

# SHAWN DESAI, Ph.D., J.D., N.R.C.C.

Buford, Georgia

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## Board Certified Medical Laboratory Director and Technical Supervisor

### EDUCATION

**The University of Georgia School of Law** Athens, GA  
Juris Doctor, May 2011

- Law School Association Scholar
- President, Intellectual Property Club

**Emory University** Atlanta, GA  
Doctor of Philosophy in Chemistry, August 2008

- George W. Woodruff Fellow
- Osbourne R. Quayle Fellow
- American Chemical Society Graduate Student Travel Award
- Graduate coursework in organic chemistry, biochemistry, and molecular biology

Dissertation Title: *Engineering Control of Gene Expression in Bacteria Using RNA-Small Molecule Interactions*

**University of South Florida** Tampa, FL  
Bachelor of Arts in Chemistry, December 2001

- Graduated *Summa Cum Laude*
- Florida Academic Scholar
- Honors Program graduate

Honors Thesis Title: *Structure Function Studies of Assimilatory Nitrate Reductase*

### ADMISSIONS

- United States Patent and Trademark Office
- State Bar of Georgia
- National Registry of Certified Chemists

### CERTIFICATES

- Principles of Clinical Toxicology, AACC, 2018

### EMPLOYMENT AND RESEARCH EXPERIENCE

**CEO, Precision Microbio LLC and Double Helix Specialists LLC**  
Atlanta, GA January 2019-Present

- Precision Microbio and Double Helix Specialists install turnkey molecular lab setups in physician offices, reference labs, urgent cares, and hospitals
- Panels include molecular UTI, Respiratory, Vaginitis, Wound, Covid-19
- Serve as CLIA Technical Supervisor for several molecular laboratories

**CLIA High Complexity Medical Laboratory Director**  
Atlanta, GA August 2018-Present

- Currently serve as high complexity CLIA laboratory director for multiple medical laboratories

- Consult with numerous medical laboratories on new test selection and implementation
- Highly experienced with CLIA, COLA, and Joint Commission
- Board Certified through the National Registry of Certified Chemists
  - Registrant #4557

**Chief Technology Officer, Co-Founder and Partner**  
**Aeon Global Health**

Gainesville, GA November 2011- December 2020

- Act as Technical Supervisor for CLIA high complexity laboratory
- Researched and implemented plan to begin new CLIA-certified laboratory
- Initially handled all aspects of business including scientific, accounting, ordering, cleaning, sales
- Lab specializes in toxicology by mass spectrometry, pharmacogenomics, microbiology and cancer testing
- Write procedures and develop testing methods
- Highly experienced in Next Generation Sequencing (NGS) using Illumina machinery (5 years)
- Highly experienced in molecular SNP detection (6 years)
- Highly experienced in toxicology testing with mass spectrometry and EIA (9 years)
- Highly experienced in bacteria, virus, yeast, and pathogen detection by molecular methods (6 years)
- Highly experienced with blood chemistry, hormone testing and hematology (5 years)
- Select all equipment and negotiate purchasing
- Prepare report and requisition formats
- Oversee all CLIA inspections
- Implement LIS and associated protocols
- Manage 20 scientists/hire new staff (Supervised over 50 scientists in total)
- Discuss results and interpretation with physician clients

**Consultant**

**Medical Laboratory**

Smyrna, GA April 2009 – August 2011

- Researched and implemented plan to begin new CLIA-certified toxicology laboratory
- Wrote procedures and developed testing methods
- Selected all equipment and negotiated purchasing
- Prepared report and requisition formats
- Implemented LIS and associated protocols

**Graduate Student**

**Emory University Department of Chemistry, Dr. Justin Gallivan Group**

Atlanta, GA Fall 2002 – Summer 2008

- Developed several novel methods for engineering bacteria to respond to non-endogenous small molecules using synthetic riboswitches
- Acquired extensive experience with molecular biology, bacteriology, high-throughput screening, biochemical assays, in vitro nucleic acid selections, in vivo genetic selections, and nucleic acid structure probing
- Project on engineering a caffeine-free coffee plant was featured in several news stories
- Guided individual research projects for 6 Emory undergraduate chemistry students; each project lasted at least one semester
- First graduate student to join lab: Trained three graduate students and setup laboratory

**Research Assistant**

**University of South Florida Department of Molecular Medicine, Dr. Michael Barber Group**

Tampa, FL Fall 1999 – Summer 2002

- Designed, cloned, expressed, and purified mutant reductase enzymes
- Characterized mutant enzymes with biophysical and spectroscopic techniques
- Received 1<sup>st</sup> place at the American Society for Biochemistry and Molecular Biology annual undergraduate poster competition