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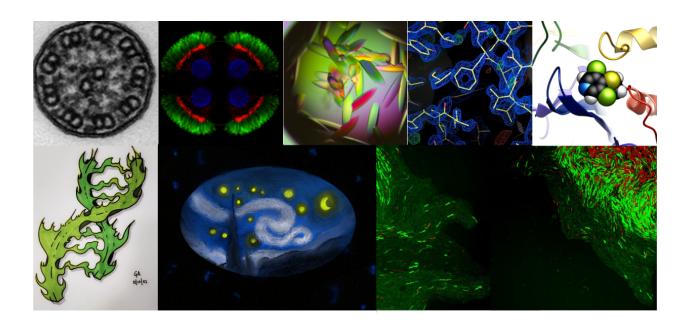
UCONN HEALTH

Graduate Program in Molecular Biology and Biochemistry Student Handbook

INDEX

Page

- 3 Introduction
- 4 Graduate Program Contacts
- 5 Financial Support
- 5 Academic Matters Introduction
- 6 Thesis Research Laboratory
- 6 MBB Program Representative
- 6 Thesis Committee
- 7 Work in Progress Talk
- 7 Preliminary (General) Exam
- 9 Format for the Written Research Proposal
- 11 Thesis Prospectus (Dissertation Proposal)
- 12 MBB Journal Club
- 12 Thesis Preparation and Defense
- 14 Recommended Coursework
- 15 Services Available to UConn Health Graduate Students
- MBB Program Faculty and Research Interests



Introduction

Welcome to the graduate program in Biomedical Sciences at UConn Health! This handbook is intended to inform you about the requirements and policies of the **Molecular Biology and Biochemistry** (MBB) Area of Concentration (AoC). This AoC is based in the Department of Molecular Biology and Biophysics (also MBB). In addition to core faculty members in MBB, our AoC also includes secondary faculty members from different departments within UConn Health. This handbook contains essential information about deadlines which you will have to heed as you progress through your graduate career. Please plan to consult this handbook at regular intervals. If you have questions, please contact one of our program directors. Additional information and policies are available in the <u>UConn graduate school catalog</u>.



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Financial Support

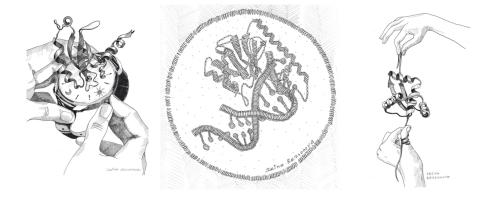
At present, the financial support package includes: a) full payment of tuition and fees; b) a stipend of \$39,100; and c) health insurance. There are no teaching responsibilities associated with the stipend. Stipend payments are distributed biweekly. It is important to recognize that graduate study is considered a full-time endeavor and other employment or educational activities need to be approved by the advisor and thesis committee.

Academic Matters

The primary goal of the program is to educate students for a broad range of careers in the biology of the coming decades. Whether the graduate enters academic research, the biotechnology industry, a liberal arts teaching college or patent law, we expect that they will bring to that career a solid base of knowledge, an ability to learn and think independently and an enduring desire to use their full range of professional skills and experience in creative ways. We expect our graduates to have demonstrated a high degree of competence in research, as judged by their ability to identify important research problems, plan and execute research projects, and communicate the findings through published scientific writing and oral presentation. We also expect our students to have incorporated ethical principles of scientific conduct into their professional activities and to be sensitive to such issues throughout their careers.

In addition to earning the PhD degree, it is also possible for students to enroll in other degree-granting programs within the university, such as the UConn Business School MBA program, contemporaneously. This requires the approval of the student's advisor, the thesis advisory committee and the Associate Dean of the Graduate School (UConn Health Campus).

All the necessary forms for the General Exam, Dissertation, Plan of Study, and other degree milestones are available on-line on the <u>UConn Health Biomedical Science Ph.D. Program Milestones</u> and the <u>UConn Current Students directory</u> website. It should be noted that all official paperwork should be filed through the Registrar's Office on the UConn Health campus, regardless of the address on the forms.



