

# Postdoctoral Positions at Cincinnati Children's

Positions Available in various areas (Click to review details):

- [Anesthesia](#)
- [Bioinformatics/ Computational Biology/ Biostatistics/ Epidemiology](#)
- [Cancer & Blood Diseases](#)
- [Cardiovascular Research](#)
- [Clinical Research/ Developmental Pediatrics/Health Disparities](#)
- [Genetics, Development, Physiology, and Disease](#)
- [Imaging Research Center](#)
- [Immunology/ Inflammation](#)

[Click here](#) to apply online and use the relevant job number.

## Questions?

Please contact:  
Tamiika Hurst, PhD or  
Gail Pyne-Geithman, D.Phil.,  
Scientist Recruiters:  
[research@cchmc.org](mailto:research@cchmc.org)

This is a dynamic document as new positions are added (as approved) and removed (when filled). Please visit our [career site](#) for the most current list of openings.

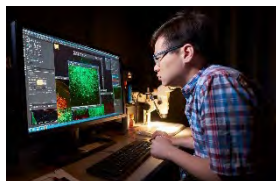
## Cincinnati Children's Research Foundation



### Cincinnati Children's Research and Training at a Glance:

- Ranked the **#1 Children's Hospital** in the country in 2023!
- Among the top in NIH funding for pediatric research institutions
- Over **1.4 million square feet** of research laboratory space
- **900+ scientists** conducting basic, translational, and clinical research
- Over **2000 publications** annually in top-tier journals
- Access to Employee Resource Groups and **Mentorship** programs
- Postdocs have gone on to careers in academia, biotech, pharma, teaching etc.

Learn more about the [Postdoctoral Fellowship Program](#)



Scan to learn more about the Research Foundation

### Compensation and Benefits:

Postdoctoral Research Fellows and Associates are eligible for:

- Group Health, Dental, and Vision Insurance Plans
- Paid Time Off
- Retirement Plan
- Tuition Reimbursement
- Relocation benefits for eligible hires



### Living in Cincinnati:

Learn more about [Cincinnati](#), living [here](#) and get to know the [neighborhoods!!](#)

Please review our current openings described in the subsequent pages (the links on the left will take you to the sections of interest).

Please submit a cover letter describing your research interest, CV, and contact information for 3 references to the email address at the end of the position for which you would like to be considered.

*Cincinnati Children's Hospital Medical Center is an Affirmative Action/ Equal Opportunity Institution*  
*Cincinnati Children's Hospital Medical Center is a Drug Free Workplace*

## Bioinformatics/ Computational Biology/ Biostatistics/ Epidemiology

**Research Fellow Job Number: 130732.** [Dr. Theresa Alenghat's Lab](#) has openings for two highly motivated postdoctoral research fellows interested in epigenetics, intestinal epithelial biology, and host-microbe interactions. We explore pathways that regulate how intestinal microbiota impact immune and metabolic homeostasis, infection, and inflammatory bowel disease. Candidates with publications reflecting expertise in epigenetics, immunology, and/or bioinformatics analyses are encouraged to apply.

**Contact: Theresa Alenghat, VMD, PhD**

**Email Address: [Theresa.Alenghat@cchmc.org](mailto:Theresa.Alenghat@cchmc.org)**

**Research Fellow Job Number: 129833.** The [Brugmann Lab](#) is looking for a postdoctoral fellow interested in combining developmental and computational biology to further our understanding of craniofacial development and disease. Craniofacial abnormalities (CFAs) are associated with approximately one-third of all birth defects. The laboratory focuses on understanding the molecular, cellular, and genetic factors that guide craniofacial development. To do so, we have focused on the function of the primary cilium, a ubiquitous, microtubule-based organelle used by all cells to integrate and transduce molecular signals. We aim to elucidate how primary cilia function during facial development and uncover how basic cellular processes are impacted when cilia are impaired. To achieve this goal, we generate and analyze large data sets (RNA-seq, ChIP-seq, CUT&RUN) from animal (murine and avian) and human (iPSC) ciliopathic models. Interested candidates must have a PhD and have a strong record of accomplishments and experience in 1) Developmental biology, Molecular biology, Craniofacial biology, Ciliary biology; OR 2) Bioinformatics, computational biology. We are looking for a colleague who is highly motivated and independent. Relevant publications: [eLife 2020 PMID: 33006313](#).

