

## Curriculum Vitae

### Positions and Employment

<b>NAME</b>	Bela Peethambaran		
<b>POSITION TITLE</b>	Associate Professor		
<b>EDUCATION/ TRAINING</b>			
<b>Institution and Location</b>	<b>Degree</b>	<b>Year</b>	<b>Field of study</b>
St. Xavier's College, India	BSc	1994-97	Biochemistry
Gujarat University, India	MS	1997-99	Biochemistry
Mississippi State University, USA	PhD	2001-06	Molecular Biology
University of Minnesota, USA	Research Post Doc	2006-08	Plant biology, Molecular Biology, Genetics
Villanova University, USA	Teaching Post Doc	2008-10	Molecular Biology, Plant stress biology

1999-2001 Institute of Kidney Diseases and Research Center, INDIA, Research Fellow

- ⊙ Advisor: Dr. Sane
- ⊙ Studying biochemical stress parameters and comparing with anesthetic scores for patients in intensive care units

2001-2006 Mississippi State University, Research Assistant

- ⊙ Advisor: Dr. Dawn Luthe, Dr. Gary Windham
- ⊙ Identify proteins that contribute to resistance to *Aspergillus flavus* in known resistant maize inbred. These candidate proteins were utilized as breeding markers

2006-2008 University of Minnesota, Research Post-doctoral fellow

- ⊙ Advisor: Dr. Jane Glazebrook
- ⊙ Modeling the plant signaling responses to *Pseudomonas syringae* invasion

2008-2010 Villanova University, Teaching Post-doctoral fellow

- ⊙ Advisor: Dr. Ronald Balsamo
- ⊙ Studying physiological, cellular and molecular drought stress response in *Arabidopsis thaliana* and crop plants

2010-2016 University of Sciences, Assistant Professor in department of Biology and Chemistry

- ⊙ Teaching Undergraduate and Graduate courses in Molecular Biology, Genetics and Pharmacognosy
- ⊙ Conduct research to identify bioactive compounds in medicinal plants that can treat bacterial and viral infections, are anti-inflammatory and anti-cancerous
- ⊙ Determine innovative and sustainable solutions for management of water used for irrigation of crops

2016-current University of Sciences, Associate Professor, Biological Sciences; now merged with St. Joseph University

- ⊙ Teaching Undergraduate and Graduate courses in Molecular Biology, Genetics and Pharmacognosy
- ⊙ Conduct research to identify bioactive compounds in medicinal plants that can treat

- bacterial and viral infections, are anti-inflammatory and anti-cancerous
- Identify neuroprotective compounds in medicinal plants

2017-current Co-Director of Graduate Studies in Biological Sciences, Associate Professor, Biological Sciences

- Primary academic advisor for Graduate students, course scheduling, reviewing graduate applications, annual student course audits, recruitment of students via open house, graduate student orientations, development of grant/fellowships writing in students, curriculum development, preparing annual assessment report, implementing new program initiatives (with PCOM & other undergraduate institutions) and involving in student activities,

### **Professional Memberships:**

2011-current American Society of Pharmacognosy

2017-current American Society of Cell Biologist

### **Honors and Awards:**

- Abraham and Edythe Roth Endowed Chair in Natural Products (December 2020-current)
- Founders Day Award of Merit, Exemplifying entrepreneurial spirit and Values of University, 2018
- Lindback Foundation Award for Distinguished teaching, 2015, University of Sciences
- USDA Research Assistantship. Corn Host resistance Unit, USDA-ARS, Mississippi State University (2001-2005)
- For finding proteins in maize that are responsible for resistance to *Aspergillus flavus* and using them as molecular markers
- University Merit Scholarship. Gujarat University, India (1998-1999)
- For first rank in university external exams in MS
- LUMC Clinical Labs. Research Fellowship, India (1996-1997)
- Awarded for excellence in research and fulfillment of dissertation titled "Protoplast Isolation and Somatic embryogenesis in rice"

### **Teaching Experience in Genetics/Molecular Biology and Pharmacognosy**

- Cell Biology-Fall 2023- 4 credits (Undergraduate level)
  - The course covers concepts on fundamentals of cell biology such as cell cycle, apoptosis, migration, cell movement, signal transduction, development from stem cells. There is a laboratory component to this class which trains students in basic cell biology techniques such as cell culturing, counting, cell viability assay, drug testing, protein assays and knocking down genes using siRNA transfections.
- Genetics-Spring 2011- current 4 Credits (Under-graduate level)
  - This course covers a study of the mechanisms of inheritance and gene action from the molecular to the organismic and population levels. Topics include Mendelian principles, molecular genetics, genetic mapping, population genetics, developmental genetics, and quantitative genetics in both lecture and laboratory.
- Molecular Biology Fall 2010-2018- 3 Credits (Under-graduate level)
  - Study principles and concepts in molecular biology. Apply molecular biology principles to solve different biological problems.
- Molecular Pharmacognosy Fall 2014-2018 (Graduate and Undergraduate level)
  - Molecular pharmacognosy explores naturally occurring structure-activity relationships specifically of those molecules with drug potential. Students will learn theories and applications of molecular biology techniques that will help in resolving existing challenges in pharmacognostic science
- Pharmacognosy (Undergraduate) /Advanced Pharmacognosy (Graduate) Spring 2012, 2014, 2016, 2018
  - This course provides an in-depth perspective on the use of natural products as drugs. The course

will cover the fundamentals of pharmacognosy, details on the phytomedicines used in pharmacy, the chemistry of secondary metabolites of organisms used in drug therapies, characterization and standardization of phytomedicines and nutraceuticals, and the use of natural products as complementary or alternative medicine

