OCCUPATIONAL AND ENVIRONMENTAL MEDICINE RESIDENCY

Welcome and Introduction
Welcome to the Johns Hopkins Bloomberg School of Public Health Occupational and Environmental Medicine Residency Program. This online resource is designed to give you an overview of the program. It includes information on policies, required competencies, evaluations, and professional resources. Please refer to this information for questions that will come up as you complete your training.

This is not intended as a stand-alone resource. You will find valuable and pertinent information regarding the MPH (https://e-catalogue.jhu.edu/public-health/departments/master-public-health) and the Johns Hopkins Bloomberg School of Public Health (https://e-catalogue.jhu.edu/public-health/) in this online catalogue. Additional occupational medicine residency resources and information can be found in New Innovations (a residency management software system) and are available online for our residents to access at any time.

The Program Director, Deputy Program Director and the administrative staff are here to provide direction through your residency. In addition, be sure to talk to faculty and rotation preceptors whose interests, research, and practice activities can help to guide you. These contacts will prove invaluable to your career.

Finally, make the most of your associations with fellow residents and students in the school. You may well find that these relationships are your richest continuing source of support, encouragement, and professional stimulation.

Again, welcome, and our very best wishes for a wonderful training experience and a successful career in the exciting field of occupational and environmental medicine!

Aisha Rivera Margarin, MD, MS
Program Director, Occupational and Environmental Medicine Residency
Johns Hopkins Bloomberg School of Public Health

Brian S. Schwartz, MD, MS
Professor of Environmental Health and Engineering, Epidemiology, and Medicine
Deputy Program Director, Occupational and Environmental Medicine Residency
Johns Hopkins Bloomberg School of Public Health

Program Overview
The Johns Hopkins Occupational and Environmental Medicine Residency (OEMR) is a two-year training program leading to eligibility for the certifying examination of the American Board of Preventive Medicine (https://www.theabpm.org/). All residents are expected to become board certified by the American Board of Preventive Medicine after completing residency training. The OEMR is accredited by the Accreditation Council for Graduate Medical Education (https://acgme.org/) (ACGME) and is one of the key programs that make up the Occupational Safety and Health Education and Research Center (https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-education-and-research-center) (ERC) at Johns Hopkins Bloomberg School of Public Health.

The first year of the program includes graduate coursework, participation in departmental activities and conferences, research and clinical activities.

The second year of the program includes practicum rotations, completion of MPH practicum requirement, participation in departmental activities, clinical activities, research and may include additional coursework.

Mission
The Mission of the Johns Hopkins Occupational Medicine Residency Program is to train physicians who will be leaders in occupational and environmental medicine. Our graduates manage and improve the health of populations through:

1. the development and implementation of programs to mitigate occupational or environmental exposure;
2. the direction of clinical care and health management of individuals and populations exposed to chemical, physical, biological, ergonomic, and/or psychological hazards in a variety of occupational and environmental settings and;
3. application of new technologies, new research findings, and new management techniques to improve the health of working populations and minimize disability.

To achieve this level of training, we will provide trainees with superior academic training and practical, experience-based rotations in a wide variety of workplaces, and unparalleled opportunities to engage in research. We will offer residents a unique opportunity to master the tools of evidence-based medicine, and to apply their skills to real-world problems including disability management, employee health and wellness, environmental exposures, and other emerging occupational and environmental medicine issues. We expect that our graduates will become board-certified practitioners with the capability to perform at high levels in any organization, practice, or academic institution. Whatever their career path, our graduates will have the desire and the ability to examine occupational and environmental health problems in fresh ways, and to generate and impart new knowledge for the improvement of public health.

Learning Outcomes
The educational objectives of the residency are to provide residents with:

1. The knowledge and skills necessary to define occupational and environmental medicine/public health problems; design and implement appropriate interventions; and evaluate the outcomes.
2. Appropriate learning environments in which to apply their skills and knowledge.

Faculty
Residency faculty includes: full-time faculty in the Schools of Public Health and Medicine, as well as affiliated faculty throughout the university and at rotation sites. This allows us to capitalize on the great breadth and depth of occupational and environmental medicine expertise in the Baltimore-Washington DC area. The faculty is engaged in a wide range of clinical, research, and management activities.

Aisha Rivera Margarin, MD, MS, is the Program Director of the residency and a Faculty Associate in the Department of Environmental Health and...
Engineering. She is board-certified in occupational and environmental medicine and general preventive medicine.

Brian S. Schwartz (https://www.jhsph.edu/faculty/directory/profile/624/brian-schwartz/), MD, MS, is the Deputy Program Director of the residency. He is a Professor of Environmental Health and Engineering, Epidemiology, and Medicine, with a joint appointment in the School of Medicine. He is board-certified in internal medicine and occupational and environmental medicine.

Information on other faculty, along with links to individual websites, can be found at the residency website (https://www.jhsph.edu/academics/residency-programs/occupational-and-environmental-medicine-training-program/Meet%20the%20Team/).

Faculty Advisors
Dr. Rivera and Dr. Schwartz will serve as MPH advisors to all residents, who, with their assistance, will be expected to create an individualized curriculum that will meet their professional training needs. A different faculty advisor may be selected depending on resident interest on a case-by-case basis. Residents will elect a customized program of study for their MPH degree that includes the required courses outlined by the MPH and in this online catalogue. Additional options include MPH (https://e-catalogue.jhu.edu/public-health/departments/master-public-health/) concentrations, however due to clinical requirements for the residency these are not always feasible.

Miscellaneous Administrative Information
Residency Facilities
Students’ Office and Computer Facilities
Located in room W7606, the students’ office has a phone, microwave, and a variety of reference materials. This room contains computers with Microsoft Office software and CD-ROM, in addition to wireless network access for laptops. Around the corner from this room, on the same floor, there is a shared departmental space with a refrigerator and coffeemaker. In addition, all residents have access to the computer facilities of the Bloomberg School of Public Health.