Thesis Research Laboratory

Typically, a student will perform three (3) rotations in the first year. This provides them with the opportunity to try a variety of research projects, work in different lab environments, and get mentorship from different faculty members. After performing laboratory rotations, the student will pick a laboratory in which to perform their thesis research. This will be done in consultation with the proposed mentor. Upon selection of a thesis laboratory, a <u>Change of Major Advisor</u> form must be completed.

MBB Program Representative

Each student in the MBB program is assigned to either the Program Director or Associate Director, who will serve as the program representative for that student. The "rep" will be the student's primary point of contact for all program-related questions and the rep will also chair the student's committee meetings and exams. In the special case of the rep also being the student's Major Advisor, it will be necessary for the other Program Director to chair the student's preliminary exam (see below), for which the student's advisor is supposed to silently observe.

Thesis Committee

The student's thesis committee will oversee the research. The committee consists of the major advisor plus at least three (3) additional members of the faculty who should be picked by the student in consultation with the major advisor. The student's MBB rep is not required to be part of the Thesis committee, but the student may ask the rep to serve on the committee. Either way, the rep should be included in all student/committee communications.

The committee should be formed by **December of the 2nd year**, if not earlier. <u>It is important to inform the MBB Program Director(s) when this is done</u>. The <u>Plan of Study</u> should be filed at the same time. Students must complete their Plan of Study and have it approved by their Advisory Committee prior to initiation of the general exam.

Thesis committee members can be members from another UConn Health area of concentration or from another program within the UConn graduate faculty. In some cases, an external member from another university can serve on the committee if they are considered to be an expert in the area of the student's dissertation research. To include an external committee member from another institution, the student's major advisor must send an email to Dr. Kream and MBB's Graduate Program Directors, providing a brief justification for the request and the individual's curriculum vitae. This request will be submitted to the Dean of the Graduate School at UConn for review and approval.

It is expected that this committee will meet a minimum of once per year (under certain circumstances more frequent meetings may be necessary) and discuss progress with the student following the presentation of their annual work-in-progress talk (see below).

Work-In-Progress Talk

All students in their second year and beyond are required to present their research work-in-progress (WIP) to the program. Students are expected to present a 45-50 min formal seminar with slides. They are also expected to answer questions from fellow students and faculty in attendance throughout the presentation. Students must complete the following forms and submit them to their thesis committee one-week before each annual post-WIP committee meeting:

- Annual Report Complete Section A ("Student Progress") and Section B ("Student Goals").
- Timeline Show the projects, publications, and presentations you have completed. This visual overview of your accomplishments will help the committee evaluate your progress in the program.

Note: The forms noted above are available for download on the MBB Graduate Program home page at:

https://health.uconn.edu/molecular-biology-biophysics/mbb-graduate-program

Note: Your **PI is responsible** for completing Section C ("Committee's Report") of the Annual Report, based on the discussion during the committee meeting. They are responsible for sending a copy of the completed form to the committee and MBB rep.

Preliminary (General) Exam

<u>General Exam Committee</u>. The committee will consist of the student's thesis committee and their MBB rep. At least five faculty must participate in the exam, so if the list of required participants is not sufficient in numbers, the student must invite the requisite additional faculty.

<u>Timeline.</u> Students will present a WIP in the period from **January through March** of their second year. Prior to the WIP, the student must draft an NIH-style Specific Aims page and distribute it to their committee. During the post-WIP committee meeting, which must be held no later than **April 15th**, the Aims Page will be discussed, and the student will have the opportunity to make edits in consultation with their PI and committee members. Each member of the thesis committee must approve the Aims Page; after that is complete, the student may select a date, no later than **April 30th**, to "start their clock."

The exam consists of two parts: a written proposal and an oral defense. Students must pass both parts to pass the exam. Students will prepare the written portion of the exam (see below for details) and provide it to their exam committee no later than **four weeks** after they started their clock. The oral examination (see below for details) can be arranged no earlier than **two weeks** after the completion of the written portion and must be

completed by **June 30th**. If the thesis committee determines that the student requires any remediation to pass either part of the exam, such activities must be completed and approved by the committee by **August 15th** of their second year.

