



Postdoctoral Positions at Cincinnati Children's

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

- [Anesthesia](#)
- [Bioinformatics/ Computational Biology/ Biostatistics/ Epidemiology](#)
- [Cancer and Blood Diseases](#)
- [Cardiovascular Research](#)
- [Genetics, Development, Physiology, and Disease](#)
- [Immunology/ Inflammation](#)

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

Questions?
Please contact:
Michael Bennett, PhD,
Scientist Recruiter:
research@cchmc.org

[Cincinnati Children's Hospital Medical Center](#) (CCHMC) is a premier [pediatric research institution](#) with over 900 diverse and productive faculty members. Here, researchers work collaboratively across specialties and divisions to address some of the biggest challenges we face today in improving child health. A strong network of research support [services](#) and [facilities](#), along with institutional commitment to research, push our team of faculty, postdocs and support staff to explore the boundaries of what is possible, leading to [significant breakthroughs](#). We are driven by our mission to improve child health and transform the delivery of care through fully integrated, globally recognized research, education and innovation.

Post-doctoral research fellows at Cincinnati Children's are valued for their unique interests and strengths, and are supported by our institution's [strong programming for post-docs](#) through the [Office of Postdoctoral Affairs](#) and the [Office of Academic Affairs and Career Development](#). Mentoring, [support for international students](#) and an emphasis on crafting high-quality grant proposals are only a few of the [features that set our program apart](#). Cincinnati Children's is a respected part of the broader, and very vibrant, Cincinnati community. With a thriving arts scene, numerous festivals celebrating music and food, a passionate fan following for our college and professional sports teams, and a variety of opportunities for outdoor activities, [our region is truly a great place to work and live](#).

Please visit our [website](#) for more information about Postdoctoral Research at CCHMC and a monthly-updated listing of postdoctoral fellowship opportunities.

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, CV, summary of research interests, 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

Anesthesia

Research Fellow Job Number: 109322 The Department of Anesthesia, Division of Pain Management at Cincinnati Children's Hospital Medical Center is seeking to recruit an enthusiastic and highly motivated Postdoctoral Research Fellow to join the laboratory of Dr. Michael Jankowski. The Jankowski laboratory is investigating the molecular mechanisms of sensory neuron plasticity after peripheral injuries. Recently, our research has found that the growth hormone signaling pathway may be particularly important in neonatal pain development. As part of our growing team, this Research Fellow will execute studies designed to understand the mechanisms by which peripheral growth hormone modulates neonatal pain and how non-neuronal cells influence neonatal nociception. Experience in electrophysiology and pain research is desired.

Contact: Michael Jankowski, PhD

Email Address: Michael.Jankowski@cchmc.org

Research Fellow Job Number: 107954. A post-doctoral Fellow position is available in the laboratory of Dr. Vidya Chidambaran. The laboratory studies the genetics, epigenetics, physiology and psychology of chronic post-surgical pain and their role in opioid efficacy, using PK/PD models of opioid concentration-exposure after surgery. We have identified variants and epigenetic mechanisms associated with post-surgical pain and opioid induced respiratory depression and analgesia. To further evaluate the functional role of these variants, the lab is seeking a research fellow who has expertise in brain imaging, biosensors and/or PK/PD modeling, bench side molecular along with bioinformatics expertise. The fellow will be expected to design experiments, interpret results, prepare manuscripts and support grant writing efforts. PhD graduates with any combination of neuro imaging, pharmacology, molecular biology, immunology, as well as bioinformatics experience, along with a strong publication record, and the initiative to independently drive research projects are invited to apply.

Contact: Vidya Chidambaran, MD

Email Address: Vidya.Chidambaran@cchmc.org

Research Fellow Job Number: 100297. The Danzer laboratory in the Center for Pediatric Neuroscience (<https://www.cincinnatichildrens.org/research/divisions/c/neuroscience>) is seeking a postdoctoral fellowship to investigate basic mechanisms of temporal lobe epileptogenesis. The principle goal of this research is to determine the mechanisms by which abnormal hippocampal granule cells 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. Additional information about the Danzer Lab can be found at <http://www.cincinnatichildrens.org/research/div/anesthesia/labs/danzer/>. Experience in neuroscience is required. The fellowship opportunity will provide training in EEG/ECOG acquisition and analysis, confocal and two-photon live imaging, calcium imaging, optogenetics, transgenic models of epilepsy and grant writing/manuscript preparation.