Residency Programs Office
The administrative office for the Occupational and Environmental Medicine Residency and the General Preventive Medicine Residency is located in room WB602. This office suite houses the residency programs administrative staff and the chief resident for the General Preventive Medicine Residency, and serves as office, computer, and seminar space for the General Preventive Medicine residents. Residency files for both programs are kept in this office.

Chief Resident
Each year a chief resident is selected by the Program Director and Deputy Program Director based on resident performance, experience, ability to work with others, ideas to improve the program and desire for the leadership opportunity. If multiple residents express an interest in the position, interviews may be arranged by the Program Director and Deputy Program Director. The chief will receive an additional $1,500 in annual stipend for his/her responsibilities.

Chief Resident Roles and Responsibilities
• Works closely with the OEMR Program Director and Deputy Program Director in all the responsibilities outlined below
• Serves as an advocate and role model for other residents by following program policies, participating in program activities, recommending improvements, and providing advice to other residents
• Serves as a member of the Graduate Medical Education Committee (GMEC) and the Residency Advisory Committee/Program Evaluation Committee (RAC/PEC) and provides feedback on residency policies, programs, and procedures
• Handles delegated administrative duties including but not limited to:
  • Scheduling Monday teaching seminars
  • Coordinating with faculty and residents to schedule administrative rounds
  • Assisting program faculty in organizing and facilitating educational activities, projects, and rotations
• Assists in the OEMR’s orientation program for new residents in early July of each year
• Participates in interviews with OEMR applicants in November and December of each year and assists in other recruitment activities as needed (including accompanying applicants in tour and lunch)
• Organizes an annual resident feedback meeting and provides an aggregate summary of recommendations from that meeting to program faculty.

Randy Bass Award
The Randy E. Bass in the amount of $1,500.00 was endowed in 1996 through Dr. Bass’ estate. Randy received his MPH from the Johns Hopkins Bloomberg School of Public Health in 1988 and completed the Occupational Medicine Residency in June 1989. Dr. Bass served as a team member in developing final environmental cadmium standards and received the Secretary’s Exceptional Achievement Award from the U.S. Department of Labor. He was active in the Occupational Medicine Residency teaching and training programs, and in the teaching of undergraduates. This award benefits a student who demonstrates the same dedication to the field that Randy did during his all too brief career.

Resources for Professional Development

Professional Organizations
The American College of Occupational and Environmental Medicine (http://www.acoem.org/) (ACOEM)

ACOEM is one of the major professional organizations for occupational health professionals (mainly physicians). ACOEM offers members a variety of services and publications, including the Journal of Occupational Medicine, ACOEM Report, an employment referral service, the Occupational Physicians Scholarship Fund, and many others. ACOEM has a Residents and Recent Graduates section that represents residents’ interests to the larger organization. ACOEM sponsors the American Occupational Health Conference (AOHC) in the spring of each year that provides an important networking opportunity. Membership for residents is discounted and includes all of the services and publications.

The ACOEM website has many useful areas including Career Planning (http://acoem.org/Careers/What-Is-OEM/); free Audio Podcasts on OEM Practice Settings and Career Opportunities; and the Knowledge Centers.

There is also a State component, the Maryland College of Occupational/Environmental Medicine (MCOEM) that sponsors scientific meetings, and residents can become members at the same time they join ACOEM. Attendance at the twice-yearly Saturday morning conferences offered by MCOEM has been a residency requirement in the past, however these are not always held from year to year.
The American Public Health Association (https://www.apha.org/) (APHA)

The APHA has an Occupational Health and Safety (OHS) Section that has mainly consisted of academics, researchers, and public health professionals in medicine, nursing, and industrial hygiene, in the past. The APHA sponsors an annual conference (>12,000 annual attendance) and offers many services. The American Journal of Public Health comes with membership and publishes good articles relevant to occupational safety and health.

Association of Occupational and Environmental Clinics (http://www.aoec.org/) (AOEC)

The AOEC is a network of individuals and clinics across the country, primarily university-based, that practice occupational and environmental medicine. The AOEC has an extensive clinical lending library, including slide sets that can be used to make presentations. It also maintains a database of clinical cases from across the country, and collaborates with Federal agencies and its members to make grant opportunities available on a wide range of topics. COEH is a clinic member.

International Society for Environmental Epidemiology (https://www.iseepi.org/) (ISEE)

The ISEE sponsors an annual scientific conference of outstanding quality and the journal Epidemiology. Join if you are interested in epidemiology or an academic career.

American College of Preventive Medicine (ACPM)

The ACPM is the preventive medicine physician professional organization.

Journals in Occupational Health

- Journal of Occupational and Environmental Medicine – The journal of the ACOEM, this is a standard that is widely read.
- Occupational and Environmental Medicine – British journal
- American Journal of Industrial Medicine
- Environmental Research
- Environmental Health Perspectives – A standard for environmental journals, high impact factor, includes the Grand Rounds in Environmental Medicine series
- American Journal of Epidemiology – Broad topics, high quality articles including some occupational and environmental epidemiologic research
- Archives of Environmental & Occupational Health
- Scandinavian Journal of Work, Environment, and Health
- American Journal of Public Health - broad


Online Data Sources

National Library of Medicine (NLM) Environmental Health and Toxicology Specialized Information Services - Lots of useful data and databases.

- TOXLINE - NLM's on-line bibliographic search system for toxicology and pharmacology
- MEDLINE/PUBMED - Also from NLM
the OEMR New Innovations site to the Program Director and Deputy Director at least every 6 months and upon request. During the second year of training, clinical requirements are met through block rotations.