<u>Preparing the Proposal.</u> In preparing the proposal (required content and format are addressed in subsequent sections), the student may consult any faculty member, including the thesis advisor, and other sources, regarding experimental methods and approaches. However, the student is solely responsible for the written proposal; the major advisor and committee members are not allowed to read or critique the written proposal during the preparation period. Copies (PDF files only) of the finished proposal must be emailed to the General Exam Committee at least two (2) weeks prior to the scheduled exam date. After submitting the written proposal, the student is allowed to prepare and practice his/her oral presentation with fellow graduate students, but not the major advisor or any other faculty member within or outside MBB. On the day of the exam, the student will present their proposal to the exam committee.

General Exam Procedure. The MBB rep will serve as the meeting chair. At the start of the meeting, the student will be asked to excuse themselves while the committee discusses the written proposal and identifies any deficiencies to the chair. The student will then return when requested and proceed with their oral presentation. At the General Exam meeting, the members of the General Exam Committee will have the opportunity to ask questions as the presentation proceeds. The discussion may focus on the theory behind the proposal, the methods used to address the problem, the interpretation of preliminary data and alternative approaches to the experimental problem. The major advisor must remain silent during the examination unless specifically requested to clarify an issue by the chair.

The student will then be asked to leave the room, and the General Exam Committee will evaluate: 1) the written proposal, 2) the student's performance during the oral defense, and 3) the student's prior performance in the program (course work, rotations, etc.; the MBB Director/Associate Director will be responsible for providing the student's records). All members of the examination committee will participate in this discussion and recommend an outcome for the exam. The exam committee must be unanimous in their decision. The student will be immediately informed of the committee's decision by the Committee Chair.

The committee will choose among the following outcomes:

Written Exam

- Unconditional pass
- Pass conditioned on a satisfactory rewrite of all of part of the written proposal

Fail

Oral Exam

- Unconditional pass
- Pass conditioned on a satisfactory retake of all of part of the oral presentation
- Fail

In addition to the exam outcomes listed above, it is at the discretion of the committee to task the student with remediation, if there are fundamental gaps in knowledge that should be addressed. Remediation can include, for example, reading and discussing specific journal papers with the PI, working with a committee member to clarify details of using a specific experimental technique, etc.

If the committee requires a rewrite of the written exam and/or a retake of the oral presentation, the student is given only one opportunity for each component. The entire general exam process, including any necessary remediation must be completed by **August 15**th of the second year for PhD students or G1 year for dual degree students¹. Deadlines stipulated by the student's General Exam committee must be complied with. A missed deadline will count as an unsuccessful exam attempt and initiate the remediation process.

The Report on the General Examination for the Doctoral Degree form should be submitted to the Office of the Registrar IMMEDIATELY following the final decision of the examination. The report must be submitted no later than **August 15**th of the exam year. The report must be submitted whether the final examination has been passed or failed. The student is responsible for preparing the report and collecting the signatures from their committee members, but not submitting the report. The original report should be submitted to the Office of the Registrar by a faculty member, which can be the student's major advisor or the Director/Associate Director of the MBB program. A copy of the report is to be retained by the major advisor. This report must be submitted within thirty days of the examination for you to be eligible for retroactive Graduate Assistantship pay.

Format for the Written Research Proposal

The General Exam will consist of a research proposal based on the student's work in their major advisor's lab. The proposal should be prepared using the NIH grant format (Arial, 11 point). The proposal will be limited to a total of **8** pages and the required sections, along with their corresponding NIH guidelines, are as follows:

Project Summary. (limited to 30 lines of text)

States the application's broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Describe the research design and methods for

Revised 08/01/24 9

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¹Extensions are possible only under extraordinary circumstances and require the approval of the Associate Dean of the Graduate School or MD/PhD or DMD/PhD Program Director.

achieving the stated goals. The project summary should be able to stand on its own (separate from the application) and be informative to other persons working in the same or related fields and understandable to a scientifically literate reader.

Specific Aims. (1 page)

State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved.

List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology.