Contact: Steve Danzer, PhD

Email Address: Steve.Danzer@cchmc.org

Bioinformatics/ Computational Biology/ Biostatistics/ Epidemiology

Research Fellow Job Number: 109718 In a joint effort, the Divisions of Biostatistics & Epidemiology, Patient Services, and the James M. Anderson Center for Excellence in Health Systems are establishing an Employee Safety Learning Laboratory (ESLL) to align employee safety research with hospital operations. The ESLL will: 1) improve injury surveillance and develop predictive models to assist operational leadership with deploying effective preventive interventions; 2) leverage employee safety issues identified by operations to inform new research into prevention strategies; and 3) develop innovative evidence-based interventions that are rigorously tested in research projects and subsequently deployed through quality improvement efforts.

The ESLL offers an outstanding opportunity for training and career development to an occupational epidemiologist or human factors engineer committed to a career focused on preventing work-related injury and improving safety in the health care sector. The research fellow will work under the supervision of Maurizio Macaluso, MD, DrPH, Professor of Pediatrics and Director of the Division of Biostatistics and Epidemiology, and Nancy Daraiseh, PhD, Associate Professor of Pediatrics.

Contact: Nancy Daraiseh, PhD

Email Address: Nancy.Daraiseh@cchmc.org

Research Fellow Job Number: 105519. The Division of Biomedical Informatics invites candidates to join their new digital health initiative: the Design, Analytics, Integration (dAI) program. The candidates will work closely with clinical investigators across the CCHMC and the University of Cincinnati to co-develop computational and technology solutions for improving the lives of children and adults. Candidates will be supervised by the program's faculty advisor and Scientific Director. He/she will collaborate with other research staff, application developers, and IT technicians within a dynamic, fast paced research environment. Candidates should expect to conduct multiple machine learning and NLP-focused projects and contribute to decision tools, applied patient safety and health care quality improvement efforts. Example projects can be found at <https://www.cincinnatichildrens.org/bio/n/yizhao-ni>. Qualified candidates for the position have earned a PhD in biomedical informatics, computer science, artificial intelligence, computational linguistics or a closely related field. Research/work experience with Machine Learning and/or Deep Learning is a requirement, and stochastic Natural Language Processing (NLP) is preferred. The successful candidate will have excellent command of both written and oral English, strong programming skills, and familiarity with Linux + (Java or Python) + (R or Matlab) for programming. Experience of parallel computing (e.g., with GPU) and familiarity with clinical NLP are preferred. Candidates with first author peer reviewed journal publications are preferred.

Contact: Michael Bennett, PHD

E-mail Address: Research@cchmc.org

Research Associate Job Number: 102877. A Computational Research Associate position is immediately available in the Weirauch Lab. The Weirauch lab studies the mechanisms of gene transcriptional regulation, and the impact of disease-associated genetic variation on these mechanisms using computational and experimental methods. We are looking for an extremely talented and highly motivated computational researcher (Bioinformatics, Computer Science, etc.) to work on multiple cutting-edge research projects. You will work in a highly collaborative environment at the interface of genetics, immunology, computer science, and immune-mediated disease research. We are currently focused on autoimmune diseases (including but not limited to Systemic Lupus Erythematosus and Multiple Sclerosis; <https://www.cincinnatichildrens.org/research/divisions/a/genomics-etiology/labs/weirauch>). Experience in analysis of high throughput sequencing data (ChIP-Seq, DNase-Seq, and/or ATAC-Seq) is necessary. Critical thinking, the ability to multi-task, and experience in linux are required. Strong biological knowledge (especially gene regulation) is preferred but not required.
Contact: Matthew Weirauch, PhD **Email Address: Matthew.Weirauch@cchmc.org**

Research Fellow Job Number: 98997. The [Mersha Lab](#) has an opening for a Research Fellow who will be involved in a combined computational and applied genetics project, focused on the development and implementation of ancestry (admixture) based detection and characterization of genetic and environmental exposure risk factors in asthma. The goal is to develop and implement statistical methods to analyze high-throughput sequence and array data and maintain large datasets linked to clinical data. The ideal candidate will have a doctoral degree in bioinformatics, computer science, computational biology, genomics, statistical genetics, or a related field, experience in population genetics analysis of admixed population or data simulation and imputation, programming skills in R, Perl, Python, Java, C++, and Unix shell scripting, a track record of analyzing sequence data, along with a strong work ethic, excellent written and oral communication skills, and demonstrated teamwork and multitasking skills. Experience with clinical cohorts is a plus.
Contact: Tesfaye Mersha, PhD **Email Address: Tesfaye.Mersha@cchmc.org**

