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

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

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Questions?
Please contact:
Tamiika Hurst, PhD or Uma Sivaprasad, PhD, Scientist Recruiters: research@cchmc.org

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Cincinnati Children’s Research Foundation

Cincinnati Children’s Research and Training at a Glance:
- Among the top in NIH funding for pediatric research institutions
- Over 1.4 million square feet of research laboratory space
- 900+ scientists conducting basic, translational, and clinical research
- Over 2000 publications annually in top-tier journals
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- Postdocs have gone on to careers in academia, biotech, pharma, teaching etc.

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

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

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

Contact: Steve Danzer, PhD Email Address: Steve.Danzer@cchmc.org

Bioinformatics/ Computational Biology/ Biostatistics/ Epidemiology

Research Fellow Job Number: 137430. A computational postdoctoral position in bioinformatics and epigenomics (computational/experimental) is available in Dr. Yaping Liu’s lab in the Division of Human Genetics. One of the research directions in Dr. Liu’s group is to study single-cell multi-omics data to understand the gene regulatory mechanism behind non-coding genetic variants. We have already developed several single-molecule (e.g. NOMe-seq, Kelly & Liu et al. 2012 Genome Research) and single-cell multi-omics technologies (e.g. single-cell methyl-HiC, Li & Liu et al. 2019 Nature Methods). We are continuing to develop several novel multi-omics technologies ourselves (e.g. https://doi.org/10.1101/2022.03.29.486102), which have been supported by multiple internal and long-term NIH grants now. The new postdoctoral position is going to work on our own single-molecule and single-cell multi-omics technologies, integrate multi-omics signals from the same single cell, and finally understand the regulatory roles of non-coding genetics variants in the heterogenous cellular system. The ideal candidate will have a recent PhD (fellow preferred) and 3+ years of postdoc experience, in computational biology, bioinformatics, genomics or quantitative research fields, proficiency with at least one high-level scripting language (R or Python) and Linux operating system (Bash), excellent quantitative background in statistics and machine learning, and/or computational genomics background, at least one impactful first or co-first author SCI paper published or accepted, and must be an effective communicator (spoken and written). Familiarity with large-scale next-generation sequencing (NGS) data analysis (WGS, WGBS, RNA-seq, ATAC-seq and/or related) and/or single-cell multi-omics preferred.

Contact: Yaping Liu, PhD Email Address: Yaping.Liu@cchmc.org

Research Associate Job Number: 122598. The division of Emergency Medicine in collaboration with the division of Biostatistics & Epidemiology has an immediate opening for a postdoctoral Research Associate. The Research Associate will engage in emergency based clinical research with divisional Faculty and Fellows, including retrospective cohorts, cross-sectional, case control studies and prospective trials as well as quality improvement and implementation studies. This individual will split his/her time between supporting emergency medicine Fellows’ projects, teaching research methods, as well as developing his/her own line of research. The division of Emergency Medicine has over 40 faculty and 13 fellows who provide emergency medical care in one of the busiest pediatric emergency departments in the country. The division has robust research infrastructure including approximately 20 clinical research coordinators, as well as data and financial analysts, a research supervisor, financial and a research manager. The division belongs to the PECARN Network, a federally funded network of 18 US pediatric hospitals. There are approximately 50 ongoing studies in the division, including 15 studies directly recruiting patients in the ED. The division receives ~4 million dollars/year in grant funding and produces ~100-120 publications per year, most of them in high impact journals. 3 or more years of relevant postdoctoral research experience is required. A PhD in Epidemiology with a minor in Occupational Health, Systems Engineering, Human Factors Engineering, Occupational Health Nursing, or related discipline is preferred. Experience in research/quality improvement is a plus.

