



Postdoctoral Positions at Cincinnati Children's

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

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

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

Questions?
Please contact:
Uma Sivaprasad, 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

Bioinformatics/ Computational Biology/ Biostatistics/ Epidemiology

Research Fellow Job Number: 103821. The Salomonis laboratory in the Division of Biomedical informatics studies the interplay between alternative splicing, genetics and tumor biology through the application and development of innovative computational tools in conjunction with high-throughput genomics sequencing datasets. The Salomonis lab welcomes applications for a postdoctoral Research Fellow who will apply, improve and augment newly developed open-source bioinformatics workflows (AltAnalyze/OncoSplice) integrating data across multiple omics modalities (RNA, DNA, epigenome, protein) in conjunction with clinical data from the TCGA, TARGET and emerging cancer genomics resources. Importantly, the applicant is expected to identify novel mechanistic relationships within and between distinct cancer subtypes to be experimentally tested with diverse research collaborators (<https://www.cincinnatichildrens.org/research/divisions/b/bmi/labs/salomonis>). Candidates must have a doctoral degree in biomedical informatics, bioinformatics, computational biology, computer science, biostatistics or a related field. Prior experience with next generation sequencing data and R/python programming is necessary. The ideal candidate will have an excellent understanding of cell and cancer biology, computational genomics, high throughput sequencing technologies, biostatistics, programming and a proven track record of success. Excellent written, verbal and communications skills are crucial. Original and out-of-the box thinking is welcomed.

Contact: Nathan Salomonis, PhD

Email Address: Nathan.Salomonis@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: 102606. A Computational Research Fellow position is available immediately in Dr. Emily Miraldi's lab (<https://www.cincinnatichildrens.org/bio/m/emily-miraldi>). The lab's focus is the development of computational methods to build predictive, mathematical models of the immune system from high-dimensional genomics measurements (e.g., chromatin state, single-cell gene expression data) with a goal to re-engineer immune-cell behavior in cancer and autoimmunity. The candidate will collaborate closely with experimental colleagues in the Center for Systems Immunology and Division of Immunobiology to design and execute hybrid computational-experimental strategies that push the boundaries of both immunology and computational biology. The candidate should have a PhD or equivalent with a quantitative background in systems biology, engineering, computer science, statistics, math, or a related field. Biology background is a strong plus. A willingness to develop immunology expertise as needed on the job is required.

Contact: Emily Miraldi, PhD

Email Address: Emily.Miraldi@cchmc.org

Research Fellow Job Number: 101434. The Center for Chronobiology in the Division of Human Genetics at Cincinnati Children's Hospital Medical Center is seeking a post-doctoral candidate to fill a computational biology/bioinformatics role in the lab of Dr. John Hogenesch, PhD (hogeneschlab.org). We are looking for candidates with a background in sequence analysis, network or systems biology, machine learning, multidimensional data analysis, and/or genome-wide circadian rhythms analysis. Expertise in sequence analysis is required. Experience in circadian biology is preferred, but not required. Successful candidates should have a Ph.D in a related field and a demonstrated track record of productivity.

