

SHENANDOAH UNIVERSITY Dual Degree:

Doctor of Pharmacy (PharmD)

And

Master of Science in Pharmacogenomics and Personalized Medicine

PROGRAM DESCRIPTION

Shenandoah University and Inova have partnered to offer a master's degree in pharmacogenomics and precision medicine for students in the Doctor of Pharmacy Program interested in exploring this fascinating field of study and applying knowledge of the human genome to clinical practice. This degree prepares you for career opportunities in biologic technology, at genetic testing laboratories, or within the pharmaceutical industry. It also provides you with the skill set needed to pursue specialized fields in health care that are poised for growth.

Pharmacogenomics uses a patient's genetic makeup to create individualized drug treatments. We were one of the first pharmacy schools to integrate pharmacogenomics into our curriculum, beginning with an introduction in the first professional year and culminating with application-based practices in the therapeutic sequence.

Some of the areas covered include:

- Genetic predictors of disease
- Applying genetic principles to guide therapeutic decisions
- Mastering genetic interpretation tools
- Ethical, legal and social implications of the human genome

Both programs integrate graduate-level critical thinking and analysis, problem solving, scientific inquiry, self-directed learning and the effective use of modern technology for professional practice that includes elements of research, leadership, education and continued enhancement of the pharmacy profession. The dual program offers individuals interested in pursuing pharmacy and pharmacogenomics a unique opportunity to complete both degree programs in less than five years, saving time and money.

ADMISSIONS CRITERIA and PROCESS

Full-time student in good standing pursuing PharmD degree with a minimum GPA of 3.0

MS application submitted in Fall of P2 academic year



Pictured: our medical campus in **Winchester, VA** (above) and **ICPH-Fairfax** (below) which is in the Washington, DC metropolitan area on the campus of INOVA's Center for Personalized Health



CONTACT US

PharmD

Dr. Katelyn Sanders
Director of Admissions
ksanders@su.edu | (540) 678-4377

MS Pharmacogenomics

PGxMasters@su.edu | (540) 542-6241

Office of Graduate Admissions
1460 University Drive
Winchester, VA 22601
sugradadmissions@su.edu | (540) 665-4581

Faculty

[Arthur Harralson, Pharm.D., BCPS](#)

Associate Dean of ICPH Fairfax
Campus, Department Chair and
Professor

[Amanda Munson, Ph.D.](#)

Associate Professor of
Pharmacogenomics
Program Director, M.S. in
Pharmacogenomics and Personalized
Medicine

[Deepak Bhatia, Ph.D.](#)

Associate Professor of
Pharmacogenomics

[Nina Hengen, M.D., Ph.D.](#)

Associate Professor of
Biopharmaceutical Sciences

[Shahzad Movafagh, Pharm.D., Ph.D.](#)

Associate Professor of
Pharmacogenomics

[Tracey Nickola, Ph.D.](#)

Associate Professor of
Pharmacogenomics

[Solomon M. Adams, Pharm.D., Ph.D.](#)

Assistant Professor of
Pharmacogenomics.

[Seenae Eum, Pharm.D., M.S.](#)

Assistant Professor of
Pharmacogenomics

[Tim Bloom, Ph.D.](#)

Associate Dean of Academic Affairs
Associate Professor of
Biopharmaceutical Sciences

[Robert Kidd, Pharm.D., Ph.D.](#)

Professor and Department Chair of
Biopharmaceutical Sciences

[Greg Sawyer, Ph.D.](#)

Associate Professor of
Biopharmaceutical Sciences

FOREIGN TRANSCRIPTS

International transcript evaluation by an accredited agency is an admission requirement. Approved services are listed at www.naces.org

FACULTY RESEARCH

The research interests of our teaching faculty in this program include:

- Oncogenes and tumor suppressor genes
- Chemoprevention of cancer by natural and synthetic agents
- Pharmacokinetics/pharmacodynamics (PK/PD) modeling and simulation
- Cardiovascular health in African-Americans
- The effect of genomic variability and regulation of hypoxia inducible factor 1 in pathogenesis of Cardio-Renal syndrome
- The impact of female mentorship on women in STEM disciplines.
- The state of Pharmacogenomic education in US professional schools
- Genomic Data Science

ADMISSION REQUIREMENTS

- Full-time student in good standing pursuing PharmD degree with a minimum GPA of 3.0
- Language Proficiency Requirement must be met. Submission of TOEFL, IELTS, PTE, or Duolingo English Test may be required. See our [policy](#) for full details: <https://www.su.edu/admissions/international-students>
- Completion of the MS Pharmacogenomics application in Fall of P2 year (to start classes in Spring of P2 year)
- Final degree transcripts – Unofficial transcripts are acceptable for initial admissions and if a student plans to matriculate, official transcripts must be sent prior to the start of classes to the Admissions Office
 - All transcripts from non-U.S. institutions must also be submitted for an academic credential evaluation to obtain equivalency information regarding courses, credits, grades, and degrees earned. A complete list of qualified companies may be found at www.naces.org and <http://aice-eval.org/>.
- Resume/C.V.
- Personal statement (maximum of 1 page), that answers **one** of the following two questions:
 - What are your career goals and/or plans with this master's degree?
 - Which aspect of Pharmacogenomics and Personalized Medicine is most interesting to you and you hope to focus on? (e.g. *Clinical Practice, Research, Drug Development, Regulatory Science, Data Science, Academia, Entrepreneurial, other*)

Note: Your personal statement will be processed using a plagiarism detection software