4. Attend all residency activities and fulfill all related requirements unless formally excused by the Deputy Director and/or Director. These activities include, but are not limited to:
   a. Summer orientation
   b. In-Service Examination
   c. Seminars
   d. Special sessions during Winter Intersession and following completion of courses in the 4th Term

   *It is your responsibility to notify the Deputy Director and/or Director at least 2 weeks in advance if you are unable to attend any of the above activities.

5. Meet all MPH and residency requirements, including course requirements of each. Note that MPH required courses must be taken for a letter grade.

6. Remain in satisfactory academic standing in the MPH program in accordance with the standards set by that program or be subject to dismissal. Any resident dismissed from the MPH program will be dismissed from the residency.

7. Maintain full-time registration (16 or more credits).

8. Maintain a 3.0 GPA in all residency-required courses in the MPH curriculum.

9. Complete and submit all monthly and final rotation reports. (Failure to submit these documents as required in a timely fashion may lead to a grade of Incomplete in PH.550.870 SS/R: OCCUPATIONAL MEDICINE RESIDENCY-PRACTICUM YEAR and/or denial of the residency certificate of completion.)

10. Receive at least a satisfactory overall evaluation from each rotation preceptor.

11. Meet with the director of the residency program twice a year, in November-December and April-June, for a formal written evaluation. Each evaluation will consist of a discussion of rotations, conferences, courses, research projects, papers, and related activities in which the resident has been involved. In addition, transcripts and preceptor evaluations will be reviewed as a part of the process. There will be a summary of the resident’s performance. This information is required for performance evaluation and credentialing of residents.

12. Complete their research project.

13. Participate in objective structured clinical evaluations, worksite evaluations, and other learning activities as they arise.

14. In addition, involvement in unique opportunities that become available through the MPH and residency program are crucial to resident learning and success. We encourage residents to be involved in these opportunities as their time and energy permit. Examples include guest lecturing and participating in public health practice projects. We also encourage attendance at national meetings, such as the annual meetings of the American College of Occupational and Environmental Medicine and the American Public Health Association.

1. those required by the school for the MPH degree and
2. those required by the residency to achieve ACGME preventive and OEM competencies (https://acgme.org/Specialties/Overview/pfcatid/20/).

The latter also include courses that fulfill American Board of Preventive Medicine (https://www.theabpm.org/) (ABPM) eligibility requirements.

Residents must meet all departmental and graduate school requirements. MPH (https://e-catalogue.jhu.edu/public-health/departments/master-public-health/) requirements can be found online.

Example Schedule with Required Courses

Courses listed for each term are required by either the residency or the MPH program, there is a document entitled "OEM courses" in New Innovations that may provide greater clarity on which courses are required by the residency. Residents should review the MPH requirements closely as these may change from year to year. Residents must register for 16 credits in all terms. You do not have to register for resident seminar for credit if you would like to take additional courses. However, you should make sure your courses do not interfere with resident seminar or your clinic. Any concerns should be communicated to Program Director and Deputy Program Director.

MPH Requirements

(80 credit hours are needed for degree, including core, residency requirements and electives), only 20 credits total may be taken in "special studies" courses.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.300.615</td>
<td>The Tools of Public Health Practice</td>
<td>1</td>
</tr>
<tr>
<td>PH.380.755</td>
<td>Population Dynamics and Public Health</td>
<td>2</td>
</tr>
<tr>
<td>PH.300.610</td>
<td>Public Health Policy</td>
<td>4</td>
</tr>
<tr>
<td>PH.306.601</td>
<td>Introduction to Bioethics in Public Health</td>
<td>1</td>
</tr>
<tr>
<td>PH.550.867</td>
<td>Introduction to MPH Studies</td>
<td></td>
</tr>
<tr>
<td>PH.550.860</td>
<td>Academic &amp; Research Ethics at JHSPH</td>
<td></td>
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<tr>
<td>PH.340.601</td>
<td>Principles of Epidemiology</td>
<td>5</td>
</tr>
<tr>
<td>PH.180.601</td>
<td>Environmental Health</td>
<td>5</td>
</tr>
<tr>
<td>PH.188.840</td>
<td>Special Studies and Research</td>
<td>1</td>
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<tr>
<td></td>
<td>Environmental Health &amp; Engineering</td>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PH.188.680</td>
<td>Fundamentals of Occupational Health (online)</td>
<td>3</td>
</tr>
<tr>
<td>PH.305.623</td>
<td>Fundamentals of Clinical Preventive Medicine (take P/F)</td>
<td>3</td>
</tr>
<tr>
<td>PH.182.631</td>
<td>Principles of Occupational Safety</td>
<td>2</td>
</tr>
<tr>
<td>PH.140.611</td>
<td>Statistical Reasoning in Public Health I (Do online but sit in on class as desired)</td>
<td>3</td>
</tr>
<tr>
<td>PH.410.620</td>
<td>Program Planning for Health Behavior Change</td>
<td>3</td>
</tr>
<tr>
<td>PH.552.609</td>
<td>Psychological and Behavioral Factors That Affect A Population’s Health (online)</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.552.625</td>
<td>Building Collaborations Across Sectors to Improve Population Health (online)</td>
<td>0.5</td>
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**MPH Highlights**

Residents matriculate in the MPH (https://e-catalogue.jhu.edu/public-health/departments/master-public-health/) program of the Johns Hopkins Bloomberg School of Public Health (JHSPH). For the MPH degree, courses required of OEM residents fall into two groups:
Occupational and Environmental Medicine Residency