Contact: John Hogenesch, PhD

Email Address: John.Hogenesch@cchmc.org

Research Fellow Job Number: 99288. Genomic technologies (ChIP-seq, EMSA, DAPA, ATAC-seq, DNA methylation, and others) 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 and powerful associations of transcription factors with genetic loci, with the goal to establish the genetic mechanisms. The team 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>). The ideal candidate will have a PhD with training in genetic epidemiology with a familiarity with genomic molecular laboratory methods (e.g., ChIP-seq, CRISPR-Cas9, EMSA, DAPA, etc.). Deep familiarity with genome wide association studies for any complex genetic disease phenotype would be important. 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: 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: 89284. The division of Biostatistics and Epidemiology has a Pulmonary Biostatistics Core lead by Dr. Hossain that involves biostatistics faculty and staff to provide support on all aspects of statistical needs from sample size calculation to proposing innovative methods for analyzing complex datasets. The Division of Pulmonary Medicine has a strong pediatric research infrastructure focusing on sleep-disordered breathing, narcolepsy, clinical research in asthma, basic and translational research in cystic fibrosis, as well as lung remodeling and fibrosis, outcomes research and imaging research. The research fellow will work on projects related to the research interests of Division of Pulmonary Medicine under the supervision of Dr. Hossain. The ideal candidate will hold a PhD in statistics/biostatistics and be highly motivated in pursuing methodologic work, with strong computational skills. Experience in mixed models, functional data analysis, Bayesian hierarchical modeling, spatially correlated data, and/or imaging data analysis preferred.
Contact: Michael Bennett, PhD (on behalf of Md Monir Hossain, PhD) **Email Address:** research@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: 104228. Dr. Susanne Wells' laboratory (<https://www.cincinnatichildrens.org/research/divisions/o/oncology/labs/wells>) has an opening for a Research Fellow to use murine and induced pluripotent stem cell models for studies of cancer biology and metabolism. The ideal candidate will be a recent PhD graduate with a strong publication record, excellent communication skills and experience with cell biology, basic biochemistry and molecular biology techniques. Experience with animal models preferred.
Contact: Susanne Wells, PhD **Email Address:** Susanne.Wells@cchmc.org

Research Fellow Job Number: 103792. Dr. Soona Shin's laboratory in the division of Pediatric Surgery (<https://www.cincinnatichildrens.org/research/divisions/g/thoracic-surgery/labs/shin>) aims to decipher the molecular basis underlying liver cancer, with a focus on pediatric hepatocellular carcinoma and hepatoblastoma. A postdoctoral Research Fellow position is available to develop and characterize mouse models of liver cancer and patient-derived xenografts. A doctoral degree or equivalent (Ph.D. or M.D.) in biology or related field, along with a strong interest in liver cancer research is required. Experience with mouse models, cell culture, and viral vector-mediated gene expression is preferred.
Contact: Soona Shin, PhD **Email Address:** Soona.Shin@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: 103926. A Research Fellow position is available immediately in Cardiothoracic Surgery to support divisional research initiatives. The research focuses on using a variety of animal model systems to study targeting non-contact activation of the coagulation pathway as novel anticoagulation strategies for cardiopulmonary bypass and ventricular assist devices. Fellow will be assigned several primary projects under the mentorship of Dr. James Tweddell and Dr. Joseph Palumbo. Specific duties will include but are not limited to helping conduct basic science experiments, collecting and organizing data, ensuring the health and wellbeing of study animals, grant writing, publication and presentation of work. The ideal candidate will be a recent PhD with a background in hematology and coagulation. Candidates must be MD or PhD, preferably with 1-2 years of animal surgical training that will help in the animal studies (in mouse, rat, rabbit, pigs and sheep).

Contact: Farhan Zafar, MD

Email Address: Farhan.Zafar@cchmc.org

Research Fellow Job Number: TBD. Dr. Molquentin's laboratory studies the molecular mechanisms of heart and skeletal muscle disease (<http://www.cincinnatichildrens.org/research/divisions/m/mcbl/labs/molquentin/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 Molquentin 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 Molquentin, PhD

Email Address: Jeffrey.Molquentin@cchmc.org

Development, Genetics, Reproduction, Physiology, and Disease

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 Job Number: 97987. Dr. Satoshi Namekawa's laboratory has an opening for a postdoctoral Research Fellow. The Namekawa laboratory is focused on elucidating the mechanisms and evolution of epigenetic programming events during germ cell development and early embryogenesis. The current goal of the project is to identify novel factors and related pathways that control epigenetic programming during mouse reproduction (<https://www.cincinnatichildrens.org/research/divisions/r/reproductive-sciences/labs/namekawa>). The ideal candidate will be a recent PhD graduate, energetic, highly motivated and creative individual, eager to explore challenging research. The new fellow is expected to independently design and conduct projects under the supervision of Dr. Namekawa. Candidates with a strong background in any of the following areas are encouraged to apply: reproduction, meiosis, spermatogenesis, DNA damage response and epigenetics including Polycomb, histone post-translational modifications and DNA methylation. Candidates with expertise in the analysis of next-gen sequencing (or strong interest in learning these skills) are preferred. Experience with basic molecular biology skills (DNA work including molecular cloning & vector construction) is required.

