

OSUWMC Resident/Fellow Research Resources

The Ohio State University College of Medicine Residency & Fellowship Training Programs

1. OSU COM Departments and Organizations

To learn about the OSU College of Medicine Basic Science Departments, Clinical Departments, Academic Offices, School of Health and Rehabilitation Sciences, Centers and Programs, Resources & Facilities and Research Institutes

<https://medicine.osu.edu/orgs/pages/index.aspx>

2. College of Medicine Research Resources**a. COM Office of Research**

Overview: The College of Medicine Office of Research supports faculty and staff as they develop proposals, conduct research, and develop plans for stimulating research growth and research career development. With experts in proposal development, grants administration, research strategy, research compliance, safety, lab management, and departmental affairs, the Office of Research is equipped to promote research and facilitate success in research endeavors in the College of Medicine.

For more information <https://medicine.osu.edu/research/Pages/index.aspx>

b. COM Basic Sciences Departments

- Anatomy <https://medicine.osu.edu/departments/anatomy>
- Biological Chemistry and Pharmacology
<https://medicine.osu.edu/departments/bcpharm>
- Biomedical Informatics <https://medicine.osu.edu/departments/biomedical-informatics>
- Cancer Biology and Genetics <https://medicine.osu.edu/departments/cancer-biology-and-genetics>
- Microbial Infection and Immunity <https://medicine.osu.edu/departments/mii>
- Neuroscience <https://wexnermedical.osu.edu/neurological-institute/departments-and-centers/departments/department-of-neuroscience>
- Physiology & Cell Biology <https://medicine.osu.edu/departments/physiology-and-cell-biology>

c. OSU COM Cores/Shared Research Resources

To learn about research cores and shared resources visit

https://medicine.osu.edu/research/research_operations/shared_resources/pages/index.aspx

d. OSU-Office of Sponsored Programs (OSP)

Overview: OSP (<http://osp.osu.edu/>) can help you with many grant application and management activities including the activities listed below. If you apply for an externally

sponsored fellowship or career development award you should contact the OSP for guidance and assistance.

- i. Establishing an NIH eRA account
- ii. Assistance with NIH grant submission/Cayuse
- iii. Assistance with PA005 Form (Authorization to seek off campus funding)
- iv. Assistance with Post Award management

3. EMR Data Access & Security

- a. In order to get access to IHIS for research purposes an eService request must be submitted <https://osumc.service-now.com/>
 - 1) separate from IHIS use for clinical activity
 - 2) requires separate approval
 - 3) must be in accordance with OSUWMC regulations and policies.
 - 4) IRB approval or exemption is required for IHIS use for research purposes
- b. To learn more about the Office of Responsible Research Practices (ORRP) information about HIPAA & Research, visit <https://orrr.osu.edu/irb/investigator-guidance/hipaa/>
- c. Additional information regarding access to Protected Health Information (PHI) for Research Purposes is available at Medical Information Management (MIM) OneSource page <https://onesource.osumc.edu/departments/MIM/Pages/Research.aspx>
For additional information Contact: Kathleen.Smith@osumc.edu
- d. Information Warehouse: All secondary use of data for research at OSUWMC is governed by the Honest Broker Protocol. This protocol allows for the delivery of 4 types of research data
 - 1) Aggregate counts (feasibility)
 - 2) De-identified data
 - 3) Coded Limited Data
 - 4) IRB approved release of PHI

All requests for research data are reviewed weekly by the Honest Broker Operations Committee. Once approved, the committee assigns the work to a certified Honest Broker who will work directly with the researcher to compile their data.