Research Fellow Job Number: 97786. Dr. Theresa Alenghat's laboratory has an opening for a highly motivated postdoctoral research fellow with computational training and an interest in epigenetics and host-microbe interactions (<http://www.cincinnatichildrens.org/research/divisions/i/immunobiology/labs/alenghat/default/>). We explore molecular pathways that regulate how intestinal microbiota impact immune and metabolic homeostasis, infection, and inflammatory bowel disease. Candidates with publications reflecting expertise in epigenetics and bioinformatics analyses are encouraged to apply.
Contact: Theresa Alenghat, VMD, PhD **Email Address: Theresa.Alenghat@cchmc.org**

Research Fellow Job Number: 96081. The division of Asthma Research is seeking a Research Fellow who will be involved in the analysis of cutting-edge high-throughput omics (genomics, transcriptomics, epigenomics, and microbiome) and clinical data generated from allergic disease patients. Key Functions: Integration omics results including genome, transcriptome, microbiome, and epigenome results with clinical and environmental exposure datasets; Participate in development and testing statistical methods for omics and clinical datasets We are looking a candidate with PhD in bioinformatics, computational biology or statistical genetics A strong background in genomics, computational biology, and/or statistics as well as experience in high-throughput integrative analyses of different types of NGS data, extensive scripting and programming knowledge, data visualization is required. The ideal candidate will have: an interdisciplinary background in bioinformatics and computational biology and genomics; advanced expertise in the analysis and interpretation of microbiome data and its integration with other "omics" data sources, including genetic variants, gene expression and epigenetics; good programming skills; and advanced knowledge of statistical and machine learning methods.
Contact: Gurjit Khurana Hershey, MD, PhD **Email Address: Gurjit.Hershey@cchmc.org**

Research Fellow Job Number: TBD. The Roskin Lab combines computational and molecular biology methods to understand the adaptive immune system (<https://www.cincinnatichildrens.org/research/divisions/b/bmi/labs/roskin>). Using modern sequencing technology, we study changes in the immune receptor repertoire and link those changes to immunogen exposure or autoimmunity/immunodeficiency status. We are looking for a postdoctoral researcher experienced in bioinformatics interested in applying their skills to process and analyze large scale immunological data sets. The ideal candidate will have a recent PhD & a strong publication track record. Experience with processing and analysis of large-scale data sets with modern "big data" methods preferred.
Contact: Krishna Roskin, PhD **Email Address: Krishna.Roskin@cchmc.org**

Cancer and Blood Diseases

Research Fellow Job Number 107365. The Ratner Lab (<https://www.cincinnatichildrens.org/research/divisions/e/ex-hem/labs/ratner>) has an immediate opening for a research fellow. The long-term interest of the Ratner Research Laboratory is to define the interactions between glial cells and axons during nervous system development and how those interactions go awry in disease, with the goal of providing novel therapies to patients with nervous system diseases. Neurofibromatosis type 1 (NF1) is an inherited autosomal dominant disorder (1:3,500 humans) that involves the formation of many nerve-associated tumors and other non-tumor related problems. Neurofibromatosis type 2 (NF2) involves the development of schwannomas, benign tumors composed of Schwann cells (peripheral glial cells). Elucidating the mechanisms by which the nerve-associated tumors arise in both diseases can lead not only to the development of therapy for NF1 and NF2 patients, but also can prove useful in providing information about noninherited nervous system cancers. A recent PhD graduate with experience in neuroscience genetics or cancer genetics is ideal. Experience with mouse models is a plus.
Contact: Nancy Ratner, PhD **Email Address: Nancy.Ratner@cchmc.org**