<table>
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<tr>
<td>PH.552.608</td>
<td>Biologic, Genetic and Infectious Bases of Human Disease (online)</td>
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</tr>
<tr>
<td>PH.552.601</td>
<td>Foundational Principles of Public Health (online)</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.188.840</td>
<td>Special Studies and Research Environmental Health &amp; Engineering</td>
<td>1</td>
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<tr>
<td></td>
<td>Electives or additional Special Studies credits (p. 5)</td>
<td>1</td>
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<tr>
<td></td>
<td><strong>Second Term</strong></td>
<td></td>
</tr>
<tr>
<td>PH.187.610</td>
<td>Public Health Toxicology (online)</td>
<td>4</td>
</tr>
<tr>
<td>PH.182.621</td>
<td>Introduction to Ergonomics</td>
<td>4</td>
</tr>
<tr>
<td>PH.140.612</td>
<td>Statistical Reasoning in Public Health II (online)</td>
<td>3</td>
</tr>
<tr>
<td>PH.182.625</td>
<td>Principles of Occupational and Environmental Hygiene</td>
<td>4</td>
</tr>
<tr>
<td>PH.380.604</td>
<td>Life Course Perspectives on Health (online)</td>
<td>4</td>
</tr>
<tr>
<td>PH.188.840</td>
<td>Special Studies and Research Environmental Health &amp; Engineering (Resident Seminar)</td>
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* *INTERPROFESSIONAL EDUCATIONAL EVENT (required, but not formal course)*

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<tr>
<td>PH.188.686</td>
<td>Clinical Environmental and Occupational Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>PH.317.600</td>
<td>Introduction to the Risk Sciences and Public Policy (online)</td>
<td>4</td>
</tr>
<tr>
<td>PH.552.624</td>
<td>Applications of Negotiation and Mediation for Public Health Professionals</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.552.623</td>
<td>Principles of Negotiation and Mediation for Public Health Professionals (online)</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.552.603</td>
<td>The Role of Qualitative Methods and Science in Describing and Assessing a Population's Health (online)</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.552.610</td>
<td>The Social Determinants of Health (online)</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.552.626</td>
<td>Systems Thinking: Concepts and Methods</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.552.611</td>
<td>Globalization and Population Health (online)</td>
<td>0.5</td>
</tr>
<tr>
<td>PH.260.720</td>
<td>Communications Primer for the Public Health Sciences (online assigned to 1st, 2nd, or 3rd term according to last name)</td>
<td>1</td>
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<tr>
<td>PH.188.840</td>
<td>Special Studies and Research Environmental Health &amp; Engineering (Resident Seminar)</td>
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<tr>
<td></td>
<td><strong>Third Term</strong></td>
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<tr>
<td></td>
<td><strong>Credits</strong></td>
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<td></td>
<td><strong>Total Credits</strong></td>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td>PH.188.681</td>
<td>Onsite Evaluation of Workplace and Occupational Health Programs (worksite evaluation course)</td>
<td>5</td>
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<tr>
<td>PH.340.722</td>
<td>Epidemiologic Inference in Public Health II (online)</td>
<td>4</td>
</tr>
<tr>
<td>PH.340.680</td>
<td>Environmental and Occupational Epidemiology (if it is offered online)</td>
<td>4</td>
</tr>
<tr>
<td>PH.188.840</td>
<td>Special Studies and Research Environmental Health &amp; Engineering (Resident Seminar)</td>
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<tbody>
<tr>
<td>PH.550.870</td>
<td>SS/R: Occupational Medicine Residency-Practicum Year (16 credits per term)</td>
<td>16</td>
</tr>
<tr>
<td>PH.340.680</td>
<td>Environmental and Occupational Epidemiology (4th term)</td>
<td>4</td>
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<tbody>
<tr>
<td>PH.180.629</td>
<td>Environmental and Occupational Health Law and Policy</td>
<td>4</td>
</tr>
<tr>
<td>PH.180.611</td>
<td>The Global Environment, Climate Change, and Public Health</td>
<td>4</td>
</tr>
<tr>
<td>PH.180.670</td>
<td>Introduction to Public Health Emergency Preparedness</td>
<td>3</td>
</tr>
<tr>
<td>PH.182.623</td>
<td>Occupational Health Management</td>
<td>3</td>
</tr>
<tr>
<td>PH.140.613</td>
<td>Data Analysis Workshop I &amp; PH.140.614 and Data Analysis Workshop II</td>
<td>4</td>
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1 If needed, residents can also get credit for resident seminar by signing up for 1-2 credits of EHE 188.840 to meet the 16 credit hour minimum requirement in any given term. However, some residents may choose not to sign up for resident seminar because either 1) they take additional electives instead or 2) they have a minimum of 16 credit hours with their other courses.

2 Ergonomics course can be scheduled in first year if schedule allows, however many residents have taken it in second year.

### Individualized Learning Plans and MPH Goals Analysis

Each new first year resident prepares an individualized written educational plan for the residency program and a similar, but separate MPH learning plan. Templates for the individualized learning plan can be found in New Innovations, residents are expected to complete the plan for first year prior to the first meeting with the program director. Residents are expected to start on the plan for second year prior to the first semiannual evaluation meeting with the program director. Residents should approach developing their plans seriously and use information from their MPH learning plan with the addition of residency-specific information regarding goals, additional skills, knowledge, and competencies the resident intends to gain from the residency training, and plans for obtaining these. Each plan will outline courses to be taken by the resident to meet his/her individual educational goals. The residency plan will also include research goals for the resident, and identify specific competencies that the resident will develop during residency training. Dr. Rivera will guide the resident in this process and must approve this document. There are examples of the templates...
In particular, residents will note that:

1. Their practicum plans will need to be approved in advance by Paulani Mui, MPH Practicum Coordinator.
2. An MPH practicum generally is not clinic-based.
3. Residents should proactively communicate with the rotation preceptor of the rotation they would like to use toward the practicum requirement to make sure there is an appropriate project and they can complete the MPH forms in a timely manner.

**Course Registration**

Residents must register for 16 credits in all five terms in both the first and second year of the residency. Residents doing second year rotations should register for rotation credit listed as special studies (PH.550.870 SS/R: Occupational Medicine Residency-Practicum Year).