### **Scholarly Activity:**

#### **ONGOING RESEACH/GRANT SUPPORT**

Abraham & Edythe e Endowed Roth Funds.  
St. Joseph's University

6/1/2025 – 5/31/2026

The major goal of this fund is to support the project to study small molecules that can target key oncogenes in triple negative breast cancer.

Milton Lev Memorial Faculty Research Funds.

05/30/2025-04/30/2026

The funds will be used to investigate the role of a tyrosine receptor kinase in silencing tumor suppressors in triple negative breast cancer

Role: PI

WW Smith

1/1/2024-06/30/2025

St. Joseph's University

Title 'Identification and validation of small molecules targeting tyrosine kinase-like orphan receptors for anti-cancer therapy against triple-negative breast cancer'.

The major goal of this project is to characterize compounds that can inhibit an oncogene called ROR1.

#### **PREVIOUS EXTERNAL AND INTERNAL GRANT SUPPORT**

Abraham & Edythe Roth Funds in Natural Products-awarded annually 07/01/2021-06/30/2022  
Awarded to Dr. Bela Peethambaran, Endowed Chair, December 2020

Milton Lev- internal grant

06/01/2021-05/31/2022

To characterize neuroprotective compounds from *A. millefolium* that can reduce neuronal oxidative damage Role-PI

Milton Lev Memorial Faculty Research Award, University of Sciences 06/01/2020-5/31/2021  
Establishing Strictinin (anti-ROR1) as a therapeutic for the treatment of prostate cancer. Role: PI

Milton Lev Memorial Faculty Research Award, USciences \$5000 06/01/2019-12/31/2020  
The goal of the study was to investigate the role of a receptor tyrosine kinase in neuroblastoma. Role: PI

Bridge funds, University of Sciences (received an extension) \$10,000 07/01/2019-09/30/2020

The funds will support the breast cancer research projects which focus on the determining role of receptor tyrosine kinase in chemoresistance.

Role: PI

Milton Lev Memorial Faculty Research Award, University of Sciences \$5000 06/01/2018-05/31/2019

The goal of the study was to investigate the efficacy and mechanisms of anti-triple negative breast cancer compounds.

Role: PI

Pennsylvania Department of Health Grant, SAP# 4100072570 , \$13000 6/01/2016-05/31/2018

The goal of this study was to investigate anti-cancer compounds that are selectively cytotoxic against triple-

negative breast cancer cells

Role: PI.

Milton Lev Memorial Faculty Research Award, \$5000 06/01/2015-05/31/2016

The funds were used to understand the use of Non-thermal plasma technology on plant physiology Role: PI

Milton Lev Memorial Faculty Research Funds. \$5000 06/01/2014-05/31/2015

The funds were used to investigate the anti-cancer effects of a medicinal plant on several cancer lines such as breast, lung, and prostate

Role: PI

Ruth Estrin Goldberg Memorial (REGM) Grant for Cancer Research. \$13000 06/1/2013-05/31/2017

Role: PI

American Society of Pharmacognosy Startup Award to an upcoming investigator, \$10000

6/01/2012-06/01/2015

The funds was used for grant titled "Role of 14-3-3 lambda in the biosynthesis of flavonoids"