If you want to make a request for research data, you can enter a data request via eServices. Log into the eServices catalog and go to *Submit a Request > Services > Data Reporting Requests > Data Report Request Form*. For more information contact: Patrick.Rogers@osumc.edu

e. HIPAA Compliance & Data Security

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) and its regulations, including the Privacy Rule and the Security Rule, as well as the Health Information Technology for Economic and Clinical Health (HITECH) Act, govern the way certain health information is collected, maintained, used, and disclosed. The Privacy Rule establishes a set of safeguards on certain types of health information known as protected health information, or PHI. The Privacy Rule was created to provide a national minimum level of protection for PHI.

<https://orrr.osu.edu/irb/investigator-guidance/hipaa/>
Contact: Jamie.Nelson@osumc.edu

4. Research Compliance

a. Office of Responsible Research

The Office of Responsible Research Practices provides administrative support to the university research community and the committees responsible for research review and oversight. We help Ohio State faculty, staff, and student researchers navigate research requirements through education and quality improvement initiatives designed to facilitate research, improve efficiencies, and ensure regulatory compliance.

Visit the ORRP website <https://orrrp.osu.edu/> to find more information about

- 1) Human Subjects research
- 2) Animal Care and Use
- 3) Biosafety

b. Institutional Review Board (Buck-IRB)

Buck-IRB is the electronic system used for the submission and review of exempt and Institutional Review Board (IRB) research performed by Ohio State investigators. Buck-IRB streamlines the exempt and IRB submission processes for investigators. To access the Buck-IRB system, login at go.osu.edu/Buck-IRB.

If you have general questions regarding Buck-IRB, please contact Michael Donovan, Buck-IRB Liaison, at 614-292-6950 or donovan.6@osu.edu

Technical problems with the Buck-IRB system can be directed to ORhelpdesk@osu.edu

c. Institutional Animal Care and Use Committee (IACUC) <https://orrrp.osu.edu/iacuc/>

d. Institutional Biosafety Committee (IBC) <https://orrrp.osu.edu/ibc/>

5. The OSU Center for Clinical and Translational Science (CCTS)

Overview: The CCTS led by Rebecca Jackson MD is a collaboration among The Ohio State University, The Ohio State University Wexner Medical Center and Nationwide Children's Hospital dedicated to turning the scientific discoveries of today into life-changing disease prevention strategies and the health diagnostics and treatments of tomorrow. Funded by a multi-year Clinical and Translational Science Award (CTSA) from the National Institutes of Health, the CCTS leverages expertise from every college across the University, including scientists and clinicians from the seven Health Science Colleges, the College of Engineering, OSU Wexner Medical Center and Nationwide Children's Hospital, community health and education agencies, business partnerships, and regional institutional network partnerships. The CCTS provides financial, organizational, and educational support to biomedical researchers, as well as opportunities for community members to participate in credible and valuable research. To learn more about CCTS services, educational and funding opportunities please visit <https://ccts.osu.edu/>

For more information and questions about educational opportunities please contact Stuart Hobbs stuart.hobbs@osumc.edu.

6. Health Sciences Library

Overview: Health sciences librarians and information professionals offer guidance on the use of citation management tools; help measure research impact and advise on researcher profile tools; consult or collaborate on systematic reviews and advise on comprehensive searches; provide guidance on copyright law and open access publishing;

offer support for complying with funding agency requirements and the development of data management plans for grant proposals and publications; offer publication illustrations, graphic designs, and research poster printing services. If you need help getting started on anything related to biomedical literature, try using the Medicine subject guide <https://hslguides.osu.edu/medicine>.

To learn more about Health Sciences Library please visit the HSL website

<https://hsl.osu.edu> for more information on all services and collections; read the HSL brochure

https://hsl.osu.edu/sites/default/files/Health%20Sciences%20Library%20Service%20Highlights-Revised%209.23.19_0.pdf, or watch these videos about HSL services

<https://hsl.osu.edu/service-area-videos>.

For more information and questions please call (614) 292-4861

7. Advanced Degrees during your Residency or Fellowship

a. COM Masters of Medical Science Program

Overview: A professional Master's of Science in Medical Science degree (see ix below) exclusively for OSUWMC/NCH residents and fellows. Core Curriculum requirements in research design, biostatistics and research ethics that can be tailored with coursework relevant to basic/translational, clinical and health services research.

