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
- Virology

Click here to submit an application online and use the relevant job number.

Questions?
Please contact: Uma Sivaprasad, PhD, Scientist Recruiter: research@cchmc.org

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**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: 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 autoimmunity 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, statistics, 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 writing 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: 94838. The Division of Biostatistics and Epidemiology in collaboration with Developmental and Behavioral Pediatrics invites applications for a postdoctoral fellow position. We seek talented and motivated candidates who plan to begin or expand their research in epidemiology with a focus on developmental disorders and/or hearing loss. The position offers unique and exciting opportunities for multi-disciplinary collaborations, which include collaborations with pediatric subspecialty clinicians, and professional development including publication, presentation at scientific conferences and involvement in proposal writing. Developmental disorders include (but are not limited to) autism spectrum disorders, attention deficit hyperactivity disorder, Down syndrome, and intellectual disability. The research fellow will work towards developing his/her own research program as well as work on clinically-relevant projects aligned with Developmental and Behavioral Pediatrics. Candidates must hold a PhD or equivalent doctoral degree, preferably in the field of epidemiology. Other requirements include strong communication and quantitative skills, with experience in research design, and excellent writing and verbal skills. Contact: Uma Sivaprasad, PhD (on behalf of Jareen Meinzen-Derr, PhD) Email Address: research@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 for 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: Yaping Liu, PhD
Email Address: lyping1986@gmail.com

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: Uma Sivaprasad, PhD (on behalf of Md Monir Hossain, PhD)
Email Address: research@cchmc.org

Research Fellow Job Number: TBD. A postdoctoral research fellow position in bioinformatics is available in Dr. Yaping Liu’s lab. Dr. Liu will be joining the Division of Human Genetics in January 2019. The research focuses on using genetic and multi-dimensional epigenetic information in circulating cell-free DNA and exosomes to understand the gene regulation at the population level and therefore bridge the gap between genetic and phenotypic variations in a variety of healthy and pathological conditions. The ideal candidate will be self-driven and independent, with a recent PhD in computational biology, bioinformatics, genomics or quantitative research fields, proficiency with at least one high-level scripting language (R/Python/Perl) and Linux operating system, excellent quantitative background in statistics and machine learning, and/or computational genomics background, along with a strong publication record and fluency in written and spoken English. Familiarity with large scale next generation sequencing (NGS) data analysis (WGS, WGBS, RNA-seq, ChIP-seq and/or related) and some experience with Java/Scala are preferred.

Contact: Yaping Liu, PhD
Email Address: lyping1986@gmail.com

Research Fellow Job Number: TBD. The Roskin Lab combines computational and molecular biology methods to understand the adaptive immune system. 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: 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/exhem/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: 101805. Dr. Mohammad Azam's laboratory is seeking an enthusiastic and self-motivated postdoctoral candidate to work on structural and functional analysis of protein tyrosine kinases, phosphatases and transcription factors. Candidates with an interest in the understanding the molecular networks in normal and malignant development are also welcome. Further information is available at: http://www.cincinnatichildrens.org/bioa/mohammad-azam/. Applicants must have a PhD with a strong publication record. Experience in cell biology techniques and protein structure determination by X-ray crystallography and demonstrated success in molecular biology and protein expression using insect or mammalian cells is required.

Contact: Mohammad Azam, PhD
Email Address: Mohammad.Azam@cchmc.org

Research Fellow/ Research Associate Job Number: 102201/98117. A Research Fellow or Research Associate position is available in the Division of Experimental Hematology and Cancer Biology in the lab of Dr. Elisa Boscolo. The Boscolo lab studies vascular malformations and vascular tumors, endothelial cell biology and the role of TIE2 and Gaq signaling. In addition, the Boscolo Lab focuses on translational studies to identify new therapeutic targeted drugs for vascular anomalies affecting children.
A Ph.D. in related discipline, MD, or equivalent is required. Prior experience with vascular biology research is preferred.

Contact: Elisa Boscolo, PhD Email Address: Elisa.Boscolo@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/i/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/d/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: 101385. A postdoctoral Research Fellow position is available in Dr. Katherine Yutzey's laboratory in the Division of Molecular Cardiovascular Biology. The Yutzey lab investigates molecular mechanisms of heart development and disease related to heart valves, epicardial derivatives, and muscle cells (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: 100183 & 101386. The Blaxall lab has a long-standing interest in understanding the molecular mechanisms associated with the development and progression of heart failure. We are particularly interested in developing novel treatments for heart failure and fibrosis, and are pursuing several projects with therapeutic potential, including advanced screening, chemistry, animal models and drug development (https://www.cincinnatichildrens.org/research/divisions/m/mcb/labs/blaxall). A major focus is also to understand the pathologic processes of fibrosis in both the heart and kidney. Candidates with a strong background in signaling, molecular biology and small animal experimentation are encouraged to apply. Prior experience with cardiovascular biology is also desirable, although not required.

