# CURRICULUM VITAE (CV) Robin T. Varghese, PhD

### **CURRENT POSITION**

Associate Professor of Genetics, Genetics Course Director, Edward Via College of Osteopathic Medicine (VCOM), Blacksburg, VA

## **CONTACT INFORMATION**

2265 Kraft Drive Blacksburg, VA 24060 Ph (540) 231-4823 rvarghese@vcom.vt.edu

## **EDUCATION**

College Texas A&M University, Corpus Christi, TX, 2006, B.S. Biology

Graduate School Virginia Polytechnic Institute and State University, Blacksburg, VA, 2016, Ph.D.

Genetics Bioinformatics and Computational Biology

Post doctorate Postdoctoral fellowship, Virginia Tech Carilion Research Institute Cancer Biology:

Sheng Lab, 2016

Postdoctoral fellowship, Edward Via College of Osteopathic Medicine- Precision

Medicine and Bioinformatics: Garner Lab, 2016-2018

Includes multiple 3<sup>rd</sup> and 4<sup>th</sup> year students

## Teaching currently at MABS

Human Genetics (5502) Course Director, 2018-present

Biochemistry (5104) lectures, 2018-2023

### PROFESSIONAL AFFILIATIONS

2015-present; member of American Association of Cancer Research (AACR)

2022-present; Association of Professors of Human and Medical Genetics (APHMG)

## **HONORS AND AWARDS**

NSF S STEM Award, Virginia Polytechnic Institute and State University	2013
	2019
Honorable Mention for Teacher of the Block- Class of 2025	2022

#### PROFESSIONAL SERVICE

The Edward J. Stemmler, MD Medical Education Research Grant Reviewer- (NBME)

Invited Reviewer: Frontiers in Oncology Invited Reviewer: Frontiers in Pharmacology

Invited Reviewer: International Journal of Molecular Sciences (MDPI)

Invited Reviewer: PlosOne Invited Reviewer: Cureus

#### MENTORING ACTIVITIES

Christy Smith- (co-mentor) 2018-2019, VCOM medical student who worked in my lab presented a poster at VCOM Research Day in 2018 and co-authored a published manuscript. DO awarded

Jessica Kim- (co-mentor) 2018-2019, VCOM medical student who worked in my lab presented a poster at VCOM Research Day in 2018 and co-authored a published manuscript. DO awarded

Anne Barnes- (mentor) 2018-2021, VCOM medical student who worked in my lab and will be a co-author on an upcoming manuscript. DO awarded

Mary Klacik-(mentor) 2018-2021, VCOM medical student in lab who worked in my lab and will be a co-author on an upcoming manuscript. DO awarded

Craig Johnson- (mentor) 2018-2019, VCOM medical student in lab who worked in my lab and co-authored a published manuscript. DO awarded

Jessica Kim- (mentor) 2019-2021, VCOM medical student who worked in my lab presented a poster at VCOM Research Day in 2020 and will be a first author on an upcoming manuscript. DO awarded

Katie Salim- (mentor) 2019-2021, VCOM medical student who worked in my lab and will be a co-author on an upcoming manuscript. DO awarded

Peter Samuel- (mentor for DO with Research Distinction) 2018-2022-VCOM medical student who worked in my lab on multiple projects. During his time in my lab, Peter was co-author on two posters for VCOM Research day, published two manuscripts, and was invited to speak about our projects at Ferrum College (2022). Peter will also be first author on an upcoming manuscript and 2<sup>nd</sup> author on another article. DO

Patrick Beck- (co-mentor) 2019-present, Virginia Tech Carilion (VTC) School of Medicine

Orbit Genomics 02/12/20 04/30/20

Title: Lung Cancer Panel Validation Study

Goal: The goal of the program is to validate the Lung Cancer Risk genomic diagnostic with independent, de-

identified blinded samples.

Role: Investigator (PI: H. Garner)

Orbit Genomics 05/01/19 04/30/20

Title: Development of a Pancreatic Cancer Risk Assay (Phases I and II)

Goal: Develop a proprietary microsatellite-based risk classifier for Pancreatic Cancer Risk Diagnostic based on

Orbit Genomics microsatellite biomarker discovery process.

Role: Investigator (PI: H. Garner)

VCOM Research Eureka Accelerator Program (REAP) 07/01/19 12/31/20

Title: Chelation therapy salvages the DNA damaging effects of lead and cadmium on endothelial cells

Goal: The goal of this study is to discover genomic risk markers of patients who experience post-operative atrial fibrillation following cardiothoracic surgery by analyzing variations in microsatellite genomic regions, SNPS, and INDELs.

Role: PI

VCOM Research Eureka Accelerator Program (REAP) 07/01/19 10/31/20

Title: OR2T7: A prognostic marker and a potential therapeutic target for glioblastoma

Goal: The goal of the proposed work is to investigate the role of OR2T7 in tumor progression.

Role: Co-PI (PI: R. Anandakrishnan)

VCOM Research Eureka Accelerator Program (REAP) 07/01/20 06/30/21

Title: Investigating the effect of a rare mutation in Fetuin-B on the progression of Acute Myeloid Leukemia

Goal: The goal of this project is to identify cellular pathways0 g0 0 0ibTQ0.00000912 0 612 792 reW\* nBT/F3 12 Tf1 0

- 2. Schaaf CP, Sabo A, Sakai Y, Crosby J, **Varghese R**, et al. Oligogenic heterozygosity in individuals with high-functioning autism spectrum disorders. *Human Molecular Genetics*. 2011 Sep 1;20(17):3366-75. PubMed PMID: 21624971; PubMed Central PMCID: PMC3153303.
- 3. Murphy SF, **Varghese RT**, Lamouille S, Guo S, Pridham KJ, et al. Connexin 43 Inhibition Sensitizes Chemoresistant Glioblastoma Cells to Temozolomide. *Cancer Research*. 2016 Jan 1; 76(1):139-49. PubMed PMID: 26542214.

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Complete List of Published Work in My Bibliography	;
https://scholar.google.com/citations?user=vga0ZE8AA	AAJ&hl=en&oi=ao

### PROFESSIONAL PRESENTATIONS

"The Role of Casein Kinase 1 Epsilon in Glioblastoma" GBCB Virginia Tech Seminar Series, March 2015. Blacksburg, VA- Invited speaker

GBCB Virginia Tech Seminar Series, Nov 2015. Blacksburg, VA - Invited speaker "Novel prognostic markers for glioblastoma" Annual VTCRI Meeting, November 2015. Roanoke, VA "Genomics in Medicine "VCOM 4th Annual Research Retreat 2017. Ashville, NC- Invited speaker Highschool Outreach and Educational Tour Speaker (VCOM)- Genetics 2018-2019 - Lewis Gale, Salem, VA - 1/16/2019