

**Area of Concentration in Global Health (ARCO-GH)
in the
Doctor of Pharmacy (PharmD) Program**

Purpose

The purpose of the Area of Concentration in Global Health (ARCO-GH) is to allow students to pursue an area of emphasis within global health consistent with their professional interests and while completing their PharmD degree. The ARCO-GH is intended to give students an in-depth exposure to global health pharmacy practice.

Description

“Global health is an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population based prevention with individual-level clinical care.” (Koplan JP, et al. Lancet 2009; 373: 1993–95.)

Today’s complex global health problems require solutions grounded in a broad range of disciplines. Pharmacists will practice in a world that expects the pharmacy profession to be patient-oriented and also to contribute to the health of the public at large. Patient-oriented care and population-based care each have a local and a global face. The knowledge and skills of tomorrow’s pharmacists must benefit all segments of populations locally and globally. Much of the world lacks access to basic essential medicines and health care. To better understand these complex challenges, experiences and course work in the context of global health are needed.

Pharmacists with an understanding of the needs of diverse patients and populations can improve the care of patients and their communities. Global health experiences provide a reference to better understand our own health care environment and public health policy. It is imperative that pharmacists are aware of their role as health professionals at the global level, and that they have some formal training in the various aspects of the field.

The ARCO-GH in the University of Pittsburgh PharmD curriculum does not require students to take additional credits beyond what is required for the PharmD degree, but rather is a mechanism for students to organize their classroom-based and experiential-based electives and a special project in a focused way. As such, the credits satisfy requirements for both the ARCO-GH and the PharmD degree. The ARCO-GH is available only to students enrolled in the PharmD curriculum.

The low student/faculty ratio and tailored curriculum of the ARCO-GH offers a special opportunity for students to acquire an important skill set. While new skills may be acquired throughout the School's curriculum, the ARCO-GH is an educational experience that will result in a concentrated background in global health principles.

Students will acquire the following skills:

Capacity Strengthening	<ul style="list-style-type: none"> • Describe sustainable workforce development strategies for resource-limited settings. • Identify methods for assuring health program sustainability. • Assist host entity in assessing existing capacity. • Develop strategies that strengthen community capabilities for overcoming barriers to health and well-being.
Collaborating and Partnering	<ul style="list-style-type: none"> • Develop procedures for managing health partnerships. • Promote inclusion of representatives of diverse constituencies in partnerships. • Use diplomacy and conflict resolution strategies with partners. • Communicate lessons learned to community partners and global constituencies.

Ethical Reasoning and Professional Practice	<ul style="list-style-type: none"> • Apply the fundamental principles of international standards for the protection of human subjects in diverse cultural settings. • Analyze ethical and professional issues that arise in responding to public health emergencies. • Explain the mechanisms used to hold international organizations accountable for public health practice standards.
Health Equity and Social Justice	<ul style="list-style-type: none"> • Apply social justice and human rights principles in public health policies and programs. • Implement strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being. • Critique policies with respect to impact on health equity and social justice. • Analyze distribution of resources to meet the health needs of marginalized and vulnerable groups.
Program Management	<ul style="list-style-type: none"> • Conduct formative research or quality improvement. • Apply scientific evidence throughout program planning, implementation, and evaluation. • Design program work plans based on logic models. • Develop proposals to secure donor and stakeholder support. • Plan evidence-based interventions to meet internationally established health targets. • Develop monitoring and evaluation frameworks to assess programs. • Utilize project management techniques throughout program planning, implementation, and evaluation. • Describe context-specific implementation strategies for scaling up best-practice interventions.
Socio-cultural and Political Awareness	<ul style="list-style-type: none"> • Describe the roles and relationships of the entities influencing global health. • Analyze the impact of transnational movements on population health. • Analyze context-specific policy-making processes that impact health. • Design health advocacy strategies. • Describe multi-agency policy-making in response to complex health emergencies. • Describe the interrelationship of foreign policy and health diplomacy.
Strategic Analysis	<ul style="list-style-type: none"> • Conduct a situation analysis across a range of cultural, economic, and health contexts. • Identify the relationships among patterns of morbidity, mortality, and disability with demographic and other factors in shaping the circumstances of the population of a specified community, country, or region. • Implement a community health needs assessment. • Conduct comparative analyses of health systems. • Explain economic analyses drawn from socio-economic and health data. • Design context-specific health interventions based upon situation analysis.

Academic Requirements

The ARCO-GH consists of six credits of approved elective classroom-based courses, two Advanced Pharmacy Practice Experiences (APPEs) in global health, and an approved project conducted under the guidance of an advisor. A minimum of 16 credit hours of coursework and rotations in the ARCO-GH are required.

Coursework

Within the School of Pharmacy, courses have been approved for inclusion in the ARCO-GH. Additional courses outside the School of Pharmacy have also been approved. Students may select any combination of approved courses to fulfill the requirements. Additional courses outside the School of Pharmacy may also be accepted on a case-by-case basis with prior approval of the ARCO-GH oversight group, the course director, and the School of Pharmacy Curriculum Committee. If a student desires to have another course approved for inclusion in ARCO-GH, he or she must submit a request to the ARCO-GH coordinator with the course description and intended outcomes that will be fulfilled by the course to begin the review and approval process.