Contact: Mekibib Altaye, PhD Email Address: Mekibib.Altaye@cchmc.org

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

Contact: Theresa Alenghat, VMD, PhD Email Address: Theresa.Alenghat@cchmc.org

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

Contact: Samantha Brugmann, PhD Email Address: Samantha.Brugmann@cchmc.org

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

Contact: Emily Miraldi, PhD  Email Address: Emily.Miraldi@cchmc.org

Research Fellow Job Number: 142534. Join our team and help improve medical decision making through the development and testing of new approaches to teaching pediatric shared decision making. We have an immediate opening for a graduate student or post-doctoral research fellow with expertise in education/curriculum development and an interest in applying those skills in the medical setting. Position is in the Center for Innovation in Chronic Care Delivery and Decision Making in the James Anderson Center for Health Systems Excellence which is focused on improving outcomes for children and adolescents with chronic illnesses by accelerating the development of effective care delivery methods through research and quality improvement. Within the Center, the Decision-Making Research Lab (led by Dr. Ellen Lipstein) aims to understand the current state of pediatric medical decision making, as well as develop and test methods for facilitating shared decision making, eliminating disparities, and improving outcomes for children and adolescents with chronic conditions. We are hiring to support work in developing and testing a curriculum aimed at developing pediatric clinicians’ skills in shared decision making. The position will support this effort through critical review of the existing literature, curriculum development and pilot testing. Candidates should be current or recently graduated doctoral students in a relevant field, such as education, health education or medical education. The ideal candidate will have a strong interest in medical education, pediatrics and/or shared decision making, but need not have experience in all areas. Applicants from groups underrepresented in medicine are strongly encouraged to apply. We are open to considering candidates who prefer a position that is not full-time. Funding available for up to 2 years.

Contact: Ellen Lipstein, PhD  Email Address: Ellen.Lipstein@cchmc.org

Research Associate Job Number: 143526. Join Dr. Yunguan Wang's Lab within the Division of Gastroenterology and Human Genetics has multiple openings for postdoctoral researchers, graduate students, and bioinformatics analysts in the field of bioinformatics and computational biology. Dr. Wang's research group focuses on investigating the pathogenic mechanisms in autoimmune and rare diseases through the analysis of single-cell multi-omics data and spatial transcriptomics data. His groundbreaking research has been published in esteemed journals such as Science, Cell, Nature Methods, and Nature Cancer. As a postdoc joining our team, you will work on analyzing both in-house and publicly available single-cell and spatial transcriptomics data. Your primary task will involve studying the cellular neighborhood and interactions within healthy and diseased tissues. Additionally, you will contribute to the development of novel methods for analyzing neighborhood and cell-cell communication in spatial transcriptomic data.

Contact: Yunguan Wang, PhD  Email Address: Yunguan.Wang@cchmc.org

Cancer and Blood Diseases

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

Contact: Biplab Dasgupta, PhD  Email Address: Biplab.Dasgupta@cchmc.org

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

Contact: Fukun Guo, PhD  Email Address: Fukun.Guo@cchmc.org

Cardiovascular Research

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

Contact: Kohta Ikegami, PhD  Email Address: Kohta.Ikegami@cchmc.org
Research Associate Job Number: 130279. The Ikegami lab at Cincinnati Children’s Hospital Medical Center is recruiting highly motivated postdocs interested in studying molecular mechanisms of heart, skeletal muscle, and vascular diseases. The current research focus of the lab is the molecular pathogenesis of diseases caused by nuclear lamin mutations (“laminopathies”), including dilated cardiomyopathies, muscular dystrophies, lipodystrophies, and premature aging disorders. We are recruiting postdocs interested in studying laminopathies using molecular, genetic, genomic, proteomic, lipidomic, pharmacologic, or biophysical approaches. Candidates interested in studying how the immune system contributes to laminopathies are also encouraged to apply. The postdoc will enjoy a fantastic research environment within the Division of Molecular Cardiovascular Biology, a home to world-class laboratories studying heart and skeletal muscle biology and disease.

Contact: Koha Ikegami, PhD
Email Address: Koha.Ikegami@cchmc.org

Research Fellow Job Number: 131036. Postdoctoral positions are available in the Waxman lab. Congenital heart defects are very common within newborns. The Waxman Lab uses zebrafish as its primary model to elucidate mechanisms underlying normal and improper vertebrate heart development. Current research in the lab employs genetic, cellular, and molecular tools to elucidate signaling pathways and transcriptional determinants of vertebrate cardiac chamber size and regeneration. The ideal candidate will be independent, highly motivated, and have a strong background in systems neuroscience, psychology, human sleep and sleep disturbances, digital health, and sensory testing. Leadership and management skills will be developed through training in multiple methodologies, including sensory testing, psychological assessments, and sleep/wearables. The fellow will be working primarily on different projects in the lab (Projects | King Lab (cincinnatichildrens.org)) and will have experience with some molecular biology, genetic, and imaging techniques from their graduate work. Experience using zebrafish or studying cardiovascular development is not a requirement.