Research Strategy. (6 pages)

Organize the Research Strategy in the specified order and using the instructions provided below. Start each section with the appropriate section heading — Significance, Innovation, Approach. Cite published experimental details in the Research Strategy section and provide the full reference in the Bibliography and References Cited section (References are not part of the 8-page limit).

(a) Significance

- Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
- Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
- Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

(b) Innovation

- Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
- Describe any novel theoretical concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions.
- Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation, or interventions.

(c) Approach

- Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted.
- Discuss potential problems, alternative strategies, and benchmarks for success

- anticipated to achieve the aims.
- Describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.
- **Include** information on Preliminary Studies as part of the Approach section. Discuss preliminary studies, data, and or experience pertinent to this application.

Bibliography (not included in the 8-page limit)

Provide a bibliography of any references cited in the Research Strategy. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. Include only bibliographic citations. Students should be especially careful to follow scholarly practices in providing citations for source materials relied upon when preparing any section of the proposal. The use of a citations manager (e.g., EndNote, Zotero, or Mendeley) is recommended.



Thesis Prospectus (Dissertation Proposal)

The <u>Dissertation Proposal Form</u> is a requirement of the UConn graduate school and must be submitted through the Registrar's Office on the UConn Health campus **at least 6 months prior to** the expected degree completion date. To ensure that this requirement is met in a timely manner, the MBB program requires that this form be submitted to Storrs by **the beginning of the third year (August 31**st). It is most common and expeditious for a student to rework their General Exam proposal to fit the required format. It is essential to inform Rosalie Pion when this form has been filed.

To check if your Plan of Study, Report on the General Examination, Dissertation Proposal or other graduate school forms were processed by the Registrar, login to studentadmin.uconn.edu, and go to Transcripts & Verifications. Then, click View Unofficial Transcript and hit Submit. In the PDF that appears, there is a section called "Non-Course Milestones" that will have the status updates.

MBB Journal Club

All students in all years are required to attend the weekly MBB Journal Club. Students in years 2 to 4 will be required to present at least once per year. Attendance and active participation at all Journal Club sessions is expected and graded.



Thesis Preparation and Defense

The thesis and its defense are an essential step to earning the PhD degree. The written thesis should provide a detailed exposition of the student's research work and include both an introduction that places the work in perspective and a concluding section which highlights the impact of the student's research and identifies future avenues that could be explored. The thesis will be prepared by the student in consultation with their mentor and other faculty as appropriate after the advisory committee has decided that the student is ready to defend. It is important to note that there are strict formatting requirements for the dissertation which must be adhered to.

The defense of the thesis takes place in two presentations: 1) a private defense before the student's thesis committee and 2) a public defense that is open to all. Once the thesis is submitted to the thesis committee, **a minimum of two weeks** must be allowed before the private defense is held. Once the thesis is defended successfully at the private defense, an approved DRAFT of the thesis must be submitted electronically. The student must inform Rosalie Pion and Lana Angelo at the Graduate Office of this outcome so that the public defense can be scheduled and announced. This must be done **at least two weeks prior to** the public defense. This requirement provides a minimum time in which alterations to either the thesis content or the presentation can be made.

At least five (5) members of the graduate faculty (including a Program Director) <u>must</u> be present at the public defense. It is important to note that even though a student may pass the private defense, they can still be in jeopardy if they do not perform well at the public defense. Upon successful completion of the public defense, the <u>Defense and Final Thesis/Dissertation Approval Form</u> must be submitted and an application for graduation must be completed on PeopleSoft. The student is still permitted to make additional edits to the draft thesis before final submission. For students on a visa, the final thesis must be submitted within three weeks of the public defense.



Recommended Coursework

Apart from attendance at Journal Club, AoC Exploration, and *Responsible Conduct of Science* that is mandatory for all students, the MBB program does not have a specific list of courses that are required to be taken during the first two years. Rather, MBB students take a variety of didactic coursework that is dependent on their interests and background, and is chosen in consultation with their first-year mentors and/or research mentors. Our students commonly select from the following list, although many other courses are offered within UConn Health and can be taken for credit by interested students. The MBB program strongly encourages students to register for both *Foundations of Biomedical Science* and *Molecular Basis of Disease* courses (although not necessarily in the same semester) as these courses focus specifically on the molecular underpinnings of biomedical science.

