# DrPH Leadership in Global Health and Humanitarian Systems

Heilbrunn Department of Population & Family Health Doctoral Program Handbook



HEILBRUNN DEPARTMENT OF POPULATION & FAMILY HEALTH

## DrPH Handbook 2024 Leadership in Global Health and Humanitarian Systems

#### Table of Contents August 15th, 2024

I. INTRODUCTION DrPH PROGRAM OVERVIEW AND OBJECTIVES	
CEPH AND DEPARTMENTAL COMPETENCIES	
DRPH LEADERSHIP AND FACULTY ADVISORS	
Heilbrunn Department of Population & Family Health: DrPH Program Leadership	
II. APPLYING TO THE PROGRAM	
FOUNDATIONAL MPH COURSES	8
COURSE SUBSTITUTION	8
COSTS AND FUNDING	8
RESEARCH AND TEACHING ASSISTANT POSITIONS	9
III. CURRICULUM OVERVIEW PROGRAM SCHEDULE AND TIMELINE	
COURSES: REQUIRED, ELECTIVES, AND SELECTIVES	10
TUTORIALS	
PERSONAL LEARNING PLAN	
COMPREHENSIVE EXAMS	15
INTERPROFESSIONAL EDUCATION (IPE)	15
APPLIED PRACTICE EXPERIENCE (APEx)	15
IV. REGISTRATION CONTINUOUS REGISTRATION	
LEAVE OF ABSENCE	
V. INTEGRATIVE LEARNING EXPERIENCE (ILE): PROPOSAL AND DEFENSE ILE FORMAT	
FORMING THE ILE COMMITTEE	23
PROPOSAL DEVELOPMENT	25
PROPOSAL DEFENSE	25
ILE PROGRESSION	26
FORMAT OF THE ILE DEFENSE	27

ILE DEPOSIT	28
FILING FOR GRADUATION	29
VI. APPENDICES	30
Appendix 1A: Leadership in Global Health and Humanitarian Systems Departmental Competencies	31
Appendix 1B: CEPH DrPH Foundational Competencies	32
Appendix 2A: Documentation of Competencies for APEx	33
Appendix 2B: Documentation of Competencies for ILE	37
Appendix 3: Personal Learning Plan	41
Appendix 4: HDPFH Tutorial Form	45
Appendix 5: Summary of Required and Core Courses	47
Appendix 6A: Substantive Oral Exam	51
Appendix 7: ILE Proposal Outline	53
Appendix 9: ILE Proposal Defense Form	56
Appendix 10: ILE Defense Form	57
Appendix 11: Resources on Research, Writing and Learning	58
Appendix 12: Funding Sources for DrPH Students	59

## I. Introduction

#### DrPH PROGRAM OVERVIEW AND OBJECTIVES

The DrPH in Leadership in Global Health and Humanitarian Systems at the Columbia University Mailman School of Public Health is distinctive in both its focus and delivery. The program is hosted within the Heilbrunn Department of Population and Family Health (HDPFH), which aims to address a wide range of challenges to health and focuses on sexual and reproductive health and rights, forced migration, child and adolescent health, environmental and gender justice, and complex health systems. The department's vision is to affirm that health is a basic human right and uses interdisciplinary scientific and technological approaches with a justice framework to understand factors undermining health and wellbeing. Combining knowledge of the impact of law and global governance on public health at the local level with complex health systems analysis and implementation science, HDPFH prevents and addresses public health threats in low-income, unstable, and inequitable environments globally.

The overall objectives of the DrPH program are to:

- Provide advanced research skills to address public health issues in low income, unstable, and inequitable environments globally;
- · Reflect a practice-based focus with a focus on program measurement and evaluation;
- Emphasize critical, innovative thinking rooted in best practices and rigorous research;
- Equip students for advanced leadership and management roles reflecting a strong understanding of systems approaches;
- Strengthen cross-national connections and networks amongst faculty and a diverse student body; and
- Prepare students to advocate for sustainable public health goals within governments, non-governmental organizations, and academic institutions.

The HDPFH<sup>1</sup> is home to several distinguished initiatives active in global health and humanitarian practice and research. The Reproductive Health Access, Information, and Services in Emergencies (RAISE) initiative collaborates with international and local organizations to address the sexual and reproductive health needs of refugees, internally displaced persons (IDPs), and other populations affected by humanitarian crises in countries such as Afghanistan, Chad, the Democratic Republic of Congo, Myanmar, Pakistan, South Sudan, and Uganda. The Averting Maternal Death and Disability (AMDD) program also addresses women's health and has worked with partners in over 50 countries in Africa, Asia, and Latin America since the program's founding in 1999. AMDD conducts research and policy analysis, lends technical expertise, and advocates for solutions that reduce maternal and newborn mortality.

The HDPFH is also engaged in implementation research supporting health systems and public health programs through the Advancing Research on Community Health Systems (ARCHeS) program and the Systems Improvement at District Hospitals and Regional Training of Emergency Care (sidHARTE) project. ARCHeS projects currently focus on primary health care in Ghana, noncommunicable disease prevention in Mali, and malaria control and elimination in multiple countries. Through collaboration with the Care and Protection of Children (CPC) Learning Network, the Department develops innovative tools and methodologies to better measure children's care, protection, and welfare ranging from program-level evaluations to broader research methods focused at the policy level. The Global Health Justice and Governance (GHJG) program is a new university-wide initiative housed within HDPFH that aims to disrupt global governance policies and structures that lead to injustice and poor health outcomes in the areas of gender, environment, and food security, by applying a human rights and accountability framework to its work. In partnership with community-level actors, GHJG draws on emerging and innovative work in public health and development -- including qualitative and quantitative approaches to systems thinking, "doing development differently," health and human rights, accountability, health systems policy and research, and social epidemiology.

 $<sup>^1\,\</sup>underline{https://www.publichealth.columbia.edu/academics/departments/population-family-health}$ 

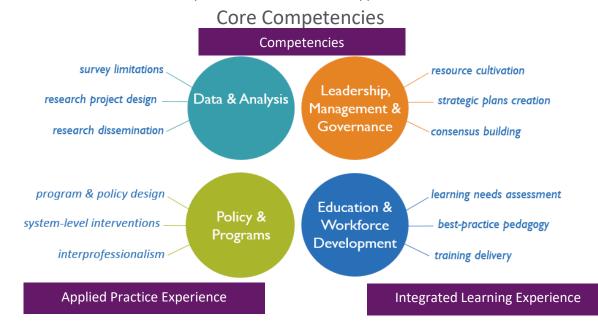
The Program on Forced Migration and Health (PFMH) at the Heilbrunn Department of Population and Family Health was launched in 1998 as one of the first interdisciplinary, practice-based humanitarian research and educational programs offered by a major university. Today PFMH continues to be a leader in developing evidence-based approaches to humanitarian response and in training the next generation of global leaders.

PFMH faculty lead and collaborate on research that influences policy and practice in complex emergencies, postemergency recovery and development contexts. We work closely with governments, international agencies and community-based organizations, building on decades of experience working with displaced populations in fragile and conflict-affected settings. Faculty have addressed previous epidemics, including Ebola, Severe Acute Respiratory Syndrome (SARS), and Middle East Respiratory Syndrome (MERS), and have responded to major conflicts and humanitarian crises globally, including supporting programs in Liberia, Sierra Leone, Sudan (Darfur), South Sudan, Central African Republic, Democratic Republic of Congo, and northern Uganda, Syria, Jordan, and Bangladesh. Our interdisciplinary team includes physicians, lawyers, epidemiologists, and demographers, with expertise spanning advocacy, law, medicine, and public health. Further information on current programs and research initiatives can be found here.

Building on the networks and initiatives of both the HDPFH and the PFMH, the DrPH program provides opportunities for rich field-based learning and research while accommodating the employment needs of mid-career professionals. Located in New York City, the HDPFH is connected to extensive humanitarian, human rights, and global health networks. Faculty, staff, and students have direct access to and support from United Nations agencies, international NGOs, and a diverse array of local and global organizations. During the first 3 semesters of study, students are required to be in residency at Columbia. Students who successfully complete all academic requirements during their first 3 semesters of study are eligible to work remotely in subsequent semesters with permission from their advisor and the DrPH Program Director.

#### CEPH AND DEPARTMENTAL COMPETENCIES

While addressing unique program objectives, the DrPH in Leadership in Global Health and Humanitarian Systems ensures that candidates acquire doctoral competencies that reflect the standards expected for a DrPH Professional Degree by the Council on Education for Public Health (CEPH). CEPH Core Competencies for this program are highlighted in the following figure. In addition to the CEPH competencies, the DrPH degree requires students to fulfill competencies in Communication and Advocacy, Community and Cultural Orientation, Critical Analysis, Leadership and Management, and Professionalism and Ethics. Additional detail on both Departmental and CEPH DrPH competencies can be found in Appendices 1A and 1B, respectively. A proposed rubric for documentation of the CEPH Core Competencies can be found in Appendix 2.



Through successful completion of coursework, an applied practice experience (APE) qualifying examinations, and a final Integrative Learning Experience (ILE), students will fulfill these competences. A Personal Learning Plan, in Appendix 3, provides a template for documentation of these requirements, and their alignment with specified competences. These documents are normally drafted in the second year of study and finalized before final submission of the Integrative Learning Experience. Students are expected to complete the entire DrPH program within 4-7 years from matriculation.

#### DRPH LEADERSHIP AND FACULTY ADVISORS

The HDPFH's Director of Academic Programs, with administrative support from a Graduate Assistant, serves as the main administrative contact for the program. Dr. Cassie Landers serves as the Director of the DrPH program and assumes day-to-day leadership over the program's implementation while addressing student needs. Policies of the DrPH program are determined by the HDPFH Doctoral Committee and influenced by the Departmental Chair and the Columbia Mailman School of Public Health school-wide policies.

In collaboration with the faculty and Program Director, students are matched with an Academic Advisor upon entry into the program. Students' specific goals and objectives, as well as expectations, are carefully identified and matched with a faculty member to support those expectations. The Academic Advisor serves as a guide to the student with regards to their academic program and supports the development of an approved Personal Learning Plan (Appendix 3). The responsibilities of the Academic Advisor are summarized as follows.

#### Role and Responsibility of the Academic Advisor

- Welcome and integrate the student into the Department and program
- Assist with planning coursework during the first 2 years and approve cross registration as needed
- At the beginning of the academic year, develop a Personal Learning Plan
- Conduct a mid-year review during the second semester; Conduct an end-of-year review before early September of the second year of study
- Review and agree upon competencies for the applied practical experience (practicum)
- Serve on the student's oral substantive exam review panel
- Work with the student to identify a dissertation sponsor it is the responsibility of the Advisor to formally invite the potential sponsor to serve in that role

#### Heilbrunn Department of Population & Family Health: DrPH Program Leadership



Interim Department Chair Patrick Kachur, MD, MPH

Vice Chair of Education Patrick Kachur, MD, MPH



Director of Doctoral Program Cassie Landers, EdD, MPH

Director of Academic Programs Chelsea Kolff, MPH

General Dept. Information msphpopfam@cumc.columbia.edu

#### **Doctoral Committee-Faculty**

Judith Austin, PhD Juliana Bol, PhD Helen de Pinho, MBBCh, FCCH, MBA Lynn Freedman, JD, MPH Patrick Kachur, MD, MPH Cassie Landers, EdD, MPH John Santelli, MD, MPH

For general program inquiries, please contact Dr. Cassie Landers (<u>cl689@cumc.columbia.edu</u>) or Chelsea Kolff (<u>cak2190@cumc.columbia.edu</u>).

Heilbrunn Department of Population and Family Health 60 Haven Avenue New York, NY 10032

# II. Applying to the Program

The program is intended for leaders and future leaders in public health looking for a flexible career combining high-level leadership, management, and research skills. It is aimed at public health professionals who are invested in applied science and seek to utilize a systems approach to research, program management, and policy development in practice-based settings in developing and crisis-affected contexts. Graduates are equipped with the advanced skills in evaluation, organizational management, and technical expertise needed to advance professionally. The program allows students to maintain careers and leadership positions within their current organization and/or home country during their course of study.

Entrants to the DrPH program typically hold an MPH, MSW, MD, or similar advanced degree that has introduced them to concepts of statistics, healthcare management, social sciences, and population-based sciences, and have several years of professional experience in the fields of global health and humanitarian systems.

#### ADMISSION REQUIREMENTS

#### Applicants must meet the following admissions criteria:

- Three to five years of post-graduate experience in global health, development, humanitarian work, or a related area, in a substantial management or leadership role;
- A prior master's or doctoral degree (not necessarily in public health);
- Grade Point Average (GPA) of at least 3.5 in prior graduate study, or equivalent at institution of graduate study;
- GREs, MCATs, and other standardized tests are optional;
- Strong analytical writing and quantitative abilities as demonstrated through coursework, work experience, and standardized test scores;
- Demonstrated leadership potential;
- Motivation to obtain senior-level positions within organizations committed to global public health;
- For international students, a TOEFL (100 minimum score) or IELTS test score.

The application is available through the online <u>SOPHAS portal</u><sup>2</sup>. In addition to the requirements listed above, all students must submit an official transcript showing courses and grades from each prior institution through the SOPHAS portal. Applicants must also submit a statement of academic purpose, a writing sample, and three letters of evaluation from academic and/or work sources.

All international students whose native language is not English or whose undergraduate degree is from an institution where English is not the official language, must submit a Test of English as a Foreign Language (TOEFL) or IELTS scores through the SOPHAS portal. A TOEFL score of 100 is required (a score of 25 is required for the writing section and preferred for all sections). A Financial Certificate from United States Immigration is a requirement for entry into the United States.

Through the SOPHAS application portal, students are required to submit a personal statement of purpose of no more than 500 words. The personal statement should convey a clear understanding of the public health field and how the student hopes to work within the field. In the statement, the student must address the following: (a) Interests in the field of leadership within global health or humanitarian systems; (b) strengths and attraction of the HDPFH DrPH program; (c) previous global health or humanitarian experience; and (d) alignment of the DrPH degree with long-term career goals.

<sup>&</sup>lt;sup>2</sup> https://sophas.org/

Students are expected to have demonstrated competencies in the core public health areas, as specified for MPH graduates by the CEPH, the core accreditation body for schools of public health, prior to beginning their DrPH studies. Students may fulfill similar coursework at CEPH-accredited outside institutions and submit transcripts and syllabi for review to ensure compatible competencies were met or fulfill coursework at Columbia. As described in the following section, students who do not have relevant, CEPH-accredited courses from a prior degree, are required to complete these prior to admission into the program. If foundational core competency courses are taken during enrollment in the DrPH program, these credits are not counted towards the required credit load for the doctorate.