For more information about the MMSP please visit

<https://medicine.osu.edu/education/masters/mms>

For questions or to schedule a meeting with the MMS program manager please contact Research.Education@osumc.edu

b. COM Degree Programs

Overview: For information about the OSU College of Medicine Masters Degree Programs please visit <https://medicine.osu.edu/education/masters> and about Doctoral Degree Programs please visit <https://medicine.osu.edu/education/phd>.

Below is a list of OSU COM advance degree programs of potential interest to residents and fellows:

- Anatomy (MS & PhD)
- Bioethics (MA)
- Biomedical Informatics (MS & PhD)
- Biomedical Sciences Graduate Program (PhD)
- Genetic Counseling (MS)
- Medical Science (MS)
- Neuroscience (MS & PhD)
- Pathology (MS)
- Translational Pharmacology (MS)

For information about degree programs offered by the **College of Public Health** please visit <https://cph.osu.edu>

OSU advanced degree programs are administered by the **OSU Graduate School**. For information about the OSU Graduate School please visit <https://gradsch.osu.edu>. Rules, policies and guidelines applicable to the graduate community are outlined in the OSU Graduate School Handbook (<https://gradsch.osu.edu/handbook>)

8. Center for Biostatistics

Overview: The Center for Biostatistics provides statistical support to the OSU Wexner Medical Center, the Comprehensive Cancer Center, and the Center for Clinical and Translational Science, the five health sciences colleges, biomedical investigators throughout the university and biomedical researchers outside the university. Our goal is to improve the quality of research through close collaboration with investigators.

For more information about the Center for Biostatistics please visit <https://medicine.osu.edu/departments/biostatistics>

9. Research Workshops/Seminars

- a. **OSU CCTS Lunch and Learn** for CCTS TL1 and KL2 trainees and other research trainees.

Overview: The CCTS TL1 offers a monthly lunch and learn (every first Tuesday of the month) <https://ccts.osu.edu/content/tl1-lunch-learn-1> on a variety of research education and training related topics. For additional information, please contact stuart.hobbs@osumc.edu.

Overview: The CCTS KL2 offers a monthly lunch and learn (every second Tuesday of the month) <https://ccts.osu.edu/content/kl2-lunch-learn-1#> on a variety of research education and training related topics.

For additional information, please contact stuart.hobbs@osumc.edu.

- b. **OSU Department of Surgery Health Services Research (SHARP)**

Overview: Every Wednesday, 3:30-5:00 PM (location TBD) SHARP provides weekly opportunities for health services researchers to share information, vet proposals and concepts, and receive constructive feedback from peers, mentors and other members through the structured works in progress meetings, as well as informal roundtable and networking discussions. Journal Club and Grand Rounds sessions occur monthly.

Department of Surgery Research Showcase

- 4th Tuesday, 12:00-1:00PM, BRT 134
- The Department of Surgery is pleased to announce a department-wide opportunity to present research in progress and research findings. The DoS Research Showcase Presentation Series occurs every 4th Tuesday, is open to attendance from faculty, staff and trainees in the department and beyond. Presentations may span basic science, translational work, clinical trials and outcomes, health services research, innovations, surgical education and more. Each session will allow for 2 (~15 minute) presentations, followed by ~15 minutes of discussion to identify new opportunities for collaboration.
- For more information, or to schedule a presentation, contact Judy Opalek, Director, and Research Administration at judy.opalek@osumc.edu or 614-293-3274.
- For more information, or to be added to the distribution list, please contact: Scott Chaffee, SHARP Administrative Assistant at scott.chaffee@osumc.edu or 614-688-6684.