**Contact: Samantha Brugmann, PhD**

**Email Address: [Samantha.Brugmann@cchmc.org](mailto:Samantha.Brugmann@cchmc.org)**

**Research Fellow Job Number: 139235.** Dr. Miraldi's [Immuno-Engineering Laboratory](#) seeks a computational research fellow to build mathematical models of the immune system in vivo. These models will be constructed from cutting-edge, high-dimensional, immune-system measurements (e.g., single-cell genomics, chromatin state, proteomics). Our mathematical modeling frameworks span mechanistic (e.g., dynamic gene regulatory networks) to deep learning (e.g., prediction of cellular epigenomes from DNA sequence). Situated at Cincinnati Children's Hospital, we are dedicated to the design of computational methods and systems-immunology studies that will ultimately improve the health of children. Through close collaboration with our physician and experimental colleagues, we iteratively test and refine our models, so that the models yield novel insights into immune-cell function and ultimately guide new therapeutic strategies in the context of autoimmunity, infectious disease, and cancer. The ideal candidate will collaborate closely with experimental immunologists, physicians, and other computational biologists. The team will design and execute hybrid computational-experimental strategies that push the boundaries of both immunology and computational biology. The ideal candidate will have a quantitative background in computational/systems biology, engineering, computer science, statistics, math, or a related field. He or she will also (1) be a fluent programmer in at least one language (e.g., Python, R, MATLAB) and be willing to develop fluency in other languages, as needed, (2) have research experience in machine learning, bioinformatics and/or mathematical modeling, and (3) a trackable publication record. An enthusiasm and willingness to develop immunology expertise on the job is also necessary.

**Contact: Emily Miraldi, PhD**

**Email Address: [Emily.Miraldi@cchmc.org](mailto:Emily.Miraldi@cchmc.org)**

## Cancer and Blood Diseases

**Research Fellow/Associate Job Number: 143537.** The [Lu lab](#) has an opening for self-motivated individuals interested in a postdoctoral position doing cutting-edge research on brain tumorigenesis, tumor immunology, immunotherapy, and cancer neuroscience. Using mouse models, and state-of-the art cancer genomics, single-cell multi-omics, spatial transcriptomics, high-throughput drug and CRISPR/cas9 screens, as well as proton therapy and experimental therapeutics, our investigations delve into both cancer cell intrinsic and extrinsic mechanisms, exploring crucial factors such as oncogenic networks, tumor microenvironment, and immune cells that influence tumor formation, recurrence, and metastasis. Our research has been published in prestigious journals, including *Nature* (Luo, et al., 2022), *Nature Cell Biology* (Hu, X., 2022), and *Nature Communications* (Luo et al., 2023), among others. Candidates who have recently obtained a PhD or MD and possess a strong background in one or more of the following areas are encouraged to apply: molecular and cellular biology, neurobiology, cancer biology, and computational biology. Join us in our mission to advance the understanding and treatment of brain tumors and make a lasting impact on the lives of patients and their families.

**Contact: Richard Lu, PhD**

**Email Address: [Richard.Lu@cchmc.org](mailto:Richard.Lu@cchmc.org)**

**Research Fellow Job Number: 145157.** Dr. Courtney Jones's lab studies tumor metabolism in acute myeloid leukemia (AML) with a focus on leukemia stem cell (LSC) biology. (Jones et al. *Cancer Cell* (2018), Pollyea et al., *Nature Medicine* (2018) Jones et al. *Blood* (2019), Jones et al. *Cell Stem Cell* (2020), Stevens et al. *Nature Cancer* (2020), O'Brien et al. *Haematologica* (2023)). The lab is moving to Cincinnati Children's Hospital Medical Center in the fall of 2023. Our goal is to develop novel therapeutic approaches to target metabolism in AML and LSCs to improve patient outcomes. We are looking for a postdoctoral fellow who is interested in at least a subset of the following areas: malignant hematopoiesis, stem cell biology, tumor metabolism, post-translational modifications, and patient derived xenograft modeling. The applicant should have a doctoral degree in Biology, Molecular Biology, Genetics, Immunology, or related field, and a strong interest in cancer research, and particularly in hematologic malignancies. The ideal candidate will be highly self-motivated and have a track record of publications.