Candidates are expected to demonstrate a track-record of employment that indicates their capacity to access relevant work contexts to fulfill the work-based and ILE requirements of the program.

Applicants to the DrPH degree program should submit their completed online applications to the Columbia University Mailman School of Public Health by December 1st to ensure full consideration for admission and funding.

#### FOUNDATIONAL MPH COURSES

The Columbia University Mailman School of Public Health, in line with the CEPH, requires entering DrPH students to have completed, or to complete, coursework covering the five core areas of public health knowledge. These foundational courses include: (a) Biostatistics, (b) Epidemiology, (c) Environmental Health Sciences, (d) Social and Behavioral Sciences, and (e) Health Policy and Management. For students entering the doctoral program without an MPH, options to meet these requirements are detailed below.

#### **COURSE SUBSTITUTION**

Foundational course requirements may be satisfied prior to matriculation through one of many CEPH-accredited programs at other institutions. This option may be a cost-effective and flexible way to complete individual courses and can potentially be done through intensive sessions or online. Students who consider that prior coursework may potentially satisfy one or more of the five foundational courses required should contact Dr. Cassie Landers and Chelsea Kolff and provide (a) course name; (b) academic institution; (c) a copy of the syllabus; and (d) documentation of the final grade received. These materials may also need to be sent to, and verified by, other departments within the Columbia Mailman School on a per-case basis. This will enable adjudication of potential substitution. Courses in other departments within Columbia Mailman may also be considered for substitution, using the same process.

#### **COSTS AND FUNDING**

Candidates are responsible for all costs associated with the program, including tuition, Columbia Mailman student activity, health service, international student, transcript and document fees, and relevant travel and accommodation costs. The tuition is determined by credits for courses taken. Each course has a set number of credits. Tuition and fees are detailed here<sup>3</sup>.

Students are ultimately responsible for funding the program. However, there are several ways to cover some or all of the costs of the DrPH, including: scholarships and fellowships arising both inside and outside the University; researchbased employment including graduate research assistantships (GRAs); or NIH individual ILE grant awards (F31 and R36). The Columbia Mailman School of Public Health financial aid office<sup>4</sup> is available to assist students with financial preparation and maintains a website of interschool and institutional fellowships<sup>5</sup> as well as outside sources of funding<sup>6</sup>. Additional funding resources are also outlined in Appendix 12. Applicants are strongly encouraged to proactively pursue funding alternatives inside and outside the university, including federally funded ILE grants. A student must be up to date

<sup>&</sup>lt;sup>3</sup> https://www.publichealth.columbia.edu/become-student/how-apply/financial-aid/tuition-fees

<sup>&</sup>lt;sup>4</sup> https://www.mailman.columbia.edu/become-student/apply/financial-aid

<sup>&</sup>lt;sup>5</sup> https://www.mailman.columbia.edu/become-student/apply/financial-aid/funding-options/scholarships-fellowships-and-grants

<sup>&</sup>lt;sup>6</sup> https://www.mailman.columbia.edu/become-student/apply/financial-aid/funding-options/outside-sources-funding

with any financial responsibilities to the University prior to registration for each year and before undertaking the qualifying exams. All financial requirements must be discharged before the degree is conferred.

#### **RESEARCH AND TEACHING ASSISTANT POSITIONS**

In addition, depending upon students' interests and needs, there are opportunities to be involved in one of the HDPFH's ongoing research initiatives. Efforts will be made to explore research assistant positions for interested students. Students can work for a maximum of 20 hours per week when classes are in session. Most students in the DrPH program continue to work during their term of study, except for their first two semesters, during which students will fulfill the DrPH residency requirement as full-time students residing in New York.

## **III. Curriculum Overview**

Consistent with CEPH guidelines for award of the DrPH, students are required to satisfactorily complete all course requirements, including completion of a minimum of 36 credits, attaining passing grades in written comprehensive examinations, and successfully completing an Applied Practice Experience (APEx) and an Integrative Learning Experience (ILE) inclusive of (a) a single monograph, (b) 3 interrelated papers, (c) substantive project.

#### PROGRAM SCHEDULE AND TIMELINE

The DrPH is structured to be fulfilled over a period of approximately 4-5 years and no longer than 7 years. During the first two years, students complete coursework, a methods exam, and an oral substantive exam. Students are expected to be in residence at Columbia for the first three Fall and Spring semesters. During residency, students take between 9-12 credits per semester.

The years of the program after residency are designed to provide flexibility for mid-career professionals. Students working with employers may, with doctoral committee and instructor permission, work remotely during the second half of Year Two (fourth semester of coursework) and Year Three (ILE writing and defense). Students may also continue in residence at Columbia, working part-time on research projects or programs as they complete the degree requirements.

Irrespective of their resident location, DrPH students must take 36 credits of coursework and must be continuously registered until the semester in which they are depositing their ILE. While in residence during the first three semesters of the program, international students must maintain full time status, but all other students may maintain status as part-time (1-5 credits) or half-time (6-11 credits).

After students complete the required 36 credits of coursework, all students, international or domestic, must register every semester (except summer) for doctoral research registration (zero credit course to maintain status). Further information on the Columbia Mailman School's continuous registration policy is described below and can be found in the <u>Columbia Mailman School Handbook</u><sup>7</sup>.

#### COURSES: REQUIRED, ELECTIVES, AND SELECTIVES

A summary of the required DrPH courses described below can be found in Appendix 5.

#### YEAR ONE

#### COLUMBIA UNIVERSITY MAILMAN SCHOOL OF PUBLIC HEALTH DRPH CORE

All DrPH students across the departments of Columbia University Mailman School of Public Health are required to take the following courses in their first year of study:

- Case Studies in Public Health Practice & Leadership I (P9070, 1.5 credits)
- Seminar in Managerial and Organizational Behavior (P9040, 1.5 credits)
- Seminar in Strategic Management (P9050, 1.5 credits)
- Essentials for Teaching and Communication (P9060, 1.5 credits)

#### DEPARTMENTAL COURSES

The first year provides a strong foundation in systems thinking, program development and evaluation, research methods and substantive areas of global health and humanitarian intervention. Students register for the following classes:

<sup>&</sup>lt;sup>7</sup> <u>https://www.mailman.columbia.edu/people/current-students/academics/student-handbooks</u>

Semester 1

- Principles and Policy for Global Health & Humanitarian Systems 1 (P9672, 1.5 credits)
- Public Health and Humanitarian Action (P8687, 3 credits)

Semester 2

- Principles and Policy for Global Health & Humanitarian Systems 2 (P9673, 1.5 credits)
  - One selective in program planning, evaluation and/or implementation science:
    - Applications of Implementation Science in Low- and Middle-Income Countries (P9620, 1.5 credits)
    - Public Health Program Planning (P8601, 3 credits)
    - Methods in Program Evaluation (P8640, 3 credits)

#### YEAR TWO

#### COLUMBIA UNIVERSITY MAILMAN SCHOOL OF PUBLIC HEALTH DRPH CORE

All DrPH students across the departments of the Columbia Mailman School are required to take the following courses in their second year of study:

Case Studies in Public Health Practice & Leadership II (P9071, 1.5 credits)

#### DEPARTMENTAL COURSES

The second year provides structured opportunities to relate learning to work and other field-related contexts, while allowing students to develop a particular and more concentrated focus of study. Students are expected to register for the doctoral DrPH seminar classes:

Semester 1

• Advanced Research Methods in Global Health (P9652; 3 credits doctoral seminar)

Semester 2

- ILE Proposal Writing Seminar (P9651; 1.5 credit doctoral seminar).
  - Students not on campus for their fourth semester, with the permission of the instructor, may complete this course remotely.

At the beginning of the academic year, students should develop a planned program of study in consultation with their Academic Advisor, informed by their agreed Personal Learning Plan (Appendix 3). In addition to the foundational and required courses listed above, students register for additional credits in accordance with their planned program of study. As part of this plan, students are required to complete methodologic courses. A list of methods courses to fulfill methodologic course requirements will be finalized in the month prior to the opening of the registration period.

A list of methods courses to fulfill methodologic course requirements will be finalized in the month prior to the opening of the registration period. Students may review and preregister for desired classes in August of each year and confirm or amend course schedules in the first week of the term. A student's final program of study is subject to approval by the Program Director.

	Year 1		Year 2		Year 3 & Beyond
Courses	Fall	Spring	Fall	Spring	
PopFam DrPH courses	Principles and Policy for Global Health & Humanitarian Systems 1 (P9672) *	Principles and Policy for Global	Advanced	Dissertation/ILE	Continuous Non- course registration RSRH P0001 RSRH P0003
MSPH DrPH Courses	Leadership in Public Health	Interdisciplinary Seminar on Teaching, Training & Communication*			
Departmental Courses	Public Health and Humanitarian Action (P8687)				
Program selective (1.5-3 credits required) Methods selective (6 credits required)	Public Health Program Planning (P8601) Methods in Program Evaluation (P8640) Applications of Implementation Science in Low & Middle-Income Countries (P9620) * See table of recommended courses				
Recommended Non-Mailman Courses	Introduction to Health Economics (HPM P6503) Quantitative Analysis for International & Public Affairs (SIPA U6500) ** Impact Evaluation Methods (SIPA INAF U6605) Quantitative Methods in Program Evaluation and Policy Research (SIPA U8500)				
Qualifying Exams & Dissertation/ILE				Methods Exam (January) Substantive Exam (March)	Dissertation/ILE Progression: Proposal, Proposal Defense, Dissertation/ILE Defense (Year 3)
Advising & Progress Reporting	Personal Learning Plan (PLP)	PLP Review	PLP Review	PLP Final Review	Annual Progress Report

#### Table 1. DrPH Snapshot: Recommended Course of Study (36 Credits)

Unless indicated, courses are 3 credits

\* Course 1.5 credits

\*\* SIPA registration period opens 2 weeks before Mailman's registration. Mailman students are not guaranteed spots in SIPA courses. Students interested in a SIPA course should email the instructor to obtain instructor permission.

#### Table 2. DrPH Courses: Methods Electives

DrPH Courses: Methods Selectives				
Fall Semester	Fall and Spring Semesters			
EPID P8432: Environmental Epidemiology	POPF P8623: Quantitative Data Analysis			
EPID P8488: Epidemiologic Research Topics in	POPF P8637: Qualitative Data Analysis			
Developing Countries	BIST P8120: Analysis of Categorical Data			
HPMN P8508: Analysis of Large-Scale Data	BIST P8100: Applied Regression I			
SOSC P8786: Ethnographic Methods in Health	EHSC P8371: Public Health GIS			
Research				
Spring S	emester			
POPF P8617: Research Design and Data Collection				
POPF P8679: Investigative Methods in Complex Emergencies				
POPF P9675: Systems Thinking for Maternal Health				
EHSC P6360: Analysis of Environmental Health Data				
EPID P8417: Selected Problems of Measurement in Epidemiology				
EPID P8422: Perinatal Epidemiology				
	EPID P8430: Public Health Surveillance			
EPID P8438: Epidemiology II: Design and Conduct of Observational Epidemiology				
EPID P8483: Applications of Epidemiologic Research Methods				
EPID P8499: Field Methods in Epidemiology				
HPMN P8586: Applied Methods in Health Services and Outcomes Research*				
SOSC P8766: Designing Needs and Assets Assessments in Public Health **				
SOSC P8777: Survey Research Methods				
SOSC P8792: Dissemination and Implementation Scien	nce			

Unless indicated, courses are 3 credits

\* 1.5 credit course

\*\* 2 credit course

#### TUTORIALS

Students may use tutorials to fulfill up to 6 credits of their required coursework. Based on agreement between students, their Academic Advisor and the faculty member, a specific plan will be outlined for the specified tutorial. Such tutorials may be in residence or abroad, and will normally involve a structured program of communication, supervised reading and/or practical fieldwork and a writing assignment. The Tutorial Form is listed in Appendix 4. A tutorial is an individualized course of study in which a student works with a faculty member on an area that is not covered in a current course offering. In a tutorial course, students enter a learning contract with a faculty member to explore an area of mutual interest, such as participation in research, in-depth exploration of an area not covered in traditional coursework, small individual projects, and so on.

Prior to registering for a tutorial, students, together with their tutorial faculty member, should develop a learning contract that specifies tutorial's scope of work (SOW). The SOW should clearly demonstrate that the amount of time the student will spend on the project will be equivalent to the work required of students taking a traditional graduate level course at Columbia Mailman (42 hours per 1 credit per semester). Once the SOW is finalized and before registering for tutorials, students should seek approval by the department Director of Academic Programs, who will then help facilitate registration via SSOL.

#### PERSONAL LEARNING PLAN

The Personal Learning Plan (PLP) (Appendix 3) documents students' key goals and objectives throughout the DrPH program. The document is used to structure discussions between the student and their Academic Advisor. Copies of the Personal Learning Plan should be kept by the student, the student's advisor, and Director of Academic Programs. The Personal Learning Plan serves as an on-going record of achievement throughout the doctoral program.

Upon matriculation at the start of the program, doctoral students should record on the Personal Learning Plan a preliminary statement of goals and objectives for the first year of doctoral study (specifying thoughts regarding substantive areas of study and methodological/ analytical skills to be developed), longer term objectives for leadership within the field of global health and humanitarian systems, and preliminary thinking regarding their potential focus of ILE fieldwork during year three and four of the program. None of these statements are binding, but they form a basis for initial and ongoing dialogue between the student and their Academic Advisor.

Within six weeks of beginning the first academic year, a statement of doctoral program goals should be completed and approved by the doctoral student and their Academic Advisor. The statement should include:

- Descriptions of the thematic, substantive foci of intended coursework;
- Specific methodological or analytical skills to be targeted; and
- Professional and managerial research competencies to be developed during the first year of study.

A mid-year review involving the doctoral student and Academic Advisor will be conducted some time during the second semester. An outline to guide discussions during the mid-year review may be found in the Personal Learning Plan in Appendix 3. The review examines student progress toward achieving targeted goals and objectives and any adjustments required in the plan. The goal and objectives previously specified should be reviewed, evidence of progress noted, challenges that have arisen acknowledged, and adjustments to the plan recorded.

An end-of-year review involving the doctoral student and Academic Advisor should be conducted before early September of the second year of study. An outline to guide discussions during the end-of-year review is included in the Personal Learning Plan (Appendix 3). The focus is to review the extent to which targeted goals and objectives (adjusted, as appropriate, at the mid-year review) have been met, and to agree on objectives for the second and third years of the program.

#### **COMPREHENSIVE EXAMS**

Two comprehensive examinations will be administered in the second year of the program, a methods exam, and a substantive exam. Passing the comprehensive examinations is a requirement for advancement to the ILE phase of the DrPH. Examinations will assess integration of key concepts from the overall program curriculum, as well as more specialized knowledge within the thematic focus chosen by the student. Students must have obtained a passing grade in all required coursework.

