**Introduction:** The Center for Pediatric Genomics (CpG) builds on the rich resources and collaborative culture of Cincinnati Children’s to accelerate outstanding innovative projects in genomics to improve child health (Figure). Herein, we announce the annual CpG funding opportunity for FY 2020 with Pilot Projects at $100,000 and more involved Accelerator Projects that may require a larger budget (up to $300,000).

The application process for FY 2020 will be modified to align with the NIH R21 application format and synergize with the June deadlines for many NIH grants. While an optional Letter of Intent (LOI) is recommended, the CpG grant application process is otherwise a one-stage submission of complete proposals. We strongly encourage Faculty who are contemplating an application, but have incomplete plans, to submit an LOI or to contact a member of the CpG team for guidance and support. One Pilot Project and/or one related Accelerator Project may be submitted per investigator. Each submission must be its own independent application. No principal investigator may hold two actively funded CpG projects.

**Center for Pediatric Genomics (CpG) Steering Committee:** Lou Muglia (co-chair), John Harley (co-chair), Peter White (co-chair), John Hogenesch, Michelle McGowan, Melanie Myers, Steven Potter, Carlos Prada, Laura Ramsey, Matthew Weirauch, Andrew Wooten, & Aaron Zorn. **CpG Managers:** Heide Aungst & Mike Furgason. **CpG Administration:** Joyce Life-Ishmael.

**Scope:** Collaborative, multidisciplinary DNA- and RNA-based projects focused on genomics, metagenomics, gene expression, or responder/non-responder phenotypes are priorities. Projects that contribute to the development of key institutional resources relevant to the CpG mission and/or advance the implementation of clinical genomics are considered responsive to this RFA. Examples include:

**Scientific Discovery**
- Collaborations between clinicians, genetics experts, basic scientists, and/or informaticists to identify, characterize, and/or sequence particular patient cohorts to define disease mechanisms.
- Coordinated efforts to develop animal models or other mechanistic studies for functional validation of potential causative genes, transcripts, genome-encoded elements, foreign DNA, or variants of uncertain significance.

**Translational Genomics/Tool or Resource Development/Implementation**
- Collaborations between translational scientists and clinicians to develop effective diagnostic, management, risk/treatment stratification, specific therapeutics, or preventive strategies for children based on genomic findings; as examples, efforts to define genomic differences between therapeutic responders and non-responders or between the afflicted and not afflicted in phenotypes with incomplete penetrance.
- Preparation to initiate or to advance gene therapy clinical trials
- Collaborations between geneticians, clinicians, informaticists, and/or ethicists to return genetic results to clinicians, patients, and/or the medical home and to evaluate their consequences.
- Coordinated efforts to develop and apply new, broadly applicable methods, tools, or applications of genomics that would result in more effective analyses and applications of genomic data.

**Eligibility:** Funding is limited to CCHMC Faculty with no other active CpG award as of July 1, 2019.

**Timeline:**
- **February 5, 2019** – Deadline for receipt of the optional Letter of Intent (LOI).
- **March 19, 2019** - Deadline for submission of completed applications
- **May 2019** – Awardees announced
- **July 1, 2019** - Funding awarded - Please note: This will be the only CpG funding awarded in FY20.
Applications should not exceed **FIVE pages for Pilot Projects and SIX pages for Accelerator Projects. Letters of Intent (LOI) are limited to THREE pages.** A suggested length for each section is given below for the final application. The applicant should make their own decisions concerning the length of the components of the LOI. The LOIs will be assigned to a Committee Member who will attempt to provide either oral or written responses to the applicant. Please use 0.5” margins and Arial 11 font or greater. This is an internal submission and therefore will **NOT** need the approval of Sponsored Programs. **Pilot Projects** may request up to a total of $100,000, and **Accelerator Projects** may request up to a total of $300,000, both over either one or two years. Budgets will be carefully evaluated. Rigorous standards for innovation and impact will be applied, particularly to the Accelerator Project requests. Applicants may apply simultaneously to both the Pilot Projects and the Accelerator Projects by submitting two closely related proposals. **Please summarize the expansions of the experimental plan for Accelerator Projects with a bulleted list on its application title page.**

Please provide the following information in the order given below on the first page:

*Date submitted/Title/Applicant/Division/Key Personnel and their Divisions/Summary of expansion plans (required for Accelerator Projects only)*

A. **Abstract** (200 words or less)

B. **Aims:** Please describe your research aims. If you are focusing on a clinical population, be sure to indicate the evidence, if known, for a genetic cause of the disease or phenotype. If you propose a patient-centered project, then please be sure to describe the numbers and accessibility of patients for the study envisioned.

C. **Background & Significance:** What is the current state of knowledge in this area? How will your project advance research and development toward better patient care outcomes at CCHMC? How does this particular project fit within other institutional strengths and priorities? What is the potential for future work related to this research at CCHMC to further advance the research, development, and implementation cycle?

D. **Innovation:** What is new and different about your solution? What new developments have enabled its viability? What approaches and resources are you creating and/or combining in a new way?

E. **Research Strategy:** Rationale for the proposed experiments, sufficient description of methods to provide the reviewers with the experimental approach, and potential outcomes and pitfalls should be provided. For Accelerator Projects supportive preliminary data should be included to provide evidence regarding the foundation for the proposed studies and to support the increased funding.

F. **Expected Outcomes & Sustainability:** What outcomes do you expect from successful completion of the study? How will you measure success? How will your project potentially evolve into a sustainable research program? How do you plan to validate and disseminate any proposed new tools, protocols, or informatics (new method grants only)?

G. **Environment:** What collaborative disciplines are necessary to answer your research question and how will each of the investigators contribute to the project? What are your plans for genomic data storage, processing, and sharing with collaborators?

H. **Incubation:** What challenges do you perceive and how could these be overcome by guidance from CpG or other expertise?

Please include (do not count against page limits):

- **Budget** - 1 page maximum, must be approved by the PI’s Business Director
- **Bibliography**
- **NIH Biosketches of Key Personnel**

The deadline for this round of submission is **March 19th, 2019 at 11:59 PM.**

Submit your application(s) before the deadline at (copy and paste this URL):

https://ccaps.research.cchmc.org/competitions/CpG/

Learn more about the Center for Pediatric Genomics at [www.cincinnatichildrens.org/genomics](http://www.cincinnatichildrens.org/genomics).

This RFA is also posted on Centerlink. Search for **“CpG Funding”**.