**Seminar Series**

Residents attend a variety of weekly seminars while the MPH terms are in session. Seminars start at noon and include:

- Education and Research Center seminars (1st Monday @ noon);
- Departmental Journal Club (2nd and 4th Monday @ noon);
- ESEE Seminar (3rd Monday @ noon);
- Resident seminar (every Monday from 1:30-3:30pm, *summer schedule varies*).

Topics and speakers for resident seminars are coordinated by the chief resident and program directors.

The schedule for resident seminars is posted on New Innovations. These seminars are being held virtually via Zoom but are subject to change. Attendance at Journal club, Departmental noon conferences, ERC, and Resident seminars is required of all residents. Attendance may be waived for residents on out of town rotations with permission of either Dr. Rivera or Dr. Schwartz. In addition, attendance at the annual Mid Atlantic Regional Conference for Occupational and Environmental Medicine (MARCOEM) conference is a residency requirement when it is held at Hopkins. Residents are expected to attend ERC events including the annual Anna Baetjer Lecture hosted by the Department of Environmental Health and Engineering. The Department also hosts a grand rounds and residents are strongly encouraged to attend during their first year and when it does not interfere with their courses or clinical rotations; second year residents are not expected to attend grand rounds while on rotations as they are typically held on campus on Fridays.

**Journal Club**

Residents are required to attend Journal Club, which meets during the Fall and Spring semesters on Mondays starting at noon. Residents and other graduate students are responsible for presentations at Journal Club. Additional guidelines on how to select an article and give a presentation at Journal Club are available on New Innovations.

**Research Requirement**

Residents are required to do a research project that results in a manuscript of publishable quality and/or conference presentation. Posters presented at national meetings such as the AOHC fulfill this requirement. Examples of resident research publications are available upon request.

Residents will meet with the Program Director and/or Deputy Director early in the program to define their research projects and advisors. Drs. Rivera and Schwartz will help residents identify an appropriate research preceptor. Residents will work individually with their research preceptor on a mutually chosen topic. The preceptor is responsible for the scientific conduct of the research and for the evaluation of the resident’s performance. The resident can devote special studies courses to research activities and manuscript preparation. Residents should carefully define their goals for the research (e.g., acquisition of data analysis skills, review article approaches, learning to prepare manuscripts or grant applications) and choose a research project with a faculty member that will meet these goals. If a resident needs more structure, they have the option and are encouraged to take courses through the MPH.
that will give them additional data analysis and research training as well as provide a structured research project as part of the coursework. Residents are strongly encouraged to publish their research results and present them at national scientific meetings.

If data analysis is the goal, previously collected data should be analyzed. The short length of the residency program precludes projects that involve collection of original data by the resident. Similarly, obtaining IRB approval is also time-consuming and should be avoided. Acceptable research projects involve those for which IRB approval has already been obtained or the project will be approved as exempt by the IRB. A timetable for resident research projects is shown below.

**Example Research Project Schedule**

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>Resident meets with Program Director and potential research project advisors, identifies research project advisor, defines research project.</td>
</tr>
<tr>
<td>October</td>
<td>Research project advisor, project outline, and timetable presented to Program Director for approval.</td>
</tr>
<tr>
<td>February-June</td>
<td>Residents present updates on progress of their research project.</td>
</tr>
<tr>
<td>Second Year</td>
<td>Residents present seminars on results of research projects at Hopkins and national meetings. The final manuscript may be submitted after receiving comments/edits from advisor, Program Director, and seminar.</td>
</tr>
</tbody>
</table>

**Practicum Rotations**

Through participation in practicum rotations, residents must acquire and demonstrate the broad clinical and public health skills necessary for occupational and environmental medicine practice. Residency rotations include: required/core, direct patient care, and elective rotations. The preceptor will be available to residents at all times. Precepting during non-clinical, population-based activities will also be direct but contact frequency will be dictated by work requirements. Any deviation from this policy should be reported to the OEMR Deputy Director or Director ASAP.

Prior to starting any rotation, residents should review the specific ACGME required competencies, goals, and objectives for that rotation. Residents should verify with the residency staff that there is an agreement between the rotation site and Johns Hopkins. Residents should submit accurate contact information for the rotation preceptor to the Residency Program Director and Deputy Program Director. Residents are responsible for rotation evaluations for each rotation. All evaluation forms are distributed through New Innovations (you will receive a notification email of pending evaluations; follow the instructions provided to you during orientation to access New Innovations.) Preceptors will receive the Preceptor Evaluation of Resident through New Innovations prior to the end of the rotation. Residents are responsible for completing evaluations of each rotation and all rotation evaluations are due a week after the rotation ends. Each resident is required to continue to attend OEMR seminars and conferences.

**Core Rotations**

1. A rotation at Johns Hopkins Division of Occupational Medicine and the University of Maryland Occupational Medicine Program, which also includes industrial hygiene and safety activities - 2 months
2. A union-based rotation (International Association of Fire Fighters) - 2 months
3. A regulatory rotation (OSHA) - 2 months
4. Direct patient care - 4 months in total per year

**Elective Rotations**

Elective rotations are designed to provide competencies unique to individual resident goals. Elective rotations allow the individual resident to tailor practicum rotations to fit his or her career objectives. These electives may be clinical, research, or administrative in nature. Established electives have goals/objectives and competency forms already completed, if these are not already completed you will need to develop goals and objectives and a competency form with your rotation preceptor. The elective must be approved by the Program Director or designee. A list of elective options can be found on New Innovations.