Role: PI

#### **Peer- reviewed publications-Undergraduate Student authors are underlined**

1. Reed V, Lalu E, Yoon L, Fultang N and Peethambaran B. Uncovering a novel role of ROR1 in the epigenetic regulation of tumor suppressor gene CREB3L1 in Triple-negative breast cancer cells. *Biomolecules*, 2025, 15, 734.
2. Ta T, Reed VL, Chandra N, Dwyer N, Gupta SR, Singh IK, Fultang N, Peethambaran B. Novel macromolecule CPD4 suppresses cell proliferation and metastasis of triple-negative breast cancer by targeting ROR1 protein. *Int J of Biol Macromolecules*, 2025, 143301. PMID: 40274160
3. Sivaganesh V, Tram T, Peethambaran B. Pentagalloyl Glucose (PGG) exhibits anticancer activity against aggressive prostate cancer by modulating the ROR1 mediated AKT-GSK3 $\beta$  pathway. *Int J of Mol Sciences* (2024); 25: 7003. (PMID 39000112)
4. Gupta S.R.R, Ta TM, Khan M, Singh A, Singh I. K, Peethambaran B. Identification and validation of a small molecule targeting ROR1 for the treatment of triple-negative breast cancer. *Frontier in Cell and Developmental Biology* (2023); 11:1243763. (PMID 37779899)
5. Sivaganesh V, Peethambaran B. ROR1 Inhibition with Anti-Cancer Compound Strictinin Targets Highly Aggressive Androgen Independent Prostate Cancer. *Exploration of Targeted Anti-tumor Therapy, Special issue: Molecular Targeted Therapy for Cancer* (2023). (PMID 38213538)
6. Leonce CM, Patel A, Gonsai R, et al. Bioassay-guided fractionation and characterization of neuroprotective compounds from the flowers of *Achillea millefolium*. *Int J Complement Alt Med.* (2022);15(3):160–166. DOI: 10.15406/ijcam.2022.15.00605
5. Sawsan H.Alelwi Jason E.Heindl, BelaPeethambaran James R.McKee (2022). Structure–Activity Relationship of 2-Aminodibenzothiophene Pharmacophore and the Discovery of Aminobenzothiophenes as potent inhibitors of *Mycobacterium smegmatis*. *Bioorganic and Medicinal Chemistry Letters*. <https://doi.org/10.1016/j.bmcl.2022.128650>
6. Sivaganesh V, Sivaganesh V, Scanlon C, Iskander A, Maher S, Le T, Peethambaran B. Protein Tyrosine Phosphatases: Mechanisms in Cancer, *Int. J. Mol. Sci.* (2021), 22(23), 12865; <https://doi.org/10.3390/ijms222312865>
7. Sivaganesh V, Promi N, Maher S, Peethambaran B (2021) Emerging immunotherapies against novel molecular targets in breast cancer. *Int. J. Mol. Sci.* 22, 2433. <https://doi.org/10.3390/ijms22052433>
8. Leonce C, Patel A, Peethambaran B. (2021) The role of oxidative stress and the underlying biological pathways in the pathogenesis of Parkinson's Disease. *Int J Complement Alt Med.* 2021;14(1):17–24.
9. Fultang N, Chakraborty M, Peethambaran B. (2021) Regulation of cancer stem cells in triple negative breast cancer. *Cancer Drug Resistance*, 4 [Online First]. <http://dx.doi.org/10.20517/cdr.2020.106>
10. Fultang N, Illendula A, Jianhuang L, Pandey MK, Klase Z, Peethambaran, B. (2020). ROR1 regulates chemoresistance in breast cancer via modulation of drug efflux pump ABCB1. *The Scientific Reports.* 10:1821, *Impact Factor.* 3.998 | <https://doi.org/10.1038/s41598-020-58864-0>