Contact: Joshua Waxman, PhD
Email Address: Joshua.Waxman@cchmc.org

Clinical Psychology/ Developmental Pediatrics/ Health Disparities

Research Fellow Job Number: 144051. The Collaborative Laboratories Investigating Pediatric Pain (CLIPP) group, under the direction of Drs. Robert C. Coghill & Christopher D. King is focused on elucidating the mechanisms underlying pain. The CLIPP group is seeking a postdoctoral fellow interested in receiving advanced training in the investigation of human pain mechanisms across the lifespan, with a particular emphasis on chronic pain in children. The ideal candidate will be independent, highly motivated, and have a strong background in systems neuroscience, psychology, human sleep and sleep disturbances, digital health, and sensory testing. The position will involve training in multiple methodologies, including sensory testing, psychological assessments, and sleep/wearables. The fellow will be working primarily on different projects in the lab (Projects | King Lab (cincinnatichildrens.org)) and will have experience with some molecular biology, genetic, and imaging techniques from their graduate work. Experience using zebrafish or studying cardiovascular development is not a requirement.

Contact: Christopher King, PhD
Email Address: Christopher.King@cchmc.org

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

Contact: Andrea Kachelmeyer
Email Address: Andrea.Kachelmeyer@cchmc.org

Research Associate Job Number: 144286. Dr. Anna Esbensen and the Division of Developmental Disabilities and Behavioral Pediatrics has an opening for a Research Associate position focused on clinical and behavioral outcomes research with children and adolescents with Down Syndrome. The research associate will be involved in several studies, including clinical trials of school-age children with Down syndrome, measuring cognitive or language outcomes in preschool to school-age children with Down syndrome and a study developing a novel behavioral outcome measure for use with individuals with Down syndrome. Primary responsibilities include: (1) supervision of research infrastructure across several federally-funded research projects, (2) overseeing behavioral coding of observational data, (3) some behavioral and cognitive data collection from children with Down syndrome, (4) statistical analysis of existing data, and (5) writing scientific papers and presenting work at scientific conferences. The preferred hire will have a Ph.D, MD or equivalent degree in a field related to developmental disabilities with 3-5 years of experience. Demonstration of a track record of publications and a strong background in research related to developmental disabilities is preferred. Experience with statistical analyses and clinical skills collecting data from individuals with intellectual and developmental disabilities, including Down syndrome, and their families is required. Please
Research Fellow/Associate Job Number: 143466. The Wells, Zorn, Takebe and Helmrath labs seek a motivated collaborative postdoctoral fellow/associate to advance human GI organoids in regenerative medicine. Studies will focus on the mesenchymal niche that supports engraftment during transplantation. CuSTOM is a multi-disciplinary center of excellence integrating developmental and stem cell biologists, clinicians, bioengineers, and entrepreneurs with the common goal of accelerating discovery and facilitating bench-to-bedside translation of organoid technology. Successful candidates must hold the PhD, MD, or MD/PhD degrees be highly motivated and have passion for collaborative research. Experience with computational biology and/or human pluripotent stem cells is an advantage.