**Contact: Uma Sivaprasad, PhD for Dr. Courtney Jones**

**Email Address: [research@cchmc.org](mailto:research@cchmc.org)**

## Cardiovascular Research

**Research Fellow/Associate Job Number: 149905.** The [Millay lab](#) at Cincinnati Children's has an opening for a postdoctoral Research Fellow (recent PhD) or Research Associate (3+ years of postdoc experience) with expertise in cell biology, biochemistry, or structural biology to work on exciting projects related to the mechanisms of muscle cell fusion. Our lab discovered the muscle-specific fusogens (Myomaker and Myomerger) that control the membrane fusion reaction in muscle cells, and we utilize cutting-edge technologies to understand how these proteins work. Applicants should have a PhD, possess independent thinking skills, and an excitement for science.

**Contact: Doug Millay, PhD**

**Email Address: [Douglas.Millay@cchmc.org](mailto:Douglas.Millay@cchmc.org)**

**Research Fellow Job Number: 128409.** The [Ikegami lab](#) at Cincinnati Children's Hospital Medical Center is recruiting highly motivated postdocs interested in developing a new tool to study chromatin biology at single cell levels. The lab has an [ongoing project](#) aiming to develop a transformative technique for mapping chromatin proteins in the genome in single cells. Candidates interested in genomics, chromatin biology, epigenetics, single cell techniques, or translational research using genomic techniques are highly encouraged to apply. A prior experience in experimental and computational genomics is a plus, but not required. Cincinnati Children's Hospital Medical Center is a home to world-class investigators working on chromatin biology and genomics. This postdoctoral position will enjoy a highly collaborative environment within and outside the medical center.

**Contact: Kohta Ikegami, PhD**

**Email Address: [Kohta.Ikegami@cchmc.org](mailto:Kohta.Ikegami@cchmc.org)**

## Clinical Research/ Developmental Pediatrics/ Health Disparities

**Research Associate Job Number: 151544.** Dr. Lisa Hunter is seeking a Postdoctoral Research Associate to join the Children's Auditory Research Lab ([CARLab](#)). Since 2009, CARLab has been part of the Communication Sciences Research Center (CSRC), the leading research hub in Ohio for pediatric hearing, reading, speech and language research. This position will focus on auditory studies in prematurity and ototoxicity, including physiological and behavioral assessment of young children. We are united by a desire to understand the mechanisms of human communication at both a basic science and applied, clinical levels. Research in the CARLab is directed toward understanding hearing development and disorders in newborns, children, and adolescents. Our studies are funded by the National Institutes of Health, the Cystic Fibrosis Foundation, the Centers for Disease Control, and the Maternal and Child Health Bureau. Successful candidates will have experience in auditory and communication science research, and doctoral training in audiology (AuD or PhD).

**Contact: Lisa Hunter, PhD, FAAA**

**Email Address: [Lisa.Hunter@cchmc.org](mailto:Lisa.Hunter@cchmc.org)**

**Research Fellow Job Number: 144051.** The Collaborative Laboratories Investigating Pediatric Pain (CLIPP) group, under the direction of Drs. Robert C. Coghill & Christopher D. King is focused on elucidating the mechanisms underlying pain. The CLIPP group is seeking a postdoctoral fellow interested in receiving advanced training in the investigation of human pain mechanisms across the lifespan, with a particular emphasis on chronic pain in children. The ideal candidate will be independent, highly motivated, and have a strong background in systems neuroscience, psychology, human sleep and sleep disturbances, digital health, and sensory testing. This position will involve training in multiple methodologies, including sensory testing, psychological assessments, and sleep/wearables. The fellow will be working primarily on different projects in the King ([Projects | King Lab \(cincinnatichildrens.org\)](#)) laboratory, including National Institute of Health (NIH) funded studies examining the neural mechanisms underlying different pain conditions, focusing on localized and overlapping pain. Additional neuroimaging training opportunities will be available in the closely aligned Coghill laboratory. Roles include oversight of research coordinators and students, experimental design and execution, actigraphy analysis, collection of patient-reported outcome data, manuscript preparation, and participating in regulatory oversight of studies. The Pediatric Pain Research Center will further enhance training opportunities by facilitating interactions with pain researchers and clinician-scientists across multiple departments across the institution. Candidates must have a doctoral degree (MD, Ph.D., or equivalent) in Neuroscience, Clinical Psychology, Computer Science, Physics, Biomedical Informatics, Bioinformatics, Epidemiology, or Biostatistics, along with prior experience with pain, sleep, digital health, or imaging, mainly working with patients with chronic pain. The preferred candidate will have an excellent understanding of the neurobiological mechanisms underlying acute and chronic pain. Excellent written, verbal, and communication skills are crucial.