11. Ilendula A, Fultang N, Peethambaran B. (2020) Regulation of ROR1 by Retinoic Acid induces differentiation in Neuroblastoma by modulation of Retinoic Acid Receptor Elements. Published online in Oncology reports, *Impact Factor*. 3.417; Ranked: 21/244 Oncology on July 7th, 2020. <https://doi.org/10.3892/or.2020.7681> OR <https://www.spandidos-publications.com/10.3892/or.2020.7681>
12. Fultang N, Ilendula A, Chen B, Wu C, Jonnalagadda S, Baird N, Klase Z, Peethambaran B. (2019). Strictinin, a novel ROR1-inhibitor, represses triple negative breast cancer survival and migration via modulation of PI3K/AKT/GSK3 $\beta$  activity. *PLoS One*. 2019 May 31;14(5):e0217789. doi: 10.1371/journal.pone.0217789. eCollection 2019.
13. Fultang N, Brar J, Mercier I, Klase Z, Peethambaran B. (2018). *Myrothamnus flabellifolius* selectively targets Triple Negative Breast Cancer in vitro, restoring Tamoxifen sensitivity through modulation of miRNAs associated with estrogen receptors. *International Journal of Applied Research in Natural Products*, 11(1):24-33
14. Brar J, Fultang N, Askey K, Tettamanzi MC, Peethambaran B. (2018). A novel anti-triple negative breast cancer compound isolated from medicinal herb *Myrothamnus flabellifolius*. *Journal of Medicinal Plants Research*, 12(1): 7-14.
15. Nabbie F, Smith J, Hnatyshyn S, Warrack B, Gu H, Merenich D, Myers K and Peethambaran B. (2017) 14-3-3 lambda protein affects anthocyanin production in *Arabidopsis thaliana* during Drought Stress, *Journal of Agricultural Science* 9(7):22-37
16. Abeer Badiab, Fizal Nabbie, Maria Cristina Tettamanzi, Nehi Patel, Nikita Jain, B Peethambaran (2016). Specific Cytotoxicity of a Novel Arbutin Derivative from *Myrothamnus flabellifolius* Against Human Leukemia Cells. *Research Journal in Medicinal Plants*. DOI: 10.3923/rjmp.2016. <http://scialert.net/current.php?issn=1819-3455>
17. Shah R., Patel T., Tettamanzi M.C., Rajan J., Shah M., Peethambaran B (2016). Isolation of a Novel Piperidine from *Achillea* 'Moonshine' Using Bioactivity Guided Fractionation for the Treatment of Acne. *Journal of Medicinal Plant Research*. 10 (30):. 495-504
18. Brar J, Jiang J, Oubarrri A, Ranieri P, Fridman A, Fridman G, Miller V and Peethambaran B. (2016). Non-thermal Plasma Treatment of Flowing Water: A Solution to Reduce Water Usage and Soil Treatment Cost without Compromising Yield, *Plasma Medicine*, 6(3-4):413-27
19. Shah, R., Patel, A., Shah, M., Peethambaran B. (2015). Anti-acne activity of *Achillea* 'Moonshine' petroleum ether extract. *Journal of Medicinal Plants Research* Vol 9(27):755-763 *Impact factor* 0.33
20. B. Peethambaran, V. Miller, Justine, K. Kermalli, Jiaying J, G. Fridman, R. Balsamo and A. Fridman. (2015). Non-thermal Plasma Technology (NTPT) Reduces Water consumption while Accelerating *Arabidopsis thaliana* Growth and Fecundity., *Plasma Medicine*, 5(2-4):87-98.
21. Balsamo R, Boak M, Nagle K, Peethambaran B, Layton B. (2015). Leaf biomechanical properties in *Arabidopsis thaliana* polysaccharide mutants affect drought survival. *J Biomech*. Nov 26;48(15):4124-9. doi: 10.1016/j.jbiomech.2015.10.016. Epub 2015 Oct 20. PubMed PMID: 26520913.
22. Dhillon J., Badiab A., Carter J., Tang C., Hyunh A., Miller V., Peethambaran B.(2014). Apoptosis-inducing potential of *Myrothamnus flabellifolius*, an edible medicinal plant, on Human Myeloid Leukemic HL-60 Cells. *International Journal of Applied Natural Products* 7(1)28-32
23. Tran, L., Naik, A., Koronkiewicz, B., Peethambaran, B. (2014). Epigallocatechin gallate Inhibits Biofilm Production and Attenuates Virulent Factors of *Pseudomonas aeruginosa* and *Pseudomonas fluorescense*. *Journal of Natural Remedies*, *Journal of Natural Remedies*.
24. Lindberg, J., Nabbie, F., Milliot, J., Smith, R., M Cristina Tettamanzi., Peethambaran, B. (2014). 14-3-3 $\lambda$  Affects Production of a Sinapoyl Derivative in Lignin Biosynthesis during Drought Stress in *Arabidopsis thaliana*. *Universal Journal of Plant Sciences*, Vol 2, no. 4: 77-85
25. Smith, R., Peethambaran B., Pontiggio, L., Blumberg, P. 2013. Does a repeated guided-instruction approach with multiple assessments increase student learning of science? *Journal of Biological Education* , 47: 11-116,
26. Peethambaran, B., Li, T C., Dzukan, P., Xiang, W., Balsamo, R. A. 2012. Physiological and Mechanical Role of 14-3-3 lambda in *Arabidopsis thaliana* during drought stress. 2012 *Journal of Agricultural Science*, 4: 149-163
27. Kelly, R. Y., Harper, J., Bridges, S. M. Warbuton, M. L., Hawkins, L. K., Pechanova, O., Peethambaran, B., Luthe, D. S., Mylroie, J. E., Ankala, A., Ozkan, S., Gresham, C., Henry, W. B., Williams, W. P. 2010. Bioinformatics and Functional Genomic Database for Identifying Candidate Genes for *Aspergillus flavus* Resistance in Maize. *BMC Bioinformatics* 11 (Suppl 6):S25
28. Peethambaran, B., Hawkins, L., Bridges, S., Windham, G. L., Williams, W. P and Luthe, D. S. 2009. Antifungal Activity of Maize Silk Proteins and Role of Chitinases in *Aspergillus flavus* resistance. *Journal of*

Manuscripts/Reviews in preparation

29. Manuscript in preparation titled 'Novel ROR1 inhibitor CPD86 suppresses cell proliferation and metastasis in triple-negative breast cancer'. To be submitted December 2025, *Frontiers in Oncology*