Comprehensive examinations, comprised of written papers and oral examinations, provide a critical and necessary opportunity to assess proficiency in the core doctoral competencies defined by the CEPH as essential for public health professionals working in the field of global and humanitarian health.

#### 1. METHODS EXAM

Administered early in the spring semester of the second year, the Methods Exam assesses technical skills accumulated from all prior research methods training. In preparation for this exam, students enroll in the *Advanced Research Methods in Global Health* (P9652) class, a core focus of which is the integration and application of methodological skills appropriate to a range of research, implementation, and evaluation projects in diverse settings.

#### 2. SUBSTANTIVE ORAL EXAM

Administered in late spring of the second year or in the summer between the second and third year, the Substantive Oral exam assesses students' competency within their specific content of interest (Appendix 6A). The exam consists of two components, including an oral discourse of two previously developed questions prepared by the student prior to the exam. In preparation for the first oral discourse components, students will develop a reading list related to their content of interest, starting in the early spring semester of the second year (more guidance is provided in Appendix 6A and 6B).

The second component of the exam includes case studies tailored to the student's areas of interest. For the second component of the exam, students will be given 2 hours to prepare their response to a set of analytical questions. The case will assess students' understanding of leadership management and governance, policy and programs, and workforce development. The oral exam will be conducted by a panel of three departmental faculty members, including the student's Academic Advisor. Students' level of competence will be assessed according to an agreed-upon rubric.

#### **INTERPROFESSIONAL EDUCATION (IPE)**

DrPH students are required to fulfill the IPE requirement. DrPH students with an MPH degree received prior to 2018 are exempt from this requirement. IPE activities are managed and tracked through the Columbia Mailman Office of Education. DrPH students and the DrPH program can propose additional activities to fulfill this requirement. These must be vetted by the Office of Education to ensure that the activity or event meets the CEPH accreditation standards. All activities are hosted and coordinated by CUIMC, with input and participation from all schools located at the Medical Center.

Currently, DrPH students participate in the E-IPE activity during the Fall term. During the Spring semester, students will participate in an IPE Day of programs. Additional information can be found <u>here</u><sup>8</sup>.

#### APPLIED PRACTICE EXPERIENCE (APEx)

Regardless of the amount or level of prior experience, all DrPH students must fulfill the Applied Practice Experience (APEx) requirement. Students are responsible for completion of at least one project that is meaningful for an organization and that helps to advance public health practice. With few exceptions, the field practice is completed after the first year

<sup>&</sup>lt;sup>8</sup> <u>https://www.publichealth.columbia.edu/academics/degrees/master-public-health/interprofessional-education</u>

of coursework. It should be conceptualized as a discrete experience that represents a first phase or precursor to the students' Integrated Learning Experience (ILE).

The APEx for students in the DrPH in Leadership in Global Health and Humanitarian Systems must address public health issues related to vulnerable, refugee, or displaced populations, and must be completed in a low- or middle-income country. Applied Practice Experiences addressing public health issues facing refugees, migrants and vulnerable populations within the US are also acceptable. Relevant organizations may include governmental, non-governmental, non-profit, industrial, and for-profit entities.

The APEx may take several forms and can include a single project or a set of related projects that demonstrate the students' competence. The deliverable must contain a reflective component that includes the student's expression of personal and/or professional reactions to the applied practice experience. This reflective component may take the form of a written product, a professional portfolio, or another deliverable as determined appropriate by the student, faculty advisor, and the site preceptor.

APEx sites can be identified in several ways, including through students' personal networks, faculty recommendations, and initiatives affiliated with HDPFH programs. The Office of Careers and Practice<sup>9</sup> also lists opportunities that may be of interest to DrPH students. The selection process must clearly address the needs of the agencies or organizations involved, and the site or agency must benefit from students' contributions and expertise. The APE should take place within an organization external to Columbia Mailman so that it is not merely an academic exercise, but application of learning to a "real world" setting. The applied practice experience may be completed within a student's own work setting.

The APE for doctoral students is designed to ensure that students have significant advanced-level practical experiences collaborating with practitioners, allowing opportunities to develop leadership competencies and contribute to the field. A minimum of five foundational and/or concentration-specific competencies must be identified, and clearly specified and described in the Scope of Work (SoW) form<sup>10</sup>. Students must fulfill at least one competency from the leadership, management, and governance domain. Competencies may differ from student to student. The SOW is approved by the student's faculty advisor and departmental administrator. The SOW form can be accessed through the Field Practice Canvas site. Students will automatically be invited to accept the invitation for this course. All relevant materials and forms will be available through this site. For more information, please contact msph-ofp@cumc.columbia.edu.

There is no minimum number of hours for the applied practice experience, but at least 8-10 weeks of field-based research is highly suggested. The final deliverable, either a portfolio or written product, will be assessed by the faculty advisor to ensure it meets a high standard and fulfills the required CEPH and Departmental competencies. Students are also required to make a presentation on the APE to the DrPH faculty and interested students during the first semester of the second year.

#### UNIVERSITY INTERNATIONAL TRAVEL POLICIES AND PROCEDURES

Columbia University has policies about international travel that apply to affiliates (students, officers of administration, and support staff) conducting Columbia-related (that is, not personal vacation) or Columbia-facilitated travel. These policies also apply to faculty, post-docs, and officers of research if they are accompanying students or support staff; these parties should also make sure that the students traveling in their party are following the policies. DrPH candidates who are not in residence (even if employed full time elsewhere) but are traveling for work related to their ILE or other Columbia-related (e.g., funded by Columbia) must also adhere to these policies.

The full policy on travel should be reviewed here<sup>11</sup>. Columbia retains an international travel emergency service, ISOS, that provides emergency medical, security and general travel assistance.

There is a list of steps that must be followed, depending on the official estimate of the risk of the destination. For all trips, at a minimum, the "affiliate" (student, staff, or faculty member) must first register the international travel<sup>12</sup>.

<sup>9</sup> https://www.publichealth.columbia.edu/academics/office-education/office-careers-and-practice <sup>10</sup> https://www.publichealth.columbia.edu/academics/office-education/careers-practice/departments/population-and-family-health-practicum

<sup>&</sup>lt;sup>11</sup> https://universitypolicies.columbia.edu/content/international-travel-planning-policy

<sup>&</sup>lt;sup>12</sup> https://globaltravel.columbia.edu/content/register-trip

Depending on the destination and risk rating, additional steps for approval will also be required:

- Insignificant-risk and Low-risk locations: required to register international Columbia Travel;
- <u>Medium-risk</u> locations: required to register international Columbia Travel and have their itinerary reviewed by ISOS.
- <u>High-risk</u> locations: required to register international Columbia Travel, have their itinerary reviewed by ISOS, and secure written approval from their dean or unit head;
- <u>Extreme-risk</u> locations: required to register international Columbia Travel, have their itinerary reviewed by ISOS, and secure written approvals from the Dean of the school (and, for CUMC affiliates, EVP of CUIMC).

Please note that high risk and extreme risk travel is exceedingly rare.

We recommend undertaking the travel approval process early. The Global Travel office at Columbia has several <u>helpful</u> <u>resources</u><sup>13</sup> around planning your trip.

<sup>13</sup> https://globaltravel.columbia.edu/content/plan-trip

## **IV. Registration**

Students may review and register for desired classes prior to the start of the term and confirm or amend course schedules during the add/drop period. Registration dates are published on the Columbia Mailman <u>academic calendar</u><sup>14</sup>. A student's final program of study is subject to approval by the student's Academic Advisor and the Program Director. Detailed information regarding the registration process can be found on Columbia Mailman's <u>registration website</u><sup>15</sup>, including instructions for students interested in cross-registration at another Columbia University school.

Additional information on registration policies and procedures may be found in the <u>Columbia University Mailman School</u> <u>of Public Health Student Handbook</u><sup>16</sup>, including the policies for taking courses pass/fail and auditing. In instances where content from the Columbia Mailman Student Handbook differs from the content of this departmental handbook, information found in the HDPFH Doctoral Student Handbook takes precedence.

#### **CONTINUOUS REGISTRATION**

Doctoral education is an investment in time and money for students, for the academic departments, and for the Columbia Mailman School. This investment is based on a mutual contract between the student and the department that includes providing students with opportunities to explore research interests, opportunities to develop academic advising and mentoring relationships, and access to other academic resources to carry out their academic goals. Because of this, it is important to ensure that each student's progress toward completion of his/her degree is being made at the appropriate pace expected of doctoral students. In support of this goal, the Columbia Mailman School has developed a policy of continuous enrollment for its DrPH students:

DrPH students must be continuously enrolled at the Columbia Mailman School. This continuous enrollment requirement will be in effect for the 36 points of academic coursework. Students who register for additional classes must pay the current Columbia Mailman tuition. To be continuously enrolled, after completion of academic coursework, DrPH students must register for one of the following in all spring and fall semesters:

#### DOCTORAL RESEARCH REGISTRATION:

- RSRH P0001 charged one credit of tuition full time status.
- RSRH P0003 must have department approval charged one credit of tuition part time status.

The continuous enrollment policy begins with the semester in which the student first enrolls in the DrPH program and continues through the semester in which the dissertation is deposited.

Waivers to the continuous registration requirement will be rare and considered on a case-by-case basis. Such rare cases should begin through a petition to the student's academic department with a recommendation from the department made to the Columbia Mailman School's Office of Student Affairs. Reasons for requesting a waiver would include maternity/paternity leave, serious personal illness, or other serious life events. Such a petition should include the reason for requesting the waiver and a proposed plan for completing the remaining DrPH degree requirements.

If any DrPH candidate fails to register for one continuous point of credit during a particular fall or spring semester without having been granted a waiver or leave, then the Office of Student Affairs will notify the student and the student's department at the start of that semester. To remain in good standing, the student will have to take one of the following actions:

- Register for one doctoral research credit immediately;
- Submit a formal request for leave; or
- Agree to some other arrangement with the approval of his/her advisor and department chair.

<sup>14</sup> https://www.publichealth.columbia.edu/academics/academic-calendar

<sup>&</sup>lt;sup>15</sup> https://www.publichealth.columbia.edu/academics/registration

<sup>&</sup>lt;sup>16</sup> https://www.publichealth.columbia.edu/people/current-students/academics/student-handbooks

Any student who misses one or more semesters without permission will have to pay for an additional point of credit for each semester missed at the time he/she registers once again. This above policy is consistent with the policy for PhD students at GSAS, who also must be continuously enrolled until graduation.

#### LEAVE OF ABSENCE

Students considering a leave of absences should consult the Columbia Public Health Student Handbook<sup>17</sup>.

<sup>&</sup>lt;sup>17</sup> <u>https://www.publichealth.columbia.edu/people/current-students/academics/student-handbooks</u>

# V. Integrative Learning Experience (ILE): Proposal and Defense

Historically, a professional practice DrPH at Columbia Mailman has been distinguished minimally from an academic research-based PhD. PhD and DrPH dissertations have had the same structure and requirements. The Integrative Learning Experience (ILE) for the DrPH is an opportunity for further differentiation. The PhD dissertation format and research base can serve as a foundation, but as described below, the DrPH ILE must have at its heart, doctoral level professional practice.

DrPH candidates will prepare an Integrative Learning Experience (ILE) demonstrating their ability to analyze and solve a complex, practice-based problem in public health. The ILE is expected to make a substantial contribution to the existing public health practice knowledge base. The format will be determined in large part by the nature of the public health problem students plan to address. It should reflect the variety of perspectives needed to analyze and ameliorate major public health problems and include explicit population-based policy and practice implications. DrPH ILEs are expected to provide support for ongoing public health field practice, while at the same time include sufficient context and transferability such that practitioners in other public health settings may gauge the usefulness of the findings for their own work.

#### Suggested ILE formats can include:

- Applied public health research
- Development and analysis of new practice interventions
- Design and implementation of public health programs
- Program or policy evaluations
- Historical program or policy analyses
- Case-studies and policy analyses

The following Table 3 is a quick snapshot of the key milestones involved in the design and development of the student's ILE.

#### Table 3. Developing the ILE: Snapshot of Key Milestones

Milestone	Description
Applied Practice Experience	Recommended as the first step in an ILE process. Practicum content and focus related to anticipated ILE. Paper submitted and presentation to DrPH students/faculty by the Fall semester of the second year.
Written and Oral Exams	Written methods exam assessed by Faculty during Spring semester of second year. Substantive oral exam based on students' selected content either Spring semester of second year and/or Summer between second and third year. CEPH competencies and content assessed through standard rubric.
Proposal Development Seminar	Seminar designed to help students prepare first draft of proposal during the Spring semester of the second year. Departmental Presentation to obtain feedback from faculty and DrPH students.
Selection/composition ILE committee	Student, Advisor and/or Sponsor discuss and identify Committee members in either Spring semester of second year and/or Summer between second and third year.
Developing and Defending Proposal	Draft and final proposal shared with Committee. Formal proposal defense is conducted either in Summer between second and third year or Fall of third year.
CEPH/Departmental Competencies addressed	CEPH and Departmental Competencies will be systematically included in the APE, ILE proposal assessment process. Competencies to be identified and documented by student, advisor, and Committee. (Appendix 2)
Completing ILE	Student works in close collaboration with Committee Sponsor and Chairman. Drafts are distributed throughout the process to all committee members for feedback between the third and fourth years of the program
Final ILE Defense	Committee review and approval or request for revisions during third or fourth year of the program. Students must complete the program within seven years from enrolment.

#### ILE FORMAT

The form, topic and scope of the ILE is proposed by the student. The student must defend his/her proposal prior to approval. The Applied Practice Experience may, but is not required to, inform the selection of the ILE. The ILE is expected to highlight the application of knowledge and skills acquired in policy, programmatic work and/or systems evaluation. It is also expected to represent the culmination of the development of a focused area of expertise by the student, demonstrating potential for practical applications within the student's professional context.

Students can choose between the following three options: (1) a single integrated monograph, (2) the three-paper option, or (3) substantive project format acceptable to the student's Committee.

Option 1. A single, integrative, coherent monograph that incorporates the following specified content:

- Statement of the public health problem/opportunity and the resulting research question
- Critical review of the scientific literature relevant to that problem or opportunity
- Conceptual framework that includes the relevant social, scientific, economic, political, environmental, human rights, administrative and/or cultural context
- Description of the study design or data sources and the analytical method(s) used to answer the research question
- Analysis results and their implications for the problem or opportunity under study
- Recommendations based on the findings of the study
- Strategy for implementing and evaluating the recommendations, taking into consideration the contextual factors identified in the conceptual framework

#### **Option 2. Three Paper Format**

A three-paper format will include three articles of publishable quality. In addition to the three papers, students should prepare an overall introduction highlighting the issues to be addressed within the papers as well as an integrative concluding section with implications for public health practice and/or policy. The three papers will be written with the goal of submission to a peer-reviewed journal.