**Contact: Christopher King, PhD**

**Email Address: [Christopher.King@cchmc.org](mailto:Christopher.King@cchmc.org)**

**Research Associate Job Number: 144286.** Dr. Anna Esbensen and the [Division of Developmental Disabilities and Behavioral Pediatrics](#) has an opening for a Research Associate position focused on clinical and behavioral outcomes research with children and adolescents with Down Syndrome. The research associate will be involved in several studies, including clinical trials of school-age children with Down syndrome, measuring cognitive or language outcomes in preschool to school-age children with Down syndrome and a study developing a novel behavioral outcome measure for use with individuals with Down syndrome. Primary responsibilities include: (1) supervision of research infrastructure across several federally-funded research projects, (2) overseeing behavioral coding of observational data, (3) some behavioral and cognitive data collection from children with Down syndrome, (4) statistical analysis of existing data, and (5) writing scientific papers and presenting work at scientific conferences. The preferred hire will have a PhD, MD or equivalent degree in a field related to developmental disabilities with 3-5 years of experienced. Demonstration of a track record of publications and a strong background in research related to developmental disabilities is preferred. Experience with statistical analyses and clinical skills collecting data from individuals with intellectual and developmental disabilities, including Down syndrome, and their families is required.

**Contact: Anna Esbensen, PhD**

**Email Address: [Anna.Esbensen@cchmc.org](mailto:Anna.Esbensen@cchmc.org)**

## Development, Genetics, Reproduction, Physiology, and Disease

[Dr. David Smith](#) is looking for a highly motivated and talented postdoctoral researcher to join the Smith Lab in the Divisions of Pediatric Otolaryngology and Pulmonary Medicine, Cincinnati Children's Hospital Medical Center, Cincinnati, USA. This position is funded by the Division of Otolaryngology and is part of an innovative collaboration with the [Koritala Lab](#). Together, we aim to unravel the molecular intricacies of Obstructive Sleep Apnea. Leveraging state-of-the-art multi-omics technologies such as single-cell sequencing, spatial-omics, and ChIP sequencing, we are at the forefront of advancing our understanding of the pathophysiology of this complex condition. We invite you to join us on this groundbreaking journey to make significant strides in biomedical research.

**Contact: David Smith, MD, PhD.**

**Email Address: [David.Smith3@cchmc.org](mailto:David.Smith3@cchmc.org)**

**Research Fellow Job Number: 149650.** The [Fernandez Lab](#) at CCHMC is currently seeking a postdoctoral fellow to join our team and contribute to cutting-edge research in neuroscience. The main goal of our research is unraveling the mechanisms underlying light perception, development, and brain plasticity. We are looking for a highly motivated candidate with a strong background in neuroscience or a related field, who is enthusiastic about taking on exciting new projects. The ideal candidate will hold a doctoral degree in a relevant field and possess experience in using: 1) precise tools for tracing neuronal circuits, 2) techniques for measuring neuronal activity (such

as fiber photometry, EEG, and optogenetics), 3) a good understanding of genetic mouse lines, and 4) experience in behavioral tests for assessing circadian, sleep, cognitive, and affective responses in rodents. We are a new lab in the Ophthalmology and Developmental Biology divisions at CCHMC that embraces and promotes diversity, equity, and inclusion. Our lab culture values teamwork, and we believe that collaborative efforts lead to the most efficient and impactful scientific discoveries. Situated adjacent to the University of Cincinnati Medical Center, our campus provides access to a vibrant neuroscience community comprising over 60 basic research labs, as well as active graduate student and postdoctoral programs. Our lab actively collaborates with other research groups, fostering a rich collaborative environment for professional growth and scientific exploration. If you are passionate about vision neuroscience and eager to contribute to advancing our understanding of the field, we encourage you to apply to join our team.