### **BOOK CHAPTERS**

30. Rahul Shah, Bela Peethambaran. (2017). **Book Chapter** "Anti-inflammatory and anti-microbial properties of *Achillea millefolium* in Acne Treatment" *Elsevier Publication*. Book titled 'Emerging Roles of Nutraceuticals and Functional Foods in Immune Support: Immunity and Inflammation in Health and Disease'. Editors Shampa Chatterjee, Debasis Bagchi. <https://www.elsevier.com/books/immunity-and-inflammation-in-health-and-disease/chatterjee/978-0-12-805417-8>
31. Fultang N, Peethambaran B. (2020). **Book Chapter** 'Wnt Signaling in Breast Cancer Oncogenesis, Development and Progression'. Submitted to e-book titled "Recent Advances in Cancer Signal Transduction and Therapy". Publishers-BenthamScience. DOI: [10.2174/9789811458118120010003](https://doi.org/10.2174/9789811458118120010003)
32. Book Chapter 13-Victoria Reed, Tram Ta, Maryam Khan, **Peethambaran B.** (2024). COVID-19 and immune dysfunction: Consequences, and natural remedies for management. *Elsevier Publication*. Book titled 'Understanding the Pandemic Pathophysiology, transmission, and treatment of COVID-19'. Editors-Shampa Chatterjee, Amaro Nunes Duarte Neto, Marco Cascella, Sonia Villapol, Anand Viswanathan, Aravind Ganesh, Ching Lung Lai, Giuseppe Remuzzi. eBook ISBN: 9780443290046

### **Presentation at National and International Conferences (Last 3 years)-Undergraduates researchers**

1. Keynote speaker at the Jawaharlal Nehru University, Deshbandhu College, Department of Zoology, Delhi, Conference- Exploring the interplay of senescence, natural compounds and environmental factors on cancer. July 8<sup>th</sup>, 2024. Title of the talk- Characterization of small, natural anti-triple negative breast cancer compounds.
2. Poster Presentation by Victoria Reed on 'ROR1 as an epigenetic regulator of CREB3L1' at American Society of Pharmacology and Experimental Therapeutics, May 16-19, 2024, Arlington, Virginia. Coauthors- Eric Lalu, Norman Fultang, Bela Peethambaran
3. Poster Presentation by Tram Ta on 'Validating the Anti-cancer potency of a novel ROR1-inhibitor against triple-negative breast cancer' at American Society of Pharmacology and Experimental Therapeutics, May 16-19, 2024, Arlington, Virginia. Coauthors- Victoria Reed, Nikhil Chandra, Nick Dwyer, Shradheya R. R. Gupta, Norman Fultang, Indrakant K. Singh, Bela Peethambaran.
4. Poster Presentation by Victoria Reed on 'ROR1 as an epigenetic regulator of CREB3L1' at Wistar Symposium, Philadelphia, Feb 28<sup>th</sup>, 2024. Coauthors- Eric Lalu, Norman Fultang, Bela Peethambaran
5. Poster presentation by Tram Ta on 'A Novel ROR1 inhibitor CPD86 suppresses Triple-Negative Breast Cancer cells via regulation of AKT/GSK3 $\beta$  pathway', Dec 5-9, 2023, San Antonio Breast cancer Symposium, At: Henry B. Gonzalez Convention Center, San Antonio, Texas 78205, USA
6. Poster presentation by Victoria Reed on 'ROR1 regulates CREB3L via a novel signaling pathway in triple-negative breast cancer', Breast Cancer Symposium, Dec 5-9, 2023, San Antonio, TX.
7. Poster presentation by Tram Ta on 'Characterization of a novel ROR1 inhibitor in Triple Negative Breast Cancer cells'. Shradheya Gupta, Maryam Khan, Nikhil Chandra, Victoria Reed, Indrakant K. Singh, Bela Peethambaran. Wistar Trainee Research Symposium 2023, At: The Wistar Institute of Anatomy and Biology, Philadelphia, PA 19104, USA
8. Talk by Shradheya Gupta on "Identifying, Screening and Validating ROR1 Inhibitors: A Systematic Approach for Breast Cancer Treatment". Presented by Shradheya Gupta, second author Tram Ta, Indrakant Singh, Bela Peethambaran. 2<sup>nd</sup> International Conference on Natural Products and Human Health 2022 (ICNPHH-2022), At: Deshbandhu College, University of Delhi, New Delhi, India
9. Poster presentation by Vignesh Sivaganesh at American Society of Cell Biologists on 'Penta-O-galloyl- $\beta$ -D-glucose (PGG) targets aggressive androgen-independent prostate cancer by ROR1 inhibition' Dec 5-7, 2022.
10. Poster presentation by Tram Ta at American Society of Cell Biologists on 'Novel ROR1-inhibitor suppresses cell survival and migration in Triple Negative Breast Cancer', Dec 5-2, 2022.
11. Talk by Vignesh Sivaganesh at Experimental Biology 2021 on 'Receptor Tyrosine Kinase-like Orphan Receptor 1 (ROR1) as a Selective Molecular Target in Androgen-Dependent and Androgen-Independent Prostate Cancer'. April 2021, The FASEB Journal, Volume 3535.