Contact: Satoshi Namekawa, PhD

Email Address: Satoshi.Namekawa@cchmc.org

Research Fellow Job Number: 96767. A postdoctoral research fellow 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 Job Number: 95516/ 95517. Two post-doctoral positions 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: 92860/100567/100569. Three postdoctoral Research Fellow positions are available in the Stottmann lab in the Divisions of Human Genetics and Developmental Biology. Our interests are in the genetic basis of congenital malformations affecting the forebrain and craniofacial structures. Areas of research include 1) characterization of novel genes and variants associated with syndromic congenital malformations, or 2) understanding the role of primary cilia in mouse neural and craniofacial development. 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. Preferred qualifications include experience with iPSC culture and/or analysis of exome/genome sequencing datasets (for 1) or the primary cilia field (for 2). More information can be found at <http://www.cincinnatichildrens.org/research/divisions/h/genetics/labs/stottmann/default/>.

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 chemo-

resistance 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. 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 a highly motivated individual 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/ Research Associate Job Number: 102823/102822. Alexander Miethke's Lab has an immediate opening for a Research Fellow or Research Associate in the Division of Gastroenterology to study mechanisms driving immune mediated liver injury, bile duct damage and liver fibrosis in pediatric autoimmune liver disease. Dr. Miethke's research focuses on discovering immune pathways controlling hepatobiliary injury in primary sclerosing cholangitis (PSC) and autoimmune hepatitis (AIH) in order to ultimately develop novel therapies. (<https://www.cincinnatichildrens.org/bio/m/alexander-miethke>) The laboratory uses established mouse models for sclerosing cholangitis, and several knockout and transgenic mice to discern disease mechanisms in pre-clinical models and works closely with the Center for Autoimmune Liver disease. (<https://www.cincinnatichildrens.org/service/a/autoimmune-liver-disease>) The specific goals for the successful applicant are 1) to mine a database comprised of liver RNAseq data, circulating biomarkers of disease, and clinical and imaging information to identify putative disease-pathways specific for pediatric onset PSC, and 2) to further investigate these mechanisms in preclinical models and in vitro systems with patient-derived specimens. The ideal candidate will have a PhD or equivalent in biomedical research. Experience in basic molecular techniques including gene expression quantification (RT-PCR), protein analysis (ELISA, Western) and immunohistochemistry are required. Candidates with a strong background in bioinformatics, and mouse/human immunology are encouraged to apply. Experience with analysis of RNAseq data, human/mouse lymphocytes, multi-parameter flow cytometry is preferred.

Contact: Alexander Miethke, MD

Email Address: Alexander.Miethke@cchmc.org

Research Fellow/ Research Associate Job Number: 104188/104189; 104192/104193. Dr. Sing Sing Way's laboratory in the Division of Infectious Diseases has an immediate opening for multiple Research Fellows or Research Associates. 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: 103529. A Research Fellow position is available in Dr. Gurjit Khurana Hershey's lab in the Division of Asthma Research. We are seeking a highly motivated scientist who is interested in studying asthma, allergy and immunology, specifically identifying and delineating the mechanisms underlying the contributions of genes and environmental factors that promote childhood asthma (<http://www.cincinnatichildrens.org/research/divisions/a/asthma/labs/hershey/default/>). The research fellow will be responsible for driving one of several available research projects as well as manuscript preparation and submission. The candidate is expected to be both a collaborative team-player and capable of working independently with minimal guidance. Strong personal accountability for results and integrity are essential. Good communication, technical and organizational skills are strongly desired. Requirements: PhD in molecular biology, immunology, or related field with a minimum of 3-5 years laboratory experience in molecular biology and immunology. Experience with mouse models preferred.