Research Fellow Job Number 109865. Dr. Daniel Starczynowski's lab studies the molecular and cellular basis of hematologic malignancies, with a focus on normal hematopoietic stem cell function, immune dysregulation, acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS): Smith et al., Nature Cell Biology (2019); Melgar et al., Science Translational Medicine (2019); Fang et al., Nature Immunology (2017); Fang et al., Nature Medicine (2016), Varney et al., Journal of Experimental Medicine (2015), Rhyasen et al., Cancer Cell (2013) (<http://www.cincinnatichildrens.org/research/divisions/e/ex-hem/labs/starczynowski/default/>). We are looking for a research fellow with an interest in one or more of the following areas: cancer genetic networks and signaling pathways, normal and malignant hematopoiesis, post-translational modifications, RNA biology, onco-immunology, and/or mouse genetic modeling of cancer. 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 applicant should also be highly self-motivated and have a track record of publications (first-authored publications in respected journals).
Contact: Daniel Starczynowski, PhD **Email Address: Daniel.Starczynowski@cchmc.org**

Research Associate Job Number 106348. Dr. Punam Malik's lab has an immediate opening for a Research Associate in the Hematology and Gene Therapy Program. We are looking for successful post-doctoral fellows with a strong publication record in the field of molecular and cellular biology. Prior experience in gene therapy is desirable. The project will utilize cellular, molecular, and biochemical techniques with an emphasis on sickle cell disease, as well as new approaches for gene therapy such as gene editing in hemoglobinopathies. This position is available for a two year period and successful applicant will be mentored in developing independent research projects and grantsmanship to help them develop an independent academic career after this period and be competitive for K awards.
Contact: Punam Malik, MD **Email Address: Punam.Malik@cchmc.org**

Research Fellow Job Number: 102057. A position is available to study the role of Rho family GTPases and mTOR signaling in hematopoiesis and cancer, particularly in hematopoietic stem cells and cancer stem cells, in Dr. Yi Zheng's laboratory. The laboratory employs mouse gene targeting models and current molecular, cellular, and embryological techniques to elucidate the signaling pathways regulated by Rho GTPases and mTOR (see: <http://www.cincinnatichildrens.org/research/divisions/e/ex-hem/labs/zheng/default/>). A PhD in Molecular or Developmental Biology, Cell Biology, Biochemistry, or a related field, is required. Experience studying mouse models, hematopoiesis and/or various stem cell regulations are desirable.
Contact: Yi Zheng, PhD **Email Address: Yi.Zheng@cchmc.org**

Research Fellow Job Numbers: 99452. Dr. Biplab Dasgupta's laboratory is looking for a highly motivated, self-driven and ambitious postdoctoral researcher to start this winter at Cincinnati Children's Hospital Medical Center. Using genetically engineered mouse models and human tissue, the Dasgupta lab has been engaged in cutting-edge research to understand neural stem cell metabolism, genetic and metabolic uniqueness of glioblastoma (a type of brain tumor) subtypes, energy and nutrient sensing signaling pathways in cancer versus normal cellular counterparts and the built-in metabolic vulnerabilities of human cancer cells. We are also deeply interested to understand 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 Nature Cell Biology, Nature Communications, PNAS, Cancer Cell, Neuro-Oncology, Trends in Pharmacol Sci, and Cancer Research (<https://www.ncbi.nlm.nih.gov/pubmed/?term=dasgupta%2C+biplab>). Requirements: The ideal candidate could be finishing up graduate studies or have completed graduate studies with no more than one year of post-PhD research experience. Experience in molecular biology including in-depth understanding of molecular cloning, DNA, RNA and protein work and extensive cell culture is required. Some experience in mouse genetics is preferable. Background in cancer biochemistry, metabolism, signaling and genetics will be considered favorably and interest in the above fields is necessary.
Contact: Biplab Dasgupta, PhD **Email Address: Biplab.Dasgupta@cchmc.org**

Research Fellow Job Number: 101446. A postdoctoral Research Fellow position is open in the Brain Tumor Center for individuals with an interest in glial cell biology, brain cancers, and neurodegenerative diseases. Research areas include brain development and tumorigenesis, demyelinating diseases such as multiple sclerosis, and functional regeneration (<http://www.cincinnatichildrens.org/bio/l/qing-richard-lu/>). Recent PhD or MD graduates with a strong background in one or more of the following areas: molecular & cell biology, neurobiology, cancer biology, or computational biology are encouraged to apply.
Contact: Qing (Richard) Lu, PhD **Email Address: Richard.Lu@cchmc.org**