12. Talk by Chelsea Leonce at ACS Philadelphia section 2021 Expo on 'Neuroprotective Mechanisms of *Achillea millefolium* against Toxin-Treated SHSY5Y Neuroblastoma Cells for Treatment of Parkinson's Disease', April 2021.
13. Poster presentation by Amrut Patel at American Society of Cell Biologist on 'Elucidating the Neuroprotective Mechanism of Action of Compounds Derived from the Petroleum Ether *Achillea millefolium* Extract using *in vivo* & *in vitro* Models of Parkinson's Disease'. Other authors- Patel A, Leonce C, Patel S, Kwatra Pallavi, Suryanarayanan A, Peethambaran B. Dec 2-16, 2020.
14. Poster presentation by Chelsea Leonce at American Society of Cell Biologist on 'Compounds from *Achillea millefolium* (Yarrow) Minimizes Damage to Neurons'. Other authors- Chelsea Leonce, Austin Kim, Delghir Sanzhikov, Amrut Patel, Asha Suryanarayanan, Bela Peethambaran. Dec 2-16, 2020.
15. Poster presentation by Chelsea Leonce at ACS Philadelphia section 2020 Expo and YCC Annual Poster session, April 2020 on 'Neuroprotective Mechanisms of the Petroleum Ether Extract of *A. millefolium* for Symptomatic treatment of Parkinson's Disease. Other authors: Kim, Austin; Gonsai, Radha; Sanzhikov, Delghir; Patel, Amrut; Peethambaran, Bela
16. Oral presentation at Start Talking Science, Philadelphia PA by Chelsea Leonce on 'Compounds from Yarrow Plant (*Achillea millefolium*) protects brain from neurodegeneration'. Other Authors: Kim, Austin; Sanzhikov, Delghir; Patel, Amrut; Suryanarayanan, Asha; Peethambaran, Bela
17. Poster presentation on 'Regulation of ROR1 by retinoic acid induces differentiation in neuroblastoma cells by modulation of retinoic acid receptor elements'. By Illendula A, Fultang N, Peethambaran, B. Dec 7-11, 2019. American Society of Cell Biologist Conference, Washington DC.
18. Poster presentation on 'ROR1 regulates chemoresistance in breast cancer via modulation of ABCB1 pump'. By Fultang N, Illendula A, Jianhuang L, Pandey MK, Klase Z, Peethambaran, B. Dec 7-11, 2019. American Society of Cell Biologist Conference, Washington DC.
19. Poster presentation on 'Cranberry pomace: feedstock for the recovery of antioxidant rich products using pressurized/ supercritical fluid technology'. Sekhon, J. K., Mekala, S., Illendula, A., Peethambaran, B., Saldana, M. D. A. (2019). 23<sup>rd</sup> Annual Green Chemistry & Engineering Conference- 9<sup>th</sup> International Conference on Green and Sustainable Chemistry, Reston, Virginia, USA.
20. Poster presentation on 'Recovery of bioactive polyphenols by pressurized fluid extraction of cranberry pomace'. Sekhon, J. K., Mekala, S., Illendula, A., Peethambaran, B., Saldana, M. D. A. (2019). 16<sup>th</sup> Annual Conference of Natural Health Products Research Society (NHPRS), Edmonton, Alberta, Canada.
21. Poster presentation on 'Recovery of bioactive polyphenols by pressurized fluid extraction of cranberry pomace'. Sekhon, J. K., Mekala, S., Illendula, A., Peethambaran, B., Saldana, M. D. A. (2019). 17<sup>th</sup> European Meeting on Supercritical Fluids (EMSF)- 7<sup>th</sup> European Meeting on High Pressure Technology, ITQUIMA, Ciudad Real, Spain.
22. Poster presentation on 'Rx7, a novel RoR-1 inhibitor represses triple negative breast cancer survival and migration via deregulation of P13K/AKT/GSK3b'. By Norman Fultang, Abhinav Illendula, Brian Chen, Chun Wu, Zachary Klase, Bela Peethambaran. Dec 7-12, 2018. American Society of Cell Biologist Meeting, San Diego, CA.
23. Poster presentation on 'Isolating neuroprotective compounds from *Achillea millefolium* to treat parkinsonian symptoms'. By Delghir Sanzhikov, Chelsea Leonce, Amrut Patel, Asha Suryanarayanan, Bela Peethambaran, Dec 7-12, 2018. American Society of Cell Biologist Meeting, San Diego, CA.
24. Poster presentation on 'Elucidating the Neuroprotective Mechanism of Action of Compounds Derived from the Petroleum Ether *Achillea millefolium* Extract using *in vivo* & *in vitro* Models of Parkinson's Disease. Patel A, Leonce C, Gongalla S, Suryanarayanan A, Pearce M, Peethambaran B. Dec 7-12, 2018. American Society of Cell Biologist Meeting, San Diego, CA

### Invited Speaker at Regional, National and International Conferences

1. Speaker at the "The Franklin Institute- Synder Hockey Summer Initiative", July 28<sup>th</sup>, 2020 on "Myrothamnus: a source of novel anti-cancer compounds".
2. Keynote speaker at Philadelphia College of Osteopathic Medicine Research Day, May 8, 2019, on 'Rx7: a novel ROR1-inhibitor represses Triple Negative Breast Cancer Cell Survival and Migration' by Bela Peethambaran.