10. Research Centers

a. OSU Comprehensive Cancer Center (OSUCCC)

Overview: The Arthur G. James Cancer Hospital and Richard J. Solove Research Institute (OSUCCC – James) The OSUCCC – James is the only cancer program in the United States that features a National Cancer Institute (NCI)–designated comprehensive cancer center aligned with a nationally ranked academic medical center and a freestanding cancer hospital on the campus of one of the nation’s largest public universities.

For more information about the CCC services, research and education please visit <https://cancer.osu.edu/>

b. The Ohio State Comprehensive Transplant Center (OSUCTC)

Overview: The OSU transplant program began in 1967. The OSU CTC is central Ohio’s only adult comprehensive transplant center. The research we perform at the Ohio State Comprehensive Transplant Center covers basic, translational and clinical, with the goal of developing the next generation of surgical innovation.

What we learn at the bench we apply to the bedside. For more information about CTC <https://wexnermedical.osu.edu/departments/transplantation-surgery/research>
Contact Ken.Washburn@osumc.edu

c. Dorothy M. Davis Heart and Lung Research Institute (HLRI)

Overview: The OSU DHLRI encompasses a team of over 600 faculty, staff and trainees representing eight University Colleges and 26 different departments dedicated to discovering new diagnostics and treatments for patients with acute and chronic disease. The DHLRI research spans from basic molecular and genetic research to large multi-center clinical trials investigating the causes and treatments for diseases that affect the heart and lungs.

For more information <https://wexnermedical.osu.edu/heart-vascular/heart-lung>

d. CATALYST

Overview: CATALYST is a center within The Ohio State University College of Medicine focused on advancing research and discovery in the delivery of health services across the continuum of care using a team science approach. As an innovative and independent center, CATALYST is focused on providing a well-recognized hub for health services and implementation science research efforts.

For more information <https://wexnermedical.osu.edu/departments/catalyst-center>

e. Pelotonia Institute for Immuno-Oncology

Overview: The Pelotonia Institute for Immuno-Oncology (PIIO) is a comprehensive bench-to-clinical-trial research institution that accelerates cancer immunotherapy. The institute focuses on Fundamental, Systems, Synthetic (including cell therapy and engineering) and Translational Immuno-Oncology, Immunogenomics, and Immune Monitoring and Discovery (IMD). IMD platform technologies include:

- High-Content Spectral Flow Cytometry (Cytex Aurora)
- Mass Cytometry (Fluidigm Helios CyTOF)
- Single Cell Proteomics (IsoPlexis IsoLight)
- Single Cell Genomics (10x Genomics Chromium System)

- Tissue/Sample Acquisition and Biobanking Services; and More.

To enlighten IO researchers, the PIIO offers special research seminars, weekly Research-in-Progress meetings, quarterly newsletters, and its annual immunology (IO) symposium. Please visit <https://cancer.osu.edu/piio> to learn more about how the PIIO is driving the next generation of cancer immunotherapies. For questions, or to be added to the PIIO Email Distribution List, please contact James Fant at James.Fant@osumc.edu

f. **The Center for Surgical Health Assessment, Research and Policy (SHARP)**

Overview: SHARP is led by Heena Santry, MD, MS is the intellectual home of health services researchers within the Department of Surgery at The Ohio State University. The mission of SHARP is to empower surgeon scientists to determine the biopsychosocial underpinnings of surgical disease, measure surgical outcomes and test innovative approaches to improving surgical care in central Ohio and beyond, through robust health services research methodology. SHARP is comprised of 19 core faculty members, from within the Department of Surgery and other surgical specialties (Orthopedic Surgery, Plastic Surgery) and select other departments such as Biomedical Informatics. The staff include project coordinators/managers who oversee daily activities across all projects and Master's or PhD trained senior biostatisticians who perform data management, sample size estimations, and statistical planning and analysis. All staff are embedded in shared office space in close proximity to the Department of Surgery and hospital clinical space, and within walking distance of numerous other University resources such as the Department of Biomedical Informatics, the Comprehensive Cancer Center, and the College of Public Health. A SHARP Administrative Director and Scientific Director guide overall progress across investigators with shared interest in examining surgical disease from a health services research perspective and support all personnel and operations. SHARP faculty receive mentorship, guidance and feedback from seasoned health services researchers and support staff as described above, in formal weekly meetings as well as informal and impromptu discussions. Faculty also have access to ~350 feet of shared physical lab space and access to a secure high performance virtual server for data storage and manipulation. SHARP also maintains numerous healthcare related databases including HCUP datasets, NSQIP and SEER. SHARP members meet every Wednesday, as detailed above.

