

# 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](#)
- [Genetics, Development, Physiology, and Disease](#)
- [Clinical Psychology/ Developmental Pediatrics/Health Disparities](#)
- [Imaging Research Center](#)
- [Immunology/ Inflammation](#)

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

## Questions?

Please contact:

Tamiika Hurst, PhD or

Uma Sivaprasad, PhD, 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.

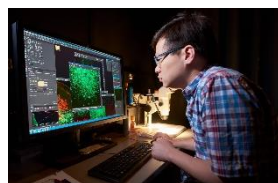
## Cincinnati Children's Research Foundation



### 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*

## Anesthesia

**Research Fellow Job Number: 128643.** The [Danzer laboratory](#) in the [Center for Pediatric Neuroscience](#) is seeking a postdoctoral researcher to investigate basic mechanisms of temporal lobe epileptogenesis. The principal goal of this research is to determine the mechanisms by which altered mechanistic target of rapamycin (mTOR) signaling disrupt hippocampal circuit function and lead to the development of epilepsy. The research has the potential to lead to new therapies to treat epilepsy, which will be tested in preclinical studies. The fellowship will provide training opportunities in EEG/ECOG acquisition and analysis, confocal and two-photon live imaging, hippocampal circuitry, calcium imaging, optogenetics, DREADDs, transgenic models of epilepsy and grant writing/manuscript preparation. The ideal candidate will have a doctoral degree in a relevant field along with experience in basic wet lab techniques and animal handling. The CCHMC campus sits adjacent to the affiliated University of Cincinnati Medical Center, and combined faculty at the two institutions includes more than 60 basic neuroscience labs as well as active graduate student and postdoctoral programs.

**Contact: Steve Danzer, PhD**

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

## Bioinformatics/ Computational Biology/ Biostatistics/ Epidemiology

**Research Associate Job Number: 122598.** The division of [Emergency Medicine](#) in collaboration with the division of [Biostatistics & Epidemiology](#) has an immediate opening for a postdoctoral Research Associate. The Research Associate will engage in emergency based clinical research with divisional Faculty and Fellows, including retrospective cohorts, cross-sectional, case control studies and prospective trials as well as quality improvement and implementation studies. This individual will split his/her time between supporting emergency medicine Fellows' projects, teaching research methods, as well as developing his/her own line of research.

The division of Emergency Medicine has over 40 faculty and 13 fellows who provide emergency medical care in one of the busiest pediatric emergency departments in the country. The division has robust research infrastructure including approximately 20 clinical research coordinators, as well as data and financial analysts, a research supervisor, financial and a research manager. The division belongs to the [PECARN Network](#), a federally funded network of 18 US pediatric hospitals. There are approximately 50 ongoing studies in the division, including 15 studies directly recruiting patients in the ED. The division receives ~ 4 million dollars/year in grant funding and produces ~ 100-120 publications per year, most of them in high impact journals. 3 or more years of relevant postdoctoral research experience is required. A PhD in Epidemiology with a minor in Occupational Health, Systems Engineering, Human Factors Engineering, Occupational Health Nursing, or related discipline is preferred. Experience in research/quality improvement is a plus.

**Contact: Mekibib Altaye, PhD**

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

**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: 145807.** [Dr. Dao Pan's laboratory](#) is looking for a self-motivated Postdoctoral Fellow/Associate with an interest in neuroimmunology, brain physiology and translational research to start immediately in the Division of Experimental Hematology and Cancer Biology. Using mouse models of human diseases and human tissues, the Pan lab has been engaged in cutting-edge research to understand the pathogenesis of inherited neurological lysosomal storage diseases with special

interests in blood-brain-barrier, neuroinflammation and biomarkers. Utilizing state of art technology and insights from basic research, the team seeks to develop innovative approaches to enhance brain drug delivery and viral vector-mediated gene transfer into stem cells or effector cells with preclinical assessments using animal models. We have published our work in highly visible journals on basic and bioengineer fields, including PNAS, Sci Adv, Molecular Therapy, Haematologica, Human Gene Therapy, Gene Therapy, Front Mol Neurosci. 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, biochemistry, and computational biology as well as some experience working with genetically engineered mouse models. 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: Dao Pan, PhD**