3. Oral presentation at 17<sup>th</sup> European Super Critical Fluid Conference, Spain, April 8<sup>th</sup>-11<sup>th</sup>, 2019. Presented by Jasreen K Sekhon, Bela Peethambaran, Marleny D. A. Saldana
4. Keynote speaker at Drexel University Food Science Department Seminar Series, December 16, 2018, on 'Novel anti-cancer compounds isolated from medicinal herb *Myrothamnus flabellifolius*' by Bela Peethambaran.

## **Mentoring**

### **Graduate Studies Co-Director for 37 Graduate students in Biology (2017-current)**

#### **Research advisor two graduate students and two part time students- 2022- 2024**

Victoria Reed, Tram Ta, Jocelin Joseph (Part-time PhD), Zhongyin Liu (Part-time PhD),

**Graduate Committee Member for 20 students from other laboratories 2020-24-** Meet Desai (Pharmacy), David Garcia-Castro (DO-PHD), Joe Zundell (Cancer Biology), Xizhou Zhu (Cancer Biology), Pratik Bhojnarwala (Cancer Biology), Saad Alharthi (Pharmacy), Lama Abdullah (Pharmacy), Rachel Nicoletto (Pharmaceutics), Priya Aryal (Rowan-Biology), Michelle Brock (Rowan-Biology), Richard Howly (Pharmaceutics), Sharyu Phadtre (Pharmaceutics), Jenny Bundi (Pharmaceutics), Ravina Kajare (Pharmaceutics), Amjad Alanazi (Pharmaceutics), Niklas Laeger (Cancer Bio-Wistar), Pratik Bhojnarwala (Cancer Bio-Wistar), Xihou Zhou (Cancer Bio-Wistar), Kaithlyn Casey (Cancer Biology). Seamus Weller (Pharmaceutics)

**Research Advising 9 Under-graduate students 2020-21** (Pallavi Kawatra, Radha Gonsai, Delyana Warrell, Nazifa Promi, Salma Maher, Sankalp K. Patel, Karl Kamanusa, Maryam Khan, Ryan Rahim)

### **Post-Graduation Development of Recent B.S. Student Researchers Mentored by the PI**

<b>Name</b>	<b>Graduation Year</b>	<b>Upon Graduation Went To:</b>
Alex Mercado	2011	MD, Hahnemann University hospital
Vaishali Desai	2011	MS, Medical technologist
<b>Phil Duzgan</b>	2011	Employment at Jansen
Jung Yoo	2011	MS
Tom Mirowski	2012	MS, Senior Algorithm Engineer at TDI Technologies, Inc
Jeniffer Mcfarlan	2012	employment
Natalie Artese*	2013	MS, Senior QC Data Review Specialist at Spark Therapeutics, Inc.
<b>Linda Tran*</b>	2014	MD, Cooper Hospital, Rowan Univ
<b>Joshua Milliot*</b>	2014	MD, Univ of Alabama
<b>Osljon Sheprdheja*</b>	2014	PA, Mercy College, NY
<b>Brian Koronweicz*</b>	2014	PhD, Purdue, Senior Professional Staff at The Johns Hopkins University Applied Physics Laboratory, NY
<b>Jasjit Dhillon**</b>	2015	MD, Resident at Christina Care, DE
<b>Abhishek Patel*</b>	2015	MD, Resident at Drexel Medicine
Sabrina Brunnozi*	2015	MD, Resident at CMSRU
<b>Khudiaja Kermalli</b>	2015	MD, Residency at U of Florida
<b>Nehi Patel**</b>	2017	MD, Resident at Cooper Medical School, Rowan Univ, NJ
Kayla Askey	2020	Pharmacy Practitioner
Richard Howley	2017	PhD, Pharmaceutical Sciences, SJU
Jordan Smith	2019	Pharmacy Practitioner
Isabel Paporinuku	2017	MS, U of Alabama
Akshan Lidhar	2017	Employed at Pharm Industry
<b>Nikita Jain*</b>	2018	Pharmacy Practitioner
Daniela Reyes*	2018	Research Tech, Aerobio therapeutics
<b>Jaspal Brar**</b>	2018	MS, Temple University
<b>Delghir Sanzhikov*</b>	2019	Bio medical technician
Jazmin Vasquez*	2019	Employed in Wuxi Tech
Sankalp Patel	2020	PA program at St. Joseph's Univ
<b>Austin Kim*</b>	2020	Employed in Pharma
<b>Abhinav Illendula*</b>	2019	MD/PhD, Temple University



<b>Pallavi Kwatra*</b>	2020	DO at Philadelphia College of Osteopathic Medicine (PCOM)
<b>Christina Scanlon*</b>	2022	MD at Drexel Univ
<b>Radha Gonsai</b>	2022	MD Temple Univ
<b>Maryam Khan*</b>	2023	LECOM (DO program)
<b>Ivy Le*</b>	2024	Training at WuXi
Nikhil Chandra	2024	MD program
Nick Dwyer*	Anticipated 2026	Graduate programs in Cell & Mol
Eric Lalu**	Anticipated 2025	MD programs
Chris Michel	Anticipated 2026	Graduate programs in Cell & Mol
Ian Pau	Anticipated 2025	MD programs
Harisha	Anticipated 2025	MD programs