**Contact:** Diego Fernandez, PhD

**Email Address:** [Diego.Fernandez@cchmc.org](mailto:Diego.Fernandez@cchmc.org)

**Research Associate Job Number: 147738.** The [Accelerator Lab](#) at the Center for Stem Cells and Organoid Medicine (CuSTOM) at Cincinnati Children's Hospital is seeking a Postdoctoral Research Associate with a focus on immunocompetent Organoid models. This is a rare opportunity to join CuSTOM, where we revolutionize drug discovery and development, personalized medicine, and improve patient care using advances in developmental biology and stem cell technologies. The research associate will work on establishing and applying organoid based HTS/HSC platforms, isolation, culture, and characterization of immune cells, planning, conducting, and analyzing assays using organoid models, evaluation of immune phenotypes in the platform, & presentation and publication of research results. The ideal candidate will have a PhD in natural sciences or engineering, comprehensive experience in (primary, stem cell) cell culture, organoids, or organs-on-chips, and microscopy, in depth knowledge of immunoengineering, a willingness to engage in interdisciplinary research, a structured, independent work style, and excellent communication skills. Previous postdoc experience in academic/ industry is an advantage. Experience with stem cells and organoids is desirable.

**Research Associate/Staff Scientist Job Number: 143711.** [CuSTOM Accelerator](#) is now preparing to advance human liver and intestinal organoid technology toward drug discovery and regenerative medicine as such is seeking a Postdoctoral Research Associate / Staff Scientist as a key participant in this effort (position title will depend on the specific qualification of the candidate). The Postdoctoral Research Associate / Staff Scientist will join our multidisciplinary team working on the automation of 3D organoid generation and differentiation methods and downstream procedures, including testing of safety and efficacy of therapeutics. The overall goal of this team is to disrupt the traditional drug development process through big and bold ideas to develop more predictive, highly reproducible, and scalable human stem cell-based models. Project is being performed in close collaboration with industry that will help to commercialize project findings and innovations. The Postdoctoral Research Fellow or Associate / Staff Scientist will lead the development of high throughput screening platforms, enabling fully automated cell seeding, monitoring of stem cells-derived organoids growth and maturation, assessment of their response to drugs or other types of treatments.

**Contact:** Magdalena Kasendra, PhD

**Email Address:** [Magdalena.Kasendra@cchmc.org](mailto:Magdalena.Kasendra@cchmc.org)

**Research Fellow Job Number: 147290.** [Mingxia Gu's Lab](#) explores the role of vascular insufficiency in causing cardiopulmonary diseases, and to understand the genetic and epigenetic underpinnings of the variation in disease phenotypes and drug response in a personalized manner (for more details, check our recent publications in *Circulation Research* 2012, *European Heart Journal* 2015, *AJRCCM* 2017, *Cell Stem Cell* 2017, *Cell Stem Cell* 2020, *Cell Stem Cell* 2021, *Science Translational Medicine* 2021, *Circulation Research* 2022). The lab uses patient-specific iPSCs, vessel and lung organoids, machine learning, single cell RNA/ATAC sequencing, and spatial transcriptomics for disease modeling and high-throughput drug screening. Our team works together with developmental and stem cell biologists, data scientists, clinicians, bioengineers, and entrepreneurs with the common goal of accelerating discovery and facilitating bench-to-bedside translational science. The ideal candidate will be self-motivated, passionate about science and medicine, and have a solid background in the cardiopulmonary biology and/or bioinformatic analysis with a good publication record. Prior experience in either 1) stem cell biology: iPSC differentiation and organoid generation, vascular biology and pathobiology, gene editing, genomics/epigenetics, and animal models for cardiopulmonary diseases; or 2) biomedical informatics: single cell RNA/ATAC seq analysis, spatial transcriptomics, machine learning, and artificial intelligence; 3) bioengineering: biomaterial, microfluidic device, organ-on-a-chip. Candidates must have (or expect to receive) a PhD, MD, or MD/PhD degree.