Research Fellow Job Number: 92953. A Postdoctoral position is now available in the laboratory of Dr. Damien Reynaud. Our lab studies hematopoiesis in various patho-physiological contexts (<https://www.cincinnatichildrens.org/bio/r/damien-reynaud/>). We are particularly interested in understanding how metabolic dysregulations impact on hematopoietic stem cell function and how they could contribute to hematological disorders. We are looking for a highly motivated and enthusiastic individual to develop our thematic. Applicants with experience in mouse model, FACS, cell imaging and cell culture are encouraged to apply. Candidates with a recent PhD and a background in hematology and immunology are preferred.
Contact Damien Reynaud, PhD **Email Address: Damien.Reynaud@cchmc.org**

Cardiovascular Research

Research Fellow Job Number: 110209. A postdoctoral Research Fellow position is available immediately in Dr. Douglas Millay's lab in the Division of Molecular Cardiovascular Biology at Cincinnati Children's Hospital Research Foundation. The Millay lab is interested in understanding the formation of multi-nucleated skeletal muscle, which arises from the membrane fusion between precursor cells (myoblast fusion). Projects include delineating the mechanisms by which novel muscle membrane proteins directs cell-cell fusion, understanding the role of fusion and myonuclear accretion for muscle physiology, and harnessing the muscle cell fusion machinery as a strategy for in vivo delivery of therapeutic material. (<http://www.cincinnatichildrens.org/research/divisions/m/mcb/labs/millay/default/>). Recent Ph.D candidates with research experience in molecular biology, cell biology, biochemistry, or developmental biology are encouraged to apply.

Contact: Douglas Millay, PhD

Email Address: Douglas.Millay@cchmc.org

Research Fellow Job Number: 109519. A postdoctoral Research Fellow position is available in Dr. Katherine Yutzey's laboratory in the Division of Molecular Cardiovascular Biology in the Heart Institute. The Yutzey lab investigates molecular mechanisms of heart development and disease with the long-term goal of identifying new therapeutics for cardiovascular disease. (<http://www.cincinnatichildrens.org/bio/y/katherine-yutzey/>) Possible projects include mechanistic studies of valve development and disease, cardiac fibrosis, and cardiomyocyte proliferation/regeneration using human, mouse, porcine and avian systems. The Heart Institute at Cincinnati Children's provides a strong training environment in cardiovascular biology with multiple investigators examining aspects of heart development and disease mechanisms. Candidates with a recent PhD and a strong background in molecular and cellular biology are encouraged to apply.

Contact: Katherine Yutzey, PhD

Email Address: Katherine.Yutzey@cchmc.org

Research Fellow Job Number: TBD. Dr. MolKentin's laboratory studies the molecular mechanisms of heart and skeletal muscle disease (<http://www.cincinnatichildrens.org/research/divisions/m/mcb/labs/molkentint/default/>). Major focus areas include mitochondrial-dependent mechanisms of non-apoptotic death (such as cellular necrosis), signal transduction in cardiac and skeletal muscle hypertrophy, transcriptional regulation of cardiac development, and molecular mechanisms that underlie skeletal muscle degeneration in muscular dystrophy (MD). Dr MolKentin is an HHMI investigator. Outstanding new PhD graduates with prior experience in mouse genetics & cardiomyopathy research and the desire to be competitive at the highest level are invited to apply.

Contact: Jeffrey MolKentin, PhD

Email Address: Jeffrey.MolKentin@cchmc.org

Development, Genetics, Reproduction, Physiology, and Disease

Research Fellow Job Number: 109843. A postdoctoral research position is available immediately in the Division of Human Genetics to work jointly with Dr. Melanie Myers and Dr. Michelle McGowan. We are actively engaged in community-based research to engage underrepresented adolescents and a parent in decisions about genetic testing. We seek a highly motivated researcher who is able to assist with or lead various aspects of study planning, implementation, analysis and manuscript writing related to genomic testing choices and outcomes in underserved predominantly African-American communities. The ideal candidate will have experience conducting both qualitative and quantitative research and be able to work independently as well as collaboratively with researchers and clinicians across divisions. Candidates with a strong background in any of the following are encouraged to apply: social behavioral sciences, public health genomics, health education, psychology, sociology, anthropology, bioethics, or related fields. Candidates should have a fundamental knowledge of genomics. Strong writing skills are required. Teaching opportunities are also available.