To learn more about SHARP please visit www.u.osu.edu/sharp.

For more information, questions or to schedule a meet and greet, please contact Scott Chaffee, SHARP Administrative Assistant at scott.chaffee@osumc.edu or call 614-688-6684.

g. **OSU Infectious Disease Institute**

Overview: Infectious diseases are a leading cause of death worldwide and a major threat to our food supply and natural resources. The Ohio State University Infectious Diseases Institute (IDI) was established in 2017 to build upon the successes of previous OSU programs and to accelerate infectious disease research and education. IDI supports researchers and educators throughout the university with resources, connections and opportunities. It provides an infrastructure that maximizes our comprehensive capabilities and streamlines our efforts. The IDI promotes a clear external understanding of Ohio State's infectious disease activities to strengthen our efforts to partner with industry, government and other

organizations. All Ohio State and Nationwide Children's Hospital faculty, postdocs, students and staff working within the infectious diseases and microbiology realm are invited to join the IDI community. Through a team-science based approach, we advance an inclusive strategy connecting new knowledge to applications in six programmatic areas:

- Antimicrobial Resistance
- Ecology, Epidemiology and Population Health
- Host Defense and Microbial Biology
- Microbial Communities
- Prevention, Detection and Therapies
- Viruses and Emerging Pathogen

Please see our web site for listings of resources and events <https://idi.osu.edu>
For more information or to meet to discuss educational opportunities, please contact Associate Director John Gunn John.Gunn@nationwidechildrens.org or Robyn Kroeger kroeger.68@osu.edu

11. Presenting Your Research/Networking and Research Collaborations

a. The Ohio State University Center for Clinical and Translational Science (CCTS)

Overview: The CCTS is a collaboration among The Ohio State University, The Ohio State University Wexner Medical Center and Nationwide Children's Hospital dedicated to turning the scientific discoveries of today into life-changing disease prevention strategies and the health diagnostics and treatments of tomorrow. Funded by a multi-year Clinical and Translational Science Award (CTSA) from the National Institutes of Health, the CCTS leverages expertise from every college across the University, including scientists and clinicians from the seven Health Science Colleges, the College of Engineering, OSU Wexner Medical Center and Nationwide Children's Hospital, community health and education agencies, business partnerships, and regional institutional network partnerships. The CCTS provides financial, organizational, and educational support to biomedical researchers, as well as opportunities for community members to participate in credible and valuable research. To learn more about CCTS services, educational and funding opportunities please visit <https://ccts.osu.edu/>
For more information please contact Stuart Hobbs stuart.hobbs@osumc.edu

b. Reese Immunology Seminar Series

Overview: This seminar series, organized by Dr. Wael Jarjour, Professor and Director of the OSUWMC Division of Rheumatology & Immunology, includes scientific presentations by immunology researchers across the OSU campus. The conference is designed to increase awareness of immunology research at OSU and to facilitate research collaborations. For questions and more information contact ruth.franklin@osumc.edu or check OneSource Research tab for calendar information.

c. **COM Trainee Research Day**

Overview: Research Day is an annual event featuring the biomedical research of trainees within the OSU Medical Center. This group includes graduate, undergraduate, medical and MD/PhD students of the OSU College of Medicine, as well as postdoctoral fellows and researchers and clinical residents and fellows. Held each spring, Research Day features posters from hundreds of trainees, a trainee speaker series, and a keynote address by a world-renowned researcher in the field of biomedical science. Faculty members judge poster presentations throughout the day, and travel awards are given to the highest-scoring trainees.