Contact: The CuSTOM Group

Email Address: CuSTOM@cchmc.org

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

Contact: SK Dey, PhD or Xiaofei Sun, PhD

Email Address: sk.dey@cchmc.org; Xiaofei.sun@cchmc.org

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

Contact: Magdalena Kasendra, PhD

Email Address: Magdalena.Kasendra@cchmc.org

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

Contact: Maria Mikedis, PhD

Email Address: Maria.Mikedis@cchmc.org

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

Contact: Rulang Jiang, PhD

Email Address: Rulang.Jiang@cchmc.org

Research Fellow Job Number 124706. The Özbudak Lab is looking for a postdoctoral fellow interested in combining interdisciplinary approaches to discover systems-level mechanisms governing spatiotemporal pattern formation during embryonic development. Embryos develop spatiotemporal patterns by encoding and interpreting biological signals in real time. Despite unavoidable fluctuations in gene expression, embryonic development is robust and reproducible, which necessitates several mechanisms buffering stochastic gene expression. A striking example of robust spatiotemporal patterning is the rhythmic segmentation of somites, which are precursors of the vertebral column. Segmentation of somites is controlled by 1) oscillatory expression of Hes/Her gene family, known as the vertebrate segmentation clock, 2) short-distance Notch signaling, 3) long-distance Fgf, Wnt, and Retinoic Acid signaling gradients and 4) a network of transcription factors integrating outputs of the segmentation clock and the signaling pathways. Errors in this regulatory cascade result in various birth defects, including congenital scoliosis. We combine single-cell microscopy measurements, time-resolved perturbation experiments, biophysical modeling, and computational simulations to decipher the mechanism underlying robust spatiotemporal pattern formation and cell fate determination.

Contact: Ertugrul Özbudak, PhD

Email Address: Ertugrul.Ozbudak@cchmc.org

Research Fellow Job Number: 123042. The Takebe Lab is seeking to recruit a highly motivated research fellow to lead a stem cell and organoid research investigating their potential for understanding human hepatobiliary-pancreatic development and pathogenesis towards therapy. Dr Takebe's lab proposes to take a “reverse reductionism approach” for a holistic mechanistic understanding of the dynamic nature of a self-developing system. The Takebe lab is also leading newly established Center for Stem Cell and Organoid Medicine (CuSTOM) to facilitate transformative application of organoids for the patients with no cure thru multi-industrial collaboration. Qualified
applicants will have MD and/or PhD with peer reviewed research publications. Experience in molecular and cell biology, surgery, neurology, mathematics and/or bioinformatics is a plus.

**Contact**: Takanori Takebe, PhD  
**Email Address**: Takanori.Takebe@cchmc.org

**Research Fellow Job Number**: 112135. A postdoctoral research fellow position is available in Dr. Assem Ziady's laboratory to study Cystic Fibrosis (CF). Focus areas are 1) understanding the regulation of Nrf2 activity and identify various interventions as therapy for Nrf2 dysfunction; and 2) examine and further develop non-viral DNA delivery vectors for CF gene therapy. These studies will use CF primary epithelial cells, CF animal models, and tissues from CF patients. The ideal candidates for the position will be recent Ph.Ds with a strong background in one or more of the following: protein-Protein interaction studies, redox biology, biochemistry, transcription factor activity, protein biomarker identification, animal models of disease. Experience with proteomics and mass spectrometry would be ideal. Evidence of strength in experiment design, data analysis, and a strong publication record are strongly desired. Background knowledge in other areas where this inflammatory pathway is relevant (cardiac, pulmonary, and neurological disease) is beneficial.

**Contact**: Assem Ziady, PhD  
**Email Address**: Assem.Ziady@cchmc.org

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## Imaging Research/Qualitative Methods and Analysis

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

**Contact**: Uma Sivaprasad, PhD (for Lili He, PhD)  
**Email Address**: Research@cchmc.org

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## Immunology/Inflammation

**Research Fellow Job Number**: 104634/129047/129048/132332. Four postdoctoral positions are available immediately in Dr. Marc Rothenberg's laboratory, which is focused on allergic responses especially in mucosal tissues such as the lung and the gastrointestinal tract, and aims to understand mechanisms, develop drug targets and identify novel therapeutic strategies and agents. The postdoctorate will be focused on genomics, genetics, molecular immunology, and/or chemistry of several novel susceptibility loci and pathways involved in allergic diseases, and the biochemistry and enzymology of proteases (particularly calpain-14). The postdoctorate will develop, synthesize and/or evaluate small molecule detectors and inhibitors of signaling pathway molecules relevant in allergic diseases, 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, 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, and the biochemistry and enzymology of proteases (particularly calpain-14).