Contact: Melanie Myers, PhD

E-mail Address: Melanie.Myers@cchmc.org

Research Fellow Job Number: 109230. The Division of Human Genetics at Cincinnati Children's Hospital seeks applications for the Research fellow position to conduct independent and directed scientific research to understand the genetic basis of human gestational duration and associated pregnancy phenotypes. A background in medicine, human pregnancy and genomic. Experience in management, processing and analysis of large genomic data sets using R, Python or other programming language is preferred. Ideally, the candidate should have solid knowledge in mathematics and statistics. Ph.D. or M.D. in. Medical sciences, Biology or Quantitative sciences or equivalent is required. Must have experience in genomic data analysis and experience in studying of human pregnancy.

Contact: Ge Zheng, PhD

Email Address: Ge.Zhang@cchmc.org

Research Fellow Job Number: 103580. The laboratory of Juan Sanchez Gurmaches is seeking to recruit a highly motivated postdoctoral fellow to spearhead research investigating the genetic and metabolic basis of cell-to-cell heterogeneity during development and disease. The goal is to understand the mechanisms that drive the normal and pathological formation and function of distinct types of adipocytes by using mouse genetics, single cell tools, CRISPR screenings, omics approaches and functional in vivo and in vitro studies among others. Successful applicants will have a recent PhD or equivalent with peer review publications, high capacity for independent thinking, collaborative work and problem solving and show motivation and inclination for the area of research. Candidates with strong experience using mice as in vivo model, cell culture techniques, molecular biology and biochemistry and microscopy are encouraged to apply.

Contact: Juan Sanchez Gurmaches, PhD

Email Address: Juan.Sanchez-Gurmaches@cchmc.org

Research Fellow Job Number: 102756. A postdoctoral research position is available immediately in Dr. Rulang Jiang's laboratory in the Division of Developmental Biology (<http://www.cincinnatichildrens.org/research/divisions/d/dev-biology/labs/jiang/default/>). We use state-of-the-art genomic technologies, including RNA-seq, ChIP-seq, and CRISPR/Cas9-mediated genome editing, in combination with conditional gene knockout and pharmacogenetics approaches to investigate the genetic, epigenetic, and developmental mechanisms of craniofacial birth defects, including cleft lip, cleft palate, frontonasal dysplasia, and craniofacial skeletal defects. Candidates with a recent PhD degree or equivalent, with research experience in molecular/cell biology, developmental biology, or mouse genetics are encouraged to apply.

Contact: Rulang Jiang, PhD

Email Address: Rulang.Jiang@cchmc.org

Research Fellow Job Number: 100947. A postdoctoral position is available immediately in Dr. Amanda Zacharias's Lab to conduct mechanistic inquiries into the problem of context in developmental signaling responses. We seek to understand how Wnt signaling activates distinct targets in different developmental contexts by studying how enhancers integrate multiple quantitative inputs to activate gene expression. We use an innovative time-lapse imaging approach to measure expression of a gene in all cells of a live *C. elegans* embryo and plan to extend our studies to mammalian embryonic stem cells. Interested candidates must have a PhD and a strong record of accomplishment and experience in developmental biology, model organism genetics or computational modeling. The ideal candidate will have proficiency in English, at least one first author publication in a reputable international journal from their PhD work, and be collegial, highly motivated, and independent.

Contact: Amanda Zacharias, PhD

Email Address: Amanda.Zacharias@cchmc.org

Research Fellow/Associate Job Number: 96767/108979. A postdoctoral research fellow or research associate position is available in Dr. Ziady's laboratory to examine the regulation of Nrf2 activity in CF primary epithelial cells, CF animal models, and tissues from CF patients. We plan to: 1) To determine the step(s) in the Nrf2 activation cascade that are dysfunctional in CF; 2) Examine the mechanism by which CFTR dysfunction results in the dysregulation of Nrf2; and 3) Test pharmacological agents that activate Nrf2 by different mechanisms as potential therapies for Nrf2 dysfunction (<https://www.cincinnatichildrens.org/research/divisions/p/pulmonary/labs/ziady>). Suitable candidates for the position will be new Ph.D. graduates seeking their first postdoctoral fellowship with a strong background in protein-protein interaction studies as well as biochemistry, along with the study of transcription factor activity. Knowledge of the regulation of redox balance in the cell and experience with proteomics and mass spectrometry would be ideal. Background knowledge in other areas where this inflammatory pathway is relevant (cardiac, pulmonary, and neurological disease) would be beneficial.