**Contact:** Mingxia Gu, MD, PhD

**Email Address:** [Mingxia.Gu@cchmc.org](mailto:Mingxia.Gu@cchmc.org)

**Research Fellow Job Number: 145804.** The [Chen lab](#) is looking for a postdoctoral fellow to study how epigenomic landscape is established during oogenesis and early development and how the epigenetic memories are maintained or reprogrammed during parental-to-zygotic transition (relevant publications: *Chen et al., 2019 Science Advances*, *Chen et al, 2020 Nature Review Genetics*, *Chen et al., 2021 Nature Genetics*, & *Chen et al., 2019 Nature Genetics*). With a heavy focus on functional genomics, we also use mouse models, numerous epigenomic profiling technologies, ES cells for in-depth mechanistic studies, and we invent new techniques to address interesting questions in developmental biology. We believe you will be an excellent fit if you have a PhD degree in reproductive sciences, developmental biology, epigenomics, or related fields, along with strong communication skills and are self-motivated. Prior experience in bioinformatics is preferred but not required.

**Contact:** ZY Chen, PhD

**Email Address:** [Zhiyuan.Chen@cchmc.org](mailto:Zhiyuan.Chen@cchmc.org)

**Research Fellow/Associate Job Number: 142484.** The [Peiro lab](#) has an immediate opening for a postdoctoral research fellow/ research associate (3+ years of postdoc experience). The lab investigates basic physiopathologic mechanisms of pediatric and fetal surgical congenital malformations with a goal to discover solutions or therapeutic strategies for unresolved problems in the treatment of these anomalies through translational research. The ideal candidate will have a doctoral degree, along with expertise in neuroscience (specifically studying the brain/spinal cord using animal models), and stem cells or exosome-related regenerative medicine to reinforce our research projects.

**Contact:** Jose Peiro, MD, PhD, MBA

**Email Address:** [Jose.Peiro@cchmc.org](mailto:Jose.Peiro@cchmc.org)

**Research Associate Job Number: 143048.** A research associate position is available in the [Clinical Mass Spectrometry Laboratory](#) with [Kenneth Setchell, PhD](#) in the Division of Pathology and Laboratory Medicine. Research in the lab focuses on developing cutting-edge mass spectrometry based lipidomics and metabolomics techniques including pathway-based approaches and stable isotope resolved metabolomics analysis to understand dysregulated metabolism underlying genetic disorders and gastroenterological diseases. The

incumbent will assist the Principal Investigator to conduct research and/or analyze research data. Highly motivated and creative individuals with analytical chemistry, metabolomics, and/or biochemistry background are encouraged to apply. Prior experience with isotope tracing metabolomics or mass spectrometry imaging (MSI) is highly valuable but optional.

**Contact:** Ken Setchell, PhD

**Email Address:** [Kenneth.Setchell@cchmc.org](mailto:Kenneth.Setchell@cchmc.org)

**Research Fellow Job Number: 140337.** There is an immediate opening for a Postdoctoral Research Fellow in the [Jiang Laboratory](#) in the Division of Developmental Biology. The long-term goal of research in the Jiang Laboratory is to understand and apply mechanisms of mammalian organogenesis to the development of better strategies for diagnosis, treatment and / or prevention of human birth defects. The project for this position is focused on translational craniofacial genetics research to understand the genetic, genomic, and developmental mechanisms of craniofacial disorders. Candidates with experience in Genomics, Developmental Biology or Cell Biology research are encouraged to apply. Experience with animal models, particularly mouse models, is a plus.

**Contact:** Rulang Jiang, PhD

**Email Address:** [Rulang.Jiang@cchmc.org](mailto:Rulang.Jiang@cchmc.org)

**Research Fellow Job Number: 142704.** Drs. [SK Dey](#) and [Xiaofei Sun](#) are looking for a postdoctoral Research Fellow to join the research team whose interests fall into two broad categories: embryonic implantation and pregnancy, and endocannabinoid signaling in implantation and placentation. Using genetically engineered mouse models, we work to define the uterine characteristics and circumstances necessary for successful embryo implantation, the implications of uterine ageing and the origins of reproductive diseases. The ideal candidate will have received a very recent PhD, MD/PhD, or equivalent degree in biomedical research & demonstrate high enthusiasm for research in basic reproductive sciences in female reproduction. Familiarity with contemporary techniques in molecular/cellular biology & mouse handling/ reproduction, breeding and surgeries in small animals along with experience in common laboratory techniques is a must.

