15. Harshit Garg, **Mukund Bhandari**, Onika Noel, Furkan Dursun, Michael Liss, Dharam Kaushik, Chethan Ramamurthy, Ahmed M. Mansour, Impact of systemic treatments on overall survival in metastatic urothelial bladder cancer: A time-trend analysis, European Urology 2023, <a href="https://tinyurl.com/2s3h4k8d">https://tinyurl.com/2s3h4k8d</a>
- 16. Harshit Garg, Mukund Bhandari, Furkan Dursun, Dharam Kaushik, Deepak K.Pruthi, Michael liss, Robert S. Svatek, Ahmed M. Mansour, A comparative analysis of open vs minimal invasive lymph node dissection for testicular cancer using National Cancer Database, European Urology '23, <a href="https://tinyurl.com/ywjxrpzj">https://tinyurl.com/ywjxrpzj</a>
- 17. Harshit Garg, **Mukund Bhandari**, Furkan Dursun, Michael Liss, Dharam Kaushik, Ahmed M. Mansour, Comparison of contemporary treatment strategies for locally advanced (stage IIIB) urothelial bladder cancer using National Cancer Database, European Urology, 2023, <a href="https://tinyurl.com/2krz4js4">https://tinyurl.com/2krz4js4</a>
- 18. **Bhandari, M**., Lockwood H., and Clack B., Induction of Apoptosis in DLD-1 Colorectal Cancer Cells using water soluble compounds from Rumex Crispus. The FASEB Journal vol 30.1. April 2016, <a href="https://tinyurl.com/d4svxmys">https://tinyurl.com/d4svxmys</a>
- 19. **Bhandari, M** and Clack, B., Extraction of Anti-Cancer Water Soluble Compounds from *Rumex Crispus*. FASEB, 2015 https://tinyurl.com/yu4zydez

# **ORAL PRESENTATION AT CONFERENCES:**

- 1. <u>Mukund Bhandari</u>\*, Funan He, Anna Rogojina, Abhik M Bandyopadhyay, Zhao Lai, Gail Tomlinson, Siyuan Zheng, Yidong Chen, Peter Houghton, Xiaojing Wang, "Benchmarking Mouse Contamination Removing Protocols in Patient-Derived Xenografts Genomic Profiling" San Antonio Pediatric Cancer Symposium, Feb 2023
- 2. <u>Mukund Bhandari</u>\*, Funan He, Anna Rogojina, Abhik M Bandyopadhyay, Zhao Lai, Gail Tomlinson, Siyuan Zheng, Yidong Chen, Peter Houghton, Xiaojing Wang, "Genomic Profiling of Patient-Derived Xenografts" Greehey Children Cancer Research Institute, Nov 10, 2022
- 3. **Mukund Bhandari,** Beatrice Clack, "Extraction of Anti-Cancer Water Soluble Compounds from *Rumex crispus*." Experimental Biology 2015, Boston, USA
- 4. <u>Mukund Bhandari\*</u>, Beatrice Clack, "Induction of Apoptosis in DLD-1 Colorectal Cancer Cells using water soluble compounds from Rumex Crispus", Experimental Biology 2016, California, USA
- 5. <u>Mukund Bhandari\*</u>, Beatrice Clack, "Extraction of Anti-Cancer Water Soluble Compounds from *Rumex crispus*.", Bright Ideas Conference, April 29, 2015, SFA State University, Nacogdoches, Texas

# **HONORS AND AWARDS:**

2015 Graduate or Postdoctoral Travel Award

Awarding Institution: American Society of Biochemistry and Molecular Biology (ASBMB)

### **STEM JUDGING:**

Invited Judge, 2023 Academic Research Symposium, San Antonio

Invited Judge, 2023 Research Showcase, St. Mary University

Invited Judge, 2023 Alamo Regional Science and Engineering Fair (ARSEF)

Invited Judge, 2022 Jay Science and Engineering Academy (SEA)

Invited Judge, 2021 Almo Reginal Science and Engineering Fair (ARSEF)

Invited Judge, 2021 Jay Science and Engineering Academy (SEA)

# PRESENT AND PAST MEMBERSHIPS:

Member, American Association for Cancer Research

Member, American Society of Biochemistry and Molecular Biology

Member, Mays Cancer Center, San Antonio, Texas

Member, Greehey Children's Cancer Research Institute, San Antonio, Texas

Gulf Coast Consortia for Quantitative Biomedical Sciences

# **COMMITTEE RESPONSIBILITIES/INVOLVEMENT:**

Executive Committee Member, GCCRI Trainee Workshop Series Vice President, GSIC, UTHealth San Antonio Secretary, Biotech Club, Stephen F Austin State University 2023-Current 2010-2020 2014-2015

# **TEACHING:**

R programming Aug 2021

Graduate course, *UTHealth San Antonio, Integrated Biomedical Sciences*, 2021 Instructed graduate pre-mat R programming course to the class of above 30 students.

Teaching Assistant Aug 2020

Bioinformatics workshop, BIG Bioinformatics

Helped students with installation, troubleshooting, and basics of coding language

**Teaching Assistant** 

BIOL101, Stephen F Austin State University, Department of Biology, 2013-2015

Instructed undergrad BIOL101 course to a class of above 50 students.

TED Talk April 2019

TEDx Youth at The Woodlands, Houston, TX,

# **SCIENTIFIC PROFILES:**

LinkedIn: https://www.linkedin.com/in/mukundbhandari

Google Scholar: https://scholar.google.com/citations?user=IftooZgAAAAJ&hl=en

ORCID: https://orcid.org/0000-0001-9648-4844

Research gate: https://www.researchgate.net/profile/Mukund-Bhandari

BIG Bioinformatics: https://www.bigbioinformatics.org/about

GitHub: https://mukund-bhandari.github.io/