**How to Confirm A Rotation**

1. Get verbal agreement from selected rotation supervisor
2. Get verbal approval from Program Director
3. Ask rotation preceptor to send credentials and contact information to Program Director
4. Create or review (if one already exists) the list of Goals and Objectives, and Competencies and submit to the Program Director
5. Residency manager will coordinate with the rotation site to establish an agreement if one does not already exist

**Sample OEMR Rotation Schedule**

<table>
<thead>
<tr>
<th>Rotation Period</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
</tr>
<tr>
<td>July-August</td>
<td>Coursework only</td>
</tr>
<tr>
<td>September-December</td>
<td>Continuity Clinic (one day per week)</td>
</tr>
<tr>
<td>January</td>
<td>FT Clinics with continued Continuity Clinic</td>
</tr>
<tr>
<td>February-May</td>
<td>Continuity Clinic (one day per week) with PT academic or OM clinics</td>
</tr>
<tr>
<td>End of May-June</td>
<td>FT Clinics with continued Continuity Clinic</td>
</tr>
<tr>
<td>Year 2</td>
<td></td>
</tr>
<tr>
<td>July-August</td>
<td>IAFF</td>
</tr>
<tr>
<td>September-October</td>
<td>OSHA</td>
</tr>
<tr>
<td>November-December</td>
<td>Elective</td>
</tr>
<tr>
<td>January-February</td>
<td>JHH/UM</td>
</tr>
<tr>
<td>March-April</td>
<td>Elective (e.g., Erickson Living)</td>
</tr>
<tr>
<td>May-June</td>
<td>Elective (e.g., OM Clinics: Mercy/ PFC/CorpDHS</td>
</tr>
</tbody>
</table>

**Direct Patient Care Clinical Requirement**

In accordance with ACGME requirements, all OEM residents will complete 80 days of clinic in an OEM specialty clinic during each year. This is accomplished through weekly continuity clinic to attain patient and programmatic competencies with full-time clinical experiences in January and June at a range of clinics where residents can be assigned including OEM clinics at Johns Hopkins, the University of Maryland, the Center...
for Occupational and Environmental Neurology, Mercy Health, DC Police and Fire Clinic, CorpsOHS and Occupational Health Consultants. During the second year, residents do 4 months of clinical rotations to fulfill this requirement, the required core JHH/UM rotation is a 2 month rotation but only counts toward one month of clinical rotation time because residents are not in clinic every day. Residents should sign up for at least 3 additional months of clinical rotations in the second year but are encouraged to choose more clinical time.

**Continuity Clinic**
This clinical experience will be coordinated with the MPH course schedule, and take place in half to full day increments. During weeks when no classes are in session, residents are strongly encouraged to spend full weeks in clinic in order to meet this requirement. The Program Director and Deputy Program Director will supervise the selection and scheduling of clinical time in clinics that meet this ACGME requirement, including but not limited to: the JHH OIC, the UM OEM Clinic, the COEN, Corp OHS, and Occupational Health Consultants. A tracking form shall be used to document clinical experience, and will be reviewed with residents during orientation and periodically reviewed by the Program Director, Deputy Program Director, and Program Manager in order to ensure compliance with this requirement.

**Third (Research) Year and Other Training Options**
The residency program has limited funding available for an optional third year of training. This position, which is not considered part of the ACGME-approved residency, is designed for those physicians interested primarily in research. The third year option would allow the trainee to pursue an investigation in depth, utilizing the extensive research resources available within the School and the University. Interested physicians should discuss their interest with Dr. Schwartz.

Applicants with prior experience or education in occupational medicine can request special or flexible programs that may involve partial course loads, research, and other special schedules. These requests are also handled individually and interested applicants should express their interest early in the application process. Residents may also earn a PhD or DrPH in occupational health. These degree programs have several requirements and would be expected to add at least 3 years of additional training, and are not a part of the ACGME-approved residency program.

**Evaluations**

**Evaluation of Residency Program**
Numerous evaluations are utilized to assess the program and the resident’s progress in it. Resident input is an essential part of the evaluation process. Residents have several opportunities to provide written evaluations of the adequacy, quality, and appropriateness of each component of the educational program. Some of these evaluations are provided to the Chair of the Residency Advisory Committee/Program Evaluation Committee on an annual basis.

1. Students evaluate individual courses in the school and evaluations are made available to faculty members. Each resident completes an evaluation of every rotation.
2. Residents complete a comprehensive anonymous evaluation of all aspects of the program at the end of each year through Survey Monkey.
3. The ACGME’s anonymous resident survey of the residency program is done annually.
4. The Program Evaluation Committee (PEC), an external group composed of prominent occupational health professionals, meets to evaluate the residency once per year. The program has Residency Advisory Committee that can meet if needed and requested.
5. The Graduate Medical Education Committee (GMEC) meets four times per year and provides input to the program. Residents are welcomed at the meetings.
6. Residents meet every year and provide compiled anonymous feedback to the program.

**Evaluation of Residents**

**Self-evaluations**
At the beginning of each year, residents perform a self-evaluation, based on competencies identified by the ACGME. These competencies form the basis of the educational program. Discussions with the Program Director, the self-assessment and the resident’s previous experience and training, are used by each resident as he/she prepares an individual written educational plan. This plan identifies training needs and experiences for the resident, and serves as the basis for course selection over the two years. An update of this document in the second year guides additional rotation selection. Both documents are discussed with and approved by the Program Director and/or Deputy Program Director.

**Coursework**
Academic grades are evaluated each term. Performance in courses and other activities are monitored and any academic deficiencies are quickly identified and addressed. Resident participation in and presentations at the OEMR conference series are also used by the Program Director and Deputy Program Director to provide additional feedback to residents.

The Clinical Competency Committee and the rotation preceptors discuss resident progress throughout the year. Overall progress of trainees is also used to modify the training program.

**In-Service Examination**
All residents are required to take the annual Preventive Medicine In-Service Examination in each year of training. The exam is given during the summer of each year. The Preventive Medicine In-Service Examination, provided by the American College of Preventive Medicine (ACPM), is designed for residents in all specialty areas of Preventive Medicine. The material covered in the exam relates to the core (morning) portion of the American Board of Preventive Medicine (ABPM) examination and includes questions on Epidemiology, Biostatistics, Infectious Disease, Chronic Disease, Occupational Medicine, and Health Services Administration. Exam results include individual scores by category, the overall percent correct, and a national comparison with other programs (coded). Results are used to guide programmatic content in the OEMR as well as identify areas of additional concentration for individual residents.