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

**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: 142957/145393.** Dr. Biplab Dasgupta's laboratory is looking for two highly motivated, self-driven and ambitious postdoctoral researchers to start this summer/fall in the Division of Oncology. Using genetically engineered mouse models and human tissue, the Dasgupta lab has been engaged in cutting-edge research to understand neural stem cell metabolism, metabolic liabilities of high-grade brain tumors, and energy and nutrient sensing signaling pathways in cancer and normal cells regulated by the AMPK-mTOR pathways. We are also deeply interested in understanding the mechanisms by which non-genetic factors regulate the incidence and penetrance of human cancer. We have published our work in highly visible journals including Science Advances, Cell Reports, Nature Cell Biology, Nature Communications, PNAS, Cancer Cell, Neuro-Oncology, Cancer Research and Trends in Pharmacological Sciences. Interested applicants must have a PhD and are expected to work on one or both projects. A strong background in biochemistry, molecular biology and signaling and some experience in working with genetically engineered mouse models is essential. Prior experience in bioinformatic analysis of omics data is preferred.

**Contact: Biplab Dasgupta, PhD**

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

**Research Fellow Job Number: 118972.** [Fukun Guo](#), PhD, has an immediate opening in his lab for a postdoctoral Research Fellow. Dr. Guo's lab investigates the role and mechanisms of Rho family GTPases in T lymphocyte development and function, particularly in the context of tumor immune evasion. Candidates need to have excellent skills in flow cytometry and animal handling. Experience in Molecular and Cellular biology, Immunology, and Cancer Biology is required. Expertise in T cell biology, tumor immunology/cancer immunotherapy, and/or bioinformatics is a plus.

**Contact: Fukun Guo, PhD**

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

## Cardiovascular Research

**Research Fellow/Associate Job Number: 144706.** The [Molkentin lab](#) is interested in understanding the molecular mechanisms of heart and skeletal muscle disease. Focus areas include 1) cellular necrosis, 2) transcriptional and epigenetic regulation of cardiac and skeletal muscle differentiation, growth, death, and replication, 3) secreted protein factors (e.g., cytokines, growth factors, chemokines) that control disease responsiveness, 4) role of cardiac fibroblasts in extracellular matrix alteration and heart remodeling in disease, and 5) role of endogenous progenitor stem cells in cardiac regeneration. Individuals with a doctoral degree and a strong publication record that are interested in any of these areas along with experience using mouse models, cardiac physiology and general molecular and cellular techniques are invited to apply. The laboratory is considered one of the best training environments in the nation for heart and skeletal muscle disease-based research.

**Contact: Jeffery Molkentin, PhD**

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

**Research Fellow Job Number: 144315.** [Dr. Shijie Liu's](#) laboratory has an immediate opening for a postdoctoral research fellow. The lab aims to understand the molecular mechanisms in cardiomyocyte renewal and cardiac remodeling (including Hippo & Wnt signaling pathways) & develop gene therapy strategies to treat heart failure. In addition to standard molecular biology & biochemistry tools, the fellow will use mouse genetics, cell culture and manipulation, mass spectrometry, and the 2<sup>nd</sup> generation sequencing techniques (single-cell RNA-seq, spatial-transcriptomics, and Cut&Run) to identify gene profiles in disease models. A Ph.D. and/or M.D. degree or equivalent

in a relevant research area is required. Highly motivated and creative individuals with a strong developmental biology, molecular and cell biology, and/or biochemistry background are encouraged to apply. Prior experience with mouse genetics is valuable but optional.