**Contact**: Laura Walkup, PhD  
**Email Address**: Laura.Walkup@cchmc.org

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## Research Fellow Job Number: 133715. Dr. Laura Walkup's laboratory within the Center for Pulmonary Imaging Research (CPIR) is seeking a motivated and enthusiastic postdoctoral fellow to develop magnetic-resonance imaging (MRI) techniques for quantitative lung imaging. The fellow will collaborate with a multidisciplinary team of clinicians and scientists to develop and translate novel proton and hyperpolarized-gas MRI techniques to understand regional lung structure-function relationships in clinical studies of children and adults. Currently funded projects focus on rare-lung diseases including pulmonary complications of bone-marrow transplantation and cancer treatment, cystic fibrosis, and childhood interstitial lung diseases. CCHMC has rich infrastructure to support research and translational science, and our imaging-research instrumentation includes three Philips 3T MRI scanners and three xenon gas polarizers. The ideal candidate will have a quantitative background in physical sciences (e.g., physics, chemistry, or engineering) with training in magnetic resonance (EPR, NMR, or MRI). Candidates with expertise in hyperpolarized media, image reconstruction or analysis, in vivo imaging or spectroscopy, and/or programming languages such as MATLAB, Python, C++, are encouraged to apply.

**Contact**: Laura Walkup, PhD  
**Email Address**: Laura.Walkup@cchmc.org

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

**Contact**: Nurit Azouz, PhD  
**Email Address**: Nurit.Azouz@cchmc.org

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## Research Fellow Job Number: 140598. A postdoctoral research position is immediately available in the Grimes Laboratory of the Cincinnati Children's Hospital Research Foundation, in Cincinnati Ohio (an affordable metro area of more than 2 million people, with access to the arts, great restaurants, excellent schools and parks). Dual training in hematology/oncology and informatics. Nathan Salomonis. The lab exploits cutting-edge omics tech to answer fundamental biological questions in hematopoiesis, marrow failure and myeloid leukemia. We develop new informatics tools when existing tools are insufficient to resolve the data. For example: PMID: 32494068, PMID: 30249787, PMID: 30243574, PMID: 29977015 and PMID: 27580035.

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

Contact: Chandrashekhar Pasare, PhD
Email Address: Chandrashekhar.Pasare@cchmc.org

Research Fellow Job Number: 140019. The Panganiban Lab is seeking to recruit a highly creative and motivated postdoctoral research fellow to study the mechanisms of gene-environment interplay in asthma and allergic disease. The successful candidate will lead projects that aim to elucidate the functional role of gasdermins and pyroptosis in cell damage and tissue repair in asthma and other allergic diseases. The studies will involve the use of classical and modern techniques in molecular and cellular biology, biochemistry, and functional genomics, as well as animal models of disease. Collaborations with dry labs (Bioinformatics and Epidemiology) are highly anticipated. Candidates with a PhD in Molecular Biology, Cell Biology, Genetics, Physiology or other Biomedical Science-related fields are encouraged to apply. The ideal candidate should possess strong laboratory and analytical skills and have a record of peer-reviewed publications.

Contact: Ronald Panganiban, PhD
Email Address: Ronald.Panganiban@cchmc.org

Research Fellow/Associate Job Number: 142050. Dr. Way’s Laboratory in the Division of Infectious Diseases has two immediate openings for a Research Fellow and a Research Associate (3+ years of post doc experience) to perform basic research on host sensing of commensal-pathobiont microbes; and how these interacts shape host immunity systemically and in mucosal barrier tissues. Another focus of the laboratory is reproductive and developmental biology, and integration of concepts in immunological tolerance related to commensal microbes to maternal-fetal tolerance and/or developmental shifts in how commensal tolerance to achieved are areas of active investigation. Dr. Way’s laboratory has been at the leading edge of these scientific areas for the past 10 years with seminar publications in Nature, Cell and Science.

Contact: Sing Sing Way, MD, PhD
Email Address: Singsing.Way@cchmc.org

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

Contact: David Hildeman, PhD
Email Address: David.Hildeman@cchmc.org

Research Associate Job Number: 142705. Dr. Maisam Abu-El-Haija, MD, MS Laboratory is looking for a Postdoc who will investigate biomarkers of disease in acute and chronic pancreatitis subjects’ research bio samples. The applicant should have a Doctoral degree in Biology, Molecular Biology, Genetics, Immunology or related field with interest in pancreas research. The role requires understanding and expertise in laboratory techniques and research methodology that serve studies for cellular and signaling pathways for inflammation in pancreatitis. Experience in pancreas biology and molecular genetics in preferred, but not required. A demonstrated track record of productivity via publications in peer-reviewed journals in a strong plus.

Contact: Maisam A. Abu-El-Haija, MD, MS
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