**Rotation Evaluations**
A fundamental requirement of the residency training program is that the resident be given and demonstrate increasing responsibility for the management of all aspects of occupational and environmental medicine. An evaluation of performance, based on a set of competencies/educational objectives designed for each rotation, is obtained at the completion of each rotation. Preceptors in each rotation are asked to evaluate each resident on his or her ability to assume responsibility throughout the rotation. Preceptors are encouraged to review these evaluations with the resident in an exit interview at the end of the rotation.

**Resident Learning Portfolio and Semi-Annual Evaluation of Residents**
All residents meet with the Program Director twice per year for a semi-annual performance evaluation that becomes a permanent part of the
Resident Grievances
Residents have a number of options to raise concerns about the residency. In addition to discussing concerns with the Program Director, Deputy Program Director, or Chief Resident and the information listed in the Policies and Procedures for Graduate Medical Education provided to residents, residents can contact the OEMR Residency Advisory Committee/Program Evaluation Committee Chair, currently Dr. Marianne Cloeren to discuss concerns, her contact information is provided in the contacts section of the manual. Residents could also meet Dr. Cloeren in person at luncheons following PEC meetings as well as in her lectures during resident seminar. In addition a member of the PEC is invited to attend resident seminar.

Vacation Policy
Residents are permitted three (3) weeks of vacation time in each training year. During the first year of training, vacation may not be taken when MPH classes are in session or when mandatory training or the in-service examination is scheduled (eg: EPIC training between summer session and first term). Residents must ensure that they meet the 80-day clinic requirement during the first year of training.

During the second year of training, residents should avoid planning vacation during one-month rotation periods and should contact preceptors in advance for approval when planning vacations. A maximum of one week of vacation may be taken from each 2-month required rotation.

Residents in both years are encouraged to discuss vacation plans with the Program Director and/or Deputy Program Director prior to confirming plans.

PROCEDURE FOR FIRST-YEAR RESIDENTS
1. Resident will submit a vacation request through New Innovations at least 2 weeks in advance and alert the Program Director of the request.
2. Program Director will review the request. An approval or denied email will be sent via email to the resident.
3. Vacation Requests reports are available to the Program Director.

PROCEDURE FOR SECOND-YEAR RESIDENTS
1. Resident will submit a vacation request through New Innovations at least 2 weeks in advance and alert the Program Director of the request.
2. Resident will request time off from preceptor.
3. Vacation is granted when approved by Program Director and preceptor.
4. Vacation Requests reports are available to the Program Director.

Sick Leave Policy
All residents at JHSPH are entitled to 15 days (three weeks) paid sick leave per year. Days may be used for a resident’s own sickness or to care for a family member. Unused days may not be carried over into the following 12-month period and are not payable upon departure.

When a resident takes sick leave, they should notify their Program Director and keep them as up to date as feasible. The Program Director may require the resident to submit verification of the need for sick leave from their healthcare provider to the University Health Service Center for review. Any documents containing a resident’s medical information must be kept separate from their academic file. Extended absences (more than two weeks) must be reported by the resident and

Program Policies
Residents must abide by the Johns Hopkins Bloomberg School of Public Health Graduate Medical Education Policies (https://e-catalogue.jhu.edu/public-health/departments/residency-programs/facultytext) and the School (https://e-catalogue.jhu.edu/public-health/policies/and University (https://e-catalogue.jhu.edu/university-wide-policies-information/)Policies. Additional program-specific policies are outlined in this section.

Graduate Medical Education Committee
The Graduate Medical Education Committee (GMEC) of the Johns Hopkins Bloomberg School of Public Health is responsible for monitoring and advising on all aspects of residency education. Voting membership on the committee includes:

1. residents from each of the two residency programs nominated by their peers;
2. the directors of the General Preventive Medicine and Occupational Medicine residency programs;
3. other members of the faculty from each department participating in either of the residency programs; and
4. the accountable institutional official or his or her designee (the Associate Dean for Professional Education and Programs).

The committee meets a minimum of four times per year and minutes of each meeting are kept.

The GMEC:

• establishes residency policies for graduate medical education (see Exhibit A);
• maintains open and regular communication with the General Preventive Medicine and Occupational Medicine Program Directors and administrators;
• reviews the residency training programs for their compliance with institutional and ACGME policies;
• establishes policies for resident selection, evaluation, promotion, and dismissal;
• establishes policies for grievances;
• reviews resident funding, benefits, and support services;
• reviews resident working conditions; and
• reviews ethical, social, socioeconomic, medical/legal, and cost containment issues that affect graduate medical education.

Each resident receives a Resident Contract (see Exhibit B) which contains the terms and conditions of the trainee’s appointment.
the Program Director to the Program Manager as quickly as possible. If the illness requires an extended absence, the resident may apply for a leave of absence.

Some Additional Points
1. Rotations generally accommodate sick days in a flexible way, and do not count sick days as vacation days. However, if the number of sick days becomes significant, rotations may count these days towards the vacation allotment.
2. There are no “personal days” allotted to residents. Such days will generally be counted as vacation days unless prior agreements have been reached with the Program Director and the rotation preceptor.
3. There is no special policy for days taken off between the Christmas and New Year holidays. These days are counted as vacation days during both years of training for both the rotations’ and the residents’ totals.

Holidays
Residents schedule will reflect the Johns Hopkins University holidays below. Because residents rotate in many locations, residents should discuss any holiday that falls while they are on a rotation with their rotation preceptor ahead of time to ensure the preceptor is aware and is not expecting them in clinic. Additionally, if a rotation site is open, residents should make sure that taking the holiday will not interfere with their ability to meet the clinical requirement.