#### **Option 3: Substantive Project Format**

Alternatively, students may choose a substantive project as their Integrative Learning Experience. In a substantive project, the student will work with an identified host agency or organization and detail a programmatic response to a specific public health problem. The programmatic response proposed may include designing an intervention or evaluating an intervention which has been implemented. A proposal for the proposed substantive project would need final approval by the DrPH Committee prior to undertaking and completing the project. Following completion of the substantive project work, a comprehensive written report summarizing the work is required and should outline the project goals, programmatic approach(es), methods and findings, strategies to move forward to act on or implement the findings of the project.

Past ILE submissions can be found through Columbia University Libraries<sup>18</sup>.

Three Paper Format:				
International Rescue Committee	Investigating the Health Care Experience of Refugees with Non-Communicable Disease (NCD) residing in urban settings in the Middle East and North Africa			
Columbia Global Center Amman				
Indonesia's Ministry of National Development UNICEF Puskapa	Ending Invisibility: Improving the Birth Registration System for and Advancement of Population Health in Indonesia			
Women's Refugee Committee UNICEF BRAC University	Adolescent pregnancy in humanitarian settings: A dissertation proposal for three papers exploring demand-side facilitators and barriers to adolescent contraceptive use			
Single Monograph:				
AMMD Columbia University Thamini Uhai, NGO Tanzania Ifakara Health Institute, Tanzania	Designing a birth companion program in Dar es Salaam: Application of Human Centered Design Approach (HCD)			

#### Table 4. Examples of Past ILE Monograph and 3 Paper Options

#### Substantive Project Examples:

Suggested examples of potential Substantive Projects are illustrated in the following examples.

• Preparation of the Terms of Reference for a technical collaboration between UNICEF and the Government of Bangladesh to advocate for sharpening the implementation of the National Action Plan for the Elimination of

<sup>&</sup>lt;sup>18</sup> <u>https://guides.library.columbia.edu/uarchives/thesis</u>

Child Marriage and changing gender norms. Develop Monitoring and Evaluation tools to inform policy. Use qualitative and quantitative methods to generate further evidence on (1) the household and contextual determinants of child marriage and (2) examine gender inequities in health outcomes related to child marriage.

- A review of the evidence available on the effectiveness of working in consortia in tackling complex developmental and humanitarian challenges. Provide a synthesis of the literature on the wider field of multi-stakeholder partnerships. Include short illustrative case studies of the evidence on (1) the impact of working in consortia and (2) lessons learned for donors supporting consortia and (3) recommendations for future consortia developments.
- An analysis of the development, validation, feasibility, and effectiveness of an innovative mobile health (mHealth) intervention for marginalized and refugee populations. Utilizing an emerging technology platform, the goal of this program is to catalyze innovation through multidisciplinary research that addresses global health problems, develop an evidence base for the use of mHealth technology to improve clinical and public health outcomes, and strengthen mHealth research capacity among refugees and marginalized populations.

#### FORMING THE ILE COMMITTEE

#### ILE SPONSOR

The Integrative Learning Experience (ILE) Sponsor provides key subject matter and/or methodological guidance to students with regards to their ILE. The ILE Sponsor is usually identified during the second year of study. The appointment of an ILE Sponsor is formalized by the DrPH Program Director and the Vice Chair of Education after discussion with the student, their Academic Advisor, and other relevant faculty. While students are actively involved in the process of identifying potential sponsors, it is not appropriate for a student to invite faculty to officially serve as their ILE Sponsor. The responsibilities of the ILE Sponsor are summarized below. Although the role of the Sponsor and the Academic Advisor are distinct, the Academic Advisor can be selected as the ILE Sponsor if the Advisor is willing and possesses relevant expertise.

#### ILE Sponsor: Roles and Responsibilities

- Work with the students to: define an ILE project, identify appropriate data, discuss possible committee members construct a timeline for completing proposal and research steps
- Finalize the selection of committee members and present them to the Program Director for approval
- Formally request committee members' and the Chair's agreement to participate on the ILE committee
- Determine when the student's proposal is ready for defense
- Once student is ready to defend their ILE, contact the Chair to request a time/date for the defense.
- · Communicate with the student about any revisions following the proposal defense or the ILE defense
- Serve on the student's ILE Committee

Prior to forming an ILE committee, the student should meet with their Academic Advisor to identify potential Sponsors. Potential sponsors are then proposed to, and formalized by, the Program Director after discussion with the student, their Academic Advisor, and other relevant faculty. Once a proposed Sponsor is identified, the Academic Advisor will extend a formal invitation.

Once the Sponsor is identified and agrees to serve the role, the student, and the Sponsor work together to define an ILE project, identify appropriate data, discuss possible committee members, and construct a timeline for completing the proposal and research steps. The selection of the ILE committee typically occurs between Spring semester of second year and/or Summer between the second and third year. Support in this process is also provided to students in their second-year doctoral seminar, ILE Proposal Writing Seminar (P9651; 1.5 credit doctoral seminar).

#### COMPOSITION OF THE ILE COMMITTEE

The ILE Committee for the DrPH is composed of a minimum of five faculty members: a Sponsor, a Chair, and three additional Readers. At least two of the committee member faculty must hold the rank of Associate Professor or higher (senior faculty), two members usually hold the rank of Associate Professor or lower (junior faculty), and at least one must be from outside the Department of Population and Family Health. A senior faculty member other than the candidate's ILE Sponsor is designated to be the Chair of the Committee. Special justification must be provided for the proposed inclusion of adjunct faculty, or faculty from outside Columbia. The Sponsor will finalize the selection of committee members and again present the nominations to the Program Director for approval. Then, it is the responsibility of the Sponsor, not the student, to formally request committee members' and the Chair's agreement to participate; however, it is expected that the student will have input into their selection and be introduced to faculty they may not know.

The role of the Chair of the Committee is to ensure that the ILE process moves forward smoothly in accordance with guidelines. In the event conflict arises between the student and the Sponsor or another committee member, the Chair will serve as the mediator. The Chair is responsible for coordination and communication during the ILE phase of the program. The student works with the committee Chair and committee members to identify potential dates for the proposal defense. The Chair will extend a formal ILE invitation to committee members and identify a timeline by which to report results. The responsibilities of the Committee members are summarized in Table 5.

Role and Responsibility	Sponsor	Chair	Committee Members 3-5
Functions	Serves as the primary point of contact for the student and the DrPH Committee; invites Committee members and coordinates feedback to student, determines when student is ready to proceed to the next stage.	Chairs the Committee and signs off on all required paperwork	Contribution in area of expertise to the project and provides feedback and evaluation milestones.
Feedback	Primary faculty provides proposal feedback and is responsible for prompt and timely feedback. Sets timeline, determines process, and coordinates the review and timely feedback of committee members.	Reviews and offers timely feedback on area of expertise for proposal drafts and deliverables. Should provide resources guidance of area of expertise and ask question for deepening project.	Reviews and offers timely feedback on area of expertise for proposal drafts and deliverables. Should provide resources guidance of area of expertise and ask question for deepening project.
Evaluation	Ensures student meets the expectations identified to the satisfaction of all committee members. Coordinates final evaluation in accordance with CEPH and Departmental Competencies.	Prepares all written documentation, summarizes committee feedback, completes, and submits approval forms to DrPH Coordinator	Provides substantive feedback to ensure student meets and complies with the criteria defined and expected to meet the standards defined by the committee.

#### Table 5. Role and Responsibilities of ILE Committee Members

#### PROPOSAL DEVELOPMENT

An effective dissertation proposal clarifies (a) what the student proposes to study, (b) why the student proposes this focus, (c) how the student proposes to perform the research, (d) when various stages of the research will be completed. There are common challenges in constructing a proposal. Effective proposals ensure that (a) the research objectives are focused and avoid questions that are too broad and cannot be clearly defined, and (b) the proposed research is manageable with respect to the time available.

Excluding references, the proposal should be approximately 25-30 pages (single-spaced), excluding references, and include the following sections:

- Goal and Specific Aims
- Relevance of the problem to public health
- Background and Significance
- Research Design and Methods
- Anticipated Schedule
- Ethics and IRB
- References

A detailed outline of the proposal format is included in Appendix 7A and 7B. Beyond covering the topics listed above, the Department has no specific expectations regarding the precise format and content of the proposal, which varies among the social science departments and disciplines. The student's sponsor is responsible for assisting the student in developing a suitable format for the proposal.

Students must submit a completed, formal written proposal and make an oral presentation based on that proposal to their DrPH Committee. A similar format is to be used whether the student intends to write up their ILE in the form of a single thesis, three linked papers, or a substantive project. Irrespective of the ultimate form of the ILE, the goal is the articulation of a systematic investigation to address a focused research question.

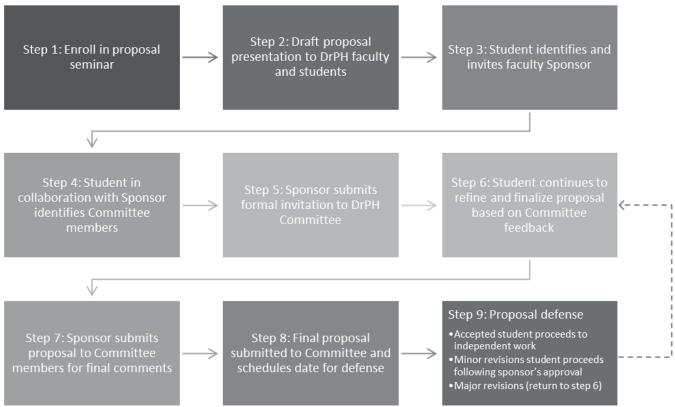
#### PROPOSAL DEFENSE

The ILE Sponsor will determine when the proposal is ready for defense. Proposals are then submitted to all DrPH Committee Members. There is a great deal of variation in the extent to which students solicit input from members of the dissertation proposal defense committee in advance of the meeting. In some cases, the proposal a student distributes two weeks before the defense will be the first version a faculty member reads. In other cases, in addition to working closely with the Sponsor, a student has shared multiple drafts of the proposal with several members of the committee. Although the primary responsibility for mentoring a student falls to the Sponsor, students are encouraged to share their work as it develops, and when the sponsor feels that it is ready, with those members of their committee who are available and willing to provide input at an earlier stage. It is the Sponsor's responsibility to ensure that all committee members receive the final proposal at least two weeks before the scheduled defense.

Once the Sponsor has determined that the proposal defense is ready to be scheduled, the student works with the committee Chair and committee members to identify potential dates for the proposal defense. The Chair will extend a formal ILE invitation to committee members and identify a timeline by which to report results.

During the proposal defense, the student should outline the project, discuss its methods and substance, and explain the rationales underlying decisions that were made as the proposal developed. The proposal defense generally lasts between 1.5 to 2 hours. The Committee will take a critical look at the research plan with the aim of ensuring the student will execute an adequate and feasible study. The student may be asked to revise the proposal if the committee members agree that there are weaknesses in the plan that are not resolved during the meeting. Another meeting of the Committee may be convened before the proposal is approved. The Committee will complete the ILE Proposal Defense Form (Appendix 10) and send to the DrPH Graduate Assistant. The steps involved in the proposal development and defense process are summarized in Figure 2.





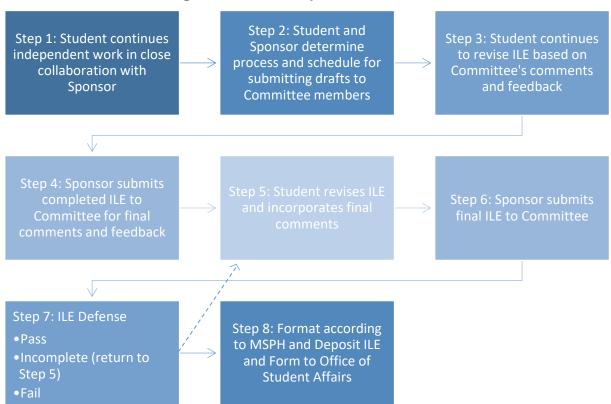
The meeting should be viewed as a working conference, where the committee takes a critical look at the research plan with the aim of protecting the student from attempting to execute an inadequate and unfeasible plan. Any differences among committee members concerning the adequacy of the plan should be resolved among themselves during the meeting. If the committee members agree that there are weaknesses in the plan that are not resolved during the meeting, the student may be asked to revise the proposal. Depending on the extent of the revisions, another meeting of the committee may be convened before the proposal is approved.

Target dates for completion of various steps should be set when the proposal is approved, not to constrain the student, but to give a standard against which to evaluate satisfactory progress. Unanimous approval must be obtained from the Committee before the student can proceed with the dissertation. It is the responsibility of the Chair to inform the DrPH Program Director of the approval of the dissertation proposal. A copy of the approved proposal should be given to the DrPH Program Director to be kept on file.

#### ILE PROGRESSION

Once the student's proposal has been approved and IRB approval, if needed, is obtained, dissertation /ILE research can begin. Additional information about IRB requirements is provided in Appendix 8. The student should maintain regular and ongoing contact with their ILE Sponsor for further guidance. Students are responsible for establishing ongoing communication with the Committee members regarding their progress. The steps involved in the development and defense of the ILE are indicated in the illustration below (Figure 3).

The successful defense of an ILE is the final eligibility criterion for the DrPH degree. The ILE demonstrates the student's capacity to conduct original research and to present findings in a scholarly manner, along with a demonstrated understanding of public health professional practice leadership. The student uses their acquired social science knowledge and skills to investigate a problem in the health field, along with the application of their learning in public health practice. The student's research may involve the collection of data, or may be an analysis, from a new point of view, of data that has been previously collected. The student should view the ILE as a demonstration of research competence, and not necessarily expect to provide definitive answers to the theoretical questions posed. Students are urged to discuss possible ILE topics with several faculty members. Incorporated within the ILE is the development of a detailed plan for change that demonstrates the student's understanding and application of public health practice and leadership.



#### Figure 3. ILE Development and Defense

#### FORMAT OF THE ILE DEFENSE

The defense will be scheduled when both the ILE Sponsor and at least one other Committee Member have signified that, in their judgment, the ILE is acceptable and thus, ready for a formal defense. At this point the ILE Sponsor will contact the Chair and request a time and date for the defense to be scheduled. The defense should be scheduled at least 6-8 weeks prior to the anticipated graduation date.

The closed-door defense portion is attended by the student and his/her committee members and will last for approximately 2 hours. The Chair of the committee runs the defense, which begins with a short discussion (without the student present) to determine the general focus of the defense. Next, the student makes a presentation, 20-30 minutes in length, highlighting the conclusions of the ILE research with respect to data sources, findings, interpretations, and conclusions. The candidate is expected to show expertise regarding the research and literature pertinent to his or her subject matter and the knowledge relevant to the research questions and methods.