Contact: Burns Blaxall, PhD Email Address: Burns.Blaxall@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/molkentin/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: 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 genomics 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:** 102441. A postdoctoral research fellow position in epigenomics is available in Dr. Yaping Liu’s lab. Dr. Liu will be joining the Division of Human Genetics in January 2019. The research focuses on using genetic and multi-dimensional epigenetic information in circulating cell-free DNA and exosomes to understand the gene regulation at the population level and therefore bridge the gap between genetic and phenotypic variations in a variety of healthy and pathological conditions. The ideal candidate will be self-driven and independent, with a recent PhD in a biomedical field, strong training in one or more of the following areas: epigenetics/epigenomics, genetics/genomics, immunology or liquid biopsy, along with a strong publication record and fluency in written and spoken English. Familiarity with basic molecular biology techniques (PCR, qPCR, mammalian cell culture) and NGS library preparation (WGS, WGBS, RNA-seq, ChIP-seq or related areas), with experience in FACS sorting, and single-cell –omics preferred.

**Contact:** Yaping Liu, PhD  
**Email Address:** yaping1986@gmail.com

**Research Fellow Job Number:** 102015. A postdoctoral fellow position is available in the De Falco laboratory in the Divisions of Reproductive Sciences and Developmental Biology. Our research interests are in how the reproductive system is formed during fetal life and how male fertility is maintained during adulthood (http://www.cincinnatichildrens.org/research/divisions/r/reproductive-sciences/labs/default/defalco/default/), with focuses on the roles of: macrophages and immune cells; vasculature; and endocrine-disrupting compounds. These projects will involve extensive use of mouse genetic models, organ culture, flow cytometry, confocal microscopy, next-generation sequencing, and time-lapse live imaging techniques. The ideal candidate will possess a Ph.D. in developmental biology, reproductive biology, or a related field, with proven proficiency in cell biological/molecular techniques and publications in those fields. Experience with mouse model systems and flow cytometry is highly desired but not absolutely required.

**Contact:** Tony De Falco, PhD  
**Email Address:** Tony.DeFalco@cchmc.org

**Research Fellow Job Number:** 101317. A Research Fellow position is open in Dr. Nakamura’s lab, focused on studying the roles of extracellular vesicles (EVs), including exosomes, in the regulation of systemic metabolism. With a successful candidate, we aim to develop a project investigating tissue-specific EVs and small RNAs in the EVs in the pathogenesis of obesity-associated diseases, mainly type 2 diabetes and non-alcoholic fatty liver disease, based on our recent findings (Nature Comm (in press), bioRxiv 2018, Cell Reports 2018, Cell Reports 2015, PNAS 2015, Diabetes 2014, Nature 2012, Cell 2010; https://www.cincinnatichildrens.org/research/divisions/e/endocrinology/labs/nakamura/). The successful candidate will engage in molecular/acellular/genetic studies with our newly established mouse models to critically understand the in vivo networks of EVs and investigate if these networks are disrupted in obesity and induce obesity-associated metabolic disorders and comorbidity. We are looking for an individual with a PhD or equivalent, who is highly motivated, inquisitive, well-trained in molecular biology, metabolism, and/or immunology, and positively contributes to the collaborative atmosphere of the lab.

**Contact:** Takahisa Nakamura, PhD  
**Email Address:** Takahisa.Nakamura@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 (https://www.cincinnatichildrens.org/research/divisions/r/reproductive-sciences/labs/namekawa/). The current goal of the project is to identify novel factors and related pathways that control epigenetic programming during mouse reproduction. 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 and 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...
Research Fellow Job Number: 95623. A postdoctoral fellow position is available in the Division of Developmental Biology for individuals enthusiastic about pursuing research at the intersection of systems biology and developmental biology. Research areas include pattern formation, reconstructing the regulatory networks, stochastic gene expression and dynamic information encoding by signaling gradients (https://www.cincinnatichildrens.org/research/divisions/d/dev-biology/labs/ozbudak). Interested candidates must have a PhD and a strong record of accomplishment and experience in one of the following areas: mathematics, computational modeling, biophysics, microscopy, genetics or developmental biology. The ideal candidate will have proficiency in English, at least one first author publication in a reputed international journal from their PhD work, collegial, highly motivated, and independent.