• New Year’s Day
• Martin Luther King
• Memorial Day
• Juneteenth
• Independence Day
• Labor Day
• Thanksgiving Day
• Day after Thanksgiving
• Winter holidays include Christmas Eve, Christmas Day, New Year’s Eve, New Year’s Day

Conferences
Residents are strongly encouraged to attend a scientific meeting each year. Options to consider include: ACOEM/AOHC fall or spring meeting, the American Public Health Association conference, American College of Preventive Medicine annual meeting, or other occupational/environmental medicine-related content. While the residency encourages residents to attend the American Occupational Health Conference (AOHC), residents may choose to use their conference allowance on a conference that is not AOHC with the pre-approval of the Program Director.

• All conference travel must be pre-approved by the Program Director.
• Conference allowance is to be used toward reasonable expenses of attending occupational medicine-related conferences. The amount of the travel allowance is stated on the Resident Benefits Summary (Exhibit C), which is updated annually. Note: the amount may change each year.
  • If residents do not use all of the conference allowance funds on the conference they select to attend, remaining funds can be applied towards another conference or course travel expense.
• Residents may take up to five working days during each year of the residency to attend a scientific meeting.

Reimbursements
• Residents must complete and submit the reimbursement request form found in New Innovations, along with all receipts as specified on the form, to the Residency Program Coordinator within 30 days of travel or in the case of non-travel expenses (i.e., courses) within 30 days of incurring the expense. It is important that this information be submitted within 30 days, receipts submitted after 30 days risk not being able to be reimbursed.

Attire

CLINICS AND ROTATIONS
Professional attire is expected, for example, business casual. For clinical rotations you should also take your white coat, ID badge, pen, stethoscope, and a small notepad for taking notes of things you may want to remember later. If you have doubts about what to bring with you to your rotation, ask your preceptor.


CLASSES
Comfortable but professional clothing.

SITE VISITS
Attire should be functional and professional. You may be the medical professional consultant, and that role needs to be reflected in what you wear. You also may need your clothing to serve as barrier protection. The following dress guidelines are recommended:

Shirt: Non-revealing professional shirt or blouse. Sleeves may be helpful as some level of protective barrier. Some professionals wear long-sleeved button-down shirts with University logo.

Pants: Trousers or jeans, which cover the entire leg and do not drag on the floor. Khakis or jeans are good options.

Shoes: Closed-toe shoes and/or sturdy boots are always appropriate. Depending on the situation, a steel-toed boot may be required.

Social Media Use
The JHU Bloomberg School of Public Health Social Media Policy (https://e-catalogue.jhu.edu/public-health/policies/student-life/social-media-policy/) may be found on the JHSPH website.

The JHU School of Medicine has Social Media Guidelines (https://www.hopkinsmedicine.org/webcenter/social-media-guidelines/) that can be found online. You will need Network Connect open to get in.
Health Insurance Portability and Accountability Act (HIPAA)

Available in the HIPAA (https://intranet.insidehopkinsmedicine.org/privacy_office/) intranet site. You will likely need Network Connect open to get in.

Privacy Regulations means the regulations promulgated by the Secretary of the Department of Health and Human Services to implement portions of HIPAA that concerns the confidentiality of health information, as amended from time to time; these regulations currently include 45 CFR §§ 160 and 164, subparts A and E.

The Johns Hopkins HIPAA Office has posted on its website (http://www.insidehopkinsmedicine.org/hipaa/guidance.cfm) guidance on two topics of significant interest: “Use of Social Networking” and “Portable Electronic Devices.”

This information provides short, practical, and basic advice, and is not meant to be definitive statements on these topics.

Monitoring and Evaluating Residents

Definitions:

- **PM-1** = resident in the 13th through the 24th month of preventive medicine training
- **PM-2** = resident in the 25th through 36th month of preventive medicine training

Clinical Skills:

Each resident entering the program as a PM-1 will have completed at least one year of ACGME-accredited clinical residency training. The program director will ascertain from the resident's previous clinical program (or other source as appropriate) that the resident has achieved the six core clinical competencies.

Outpatient Care:

All patients seen by a resident on an outpatient basis must be seen by, discussed with, or reviewed by the responsible site preceptor.

Communication:

Communication with the site preceptor is mandatory in the case of emergent and/or critical incidents or other significant changes in clinical status.

Monitoring/Evaluation:

The goals and objectives as well as the process of evaluation for the training program are discussed at orientation. The goals and objectives are available to all residents and faculty on the residency website.

Rotation specific evaluations mirror the goals and objectives for a given rotation. At the end of each rotation, a formal written evaluation is completed for each resident by the site preceptor via New Innovations. A copy of this evaluation is provided to the resident.

Assessment of resident performance will be based on multiple evaluation strategies and may include:

- Direct observation of clinical and interpersonal skills
- Case-based discussion
- Completion of teaching modules
- Review of medical records
- Preparation and delivery of teaching sessions
- Participation in conferences
- Review of patient and/or procedure logs
- Feedback from patients and families
- Feedback from allied health professionals
- Assigned projects such as a clinical research project

Non-compliance with responsibilities or performance problems are generally discovered and addressed in one of the following ways:

1. The site preceptor may address isolated problems with specific individuals. The problem and corrective actions are documented by the site preceptor who notes the problem and are transmitted to the program director.
2. Each resident meets with the Program Director a minimum of twice a year to review evaluations and provide career counseling.
3. The program director reviews all resident evaluations. The Clinical Competency Committee consisting of leadership and key faculty members and as required by ACGME guidelines, meet semi-annually to discuss the progress of each resident. Any identified problems will be discussed and remediation plans are implemented.
4. Semi-annual, annual, and summary evaluations are completed on each resident in accordance with ACGME-RRC and JHSPH requirements.

In order to be promoted to the PM-2 year, the resident must have demonstrated satisfactory performance in academic coursework and all practicum evaluations must reflect satisfactory performance.