Following the presentation, committee members ask questions about the research and its implications. After the questioning is completed, the student is asked to leave the room while the committee deliberates. Committee members discuss whether the ILE is adequate, what revisions are required, and whether the ILE merits an award of distinction. For those candidates whose ILEs are deemed acceptable pending minor revisions, the Chair of the Committee shall, at the conclusion of the defense, call for a closed vote of committee members as to whether the degree should be awarded a distinction. A unanimous vote is required. Candidates are then called back into the examination room and informed of the results. To be judged acceptable, the ILE must meet current standards in the student's ILE topic and must add to the existing knowledge or concepts in the field. It is the responsibility of the Sponsor to communicate with the student about required revisions. Depending on the level of revision needed, the Sponsor and/or additional members of the committee will review the revised portions and determine whether the revisions are acceptable.

#### ILE OUTCOMES

Three outcomes are possible:

#### Pass

The ILE is acceptable subject to minor revision (mainly editorial). Upon satisfactory completion of the required revisions, as judged by the Chair of the ILE Committee, the student is recommended for the DrPH degree. The student should deposit the revised ILE along with a Dissertation Defense Form signed by all who reviewed and accepted revisions (if applicable), no later than six months after the date of the ILE defense to Carlos Correa in the Office of Enrollment Services.

#### Incomplete

The ILE is deemed acceptable, subject to major revisions. Upon satisfactory completion of the required revisions, as judged by a minimum of three members of the committee, the student is recommended for the DrPH degree. All revisions must then be satisfactorily completed, and the ILE deposited no sooner than three months, and no later than one year from the date of the ILE defense.

#### Fail

The ILE is not acceptable, and the student is not recommended for the DrPH degree. This result is unlikely if the student has worked closely with the faculty sponsor and has received adequate guidance. In exceptional circumstances-marked by an awareness of significant and substantive factors not known to the committee at the time of the initial examination- a candidate may be offered a second opportunity to demonstrate that the work has been strengthened to a passing standard.

#### **ILE DEPOSIT**

There are three steps to completing a dissertation deposit. These steps can be done in any order, but a deposit is only considered complete when the student has completed all 3 steps.

- 1. Complete the required Survey of Earned Doctorates<sup>19</sup>
- 2. Upload and submit a PDF copy of the dissertation to <u>ProQuest ETD Administrator<sup>20</sup></u>. This is the ILE deposit.
- 3. Submit a Dissertation Defense Form (Appendix 10) signed by all committee members that certifies that all required revisions have been completed and that the dissertation has been approved for deposit by the student's Sponsor and Program Director.

There are specific formatting requirements for the student's dissertation. Visit the GSAS website to view the <u>guide to</u> <u>formatting</u><sup>21</sup>.

<sup>&</sup>lt;sup>19</sup> <u>https://sed-ncses.org/GradDateRouter.aspx</u>

<sup>&</sup>lt;sup>20</sup> https://secure.etdadmin.com/cgi-bin/school?siteId=494

<sup>&</sup>lt;sup>21</sup> https://gsas.columbia.edu/student-guide/dissertation/formatting-guidelines

Students must not leave this process for the last day of a deposit deadline. Faculty do their best to provide feedback regarding formatting and other matters as quickly as possible, but it is ultimately the student's responsibility to ensure that all parts of the deposit are completed by the deadline, including a correctly formatted dissertation. The Office of Student Affairs (OSA) reviews every dissertation that is submitted. **Thus, it is best if students deposit their dissertation/ILE approximately 2 weeks prior to the degree award date.** This ensures that the student receives feedback from the Office of Student Affairs on formatting and other matters in a timely manner. The degree conferral date varies by calendar year and can be found on the school's <u>Academic Calendar<sup>22</sup></u>.

There is no processing fee required from DrPH students in the Department Population and Family Health for the deposit of the dissertation. Visit the <u>GSAS Electronic Deposit FAQs</u><sup>23</sup> for further information.

#### FILING FOR GRADUATION

Degrees are granted three times a year by the University: October, February, and May. Students may file an application for graduation when they anticipate fulfillment of all degree requirements by the anticipated graduation date. The filing deadlines are absolute and are the strictest in the University. It is the student's responsibility to file for graduation on time.

Graduation application date deadlines can be found at the Columbia University <u>Mailman School of Public Health</u> <u>Graduation website<sup>24</sup></u>. Students must fill out the graduation application shared with students by the Office of Enrollment Services by the specified deadline. The degree conferral date varies by calendar year and can be found on the school's <u>Academic Calendar</u>.

The Dissertation Defense Form should be signed by all Committee members. The DrPH Graduate Assistant will send the signed form to the Office of Enrollment Services: <u>msph-enrollment@cumc.columbia.edu</u>.

<sup>22</sup> https://www.publichealth.columbia.edu/academics

<sup>&</sup>lt;sup>23</sup> https://gsas.columbia.edu/student-guide/dissertation/electronic-deposit-fags

<sup>&</sup>lt;sup>24</sup> https://www.publichealth.columbia.edu/academics/policy-and-procedures/graduation

## VI. Appendices

# Appendix 1A: Leadership in Global Health and Humanitarian Systems Departmental Competencies

#### COMMUNICATION AND ADVOCACY

1. Apply communication strategies across diverse and marginalized audiences in low-income and resourcepoor communities to inform individual, organization, community, and policy actions

- Synthesizes evidence to create persuasive policy and practice guidance documents
- Integrates culturally competent concepts in all communication initiatives
- Communicate with partners to identify priorities and articulate goals
- Demonstrates both oral and written skills for communicating with local, national, and global- level partners.

#### **PROFESSIONALISM AND ETHICS**

## 2. Identify, analyze, and act on the ethical concepts of social justice and human rights in public health research and practice

- Manage potential conflicts of interest encountered by practitioners, researchers, and/or organizations
- Design strategies for resolving ethical concerns in research, law, and regulations
- Assess ethical considerations in developing research initiatives
- Weigh risks, benefits, and unintended consequences of research and practice
- Balance claims of personal liberty with the responsibility to protect and improve the health of the population

#### COMMUNITY ENGAGEMENT AND CULTURAL SENSITIVITY

3. Develop strategies to engage communities in the design of health and protection services for at-risk, marginalized, internally displaced and refugee populations

- Facilitates and develops collaborative partnerships with donors, researchers, local policy makers, and implementing partners
- Integrates culturally appropriate participatory research methodologies into prevention and research projects
- Assesses cultural influence on communities' health attitudes, beliefs and practices
- Demonstrates both personal and professional ability to understand and acknowledge the impact of cultural values and norms on health outcomes.

#### **CRITICAL ANALYSIS & IMPLEMENTATION SCIENCE**

4. Synthesize and propose innovative research methodologies from a broad range of disciplines to strengthen the capacity of health systems to provide access to quality health services for at-risk families and marginalized communities in resource-poor communities

- Synthesize and present information from multiple sources to inform research and practice
- Evaluate the performance and impact of health programs, policies, and systems
- Analyze the impact of global trends and interdependencies on public health challenges and systems
- Apply theoretical and evidence-based perspectives from multiple disciplines in the design and evaluation of programs, policies, and systems to promote the health and well-being of marginalized populations.

#### LEADERSHIP AND MANAGEMENT IN GLOBAL HEALTH AND HUMANITARIAN SETTINGS

## 5. Develop strategies for working with local and international non-governmental organizations to develop partnerships and networks, ensure sustainable programs, and scale up evidence-based approaches

- Create and communicate a shared vision
- Increase leadership capacity in order to inspire trust and motivate inter-agency partners
- Provide strategic and operational guidance within public and/or private health organizations
- Use evidence-based strategies to enhance essential public health services and programs

## Appendix 1B: CEPH DrPH Foundational Competencies

#### Data & Analysis

- 1. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels
- 2. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue
- 3. Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring and evaluating policies and programs and to address a population's health

#### Leadership, Management & Governance

- 4. Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders, and other partners
- 5. Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies
- 6. Integrate knowledge, approaches, methods, values and potential contributions from multiple professions, sectors, and systems in addressing public health problems
- 7. Create a strategic plan
- 8. Facilitate shared decision making through negotiation and consensus-building methods
- 9. Create organizational change strategies
- 10. Propose strategies to promote inclusion and equity within public health programs, policies, and systems
- 11. Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency
- 12. Propose human, fiscal, and other resources to achieve a strategic goal
- 13. Cultivate new resources and revenue streams to achieve a strategic goal

#### **Policy & Programs**

- 14. Design a system-level intervention to address a public health issue
- 15. Integrate knowledge of cultural values and practices in the design of public health policies and programs
- 16. Integrate scientific information, legal and regulatory approaches, ethical frameworks, and varied stakeholder interests in policy development and analysis
- 17. Propose interprofessional and/or intersectoral team approaches to improving public health

#### **Education & Workforce Development**

- 18. Assess an audience's knowledge and learning needs
- 19. Deliver training or educational experiences that promote learning in academic, organizational or community settings
- 20. Use best practice modalities in pedagogical practices

### Appendix 2A: Documentation of Competencies for APEx

#### CEPH DrPH APEx Overall Assessment | Competency Attainment Department of Population and Family Health

#### **Student Name:**

Faculty Advisor:

Date:

The DrPH student's work must reinforce attainment of a minimum of **five foundational and/or departmental-specific competencies**. One of the five competencies must be from the foundational "Leadership, Management, and Governance" domain (F4-13).

#### **CEPH DrPH Foundational Competencies**

Competency	Faculty Assessment	Faculty Comments			
	Data and Analysis				
☐ F1 Explain qualitative, quantitative, mixed methods, and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community, and population) levels	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>				
F2 Design a qualitative, quantitative, mixed methods, policy analysis, or evaluation project to address a public health issue	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>				
□ F3 Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring, and evaluating policies and programs and to address a population's health	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>				
Leadership, Management and Governance					
☐ F4 Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders, and other partners	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>				

		1
□ F5 Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	
□ F6 Integrate knowledge, approaches, methods, values, and potential contributions from multiple professions, sectors, and systems in addressing public health problems	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	
□ F7 Create a strategic plan	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	
F8 Facilitate shared decision making through negotiation and consensus-building methods	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	
□ F9 Create organizational change strategies	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	
□ F10 Propose strategies to promote inclusion and equity within public health programs, policies, and systems	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	
☐ F11 Assess one's own strengths and weaknesses in leadership capacities, including cultural proficiency	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	
□ F12 Propose human, fiscal, and other resources to achieve a strategic goal	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	
□ F13 Cultivate new resources and revenue streams to achieve a strategic goal	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>	

Policy and Programs			
☐ F14 Design a system-level intervention to address a public health issue	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
F15 Integrate knowledge of cultural values and practices in the design of public health policies and programs	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ F16 Integrate scientific information, legal and regulatory approaches, ethical frameworks, and varied stakeholder interests in policy development and analysis	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ F17 Propose interprofessional and/or intersectoral team approaches to improving public health	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
	Education and Workforce Development		
□ F18 Assess an audience's knowledge and learning needs	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ F19 Deliver training or educational experiences that promote learning in academic, organizational, or community settings	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
☐ F20 Use best practice modalities in pedagogical practices	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience</li> </ul>		

# Departmental DrPH Competencies | Department of Population and Family Health

Competency	Faculty Assessment (check the appropriate box)	Faculty Comments
□ D1 Apply communication strategies across diverse and marginalized audiences in low-income and resource-poor communities to inform individual, organization, community, and policy actions	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience</li> </ul>	
<ul> <li>D2</li> <li>Identify, analyze, and act on the ethical concepts of social justice and human rights in public health research and practice</li> </ul>	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience</li> </ul>	
D3 Develop strategies to engage communities in the design of health and protection services for at- risk, marginalized, internally displaced and refugee populations	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience</li> </ul>	
□ D4 Synthesize and propose innovative research methodologies from a broad range of disciplines to strengthen the capacity of health systems to provide access to quality health services for at- risk families and marginalized communities in resource-poor communities.	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience</li> </ul>	
D5 Develop strategies for working with local and international non-governmental organizations to develop partnerships and networks, ensure sustainable programs, and scale up evidence- based approaches	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience</li> </ul>	

# Appendix 2B: Documentation of Competencies for ILE

# CEPH DrPH ILE Overall Assessment | Competency Attainment Department of Population and Family Health

#### **Student Name:**

**Faculty Sponsor:** 

Date:

The DrPH student's work product or products must reinforce attainment of a minimum of **three foundational and/or departmental-specific competencies**. At least one must be foundational, and one must be departmental.

CEPH DrPH Foundational Competencies			
Competency	Faculty Assessment		
Data and Analysis			
F1 Explain qualitative, quantitative, mixed methods, and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community, and population) levels	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ F2 Design a qualitative, quantitative, mixed methods, policy analysis, or evaluation project to address a public health issue	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ F3 Explain the use and limitations of surveillance systems and national surveys in assessing, monitoring, and evaluating policies and programs and to address a population's health	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
Leadership, Management and Governance			
☐ F4 Propose strategies for health improvement and elimination of health inequities by organizing stakeholders, including researchers, practitioners, community leaders, and other partners	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
F5 Communicate public health science to diverse stakeholders, including individuals at all levels of health literacy, for purposes of influencing behavior and policies	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		

□ F6	□ 1 - low/novice understanding and experience.		
Integrate knowledge, approaches, methods, values, and potential contributions from	$\Box$ 2 - moderate/solid understanding and experience.		
multiple professions, sectors, and systems in addressing public health problems	□ 3 - high/expert understanding and experience.		
□ F7	□ 1 - low/novice understanding and experience.		
Create a strategic plan	□ 2 - moderate/solid understanding and experience.		
	□ 3 - high/expert understanding and experience.		
□ F8	□ 1 - low/novice understanding and experience.		
Facilitate shared decision making through negotiation and consensus-building methods	□ 2 - moderate/solid understanding and experience.		
	□ 3 - high/expert understanding and experience.		
□ F9	□ 1 - low/novice understanding and experience.		
Create organizational change strategies	□ 2 - moderate/solid understanding and experience.		
	□ 3 - high/expert understanding and experience.		
□ F10	□ 1 - low/novice understanding and experience.		
Propose strategies to promote inclusion and equity within public health programs,	□ 2 - moderate/solid understanding and experience.		
policies, and systems	□ 3 - high/expert understanding and experience.		
□ F11	□ 1 - low/novice understanding and experience.		
Assess one's own strengths and weaknesses in leadership capacities, including cultural	2 - moderate/solid understanding and experience.		
proficiency	□ 3 - high/expert understanding and experience.		
□ F12	□ 1 - low/novice understanding and experience.		
Propose human, fiscal, and other resources to achieve a strategic goal	2 - moderate/solid understanding and experience.		
	□ 3 - high/expert understanding and experience.		
□ F13	□ 1 - low/novice understanding and experience.		
Cultivate new resources and revenue streams to achieve a strategic goal	2 - moderate/solid understanding and experience.		
	□ 3 - high/expert understanding and experience.		
Policy and Programs			
□ F14	□ 1 - low/novice understanding and experience.		
Design a system-level intervention to address a public health issue	□ 2 - moderate/solid understanding and experience.		
	□ 3 - high/expert understanding and experience.		
□ F15	□ 1 - low/novice understanding and experience.		
Integrate knowledge of cultural values and practices in the design of public health	□ 2 - moderate/solid understanding and experience.		
policies and programs	□ 3 - high/expert understanding and experience.		