Approved School of Pharmacy courses include:

- Pharmaceutical Care to Underserved Populations (PHARM 5801) – 3 credits
- Global Health: Determinants and Application (PHARM 5814) - 3 credits
- Medical Parasitology (PHARM 5818) – 1 credit
- Smoking Cessation in Underserved Settings (PHARM 5827) – 1 credit
- Women’s Health: Global and Local Perspectives (PHARM 5823) – 2 credits
- Healthcare for the LGBTQIA Community (PHARM 5831) – 2 credits
- International Pharmacy Scholarly Experiences (PHARM 5890/5891) – 1 to 3 credits [approval for ARCO credit depends on the project and site]
- Global Health: International Pharmacy Practice Experience (PHARM 5892) – 1 credit
- Special Topics (PHARM 5851-5858) – 1 to 3 credits

Approved courses outside the School of Pharmacy include:

- BIOINF 2124: Principles of Global Health Informatics – 3 credits
- INCIGHT (Interdisciplinary Curriculum in Global Health Training)
- Concepts and Methods in Global Health (PUBHLT 2025) – 2 credits

Experiential Rotations

As part of the ARCO-GH, students must complete two Advanced Pharmacy Practice Experiences (APPEs) in the area of global health, each representing five (5) credits. It is important to clarify that the ARCO-GH rotations are not additional APPEs, but rather the students must select two rotations with a focus on aspects of global health from the existing list of approved rotations to satisfy the ARCO-GH requirement. Students are encouraged to consult the director of experiential learning and faculty from the oversight group for guidance on which rotations will qualify for the ARCO-GH. An approved rotation must fulfill one or more of the skills outlined above.

For previously approved rotations, an application must be submitted with a written overview of the site, expected learning outcomes, and anticipated experiences to the School of Pharmacy Director of Experiential Learning. Approval of new rotations to fulfill requirements for the ARCO-GH is at the discretion of the Director of Experiential Learning and the ARCO-GH coordinator or oversight group.

Students accepted for participation in the ARCO-GH will be given preferential placement for APPEs in international global health settings and US-based underserved settings.

Project

As part of the ARCO-GH, student pharmacists must complete a project under the supervision of a faculty member. Once accepted into the ARCO-GH, students will meet with the ARCO-GH coordinator to discuss suitable project ideas and identify faculty mentors. While the project is required, completing it “for credit” is not. Students may elect to work on the project for credit by enrolling in a Special Topics or Independent Study course. Students should consult the School of Pharmacy Academic Records Manager for enrollment information for Special Topics courses. Projects need not be based in an international setting, but must have either global health implications or a focus on health disparities and health equity. Students must have their project proposed and approved by the ARCO-GH coordinator and project preceptor prior to the beginning of the P4 year. Project assessment will be based on a formal presentation to the oversight group and a written report. Students are encouraged to present their work at local, national, and international conferences (e.g. PPA, ASHP, etc.).

Student Application Process

The ARCO-GH is not able to accommodate all interested students due to resource limitations. As a result, enrollment in the ARCO-GH is not guaranteed and is open to generally six (6) students per class. Students interested in pursuing this concentration are required to apply to the program. The application process requires a(an):

- Letter of intent, including a discussion of the anticipated value of the ARCO to desired career

- Professional portfolio, including résumé or curriculum vitae
- Permission for the oversight group to review the applicant's University of Pittsburgh academic transcript
- Interview with at least one member of the oversight group, if requested by the oversight group

The ARCO-GH accepts applications for students in both the P1 and P2 year. The deadline for applications is generally in the spring term and is posted annually. Students will be notified regarding the status of their application prior to registration for the fall term. Complete applications will be screened by a minimum of two members of the ARCO-GH oversight group.

When the ARCO-GH is not at full enrollment capacity following a given application period, the ARCO-GH coordinators may elect, at a later date, to consider acceptance of students who come to career goals later in his/her academic career but are committed to the specific career path and who submit the required materials (see above). Acceptance is possible only if students can successfully achieve program requirements in the remaining academic periods.

Members of the ARCO-GH oversight group are available to answer questions and discuss the ARCO-GH program. Contact information is provided below.

Requirements for ARCO-GH Retention and Completion

1. The student must remain in good academic standing in the PharmD program. Those that fall out of good academic standing will be placed on probation in the ARCO-GH. Reinstatement to the ARCO-GH will be made on a case-by-case basis by the coordinators and oversight committee.
2. The student must successfully complete 6 credits of electives in global health by the beginning of the P4 year. Successful completion is defined as a grade of a C or better in all related elective courses.
3. Successful completion of the scholarly project by the end of the P4 year. This is met by:
 - a. Project approval by ARCO-GH coordinators
 - b. Submission of final report in manuscript form
 - c. Submission of project to a minimum of 1 conference (local, national, or international)
 - d. Oral presentation of project at the Global Health and Underserved Population Forum or similar forum.
4. Successful completion of two APPEs focused on global health practice, as approved by ARCO-GH co-directors. Successful completion is defined as passing at a minimum competence level of intermediate competence for all evaluated outcomes. In addition, the student will submit a report to the ARCO-GH co-coordinators at the end of each of these two APPEs detailing skill development related to global health competencies.

Students successfully completing the ARCO-GH will receive special recognition at the School of Pharmacy hooding ceremony and a corresponding notation on their official academic transcript.

ARCO-GH Oversight Group

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