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/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/ Research Associate Job Numbers: 91699/91690. Dr. Rashmi Hegde’s laboratory in the Division of Developmental Biology has an opening for a Research Fellow (new graduates) and a Research Associate (3+ year's postdoc experience) 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 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/mitochondria). 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

Research Fellow /Research Associate Job Number: TBD. The Perl lab focuses on lung mesenchymal cells and their role in alveolarization, alveolar homeostasis and fibrotic lung disease. We use transgenic mouse models and human lung tissue, in combination with cutting edge RNA Seq technology, 2/3 dimensional immunofluorescence imaging using confocal microscopy, and organoid models (https://www.cincinnatichildrens.org/research/divisions/p/pulmonary-bio/labs/Perl). We are looking for a postdoctoral fellow to join our lab and investigate molecular and cellular changes in fibroblast subpopulations in lung development, injury, fibrosis and regeneration. The postdoc will work in a collaborative and interdisciplinary team to study lung injury and regeneration in mouse
and human lung tissue, use various RNAseq datasets and follow up predicted new interactions in vitro and in vivo, and learn about
lung disease and model disease in organoid cultures. The ideal candidate will be a highly motivated recent PhD or MD/PhD researcher
(maximum of 4 years ago), have experience in basic molecular biology techniques, tissue culture, animal models, transcriptomic data
analysis or desire to learn big data analysis, proficiency in English, and a desire to work in a collaborative environment. Knowledge of
lung biology is not required.

Contact: Anne-Karina Perl, PhD

Email Address: Anne.Perl@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.cincinnatichildren.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. A position is available immediately in Dr. Marc Rothenberg’s laboratory
(http://www.cincinnatichildren.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
drugs that target and will investigate novel therapeutic strategies. The postdoctorate will also have the opportunity to
build upon previous 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: 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, perform 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/ Research Associate Job Number: 101109/97583. Dr. Andrew Lindsley’s Lab in the Division of Allergy
and Immunology has an opening for either a Research Fellow or a Research Associate/Staff Scientist to study the epigenetic regulation
of lymphocyte activation and terminal differentiation. Research in the Lindsley Lab focuses on congenital epigenetic diseases which
exhibit an immune phenotype. Using established mouse model systems and patient-derived specimens they investigate the molecular
mechanisms driving disease pathology and test the efficacy of emerging therapies. Candidates with a strong background in
mouse/human immunology and/or epigenetics are encouraged to apply. In particular, experience with human/mouse lymphocytes
(in vivo vaccination protocols and in vitro differentiation protocols) and flow cytometry will be highly advantageous. Experience in
basic molecular techniques including gene expression quantification (RT-PCR), protein analysis (ELISA, Western) and
immunohistochemistry are required.

Contact: Andrew Lindsley, MD PhD

Email Address: Andrew.Lindsley@cchmc.org

Research Fellow/ Research Associate Job Number: 96953/9695. 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.cincinnatichildren.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: 81353. The Barski Lab at the Division of Allergy and Immunology has an opening for a Postdoctoral

Fellow to study the epigenetic and transcriptional regulation of T cell activation. The goal of the research is to understand how the epigenome shapes immune responses and whether it is possible to modulate immune responses by targeting epigenetic mechanisms (https://www.cincinnatichildrens.org/research/divisions/a/allergy-immunology/labs/barski). Candidates with a strong background in molecular biology, immunology, epigenetics and genomics are encouraged to apply. Experience with human and mouse T cells and/or methods such as footprinting, chromatin and transcription assays, DNA methylation, ChiP-Seq, RNA-Seq and NGS data analysis will be advantageous. An established track record (as evidenced by publications in peer-reviewed journals) is a significant plus.

Contact: Artem Barski, PhD
Email Address: barskilab@cchmc.org

Research Fellow Job Number: TBD. Dr. Claire Chougnet'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/chougnet/default/). The Chougnet 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 Chougnet, PhD
Email Address: Claire.Chougnet@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
Email Address: Lubov.Timchenko@cchmc.org

Virology

Research Fellow/ Research Associate Job Number: TBD. We seek postdoctoral researchers to join teams working on HIV Assembly and the basis of HIV interactions with myeloid cells (macrophages and microglia). In one project, we are defining the molecular and cellular mechanisms that are required for the assembly of HIV virions, focusing on the interface of viral structural proteins with cellular trafficking pathways. Current research in this area focuses on intracellular trafficking of the HIV envelope glycoprotein, including its interactions with Rab-related recycling pathways. In another project we are following up on observations regarding the important role played by Siglec-1 in HIV replication in macrophages, and determining how HIV is assembled and transmitted by microglia. The individuals will join a team of dedicated laboratory personnel working on a number of aspects of HIV biology, including the study of host restriction factors and the development of HIV vaccines. The project provides opportunities for novel technology development in the area of correlative light and electron microscopy and in live cell super-resolution imaging. The ideal individual will bring strong skills in cell culture, molecular cloning, protein analysis, and some degree of fluorescence microscopy experience. Experience in culturing and quantifying HIV is desirable but can be learned on the job. New PhDs (research fellows) and PhDs with 3+ years of experience (research associates) are encouraged to apply.

Contact: Paul Spearman, MD
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