□ F16 Integrate scientific information, legal and regulatory approaches, ethical frameworks, and varied stakeholder interests in policy development and analysis	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ F17 Propose interprofessional and/or intersectoral team approaches to improving public health	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
Education and Workforce Development			
□ F18 Assess an audience's knowledge and learning needs	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ F19 Deliver training or educational experiences that promote learning in academic, organizational, or community settings	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ F20 Use best practice modalities in pedagogical practices	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		

Departmental Competencies			
Competency	Faculty Assessment		
D1 Communication and Advocacy Apply communication strategies across diverse and marginalized audiences in low- income and resource-poor communities to inform individual, organization, community, and policy actions	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		
□ <b>D2 Professionalism and Ethics</b> Identify, analyze, and act on the ethical concepts of social justice and human rights in public health research and practice	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>		

Develop strategies to engage communities in the design of health and protection services for at-risk, marginalized, internally displaced and refugee populations	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>
□ D4 Critical Analysis & Implementation Science Synthesize and propose innovative research methodologies from a broad range of disciplines to strengthen the capacity of health systems to provide access to quality health services for at-risk families and marginalized communities in resource-poor communities.	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>
D5 Leadership and Management in Global Health and Humanitarian Settings Develop strategies for working with local and international non-governmental organizations to develop partnerships and networks, ensure sustainable programs, and scale up evidence-based approaches	<ul> <li>1 - low/novice understanding and experience.</li> <li>2 - moderate/solid understanding and experience.</li> <li>3 - high/expert understanding and experience.</li> </ul>

# Appendix 3: Personal Learning Plan<sup>25</sup>

This reporting template is used to document key goals and objectives for an individual's education through the taught and research elements of the DrPH program. It is a key document for structuring discussions between doctoral students, their advisors and the DrPH program director. It also serves as an on-going record of achievement through the course of the doctoral program.

Doctoral Student Name:

E-mail:

Academic Advisor:

E-mail:

ILE Sponsor: (to be assigned during second year of program) E-mail:

# Preliminary Doctoral Education Program Goals and Objectives

Doctoral students should record below a preliminary statement of goals and objectives for the first year of doctoral study (specifying thoughts regarding substantive areas of study and methodological/analytical skills to be developed), longer term objectives for leadership contribution within the field of global health and humanitarian systems, and any early ideas regarding potential focus of dissertation/ILE fieldwork in year three of the program. None of these statements are binding, but they form a basis for initial discussions with the DrPH Program Director and Academic Advisors.

(a) Preliminary statement of goals and objectives for the first year of doctoral study:

<sup>&</sup>lt;sup>25</sup> This is a condensed format of the Personalized Learning Plan. This form will be distributed to students in the program and copies can be requested from program administrators.

<b>Confirmed Doctoral Education</b>	<b>Program Goals</b>	and <b>Objectives</b>
-------------------------------------	----------------------	-----------------------

WITHIN THE FIRST SEMESTER, the following section should be completed and approved by both the doctoral student and his/her Academic Advisor. The statement should include details of the proposed **substantive foci** of taught classes, specific **methodological or analytic skills** that are to be targeted, and broader **professional and managerial competences** regarding research that are to be developed in the first year of study.

The above represents the agreed goals of the first year of the planned doctoral program.

**Doctoral Student:** 

Academic Advisor:

Date:

Date:

The above objectives are agreed to be coherent with the overall objectives and requirements of the DrPH in Leadership in Global Health & Humanitarian Systems.

DrPH Program Director:

# **Doctoral Education Program: Mid-Year Review**

A Mid-Year review involving the doctoral student and his/her Academic Advisor should be conducted by the END OF THE SECOND SEMESTER of study. The focus is on progress toward the attainment of targeted goals and objectives and any adjustments required in the Doctoral Education Plan.

Review the goal and objectives specified above, noting evidence of progress, and any challenges that have arisen. Adjustments to the Doctoral Education Plan should also be noted. Note proposals for fulfilling the DrPH practicum requirement (of special relevance for students without a prior MPH).

Summary of Overall Progress

**Progress on Specific Goals and Objectives** 

Proposal for Fulfillment of Practicum Requirement

Specifying proposed work or field study relevant to the overall learning plan in fulfillment of specified CEPH Practicum requirements.

Required Adjustments to the Agreed Doctoral Education Plan

The above represents an agreed statement on progress regarding the Doctoral Education Program, and appropriate adjustments to the program that are required in order to complete a satisfactory outcome regarding overall goals of the DrPH in Leadership in Global Health and Humanitarian Systems.

**Doctoral Student:** 

Date:

Academic Advisor:

The above report documents satisfactory progress – and appropriate revision to initial objectives for attainment of required goals for the DrPH in Leadership in Global Health and Humanitarian Systems.

DrPH Program Director:

Date:

Date:

# **Doctoral Education Program: End of First Year Review**

An End-of-Year review involving the doctoral student and Academic Advisor should be conducted in EARLY SEPTEMBER of the second year of study. The focus is on the extent to which targeted goals and objectives (adjusted, as appropriate at the mid-year review) have been met and agreeing objectives for the second and third years of the program.

**Summary of Overall Achievement** 

Attainment of Specific Goals and Objectives

Proposals for Development on the Second and Third Year of the Program		
The above represents an agreed upon statement on achievement with respect to the specified Doctoral Education Program, and proposals for later years of study.		
Doctoral Student:	Date:	
Academic Advisor:	Date:	
The above documents satisfactory progress towards the attainment of the objectives and		
requirements of the DrPH in Leadership in Global Health and Humanitarian Systems.		
Program Director:	Date:	

# Appendix 4: HDPFH Tutorial Form

This form must be completed and returned to the HDPFH Director of Academic Programs, prior to the start date of the Tutorial.

Course Information Course No: \* PUBHP Section: Call No.: Credits: Term: Start Date: End Date:

Grading Option (Please select the appropriate grading option when you register.)

Pass/Fail

Letter Grade

\*See Director of Academic Programs for the course number, section, and call number.

\*\* A 3-credit tutorial should, on average, involve 9 hours of work per week, a 2-credit tutorial should involve about 6 hours per week, and a one-credit tutorial should involve about 3 hours per week. **Tutorials over 3 credits must be approved by the Director of the DrPH Program.** 

### **Course Title:** Click here to enter text.

Overview:

Click here to enter text.

# **Objectives:**

Click here to enter text.

### Methods:

Click here to enter text.

### Work to be Submitted:

Click here to enter text.

# **Evaluation Criteria:**

Click here to enter text.

Student Name: Signature:	Date:	Click here to enter a date.
Faculty Name:	Date:	Click here to enter a date.
Signature:		

If the tutorial is for more than 3 credits, approval from the academic program director is required:

Faculty Name:

Signature:

Date:

# Appendix 5: Summary of Required and Core Courses

# **DrPH Courses – First Year**

#### Semester 1:

#### Columbia University Mailman School of Public Health DrPH Core

All DrPH students across the departments of Columbia Mailman School are required to take the following courses in their first year of study:

#### Case Studies in Public Health Practice & Leadership I (P9070, 1.5 credits)

The practice of public health requires applying public health principles, frameworks, and knowledge in contexts characterized by uncertainty, risk, competing interests, and conflicting values. The course presents foundational theoretical lenses that can help you (as current and future public health professionals) to understand, accommodate, and shift these risks, interests, and values. You will apply these lenses to case studies of actual events that exemplify the complex facets of public health practice. The course immerses students in the arena of public health problem framing, priority setting, decision-making, and debate, placing them in the role of stakeholders and policymakers who must marshal both their core knowledge and disciplinary perspectives to explore different options and create and justify interdisciplinary responses to public health challenges. The cases also provide an opportunity to identify crosscutting themes and questions that shape the discovery of new knowledge and the practice of public health. Equally important for DrPH students, the case method teaches behaviors critical to professional success, including stakeholder analysis, public speaking, and judgment.

#### **Departmental Courses**

The first year provides a strong foundation in systems thinking, program development and evaluation, research methods and substantive areas of global health and humanitarian intervention. Students register for the following classes:

#### Principles and Policy for Global Health & Humanitarian Systems 1 (P9672, 1.5 credit doctoral seminar)

This course serves as a foundational doctoral class for the DrPH in Leadership in Global Health and Humanitarian Systems. In this first semester, students will build their capacity for critical reflection on global health problems and begin to acquire the skills and tools for transformational leadership in their chosen areas of work and study. Students will be introduced to some core concepts and tools that they will employ over the course of the year to analyze problems, develop plans of action in response, and shape their own identity as effective actors in global health. Students will have the opportunity to reflect on their own goals and their personal areas of academic strength and weakness. Students complete readings and associated critical and reflective assignments ahead of class sessions. Class discussions generally are focused on a given trend in global health, the political and economic interests that drove it and the effectiveness and impact of given interventions. Students are further asked to explore new pathways to systems-based approaches to address emerging global health and humanitarian challenges.

#### Public Health and Humanitarian Action (P8687, 3 credits)

Global events over the past two decades indeed suggest that the world needs a humanitarian system capable of responding reliably, effectively and efficiently across a full range of emergencies. This course examines efforts to provide humanitarian assistance and protection in war and disaster crises. It combines the theoretical with the possible, highlighting constraints to action from the perspective of the humanitarian agency and professional worker in the field. The practice of public health focuses on improving the technical and organizational capacities, but this course will display that political forces are equally essential for alleviating human suffering. Particular attention is paid to human rights and humanitarian protection, including their nature, content, and linkages with public health assistance. Students will be exposed to current trends and debates, sides will be taken and defended, and the class will be enriched by the participation, contributions and challenges of the students.

#### Semester 2:

### Columbia University Mailman School of Public Health DrPH Core

All DrPH students across the departments of Columbia Mailman School are required to take the following courses in their first year of study:

### Seminar in Managerial and Organizational Behavior (P9040, 1.5 credits)

This course is designed to give DrPH students a strong foundation in the managerial and organizational behavior issues associated with leading health systems. The course aims to build management, teamwork, and interpersonal skills that may be put into practice. Concepts from the discipline of managerial and organizational behavior (MOB) will be used as a lens to interpret and understand current health system issues. Students should complete the course with an appreciation of the unique organizational and interpersonal aspects of their context, and with the capacity to understand their unique value to solving some of our most pressing health challenges. The course is designed to allow students to reflect on and apply lessons drawn from personal leadership experience in health systems.

#### Seminar in Strategic Management (P9050, 1.5 credits)

The course considers questions of Mission and Vision ("What areas, activities, or business(es) should we be in?") and questions of Strategy and Operations ("How can we perform or compete effectively in this area?"). It covers both strategy formulation ("What should our strategy be?") as well as strategy implementation ("What do we need to do to make this strategy work?"). The course also addresses additional issues that are critical to the strategic management "process" (e.g. designing planning systems, managing contention, analyzing market context) are considered. We will build the foundation based on "macro" theories of strategic management (i.e., theories focused on organization and firm level decisions).

#### Essentials for Teaching and Communication (P9060, 1.5 credits)

The ability to educate and communicate effectively with a variety of audiences is essential for public health professionals at the doctoral level: as teachers of students; as guides to which lay people can refer for expertise; and as advocates for sound public health practice among policymakers. This course is designed to build students' capacity to communicate with distinct constituencies, taking into account their needs, goals, and priorities. In three units, we will explore how to plan, implement, and assess a course; how to partner effectively with lay audiences; and how to engage with public and governmental discourse to advance the mission of public health.

### **Departmental Courses**

### Principles and Policy for Global Health & Humanitarian Systems 2 (P9673, 1.5 credits)

This seminar aims to help the participants to deepen their approach to leadership in global health through (1) critical thinking on contemporary issues and ethics in global health and humanitarian action, (2) collective analysis of issues of social injustice, structural power asymmetry, and culture bias inherent in current work on global health, and (3) reflection on their own leadership style and journey. Seminar discussions examine self-selected principles and policies such as evidence-based practice and universalized approaches to global mental health. Continuing their work from the first seminar, participants write a significant paper such as a literature review or a conceptual analysis on a particular global health topic.

### Program Selective (1.5-3 credits required). Students can take during the first or second year:

#### Public Health Program Planning (P8601, 3 credits) or

Students learn to design an evidence-based and culturally appropriate public health program, in both a U.S. and developing-country context. Students will gain competence in analyzing local needs and resources; developing an evidence-based and technically and programmatically sound causal pathway; articulating program objectives; designing relevant program partnerships and technical components; and designing the program's monitoring and evaluation plan, implementation plan and budget. Students are required to complete short periodic assignments and develop a final program proposal. Students must register for a section of seminar P8602.

#### Methods in Program Evaluation (P8640, 3 credits) or

Increasing demand for transparency and accountability, particularly with respect to donor-funded humanitarian programs, has heightened the need for skilled evaluators. To this end, students in this course will become familiar with various forms of evaluation and acquire the technical skills necessary for their development, design and execution through lectures and discussion, exercises, guest presentations and real-world examples. Specifically, students will discover evidence-based methods for identifying stakeholders, crafting evaluation questions, designing instruments, sampling and data gathering to achieve good response rates, analysis and synthesis of information for report-writing and case studies

#### Applications of Implementation Science in Low- & Middle-Income Countries (P9620, 1.5 credits)

Implementation research, implementation science, or delivery science has potential to redress the gap between what is known and what is done in practice through the identification of problems or inefficiencies in program implementation, improvement, and scale-up, and the rigorous and systematic application of research methods and practice-based evaluation to these identified problems. The course will, through a combination of lectures and case-based group work, focus on how to promote the uptake and successful implementation of evidence-based interventions and policies through implementation science. It will first review the basics of conducting implementation in developing world settings and how to design and integrate practical implementation research that in the context of program implementation answers the question "what is happening?" compared with what is expected, as well as "why is this happening?" The course builds upon core methodological skills in epidemiology, population health, and survey design as well as insights gained through students' field practica. The course reviews quantitative and qualitative study designs as they apply to specific implementation research questions, offering guidance on how students may design similar studies when confronted with their own implementation questions in their future careers.