### Post-Graduation Development of Recent M.S., PhD, Post Doc Student Researchers Mentored by the PI

<b>Name</b>	<b>Graduation Year</b>	<b>Upon Graduation Went To:</b>
Tsai Chi (Post Doc)	2012	Univ of Arkansas, Little Rock
Jameson Lindberg	2012	Waters
Kyle Grover	2012	Dupont
Rahul Shah	2015	Entrepreneur in Natural Products
Abeer Badiab	2016	Professor in Saudi Arabia
Faizal Nabbie	2016	Bristol Myers Squibb
Susan Arnold	2018	PhaseBio
David Mullins	2023	GlaxoSmith Kline
Norman Fultang	2020	Quanta Therapeutics Inc.
Amrut Patel	2022	Incyte therapwutics
Chelsea Leonce	2022	Jansen Pharmaceuticals
Vignesh Sivaganesh	2023	PCOM, DO Program, NIH summer scholar
Bethany Cypert	2023	Jansen Pharmaceuticals

### Service

#### Departmental and College Service: (past 5 years)

- Graduate Program Co-Director for Biology Graduate Program (2017-current)
- **Leadership roles-** Chair for upcoming tenure track faculty members-evaluated and wrote annual reports for underlined, mentored the following tenure track faculties which includes Chris Janatepolous (Tenure and Promotion to Professor level), Jason Heindl (Tenure and Promotion to Associate level) and Matthew Farber (Tenure and Promotion to Associate level)
- Search committee member for Dr. Peter Berget's replacement (Fall 2016-Spring 2017)
- Successfully chaired committees for Promotion and Tenure for – mentored, evaluated and wrote letter of supports as Pre-tenure Committee chair for
  - Ken Myers (Tenure and Promoted to Associate level) (Fall 2016-Fall 2017)
  - Dana Pape-Zambito (Promoted to Associate level) (Spring 2017)
- Chairing the Biology Scholarship Committee (2017- current)
- Leading a committee to reform Graduate Policies for Biology students (2017-current)
- Other committees:-

- Committee member for Margaret Pearce (Tenure and Promotion to Associate level)
- Committee member for the Graduate Admissions (Fall 2010-current)
- Volunteered for Open House tours of my laboratory (Fall 2016-current)
- Volunteered for Featured Fridays for Under-graduate Admissions (Fall 2016-Spring 2020)
- Participated in organizing Biological Sciences Seminar (Fall 2015-Spring 2017)- this was a successfully organized in partnership with Dr. Kenneth Meyers

### University Service (past 5 years)

- **Member of the Institutional Review Board (2019-current)**
- **Member of the Diversity, Equity and Inclusion Council (2020-2022)**
- **Member of the Provost Advisory Council (2020-2022)**
- **Member of Graduate thesis committee for 4 Pharmaceutical Sciences students (2022-current)**
- **Board member of the Council of Undergraduate Research.** Reviewed abstracts, judged posters and organized the CUR Day online in March, 2021
- **Conducted in-person workshop for high school students (27 from St. Patricks).** Conducted a session on extraction and isolation from spinach and other herbs (June 14, 2021). In collaboration with Dr. Pearce
- **Conducted an online workshop for high school students.** Conducted a session on DNA isolation, basics and application of identifying DNA sequence, St. Patrick's school (April 2021). In collaboration with Dr. Pearce
- **Conducted an online workshop for high school students.** Conducted a session on DNA isolation from strawberry, basics and application of identifying DNA sequence, Snider Hockey (June 28, 2020)
- **Faculty Promotion Committee member** for Asha Suryanarayanan (Pharmaceutics faculty)
- Part of the interview committee for DO-PhD students at PCOM (Fall 2019-2021)
- Member of **Honors Scholars Research** (Spring 2014-current). Mentored an honor students from Summer 2020- Spring 2021. Currently mentoring two honors student for Summer 2021.
- Volunteer Clinical Assistant Professor of Biochemistry and Molecular Biology, Department of Biomedical Sciences, Philadelphia College of Osteopathic Medicine (July 2013-curent)
- Served as an external evaluator for Dissertation thesis submitted by Yanzhou Huang, PI: Marvin Schulte, Pharmaceutical Sciences, Graduation date: May 2017.
- Served as the member **of the Lindback Teaching Award Committee** (Spring 2017)
- Served as **Vice-chair for University Scholarships Review Committee** (Fall 2013-Fall 2016)

### Professional

- Grant reviewer for Breast Cancer Now's Foundation, London, June 2021

### Editorial/Board Services

- Associate Editor for International Journal of Complementary and Alternative Medicine 2014-16, 2019-current
- Board member of the Council of Undergraduate Research. Reviewed abstracts, judged posters and organized the CUR Day 2017-2022
  - Reviewer for Journal "Cancer", MDPI open access journal
  - Reviewer for Journal "Current Cancer Drug Targets"
  - Reviewer for Journal "Molecules", MDPI