Contact: Assem Ziady, Ph.D.

Email Address: Assem.Ziady@cchmc.org

Research Fellow and Research Associate Job Number: 95517/105225. Two post-doctoral positions and a Research Associate position are available immediately in Dr. Samantha Brugmann's lab to study vertebrate craniofacial development, patterning and disease. For information about specific research areas see <http://www.cincinnatichildrens.org/research/divisions/p/plastic/labs/brugmann/default/>. Applicants should possess a Ph.D. in a relevant field, such as Biology, Biochemistry, Genetics or another related discipline and be highly motivated, independent and organized. Successful applicants will have a record of communicating research results via publications and/or professional presentations, and be willing and able to participate in collaborative, interdisciplinary research projects. Experience in developmental biology, cell and molecular biology and avian/murine model systems is desirable. Preference will be given to applicants with a proven record in craniofacial research.

Contact: Samantha Brugmann, PhD

Email Address: Samantha.Brugmann@cchmc.org

Research Fellow Job Number: 92860/100567. The Stottmann lab in the Divisions of Human Genetics and Developmental Biology has immediate openings for multiple postdocs and/or Research Associates (Staff Scientists). Our interests are in the genetic basis of congenital malformations affecting the forebrain and craniofacial structures. (<https://www.cincinnatichildrens.org/research/divisions/h/genetics/labs/stottmann>) The successful candidate will primarily be involved in characterizing novel genes and variants identified through genome sequencing analysis of affected patients with syndromic craniofacial malformations. Candidates will be expected to develop a vigorous research program in close consultation with the PI. Applicants with multiple first-author publications and experience in mouse genetics, molecular biology and/or embryology are preferred. Further preference will be given to applicants with demonstrable experience with iPSC culture and/or analysis of exome/genome sequencing datasets.

Contact: Rolf Stottmann, PhD

Email Address: Rolf.Stottmann@cchmc.org

Research Associate Job Number: 91690. Dr. Rashmi Hegde's laboratory in the Division of Developmental Biology has an opening for a Research Associate to work on one of two projects (<https://www.cincinnatichildrens.org/research/divisions/d/dev-biology/labs/hegde>): 1) **Tumor Angiogenesis:** We have identified a signaling pathway that promotes both tumor angiogenesis and resistance to DNA damaging therapeutics. We are now developing strategies to simultaneously target both angiogenesis and chemoresistance in several solid tumor models. 2) **Proliferative Retinopathies:** We have identified signaling pathways that play specific roles in pathological angiogenesis. Using animal models of oxygen-induced retinopathy and diabetic retinopathy, we are now validating therapeutic targets in these pathways and developing drug candidates. Both projects use genetically modified mouse models, cell biology, mechanistic biochemistry, and chemical biology. Successful candidates will have a PhD degree in molecular biology, cell biology or relevant discipline with 3+ year's postdoc experience in cancer related research. Expertise in the use of mouse models, molecular & cell biology, biochemistry, & human cell culture techniques is required.

Contact: Rashmi Hegde, PhD

Email Address: Rashmi.Hegde@cchmc.org

Research Fellow Job Number: 91144/107564 Dr. Taosheng Huang's laboratory in the Division of Human Genetics studies the molecular basis of genetic syndromes, to apply discoveries from rare diseases to common conditions and to develop treatments for genetic diseases, with a special emphasis on mitochondrial diseases (www.cincinnatichildrens.org/mitochondrial). Methodologies used include next generation sequencing to identify disease causing mutations and iPSCs and mouse models to characterize the impact of these mutations using CRISPR/Cas9 based methods. We are seeking 2 highly motivated individuals with strong background in genetics and molecular/cellular biology, & a PhD degree in Genetics or Molecular/Cellular Biology or related field. Excellent scientific writing, communication, and technical skills strongly desired. Previous experience with stem cell research & animal handling preferred.
Contact: Taosheng Huang, MD, PhD **Email Address: Taosheng.Huang@cchmc.org**

Immunology/Inflammation

Research Fellow Job Number: 105599. The Alenghat lab has an opening for a highly motivated postdoctoral scientist with an interest in host-microbe interactions and epithelial and immune cell homeostasis in the intestine. Our lab employs patient samples and mouse models to study pathways that regulate intestinal health, infection, and the development of chronic diseases, such as inflammatory bowel disease and diabetes. Recent Ph.D candidates with a strong background in molecular biology and mucosal immunology, and significant experience in flow cytometry and mouse handling are encouraged to apply.
Contact: Theresa Alenghat, VMD, PhD **Email Address: Theresa.Alenghat@cchmc.org**