Contact: Gurjit Khurana Hershey, MD, PhD

Email Address: Gurjit.Hershey@cchmc.org

Research Fellow Job Number: 100884. A post-doctoral research position is available in the Pasare Lab that is interested in studying inflammatory responses downstream of pattern recognition receptors and the cross-talk between innate and adaptive immune systems. Some examples of ongoing research projects include 1. Regulation of memory CD4 T cell responses by the Innate Immune system with a particular focus on IL-1 family of cytokines 2. Understanding the role of a novel TIR domain containing adapter BCAP in regulating inflammatory responses in macrophages 3. Role of inflammasome independent IL-1beta in systemic inflammation, autoimmunity and anti-tumor responses (<https://www.cincinnatichildrens.org/bio/p/chandrashekhhar-pasare>). Highly motivated candidates with a PhD in biomedical sciences & experience in Immunology, Biochemistry & Molecular Biology are encouraged to apply.

Contact: Chandrashekhhar Pasare, DVM, PhD

Email Address: Chandrashekhhar.Pasare@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

Research Fellow Job Number: 104513. Dr. Eric Mullins' Laboratory is seeking a post-doctoral fellow to investigate the role of fibrinogen and plasminogen in the setting of a murine model of multiple sclerosis. Our laboratory is focused on understanding the contributions of hemostatic factors in immune disorders. We use genetically modified animals, in combination with in vitro studies, to elaborate the cross-talk between immunity and coagulation. The fellow would be involved in the investigations on plasmin-mediated lysis of fibrin matrices on macrophage migration and blood-brain barrier leak. The ideal candidate would have a Ph.D. in immunobiology, molecular biology, or neuroscience. Experience with murine models of disease, immunofluorescence/immunohistochemistry, and flow cytometry is preferred.

Contact: Eric Mullins, MD

E-mail Address: Eric.Mullins@cchmc.org

Magnetic Resonance Imaging (MRI)

Research Fellow Job Number: 90408. Dr. Zackary Cleveland's laboratory in the Center for Pulmonary Imaging Research (CPIR, <https://cpir.cchmc.org>) seeks to hire a postdoctoral Fellow in lung MRI research. The candidate will work with a multidisciplinary team of engineers, pulmonologists, and MR scientists to quantify lung structure and function in humans and mouse models of lung diseases, using ultra-short echo-time (UTE) 1H and hyperpolarized 129Xe MRI. Research focuses in the CPIR include MR sequence development, normal lung development and structure-function relationships in a variety of diseases including asthma, cystic fibrosis, interstitial lung disease and neonatal lung disorders. Candidates with strong backgrounds in magnetic resonance—EPR, NMR, spin exchange, or MRI—and a PhD in a relevant discipline (engineering, physics, medical physics, chemistry, etc.) are encouraged to

apply. Ideal candidates will also possess expertise in one or more of the following: pulse programming, image reconstruction/analysis, scientific computing (MATLAB, C++, etc.), hardware design, in vivo imaging/spectroscopy, or hyperpolarized media.

Contact: Zackary Cleveland, PhD

Email Address: Zackary.Cleveland@cchmc.org

Neurology

Research Fellow Job Number: TBD. A postdoctoral position is open in Dr. Lubov Timchenko's laboratory. Dr. Timchenko studies the molecular mechanisms of neuro-muscular diseases Myotonic Dystrophies type 1 and type 2. The main focus of the research includes investigations of signaling pathways in skeletal muscle and in brain in Myotonic Dystrophies and development of therapeutic approaches for these diseases. New PhD graduates with experience in research on human diseases are invited to apply.

Contact: Lubov Timchenko, PhD

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