**Contact:** Shijie Liu, PhD

**Email Address:** [Shijie.Liu@cchmc.org](mailto:Shijie.Liu@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 Psychology/ Developmental Pediatrics/ Health Disparities

**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: 142967.** The Qualitative Methods & Analysis Center (QMAC) is a consultative shared facility at Cincinnati Children's Hospital Medical Center that facilitates the conduct of high-quality **qualitative studies** within the context of wide range of research including implementation science, quality improvement, community-based, medical education, and health services. Qualitative and participatory research are uniquely suited to capture and understand perspectives and reveal the **contextual, sociocultural, and experiential factors that contribute to understanding health outcomes and health disparities**. The Research Associate working with the Qualitative Methods and Analysis Center (QMAC) will be responsible for providing senior level (i.e., methodologic) support of qualitative research activities for assigned projects. This RA will work collaboratively with QMAC co-directors and QMAC faculty and staff in providing consultative services to investigators at all stages of study conduct. This would include providing guidance in qualitative and mixed methods research design, consulting on project challenges, data collection and analyses, and conducting other associated study activities. Job responsibilities include providing qualitative research methods and analysis training and resources to study teams, lead and/or participate in grant writing, assist in designing study protocols and data collection tools, facilitate participant interviews and focus groups, assess study needs and identifying potential study issues, lead and/or participate in data coding and analysis, providing reports of research findings, assist in manuscript development, and varied administrative tasks. The qualified should have PhD or equivalent degree in research methodology, social science or health related field. Development of a personal research program including peer and senior-level career and methodologic mentorship can be supported but is not required. Please indicate interest upon application.

**Contact:** Andrea Kachelmeyer

**Email Address:** [Andrea.Kachelmeyer@cchmc.org](mailto:Andrea.Kachelmeyer@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. Please submit your application to Dr. Esbensen with the following information: cover letter stating your research interests, CV and contact details for 2 referees.

**Contact:** Anna Esbensen, PhD

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



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

**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 or 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), as well as 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 Fellow/Associate Job Number: 143466.** The Wells, Zorn, Takebe and Helmrath labs seek a motivated collaborative postdoctoral fellow/associate to advance human GI organoids in regenerative medicine. Studies will focus on the mesenchymal niche that supports engraftment during transplantation. CuSTOM is a multi-disciplinary center of excellence integrating developmental and stem cell biologists, clinicians, bioengineers, and entrepreneurs with the common goal of accelerating discovery and facilitating bench-to-bedside translation of organoid technology. Successful candidates must hold the PhD, MD, or MD/PhD degrees be highly motivated and have passion for collaborative research. Experience with computational biology and/or human pluripotent stem cells is an advantage.

**Contact: The CuSTOM Group**

**Email Address: [CuSTOM@cchmc.org](mailto:CuSTOM@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 Associate Job Number: 143714.** A postdoctoral Research Associate position is immediately available in the [CuSTOM Accelerator](#) - with a focus on advancing organoid technology toward highly predictive screening tools for drug safety & efficacy. The Research Associate will support development of new methods for remote automation of the growth and assessment of pluripotent stem cells-derived organoids offering new opportunities for modeling of human disease and expediting the preclinical testing of new treatments. The ideal candidate will have experience & expertise with iPSC generation, differentiation, & characterization.

**Contact: Magdalena Kasendra, PhD**

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

**Research Fellow/Associate Job Number: 140347.** [Dr. Maria Mikedis'](#) laboratory is seeking a postdoctoral research fellow (recent PhD) or research associate (PhD with 3+ years of postdoc experience) who will investigate how spermatogonial stem cells/progenitors differentiate to form sperm. Specific topics include how translational control regulates spermatogonial stem cells' differentiation into mitotically dividing progenitors (Mikedis, et al., 2020 eLife), and how post-transcriptional regulation of mRNA induces progenitors to transition from mitosis to meiosis (Soh, Mikedis, et al., 2017 PLoS Genetics). The Mikedis laboratory uses a multidisciplinary approach, including cutting edge tools in scRNA-seq, molecular biology, functional genomics, biochemistry, and mouse genetics. Candidates must hold a PhD in molecular biology, cell biology, or a related field. Expertise in at least two of the following six areas is required: reproductive biology, biochemistry, functional genomics, bioinformatics, mouse models, and cell culture techniques. A demonstrated track record of productivity via publications in peer-reviewed journals is a strong plus.