Course Number	Course Name and Description
MEDS 6496	Laboratory Rotation
MEDS 6503	First Year Graduate Experience in Biomedical Science (4 credits)
<u>GRAD 6950</u>	Continuing registration for doctoral students after obtaining a thesis advisor and turning in Change of Major Advisor form.
MEDS 6497	Molecular Biology and Biochemistry Journal Club
MEDS 6448	Foundations of Biomedical Science (4 credits)
MEDS 5418	Stem Cells and Regenerative Biology (3 credits)
MEDS 6450	Optical Microscopy and Bio-Imaging (3 credits)
MEDS 5309	Molecular Basis of Disease (2 credits)
MEDS 5380	Cell Biology (4 credits)
MEDS 5420	Molecular Genomics Practicum (3 credits)
MEDS 5351	Biochemistry II (3 credits)
MEDS 6444	Medical Microbiology (3 credits)
MEDS 6413	Cancer Biology (2 credits)
MEDS 5310	Responsible Conduct in Research (1 credit; Attendance is Mandatory)

Services Available to UConn Health Graduate Students

Students experiencing personal difficulties or professional issues during the time in graduate school may utilize the following services. Please familiarize yourself with these offices and the services they provide.

- Student Behavioral Health Service (SBHS). SBHS provides mental health evaluation and treatment to graduate students at UConn Health. Students can request an appointment with counselors for a wide variety of health concerns, such as stress, crisis, anxiety, depression, eating disorder, substance usage, transitional issues, grief and relationship issues. SBHS is completely separate from the academic side of the university and what you talk there is kept confidential from the faculty and others unless the student gives written permission. The SBHS services are free. There is no co-pay and you do not need to use your insurance.
- Office of Institutional Equity (OIE). OIE ensures the University's commitment and
 responsibility to foster equitable and inclusive working and learning
 environments. Their work focuses on administering the University's nondiscrimination policies, as well as ensuring compliance with state and federal laws
 and regulations related to equal opportunity and affirmative action.
- <u>UConn Ombuds Office</u>. The UConn Ombuds Office was established to provide a confidential, neutral resource for staff, faculty, professionals, graduate students and trainees to express concerns, identify options to address workplace conflicts, facilitate productive communication, and surface responsible concerns regarding university policies and practices.



MBB Program Faculty and Research Interests

<u>Eran Agmon</u>, Assistant Professor of Molecular Biology and Biophysics, B.S., University of California San Diego, Ph.D., Indiana University. (400 FARM Room R1614, Email: <u>agmon@uchc.edu</u>). Computational systems biology, multiscale cellular modeling, microbiome. Vivarium Collective website

<u>Christine R. Beck</u>, Assistant Professor of The Jackson Laboratory for Genomic Medicine, B.S., Iowa State University, Ph.D., University of Michigan. (Room 3306 at the Jackson Laboratory, Tel: 860-837-2173, Email: cbeck@uchc.edu or Christine.beck@jax.org). *Mechanisms of structural variation and repetitive elements*. Beck Lab website

<u>Irina Bezsonova</u>, Associate Professor of Molecular Biology and Biophysics, B.S., Lomonosov Moscow State University, Ph.D., University of Toronto. (Room E2032, Tel: 860-679-2769, Email: <u>bezsonova@uchc.edu</u>). *Protein structure-function relationship, NMR spectroscopy, X-ray crystallography, protein folding, epigenetics*. <u>Bezsonova Lab website</u>

<u>Melissa J. Caimano</u>, Associate Professor of Medicine, B.S., University of Rhode Island, Ph.D., University of Alabama at Birmingham (Room E2013 or L4-103, Tel: 860-679-7312, Email: <u>mcaima@uchc.edu</u>). *Molecular biology and pathogenesis of spirochetal infections*. <u>Caimano Lab website</u>

Steven Z. Chou, Assistant Professor of Molecular Biology and Biophysics, B.S., Jiangsu Normal University, Ph.D., Chinese Academy of Sciences (Room L3081, Tel: 860-670-2253, Email schou@uchc.edu). Structural basis of actin-based cell motility, cytokinesis, and transmembrane signaling. Chou Lab website

Ann E. Cowan, Professor Emerita of Molecular Biology and Biophysics, B.Sc., Queen's University, M.S., Yale University, Ph.D., University of Colorado (400 Farmington Room 1602, Tel: 860-679-1449, Email: acowan@uchc.edu). Plasma membrane proteins in sperm.