**Contact:** SK Dey, PhD or Xiaofei Sun, PhD

**Email Address:** [sk.dey@cchmc.org](mailto:sk.dey@cchmc.org); [Xiaofei.sun@cchmc.org](mailto:Xiaofei.sun@cchmc.org)

## Endocrinology

**Research Fellow Job Number: 150928.** The [Nakamura lab](#) is recruiting a postdoctoral Research Fellow who is experienced in molecular biology, RNA biology, and/or immunology to support an NIH R01-funded position. The lab researches the role of extracellular vesicles (EVs) in the regulation of immunometabolism in the pathogenesis of obesity-associated metabolic and inflammatory diseases. We have been developing R01- projects investigating tissue-specific EVs and their RNA cargos in metabolic and inflammatory diseases, including but not limited to type-2 diabetes and non-alcoholic fatty liver disease, based on our recent findings (Cell 2010, Nature 2012, Diabetes 2014, PNAS 2015, Cell Reports 2015, Cell Reports 2018, Nature Comm 2018, Endocrinology 2021). The successful candidate will engage in immunological studies with our newly established mouse and cell culture models, EV's RNA cargo network analyses, and human clinical samples to comprehensively understand the roles of EVs in metabolic and inflammatory diseases.

**Contact:** Takahisa Nakamura, PhD

**Email Address:** [Takahisa.Nakamura@cchmc.org](mailto:Takahisa.Nakamura@cchmc.org)

## Imaging Research

**Research Fellow Job Number: 140175.** [Dr. Lili He's](#) laboratory of Artificial Intelligence for Computer Aided Diagnosis (AI-CAD) at [Imaging Research Center \(IRC\)](#) is committed to lending the group's interdisciplinary expertise in computer science, medical imaging, biomedical engineering and biostatistics to facilitate major breakthroughs in the medical AI field by developing and validating robust clinically effective AI diagnostic tools for clinicians to use at the bedside to improve diagnosis, prediction, and prevention of patient outcomes for high-risk infants and children. We are now looking for talented and highly motivated AI post-doctoral research fellows to join us. Candidates should have a PhD degree in computer science, biomedical engineering, bioinformatics, electrical engineering, or related field, along with extensive experience in machine learning and deep learning development using Scikit-learn, & deep learning package (e.g., Tensorflow, Keras, PyTorch). Experience with medical image research, biomedical statistical analysis, strong programming skills with Linux-based Python, familiarity with containerization and multiprocessing experience using GPUs for training and inference preferred.

**Contact:** Uma Sivaprasad, PhD (for Lili He, PhD)

**Email Address:** [Research@cchmc.org](mailto:Research@cchmc.org)

## Immunology/Inflammation

**Research Fellow Job Number: 104634/129047/129048/132332.** Four postdoctoral positions are available immediately in [Dr. Marc Rothenberg's laboratory](#), which is focused on allergic responses especially in mucosal tissues such as the lung and the gastrointestinal tract, and aims to understand mechanisms, develop drug targets and identify novel therapeutic strategies and agents. The postdoctorate will be focused on genomics, genetics, molecular immunology, and/or chemistry of several novel susceptibility loci and pathways involved in allergic diseases, and the biochemistry and enzymology of proteases (particularly calpain-14). The postdoctorate will develop, synthesize and/or evaluate small molecule detectors and inhibitors of signaling pathway molecules relevant in allergic diseases. The ideal candidate will have a PhD or equivalent in Biomedical Research with strong expertise in big data analysis, molecular and cellular immunology and/or genetics, Medicinal, Synthetic or Organic Chemistry. A working knowledge of the immune system, genetics and enzymology is preferable.

**Contact:** Marc Rothenberg, MD, PhD

**Email Address:** [Marc.Rothenberg@cchmc.org](mailto:Marc.Rothenberg@cchmc.org)

**Research Fellow Job Number: 131214.** The [Azouz Lab](#) has exciting projects with clinical relevance and is looking to hire talented and motivated postdoctoral research fellows! We work in a stimulating and friendly environment with cutting edge techniques, performing basic, translational and clinical science. Research projects include: 1) Developing therapeutic peptides for the treatment of allergic diseases in collaboration with a pharmaceutical company 2) Deciphering the molecular mechanism by which SARS-CoV-2 exploit host cells and developing intervention methods to block SARS-CoV-2 infectivity 3) Understanding how environmental factors promote molecular mechanisms that elicit long-lasting adaptive immune responses. Creative recent PhD graduates, passionate about scientific discovery, desire to be competitive at the highest level, a track record of publications and research experience in immunology, molecular biology, cell biology, or biochemistry are encouraged to apply.