# **DrPH Courses – Second Year**

#### Semester 1:

#### Columbia University Mailman School of Public Health DrPH Core

All DrPH students across the departments of Columbia Mailman School are required to take the following courses in their first year of study:

#### Case Studies in Public Health Practice & Leadership II (P9071, 1.5 credits)

This course serves as a bookend to the Core series of DrPH courses and builds upon the Foundational lenses introduced in Part One of the Case Studies in Public Health Practice and Leadership. The course explicitly adopts a systems thinking approach as both the means of understanding how societal structures, institutions and healthcare delivery systems drive systemic inequality, as well as informing an approach to intervening in these systems. This course recognizes that you each bring individual strengths to the classroom related to your specific areas of interest and expertise and seeks to amplify these strengths through critical engagement and reflection of complex public health case studies that you will identify. At a personal level, you will be asked to engage in your own process of self-reflexivity, crafting a practice that questions how we deal with issues of complexity, uncertainty, pluralism, responsibility, and power.

#### Departmental Courses

The second year provides structured opportunities to relate learning to work and other field-related contexts, while allowing students to develop a particular and more concentrated focus of study. Students are expected to register for the doctoral DrPH seminar classes:

#### Advanced Research Methods in Global Health (P9652, 3 credits)

This course is intended to support student preparation for the DrPH Leadership in Global Health & Humanitarian Systems comprehensive methods examination. This comprehensive methods exam assesses consolidated research competencies suitable for completion of the dissertation component of the program and, more broadly, advanced practice in global health and humanitarian systems for which the DrPH program prepares candidates. The exam thus draws on course materials to which DrPH students have been exposed during earlier study, as well as concepts, theories, and application that students are expected to attain and consolidate through guided self- and group-study in this course.

### Semester 2: Departmental Courses

#### ILE Proposal Writing Seminar (P9651, 1.5 credits)

Students not on campus for their fourth semester may, with the permission of the instructor and the DrPH Director, complete this course remotely.

This seminar completes the core doctoral sequence for the DrPH in Leadership in Global Health and Humanitarian Systems. The focus is on competencies of relevance for preparation for the dissertation proposal defense and, more broadly, specifying a focused program of research in relation to a defined question of public health policy or practice in the field of global health and/or humanitarian response.

# Appendix 6A: Substantive Oral Exam

The DrPH oral exam will include the following two components:

Part 1: Oral discourse - 1 hour (50% of grade)

- Based on their main areas of interest, students will generate in-depth questions in accordance with an agreed upon level of depth and difficulty. These will be confirmed by the DrPH committee. Students will prepare oral responses to all questions.
- On the day of the exam, examiners will select 2 of the questions. Students will be allotted 30 minutes per question: 15 minutes to respond followed by 15 minutes of open discussion.
- Examiners will assess the students' based upon an agreed upon rubric.

Part 2: General applied oral exam (case study) – 1 hour (50% of grade)

- A case study tailored will be identified and adapted by the DrPH committee.
- The case should not focus specifically students' methods capacity rather it should be substantive/content focused, and address the following CEPH competencies:
  - Leadership, Management & Governance
  - Policy & Programs
  - Education & Workforce Development
- Following part One of the oral exam, students will receive the case study and given 2 hours to prepare a presentation. A rubric will be provided to help students craft their responses and ensure CEPH competencies are addressed.
- The goal is to assess students' ability to address a real-life public health challenge addressing relevant skills as program management, policy, governance, and/or implementation.
- Student's presentations will be assessed according to a prepared rubric.

Following the oral presentations, the committee will discuss the student's responses, prepare feedback, and assign a final grade.

### Preparation for the oral discourse component of the exam: Reading List and Oral Questions Guidance

Step A: Please identify 20-25 relevant references on the following suggested thematic areas. Where appropriate, the references can be related to your area of interest/expertise.

I. Implementation Science/Health Systems:

- Management
- Quality Control and Program Monitoring
- Service Delivery Mechanisms
- Financing
- Accountability
- Community Engagement

II. Social Justice:

- Wealth and Power
- Gender
- Accessibility of vulnerable groups

III. Policy, SDGs, Leadership, Advocacy

IV: Content Specific Technical Knowledge

Step B: Please develop between 4-6 draft questions based on the above selected references. The questions should illustrate your ability to think critically and reflect the latest core concepts and frameworks guiding your specific content area. Suggested questions could include for example:

- Compare and contrast two key papers with different perspectives;
- Develop a comparative analysis of different strategies for the delivery of health services;
- Provide critical analysis of a social issue;
- Discuss the advantages and/or challenge of a particular management approach/style;
- Present an analysis of a policy position.

# Appendix 6B: DrPH General Rubric for Assessing Substantive Oral Exam

Domain	High Pass	P	ass	Fail
Explanation of issues/problem	Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding	Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions	Issue/problem to be considered is critically stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown	Issue/problem to be considered is not critically stated and/ or lacks clarification or description
Evidence	Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly	Information is taken from source(s) with enough interpretation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning.	Information is taken from source(s) with some interpretation/evaluatio n, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning	Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question.
Position (perspective, thesis/hypothesis	Specific position is imaginative, taking into account the complexities of an issue. Limits of position are acknowledged. Others' views are synthesized within position.	Specific position takes into account the complexities of an issue. Others' points of view are acknowledged within position.	Specific position acknowledges different sides of an issue	Specific position/perspective is stated, but is too simplistic, obvious, and lacks depth.
Conclusions	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly	Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified

# Appendix 7: ILE Proposal Outline

Students must submit a completed, formal written proposal and make an oral presentation based on that proposal to their DrPH Committee. A similar format is to be used whether the student intends to write up their dissertation in the form of a single thesis, three linked papers or a substantive collaborative project. Irrespective of the ultimate form of the dissertation, the goal is the articulation of a systematic investigation to address a focused research question.

An effective dissertation proposal clarifies (a) what the student proposes to study, (b) why the student proposes this focus, (c) how the student proposes to perform the research, (d) when various stages of the research will be completed.

There are common challenges in constructing a proposal. Effective proposals ensure that (a) the research objectives are focused and clearly defined avoid questions that are too broad and cannot be clearly defined, and (b) the proposed research is manageable with respect to time.

Excluding references, the proposal should be approximately 25-30 pages, and include the following sections:

- Goal and Specific Aims
- Relevance of the problem to public health
- Background and Significance
- Research Design and Methods
- Anticipated Schedule
- Human Subject Research
- References

### Goal and Specific Aims:

Describe the overall goal and specific objectives of the research proposal. This section should also include a clear articulation of the hypotheses or questions that will structure the proposed research

### Public Health Relevance:

Analyze the context and justify the importance of the public health issues to be examined. If the aims of the dissertation are achieved, the proposal should include the relevance of its findings on public health knowledge, practice, and policy.

### Background and Significance:

Summarize the literature on the past and current strategies/policies that have been used to address the issues to be addressed. Identify the background leading to the present conditions, critically evaluate existing knowledge and identify the gaps in knowledge that the project intends fill. Describe the effect of past studies on the concepts, methods, technologies, services, or interventions that drive this field.

### **Research Design and Methods:**

This section should describe and defend the proposed methodological approach, including research design and plans for data collection and analysis. If existing data sources are to be utilized these should be described and the basis for access to the data confirmed. If fieldwork data collection is planned, the context and location of such fieldwork should be described. The following subsections should be included:

- Describe the research design or conceptual or practice framework, procedures, and analyses to be used to accomplish the specific aims of the project. Explain why the design is appropriate to the proposed questions
- Explain how the data will be collected, analyzed, and interpreted
- Describe any new methodology used and its advantage over existing methodologies
- Describe any novel, concept, approaches, tools, or technologies to be used in the proposed dissertation

• Discuss the potential difficulties and limitation of the proposed procedures and alternative approaches to achieve the project's aims

### Anticipated Schedule:

Provide a tentative sequence and timetable for the dissertation work. This should comprise a realistic appraisal of the timing of the planned work. Assumptions and risks which would influence the delivery of the proposed research should be identified.

### Human Subjects Research:

Students should identify any ethical principles and issues associated with this research. The proposal should also note whether an IRB review of the proposed research is required and planned. IRB review is not required in advance of the dissertation proposal submission, but IRB issues should be anticipated and discussed.

### References

# Appendix 8: IRB Requirements

All students must apply to the Columbia University Medical Center Institutional Review Board (IRB) and obtain their approval for any research involving human participants. Even research that will be using data covered by existing IRB protocols, or that does not involve direct contact with human participants must be submitted for IRB review; the determination of whether dissertation research is exempt is the responsibility of the IRB, not the student researcher. Students should develop the IRB protocol at the same time as they begin to write the proposal.

The proposal defense can be scheduled prior to IRB approval (and it is not necessary to include details of submission [actual or planned] in the proposal narrative), but students must have IRB approval before commencing research. The CUMC Institutional Review Board is extraordinarily user-friendly, and students are strongly encouraged to take advantage of the IRB's 'office hours 'to seek advice on the preparation of their protocols. These preliminary conversations will make it clear whether the protocol presents any challenges regarding human subjects' protection, how those challenges might be addressed, and what supplementary materials it is necessary to submit. Seeking this advice in advance of submission can mean the difference between a protocol that is approved in 4 weeks and one that creates major delays in the initiation of research. More information is available at <u>www.cumc.columbia.edu/dept/irb/</u>.

Students conducting research outside the United States will be required to submit their project for review within that country as well, and so developing a relationship with a host institution is acritical part of any pre-dissertation preparatory work. The IRB application must be submitted by the student's sponsor (not the student) though an online system, RASCAL (rascal.columbia.edu). Students should be prepared for the possibility of a lengthy IRB proposal approval process, although this can be avoided by seeking input in advance from IRB staff. Six to eight weeks, or even longer, is not unheard of, and students should take that into consideration when planning.

The student's proposal defense includes a brief presentation of the status on the IRB review. It is possible that recommendations made by the committee during the proposal defense may require changes in the research design that may initiate modifications to approved IRB protocols. In addition, if research involves collaboration with other institutions, approval of the modification by their IRB may also be required. As noted above, faculty without a full-time appointment at Columbia Mailman may not serve as the PI for student research protocols, and there are a number of faculty on the list of approved sponsors who fall into that category. In those circumstances, students should consult with their sponsor and identify another committee member who is an SMS faculty member and who can serve as PI of the IRB protocol. The sponsor should be included on the protocol as an investigator and should work with the student in the preparation of the protocol.

All CUMC students, faculty, and staff must complete HIPAA certification and our students must also compete the CITI Human Subjects Protection training. Students may access information and training from <a href="https://research.columbia.edu/content/compliance-training">https://research.columbia.edu/content/compliance-training</a>.

Students are responsible for renewing the IRB approval annually throughout the course of dissertation research, which includes the period of data analysis and writing. In other words, even when data collection has been completed, it is the responsibility of the student to maintain IRB approval. Students who permit their IRB approval to lapse will not be considered in good standing. As part of the completion of the dissertation, students will be expected to present evidence of continuous IRB approval; if the renewal letters are uploaded annually to Sakai when students submit their annual report, this is considered sufficient evidence of continuous approval. Students are also responsible for 'terminating' the IRB protocol when they complete the doctoral program.

# Appendix 9: ILE Proposal Defense Form

# DrPH Leadership in Global Health and Humanitarian Systems

# Defense of Proposal For the Degree of DrPH Columbia University Mailman School of Public Health

Student Name: Date: Doctoral Committee: Committee Chair:

On behalf of your DrPH Doctoral Defense Committee, I am delighted to confirm our APPROVAL of your dissertation proposal subject to meeting the CONDITIONS listed below to the satisfaction of your Dissertation Sponsor:

- 1.
- 2.
- 3.
- 4.
- 5.

We make the following REQUIREMENTS and/or RECOMMENDATIONS for you to consider in the implementation of your work:

a.

b.

c.

d.

e.

We wish you well with your work!

Defense Committee Chair

Committee Member 1

Committee Member 2

Committee Member 3

Committee Member 4

# Appendix 10: ILE Defense Form<sup>26</sup>

# DEFENSE OF DISSERTATION

### FOR THE DEGREE OF DOCTOR OF PUBLIC HEALTH

### COLUMBIA UNIVERSITY MAILMAN SCHOOL OF PUBLIC HEALTH

(<u>Ad hoc</u> dissertation committee members must sign in COLUMN I, COLUMN II, COLUMN III, OR COLUMN IV)

(Not Accepted)

\*Revisions of the dissertation are to be completed no later than [enter a date] and are to be certified as acceptable by a subcommittee of the <u>ad hoc</u> dissertation committee.

# AD HOC DISSERTATION SUBCOMMITTEE:

1)	2)	_ 3)
,	,	,

If the major revisions are not satisfactorily completed within the time stipulated, conditional acceptance shall be considered void and the dissertation will be assigned to COLUMN IV.

# **DISSERTATION TITLE (Please print):**

Signature, Chairman of ad hoc dissertation committee

--- nups://www.publicneaim.columbia.edu/academics/policy-and-procedures

# Appendix 11: Resources on Research, Writing and Learning

# Additional resources about the graduate school experience:

- On the hidden curriculum of graduate programs, from grant writing to dissertating: <u>Jessica McCrory</u> <u>Calarco, A field Guide to Graduate School: Uncovering the hidden curriculum.</u>
- On writing, time management and organization: <u>Raul-Pacheco Vega, academic and researcher,</u> provides a lot of great resources on his website

# Additional resources at Columbia University for grant writing, conferences and learning:

- Columbia University Mailman School of Public Health WritingWorks supports doctoral students in the process of writing the dissertation. Please contact Leah Hooper (<u>lch2124@cumc.columbia.edu</u>) for more information.
- <u>Columbia's Center for Teaching and Learning (CTL)</u> provides support for teaching and pedagogy, as well as specific professional fellowships for graduate students interested in teaching and learning
- <u>Columbia University's Conference Presentation Fund</u> will support partial conference travel and/or attendance costs for graduate students presenting on their doctoral and/or class work. Applications are accepted on a rolling basis.
- <u>Columbia's Individual Development Plan (IDP) program</u> helps doctoral and post-doctoral students with career management strategies and career paths through program sessions and tools.
- <u>The Writing Center at Columbia College</u> provides writing support to graduate students in one-on-one consultations and workshops. Consultants offer feedback and strategies to help improve all stages of writing.

# Appendix 12: Funding Sources for DrPH Students

# **ALL CITIZENSHIP STATUS**

### Alpha Kappa Alpha Educational Advancement Foundation Merit Scholarship

Who is eligible: Students with a minimum GPA of 3.0 (B average), with demonstrated community service and involvement.