<u>Kimberly Dodge-Kafka</u>, Professor of Cell Biology/Center for Cardiology and Cardiovascular Research, B.S., Texas A&M University, Ph.D., University of Texas Health Science Center-Houston (Room EG029, Tel: 860-679-2452, Email: <u>dodge@uchc.edu</u>). *Molecular mechanism of signaling pathways in the heart*.

<u>Hamid Eghbalnia</u>, Associate Professor of Molecular Biology and Biophysics (Email: <u>heghbalnia@uchc.edu</u>). Computational and probabilistic modeling; small molecule characterization.

<u>Michael Gryk</u>, Associate Professor of Molecular Biology and Biophysics, B.S., M.S., University of Connecticut, Ph.D., Stanford University (Room L2051, Tel: 860-679-4785, Email: <u>gryk@uchc.edu</u>). *Three-dimensional structure and function of proteins involved in DNA repair*.

<u>Bing Hao</u>, Associate Professor of Molecular Biology and Biophysics, B.Sc., Xiamen University, Ph.D., The Ohio State University (Room L2005, Tel: 860-679-8364, Email: <u>bhao@uchc.edu</u>). Structural and functional studies of proteins involved in ubiquitin-proteasome pathway and bacterial spore germination.

<u>Christopher Heinen</u>, Professor of Medicine, B.Sc., Northwestern University, Ph.D., University of Cincinnati (Room E1032, Tel: 860-679-8859, Email: cheinen@uchc.edu). Biochemical and cellular defects of the DNA mismatch repair pathway during tumorigenesis.

<u>Jeffrey Hoch</u>, Professor of Molecular Biology and Biophysics, Director of Gregory P. Mullen NMR Structural Biology Facility; B.A., Boston University, M.A., Ph.D., Harvard University (Room L2007, Tel: 860-679-3566, Email: <u>hoch@uchc.edu</u>). *Biophysical chemistry of proteins*.

<u>Stephen M. King</u>, Professor and Chair of Molecular Biology and Biophysics, B.Sc., University of Kent, Ph.D., University College London (Room L2001, Tel: 860-679-3347, Email: <u>sking@uchc.edu</u>). *Structure and function of microtubule-based molecular motor proteins; cilia and flagella*.

<u>Dmitry Korzhnev</u>, Associate Professor of Molecular Biology and Biophysics, B.S., Ph.D., Moscow Institute of Physics and Technology (Room E2035, Tel: 860 679 2849, Email: <u>korzniev@uchc.edu</u>). Folding and conformational dynamics of proteins using NMR spectroscopy. <u>Korzhnev Lab website</u>

<u>Mark Maciejewski</u>, Assistant Professor of Molecular Biology and Biophysics, B.S., Illinois State University, Ph.D., The Ohio State University (Room L2021, Tel: 860-679-1943, Email: <u>markm@uchc.edu</u>). *Utilizing NMR to characterize the three-dimensional structure, function and dynamics of proteins from a wide range of important biological systems*.