**Contact: Nurit Azouz, PhD**

**Email Address: [Nurit.Azouz@cchmc.org](mailto:Nurit.Azouz@cchmc.org)**

**Research Fellow Job Number: 140865.** The [Pasare](#) and [Hagan](#) labs in the Divisions of Immunobiology and Infectious Diseases at Cincinnati Children's Hospital are seeking a postdoctoral fellow to perform research in identifying mechanisms of diversity in innate immune responses across the human population, with the goal of understanding how innate immune diversity impacts responses to infection and vaccination and development of long-term adaptive immunity. This position will involve a combination of both experimental work (flow cytometry, myeloid cell TLR stimulation, signaling experiments and T cell priming assays) and computational analysis (bulk and single cell RNA-seq and ATAC-seq/CUT&Tag data). This project involves close collaboration between labs. Strong communication and presentation skills are required. Highly motivated candidates with a PhD in immunology, computational/systems biology, or a related biomedical sciences field and experience in or interest in learning computational immunology are encouraged to apply.

**Contact: Chandrashekhar Pasare, PhD**

**Email Address: [Chandrashekhar.Pasare@cchmc.org](mailto:Chandrashekhar.Pasare@cchmc.org)**

**Research Fellow/Associate Job Number: 144872.** [Dr. Sing Sing Way's Laboratory](#) in the Division of Infectious Diseases has an immediate opening for a Research Fellow & a Research Associate (3+ years of post doc experience) to perform basic research on host sensing of commensal-pathobiont microbes; and how these interacts shape host immunity systemically and in mucosal barrier tissues. Another focus of the laboratory is reproductive and developmental biology, and integration of concepts in immunological tolerance related to commensal microbes to maternal-fetal tolerance and/or developmental shifts in how commensal tolerance to achieved are areas of active investigation. Dr. Way's laboratory has been at the leading edge of these scientific areas for the past 10 years with seminal publications in Nature, Cell and Science.

**Research Fellow/Associate Job Number: 144873.** [Dr. Sing Sing Way's Laboratory](#) in the Division of Infectious Diseases has an immediate opening for a Research Fellow or Research Associate (3+ years of post doc experience) to perform research investigating how the immune system works and how immune responses are regulated. The ongoing projects currently revolve around two physiological contexts: (1) reproduction, pregnancy, and immunological changes unique to the maternal-fetal dyad, and (2) commensal tolerance including systemic and local immunological changes in mucosal barrier tissues in health and disease. This position is supported by funding from the NIAID-NIH, but open to all applicant regardless of visa status. Dr. Way's laboratory has been at the leading edge of these scientific areas for the past 10 years with seminal publications in Nature, Science, Cell, and Cell Host Microbe.

**Contact: Sing Sing Way, MD, PhD**

**Email Address: [Singsing.Way@cchmc.org](mailto:Singsing.Way@cchmc.org)**

**Research Fellow/Associate Job Number: 147871.** Postdoc positions available in the [Grimes laboratory](#) (@LeeGrimesLab) at Cincinnati Children's Hospital Medical Center, in Cincinnati Ohio (an affordable metro area of more than 2 million people, with access to the arts, great restaurants, excellent schools and parks). Dual training in hematology/oncology and informatics (with @nsalomonis). The lab exploits cutting-edge omics tech to answer fundamental biological questions in hematopoiesis, marrow failure and myeloid leukemia. We develop new single cell analyses and informatics tools when existing tools are insufficient to resolve the data. We hypothesize that some unrecognized molecular features are ancestry-associated drivers of AML-genesis and/or therapy resistance. We propose to use cutting-edge single-cell multiomic assays to delineate bystander clonal mutations from potential driver mutations, then we will biologically test their role in clonality/leukemia-stem-cell frequency and treatment response. We expect to provide an inclusive characterization of the genetic and genomic landscape of AML, identify those variants with prognostic significance, and provide exemplars of here-to-fore unrecognized drivers of treatment response and survival. The overall goal is to enable precision oncology approaches which accommodate the effects of underlying human genetics.

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