Research Fellow/ Research Associate Job Number: 104192/104193. Dr. Sing Sing Way's laboratory in the Division of Infectious Diseases has an immediate opening for a Research Fellow or Research Associate. The laboratory investigates the immune pathogenesis of infectious diseases and immunological basis of protective immunity. For this position, there is a particular focus on reproductive and/or microbial immunity (<http://www.cincinnatichildrens.org/bio/w/singsing-way/>). Experience in cellular immunology, flow cytometry, and molecular biology is required.
Contact: Sing Sing Way, MD, PhD **Email Address: SingSing.Way@cchmc.org**

Research Fellow Job Number: 100723. Genomic technologies (ChIP-seq, EMSA, DAPA, ATAC-seq, DNA methylation, etc.) are being applied in Dr. Harley's laboratory to reconcile genetic associations with the environmental causes of idiopathic autoimmune disorders with the goal to elucidate mechanisms initiating these pathological processes. The candidate would join a team that has uncovered unexpected powerful associations of transcription factors with genetic loci, with the goal to establish the genetic mechanisms. The team in place has the strategic, informatic, clinical, and technical expertise to provide strong support for the candidate in addition to the other resources and personnel of the Center for Autoimmune Genomics and Etiology (CAGE). The disorders with direct relevance to this position include lupus, rheumatoid arthritis, multiple sclerosis, type 1 diabetes, inflammatory bowel disease, chronic lymphocytic leukemia, Hodgkin's disease, and many others (<https://www.cincinnatichildrens.org/research/divisions/a/genomics-etiology/team>) (Nat Genet. 50:699, 2018). The ideal candidate will have a PhD with a familiarity of genomic molecular laboratory methods (e.g., ChIP-seq, CRISPR-Cas9, EMSA, DAPA, etc.) and be computationally sophisticated. Deep familiarity with genome wide association studies for any complex genetic disease phenotype would be helpful. Preference will be given to applicants with experience with informatic expertise, including genome wide association studies, the analysis of next generation sequence data, large genotyping datasets, and data mining, in general, along with demonstrated scholarly productivity by discovery and publication.
Contact: John Harley, MD, PhD **Email Address: John.Harley@cchmc.org**

Research Fellow Job Number: 99449/104634. A position is available immediately in Dr. Marc Rothenberg's laboratory (<http://www.cincinnatichildrens.org/research/divisions/a/allergy-immunology/labs/rothenberg/default/>), 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**

Research Fellow Job Number: 99379. A Research Fellow position is available in the laboratory of Dr. Kenneth Kaufman. The laboratory studies the genetics of systemic lupus erythematosus (SLE) and has identified/ validated/ fine mapped over 70 genetic associations with SLE and have recently identified variants that directly cause disease. To further evaluate the functional role of these variants, the lab is seeking a research fellow who has the ability to perform bench side molecular biology and cellular biology experiments, along with bioinformatics expertise. The fellow will be expected to design experiments, interpret results, prepare manuscripts and support grant writing efforts. Some level of mentorship of junior lab members will also be involved. Recent PhD graduates with any combination of cell biology, molecular biology, immunology, as well as bioinformatics experience, along with a strong publication record, and the initiative to independently drive research projects are invited to apply.
Contact: Kenneth Kaufman, PhD **Email Address: Kenneth.Kaufman@cchmc.org**

Research Fellow Job Number: TBD. Dr. Claire Chougnnet's laboratory is studying T cell ontogeny during fetal development and how it is altered by exposure to the inflammatory stimuli associated with prematurity. Her laboratory is also studying regulatory T cell function and homeostasis (<http://www.cincinnatichildrens.org/research/divisions/i/immunobiology/labs/chougnnet/default/>). The Chougnnet laboratory has an open position for a highly motivated postdoctoral research fellow with an interest in immune regulation, T cell effector function, and/or neonatology. The applicant should have a strong background in cellular immunology, with specific experience including flow cytometry, cell purification and in vitro functional studies.

Contact: Claire Chougnnet, PhD

Email Address: Claire.Chougnnet@cchmc.org

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