**Contact: Maria Mikedis, PhD**

**Email Address: [Maria.Mikedis@cchmc.org](mailto:Maria.Mikedis@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: 112135.** A postdoctoral research fellow position is available in Dr. Assem Ziady's laboratory to study Cystic Fibrosis (CF). Focus areas are 1) understanding the regulation of Nrf2 activity and identify various interventions as therapy for Nrf2 dysfunction; and 2) examine and further develop non-viral DNA delivery vectors for CF gene therapy. These studies will use CF primary epithelial cells, CF animal models, and tissues from CF patients. The ideal candidates for the position will be recent PhDs with a strong background in one or more of the following: protein-protein interaction studies, redox biology, biochemistry, transcription factor activity, protein biomarker identification, animal models of disease. Experience with proteomics and mass spectrometry would be ideal. Evidence

of strength in experiment design, data analysis, and a strong publication record are strongly desired. Background knowledge in other areas where this inflammatory pathway is relevant (cardiac, pulmonary, and neurological disease) is beneficial.

**Contact:** Assem Ziady, PhD

**Email Address:** [Assem.Ziady@cchmc.org](mailto:Assem.Ziady@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 Job Number:** 145341. A post-doctoral research position is available in the [Pasare Laboratory](#) to study inflammatory responses downstream of pattern recognition receptors and the cross-talk between innate and adaptive immune systems. We are currently focused on the following projects: 1. Innate control of adaptive immunity with a particular focus on IL-1 family of cytokines: The work focuses on understanding how different pathogens activate the innate immune system to induce tailored immune responses and the molecular pathways involved in pathogen recognition. 2. Role of inflammasome independent IL-1beta in systemic inflammation, auto-immunity, and anti-tumor responses: The work focuses on understanding how Effector and memory T cells induce pattern recognition receptor independent inflammation and identification of the molecules and receptors that induce T cell driven innate inflammation. The work has implications for several inflammatory diseases. Highly motivated candidates with a PhD in biomedical sciences and experience in, Biochemistry, Cell biology and Molecular Biology that are interested in doing research in 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:** 142050. [Dr. Way's Laboratory](#) in the Division of Infectious Diseases has two immediate openings for a Research Fellow and a Research Associate (3+ years of post doc experience) to perform basic research on host sensing of commensal-pathobiont microbes; and how these interact 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 seminar publications in Nature, Cell and Science.

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

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

**Research Fellow Job Number: 141781.** Dr. David Hildeman is currently seeking a full-time Post-Doctoral Research Fellow with a Ph.D. in Immunology. The [Hildeman Lab's](#) research focuses on the homeostasis and function of lymphocytes in health and disease, with a particular focus on transplant rejection. The lab works closely with adult and pediatric clinicians to analyze mechanisms underlying the acceptance and rejection of human allografts. The research team integrates clinical, translational, immunologic, bioinformatics, and multi-omics approaches to define the cellular and molecular landscape of human allografts. The long-term goal is to identify mechanisms that underlie allograft injury and to foster the development of breakthrough therapeutics that enable life-long graft acceptance and durability. The position is open immediately for a motivated and detail-oriented individual with a strong interest in developing projects related to cellular mechanisms involved in transplant rejection. The candidate should have a strong background and interest in allo- or auto-immunity, possess knowledge and experience in bioinformatics, have strong oral and written communication skills, be able to sustain diverse activities simultaneously, have outstanding organizational skills, and be able to develop innovative approaches to solving experimental challenges. The ideal candidate should be innately motivated, dependable, detail-oriented, energetic, and have a positive attitude toward research. The preferred candidate will be team player willing to learn on the job and collaborate with the lab and division members. They will also work to ensure the highest quality of laboratory research support and have good communication skills with co-workers, the clinical team, PIs, research staff, students, and other support services.

**Contact: David Hildeman, PhD**

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

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