**Enrollment Status**: Must be enrolled in the sophomore year or beyond, fulltime **Deadline**: August 15

Website: <u>https://akaeaf.org/scholarships</u>

### **International Dissertation Research Fellowship**

**Who is eligible**: Graduate students in PhD program in the United States (regardless of citizenship) conducting research on non-U.S. topics.

Enrollment status: Must be enrolled full time in a PhD program.

Amount: Average of \$20,000

Deadline: November

Website: http://www.ssrc.org/fellowships/idrf-fellowship/

### Sheikh Saud Bin Saqr Al Qasimi Foundation for Policy Research

### **Doctoral Research Grant**

Who is eligible: Applicants whose dissertation proposal must be approved by applicant's graduate program, must have IRB approval for research, must focus on the UAE, particularly Ras Al Khaimah, and must address a social science issue or question. **Amount**: The grant covers all student expenses associated with their field research in the United Arab Emirates, including return airfares, furnished accommodation for up to 12 months, a stipend to cover living expenses, and research support.

Deadline: March 1

**Enrollment Status**: Must be a current DrPH student in good academic standing with coursework complete and ready to conduct field research for dissertation

Website: https://www.alqasimifoundation.com/grants-research

# ICRW Mariam K. Chamberlain Award

**Who is eligible**: The award will support a first-generation doctoral student as they work on a dissertation under the close supervision of a senior dissertation advisor over one academic year. The graduate student's dissertation must be related to ICRW's mission to advance gender equity, inclusion and shared prosperity worldwide. The award honors the legacy of Dr. Mariam K. Chamberlain, a visionary who founded Re:Gender – formerly the National Council for Research on Women – in 1981.

Amount: \$10,000 (\$8,500 for student / \$1,500 for advisor)

Deadline: October 14

Website: https://www.icrw.org/mariam-k-chamberlain-

award/#:~:text=high%2Dlevel%20scholarship.-

,The%20Mariam%20K.,2021%20Award%20by%20clicking%20here

### The Mellon International Dissertation Research Fellowship (IDRF)

Who is eligible: The program is open to graduate students in the humanities and humanistic social sciences—regardless of citizenship—enrolled in PhD programs in the United States. Applicants to the IDRF competition must complete all PhD requirements except on-site research by the time the fellowship begins or by December, whichever comes first. The program invites proposals for dissertation research about US Indigenous topics that are conducted within the United States as well as proposals for projects that are conducted, in whole or in part, outside the United States on non-US topics.

Amount: \$23,000 Deadline: November 4

Website: https://www.ssrc.org/fellowships/view/idrf-fellowship/

The Woodrow Wilson Dissertation Fellowship in Women's Studies

**Who is eligible**: The Woodrow Wilson Dissertation Fellowship in Women's Studies encourages original and significant research about women that crosses disciplinary, regional, or cultural boundaries. Previous Fellows have explored such topics as transnational religious education for Muslim women, the complex gender dynamics of transidentity management, women's electoral success across racial and institutional contexts, women's sports, militarism and the education of American women, and the relationship between family commitments and women's work mobility. The WW Women's Studies Fellowships support the final year of dissertation writing for Ph.D. candidates in the humanities and social sciences whose work addresses topics of women and gender in interdisciplinary and original ways. Applicants must have finished all pre-dissertation requirements at the time of application.

**Amount:** \$5,000

Deadline: October 16

Website: https://woodrow.org/fellowships/womens-

studies/#:~:text=The%20Woodrow%20Wilson%20Dissertation%20Fellowship%20in%20Women's% 20Studies%20encourages%20original,%2C%20regional%2C%20or%20cultural%20boundaries

# Horowitz Foundation for Social Policy Grant

**Who is eligible**: The foundation supports projects with a social policy application on either a global or local level. Applicants must be current PhD (or DrPH) candidates who are working on their dissertation; applicants must not have a PhD; those who do, are ineligible; applicants must have defended their dissertation proposal or had their topic approved by their department **Amount:** \$7,500

Deadline: December 1

Website: https://www.horowitz-foundation.org/grant-info

# **U.S. CITIZENS AND PERMANENT RESIDENTS**

# American Indian Graduate Center (AIGC) Fellowship Program

**Who is eligible**: Enrolled member of a US federally recognized American Indian tribe or Alaska Native group or possess one fourth degree US federally recognized American Indian blood pursuing a doctoral degree as a fulltime student at an accredited graduate school in the United States and demonstrates financial need. Fellowship

**Amount**: \$1,000-5,000

**Enrollment Status**: Applicants do not have to be admitted into a graduate degree program at time of application.

Website: http://www.aigcs.org/scholarships/graduate-fellowships/

### Grace Legendre Endowment Fund Fellowship

Who is eligible: New York State women Amount: \$1,000 Enrollment Status: Applicants must be enrolled in graduate study Website: http://gracelegendre.org/

# The Dolores Zohrab Liebmann Fellowship

Who is eligible: U.S. citizen graduate students
Amount: full tuition and \$18,000 stipend renewable up to 3 years
Deadline: Students notified by Financial Aid Office
Enrollment Status: Applicants must be enrolled in graduate study
Website: http://publichealth.columbia.edu/apply/financial-aid/outside-funding

### Doris Duke Fellowships for the Prevention of Child Abuse and Neglect

Who is eligible: U.S. citizens or permanent residents of the U.S. interested in a career in the field of child abuse and neglect prevention

Amount: \$25,000 for up to two years

Enrollment Status: Applicants must be enrolled in a doctoral program

Website: http://www.chapinhall.org/fellowships/doris-duke-fellowships

# UJA-Federation of NY Rose Biller Scholarship Fund

**Who is eligible**: Jewish American students residing in NYC, Westchester and Long Island. The Hebrew Free Loan Society also has a variety of other scholarships (including for international students), interest-free loans, and assistance programs.

Amount: \$5,000.

Deadline: May 31

Website: https://hfls.org/apply-for-a-scholarship/

# Hispanic Scholarship Fund Fellowship Program

Who is eligible: Hispanic students who are U.S. citizens or legal permanent resident with a minimum GPA of 3.0 on a 4.0 scale who is pursuing his/her first graduate degree.
Amount: \$500-\$5,000
Enrollment Status: Must have plans to enroll fulltime at a U.S. accredited institution in the upcoming academic year.
Deadline: February 15
Website: https://www.hsf.net/scholarship

### American Association of University Women

### American Fellowships

**Who is eligible**: For women pursuing full-time study to complete dissertations or conduct postdoctoral research, or to those preparing research for publication for eight consecutive weeks. Candidates are evaluated on the basis of scholarly excellence; quality and originality of project design; and active commitment to helping women and girls through service in their communities, professions, or fields of research. There are three types of American Fellowship opportunities: dissertation fellowships, postdoctoral research leave fellowships, and short-term research publication grants.

Enrollment status: full-time student

Amount: \$6,000-\$30,000

Deadline: November 1

Website: <u>https://www.aauw.org/resources/programs/fellowships-grants/current-opportunities/american/</u>

# Paul & Daisy Soros Fellowships for New Americans

**Who is eligible**: Students who are 30 or under and your birth parents must have both been born outside of the US as non-US citizens, and both parents must not have been eligible for US citizenship at the time of their births. Additional eligibility requirements found at

<u>https://www.pdsoros.org/apply/eligibility</u>. Applicants with asylum or refugee status, and applicants born abroad but graduated from both high school and college in the U.S. are eligible (includes DACA).

**Enrollment Status**: Students must be enrolled in either the first or second year of an academic program.

Amount: up to \$90,000 over 2 academic years

Website: https://www.pdsoros.org/

### **Graduate Research Fellowships**

Who is eligible: Students who are U.S. citizens or permanent residents interested in researchbased doctoral degrees.

Fellowship Amount: 3 years of support for a graduate program.

**Enrollment Status**: Must be enrolled full time in a graduate program.

Website: http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=6201

# Hispanic Serving Health Professions Schools--- Graduate Fellowship Training Program

**Who is eligible**: U.S. citizens or permanent resident with English fluency (Spanish fluency requirement varies by program) with 5+ years of professional experience in health. Provides paid and unpaid training opportunities for graduate and doctoral students, and recent graduates, interested in working on Hispanic health research. Fellows are placed throughout the U.S. and Latin America within government agencies and academic institutions.

**Enrollment Status**: Graduate, doctoral, and recently graduated students **Website**: <u>https://www.hshps.org/programs</u>

# P.E.O. Scholars Award

Who is eligible: Applicants must be a citizen or legal permanent resident of the United States or Canada, and; be within two years of graduating from a doctoral program and have at least one full academic year of work remaining in August of the year you are awarded. The P.E.O. Scholar Awards are one-time, competitive, merit-based awards intended to recognize and encourage academic excellence and achievement by women in doctoral-level programs. These awards provide partial support for study and research. Nominations for the P.E.O Scholar Awards are made only by local chapters. You can request more information about the application and nomination from a local chapter here: <a href="https://www.peointernational.org/peo-scholar-awards-request-more-information">https://www.peointernational.org/peo-scholar-awards-request-more-information</a> Enrollment Status: enrolled in full-time doctoral-level study at an accredited U.S. or Canadian post-secondary institution during the entire academic year of the award

**Deadline**: Nominations from local chapters occur from August 20 to November 20. From there, applicants have 45 days to submit their application materials.

Website: https://www.peointernational.org/about-peo-scholar-awards

# National Science Foundation Graduate Research Fellowship (NSF GRFP)

Who is eligible: Only first year doctoral students are eligible to apply. The NSF GRFP supports outstanding graduate students in NSF-supported STEM and public health disciplines who are pursuing research-based master's and doctoral degrees at accredited US institutions. The five-year fellowship includes three years of financial support including an annual stipend of \$34,000 and a cost of education allowance of \$12,000 to the institution. You can use their eligibility checklist here: <a href="https://nsfgrfp.org/applicants/fellowship-eligibility/">https://nsfgrfp.org/applicants/fellowship-eligibility/</a>

Amount: \$34,000 allowance + \$12,000 toward tuition credits for up to five years Enrollment Status: Applicants should be enrolled in their first year of their graduate program Deadline: October 20

Website: https://www.nsfgrfp.org/

# NIH F31 – Ruth L. Kirschstein Predoctoral Individual National Research Service Award (NRSA)

Who is eligible: The purpose of this Kirschstein-NRSA program is to enable promising predoctoral students with potential to develop into a productive, independent research scientists, to obtain mentored research training while conducting dissertation research. The F31 is also used to enhance workforce diversity though a separate program. In general, NIH funding provides funding to applicants who want to become independent researchers in academia. NIH grant application process is a bit hard to navigate, so make sure to speak to your advisor about your interest. You will need to work closely with your advisor or another identified professor/mentor on your application.
Amount: Funding varies, but it's generous (you propose your own research budget)
Deadline: Several deadlines, including: April 8, August 8, December 8
Website: https://researchtraining.nih.gov/programs/fellowships/f31

# **INTERNATIONAL STUDENTS**

# American Association of University Women

### International Fellowships

Who is eligible: For women pursuing full-time graduate or postdoctoral study in the United States who are not U.S. citizens or permanent residents. International fellowships are awarded for full-time study or research in the U.S. Applicants must have applied to their proposed institutions of study by the time of the application. Recipients are selected for academic achievement and demonstrated commitment to women and girls. Recipients return to their home countries to become leaders in business, government, academia, community activism, the arts or scientific fields.

**Enrollment status**: must be enrolled full-time during the fellowship year; programs ending prior to April of the fellowship year are not eligible.

**Amount:** \$18,000-\$30,000 (up to 5 fellowships are renewable for a second year) **Deadline**: November 15

**Website**: <u>https://www.aauw.org/resources/programs/fellowships-grants/current-opportunities/international/</u>

# Margaret McNamara Memorial Fund

**Who is eligible**: Women from developing countries residing in the U.S. or Canada at the time of application, national of a lower or middle income developing member country (designated on the web site), is not a citizen or permanent resident of the U.S., demonstrates financial need and satisfactory academic performance, and is at least 25 years old.

Enrollment Status: Must be enrolled in a doctoral program full-time

Amount: \$12,000 (not renewable)

Website: https://www.mmeg.org/

# Sheikh Saud Bin Saqr Al Qasimi Foundation for Policy Research

# **Doctoral Scholarships**

**Who is eligible:** The Scholarship Office provides funding for UAE citizens from Ras AI Khaimah to pursue doctoral studies at top tier universities overseas and prepare students to serve as future leaders who contribute to the strategic development and vision of Ras AI Khaimah and the broader UAE.

**Amount**: Monthly stipends for doctoral degree programs sponsored through the Ministry of Education; full scholarships (tuition, monthly stipend, health insurance, air tickets); specific inclusions are determined based on type of approved universities and degree programs. **Enrollment Status**: full-time students **Deadline**: June

Website: https://www.algasimifoundation.com/scholarships

# P.E.O. International Peace Scholarship

**Who is eligible**: The International Peace Scholarship Fund is a program which provides scholarships for selected women from other countries for graduate study in the United States or Canada. An applicant must be qualified for admission to full-time graduate study and working toward a graduate degree in an accredited college or university in the United States or Canada. A student who is a citizen or permanent resident of the United States or Canada is not eligible. **Enrollment Status**: In order to qualify for her first scholarship, an applicant must have a full year of coursework remaining, be enrolled and in residence for the entire school year. Doctoral students who have completed coursework and are working only on dissertations are not eligible as first-time applicants.

Amount: \$12,500 Deadline: December 15 Website: https://www.peointernational.org/ips-eligibility-requirements

# **OTHER FUNDING SOURCES:**

A <u>Google database</u><sup>27</sup> compiled by a DrPH student that has pre- and post-doctoral funding sources and databases (feel free to edit/add to this database).

Other databases with funding opportunities for DrPH students:

https://www.aspph.org/teach-research/funding-opportunities/

https://www.fic.nih.gov/Funding/NonNIH/Pages/default.aspx?type=predoctoral

https://www.greatcollegedeals.net/scholarships/50-great-sources-for-graduate-school-grant-money/

https://gsas.harvard.edu/student-life/harvard-resources/carat-database-grants-and-fellowships

http://scholarships.fatomei.com/public--health--scholarships.html

https://research.utdallas.edu/researchers/grant-process/research-development/graduate-research-fellowships

<sup>&</sup>lt;sup>27</sup> https://docs.google.com/spreadsheets/d/1P1V- -PVwkMHuljNpaLtSF\_c5zNz6MiY5USzsQXshD8/edit?usp=sharing

The partial list below may be helpful, and students may also wish to consult the list of funding opportunities for graduate students found at <u>www.mailman.columbia.edu/information-for/research-resources-r2/graduate-students</u>.

A list of additional external funding (for US and International students):

https://www.publichealth.columbia.edu/become-student/how-apply/financial-aid/funding-options/outsidesources-funding