To learn more about this annual event visit <https://researchday.osu.edu>

For more information please contact research.day@osumc.edu

d. **Departmental Research Days** - Contact Department Administration

12. **Research Funding for Residents/Fellows**

Postdoctoral Research Trainees are encouraged to apply for national competitive fellowships, if timed appropriately in their training. The decision to apply is made jointly between the trainee and advisor/mentor. Preparing for these scholarships is an educational experience that will serve you well in your career as a biomedical researcher, but the process of creating a competitive proposal does take some time to plan.

a. **OSU CCTS TL1**

Overview: The OSU CCTS TL1 is an institutional training grant which supports the training in translational and clinical science for those with health related degrees and research careers (MD, DO, DVM, PsyD, PharmD, PhD, RN, nutrition, public health and other health related areas).

To learn about research funding opportunity please visit

<https://cts.osu.edu/content/tl1>

For more information and questions contact stuart.hobbs@osumc.edu

b. **Pelotonia Postdoctoral Fellowship**

Overview: The Pelotonia Fellowship Program provides funding for promising and accomplished postdoctoral trainees from any discipline who have the potential to become independent cancer researchers. These two year awards provide stipends and benefits to awardees. The program also provides one year funding for professional (medical, dental, pharmacy) students who want to take a year off for a concentrated research experience. Applications are accepted in January and September. Funding is available to trainees at The Ohio State University, Nationwide Children's Hospital and Cincinnati Children's Hospital Medical Center. Funded by the ride, Pelotonia, the program has awarded 524 awards worth almost 17 million dollars.

To learn more about this research funding opportunity please visit

<https://cancer.osu.edu/research-and-education/pelotonia-funded-research/pelotonia-fellowship-program>

For more information and questions contact Marie Gibbons, Pelotonia Fellowship Program Manager at marie.gibbons@osumc.edu or 614-685-1960.

c. **COM NIH Training Grants** (postdoctoral fellowships)

Overview: NIH Training Grants are called T32 institutional grants which provide funding to train qualified predoctoral and/or postdoctoral trainees for careers that have a significant impact on the health-related research needs of the Nation. Eligibility requires that the trainee is a U.S. citizen or permanent resident enrolled in a research or clinical doctoral or postdoctoral program. OSU T32s that could support residents and fellows who are pursuing research training are those which offer postdoctoral training positions and are listed below.

To learn more <https://researchtraining.nih.gov/programs/training-grants/T32>
To inquire about availability of training positions and application deadlines, contact the T32 PD/PI.

See table below.

NIH Grant Number	Grant Title	Program Director/Principal Investigator	# Post-doctoral Slots	Eligibility
2T32AI106704-06	Advanced Research Training in Immunology for Surgical Trainees	Ginny L. Bumgardner MD PhD	All Postdoc 4	MD
T32AI112542-05	Interdisciplinary Program in Microbe-Host Biology	Daniel Wozniak PhD	Predoc and Postdoc	PhD, MD
TL1TR002735-02	NRSA Training Core	Lawrence Kirschner MD PhD/Ginny L. Bumgardner MD PhD	Pre- and Postdoc fellow	MD, DO, DVM, PsyD, PharmD, PhD, RN, nutrition, public health and other health related areas
T32CA009338-40	Oncology Training Grant	John Byrd MD	All Postdoc 8	M.D., D.O., DVM, or Ph.D
T32CA229114	Training Program for Cancer Prevention and Control	Peter Shields MD	All Postdoc 3	
2T32CA090223-16A1	Tumor Immunology	William Carson MD	All Postdoc	MD, PhD