<u>Wendy (Wing Ki) Mok</u>, Assistant Professor of Molecular Biology and Biophysics, B.Sc., Ph.D., McMaster University (Room L2017, Tel: 860-679-2203, Email: <u>mok@uchc.edu</u>). *Investigating how bacteria respond to and survive treatment with antibiotics that target distinct cellular components under different growth niches*. Mok Lab website

<u>Julia Oh</u>, Associate Professor of The Jackson Laboratory for Genomic Medicine, B.A., Harvard University, Ph.D., Stanford University (Tel: 207-288-6000, Email: <u>julia.oh@jax.org</u>). The Oh Lab studies the human microbiome for its potential to deliver treatments for infectious and other diseases. <u>Oh Lab website</u>

Rebecca Page, Professor of Cell Biology, B.S. and B.A., University of Arizona, Ph.D., Princeton University (Room L5087, Tel: 860-679-6045, Email: rpage@uchc.edu). The Page lab studies cell signaling, focusing on the chemical language that directs how extracellular and intracellular signals are communicated to and within the cell in both space and time. Page Lab website

<u>Joana Paulino</u>, Assistant Professor of Molecular Biology and Biophysics, B.Sc., M.S., University of São Paulo, Ph.D., Florida State University (Room L3085, Tel: 860-679-2269, Email: <u>jpaulino@uchc.edu</u>). *Using biophysical and structural approaches to investigate virus-host interactions that impact maternal and fetal health*. <u>Paulino Lab website</u>

Wolfgang Peti, Professor of Molecular Biology and Biophysics, M.S., University of Vienna, Ph.D., University of Frankfurt (Room L5077, Tel: 860-679-3874, Email: peti@uchc.edu). Molecular and cellular understanding of eukaryotic and prokaryotic signaling pathways. Peti Lab website

<u>Yulia Pustovalova</u>, Assistant Professor of Molecular Biology and Biophysics, B.Sc., M.Sc., Ph.D., Moscow Institute of Physics and Technology (Room L2044, Tel: 860679-5412, Email: ypustovalova@uchc.edu). *Structural biology computation and modeling*.

<u>Justin D. Radolf</u>, Professor of Medicine, B.S., Yale University, M.D., University of California San Francisco (Room E2018, Tel: 860-679-8480, Email: <u>jradolf@uchc.edu</u>). <u>Molecular pathogenesis and immunobiology of spirochetal infections</u>. <u>Radolf Lab website</u>

<u>Jianbin Ruan</u>, Assistant Professor of Immunology, B.S., Ph.D., University of Science and Technology of China (Room L3019, Tel: 860-679-7979, Email: <u>ruan@uchc.edu</u>). *Innate Immunity; Inflammasome; Pore-forming Proteins/Toxins; Host-pathogen Interactions*.

<u>Adam D. Schuyler</u>, Assistant Professor of Molecular Biology and Biophysics, B.S., Williams College, Ph.D., Johns Hopkins University (Room L2019, Tel: 860-679-1496, Email: <u>schuyler@uchc.edu</u>) *Computational modeling; nonuniform sampling in NMR; optimizing multidimensional NMR workflows*.

<u>Peter Setlow</u>, Professor of Molecular Biology and Biophysics, B.A., Swarthmore College, Ph.D., Brandeis University (Room L2003, Tel: 860-679-2607, Email: <u>setlow@uchc.edu</u>). *Biochemistry of bacterial spore germination*.

<u>Bernd Simon</u>, Assistant Professor of Molecular Biology and Biophysics, Diploma, University of Ulm, Ph.D., Free University of Berlin (Room L2023, Tel: 860-679-7690, Email: <u>bsimon@uchc.edu</u>). *NMR spectroscopy and metabolomics*.

<u>Suzy V. Torti</u>, Professor of Molecular Biology and Biophysics, B.A., Reed College, Ph.D., Tufts University (Room EMo32, Tel: 860-679-6503, Email: <u>storti@uchc.edu</u>). *Iron regulation and tumorigenesis*.

Oscar Vargas-Rodriguez, Assistant Professor of Molecular Biology and Biophysics, B.S., Pontifical Catholic University of Puerto Rico, Ph.D., The Ohio State University (Room L3079, Email: vargasrodriguez@uchc.edu). Alternative expression of the genetic code in microbial pathogens. Vargas-Rodriguez Lab website

<u>Sandra K. Weller</u>, Professor Emerita of Molecular Biology and Biophysics, B.S., Stanford University, Ph.D., University of Wisconsin (Room E2056, Tel: 860-679-2310, Email: <u>weller@uchc.edu</u>). *Molecular genetics and biochemistry of herpes simplex virus DNA replication*.



