

Junior Investigator Preliminary/Feasibility Grant Program
University of Pennsylvania & Children's Hospital of Philadelphia
Clinical Translational Science Award
Center for Human Phenomic Science

PURPOSE

The primary goal of the Junior Investigator Preliminary/Feasibility Grant Program (JIPGP) is to encourage junior investigators to develop research projects that will ultimately lead to extramural funding and to a career in clinical and/or translational research. The JIPGP awards are in partnership with the NIH Clinical and Translational Science Award (CTSA), the Institute for Translational Medicine and Therapeutics (ITMAT), and Children's Hospital of Philadelphia (CHOP) Research Institute.

The JIPGP awards are designed to allow junior faculty members and MD, PhD, and DMD Postdoctoral trainees with appropriate mentors to perform investigator-initiated, human-based, studies utilizing the services of the Center for Human Phenomic Science (CHPS). Projects should address CTSA themes of multidisciplinary research, translational research, and research across the age spectrum. The award is intended to contribute to a competitive extramural grant application (such as NIH K or R grants).

Each award is a maximum of \$20,000. The award can be budgeted over 1-2 years. In addition, CHPS will waive up to \$10,000 in fees for their clinical Core services (requests for waived fees beyond that amount will be considered, but must be discussed with and approved by the CHPS Associate Directors: CHOP – Andrea Kelly, MD, kellya@chop.edu, Penn – Raymond Townsend, MD, townsend@upenn.edu).

GUIDELINES

Applicant Requirements

- Be an Assistant Professor (full-time faculty), Instructor, or Postdoctoral Fellow/Researcher at the time of the award. For Postdoctoral Fellows/Researchers, preference will be given to those who have an offer for a faculty position with protected time for clinical research. If the applicant is a resident, residency must be completed at the time the award is initiated.
- Hold a doctoral degree from an accredited institution.
- Be in an approved fellowship-training or postdoctoral program or have completed postdoctoral training after July 1, 2019. If the project is a change in emphasis for an applicant who completed training more than five years prior to applying, the applicant must obtain approval from the appropriate (CHOP or Penn) CHPS Associate Director to submit a proposal.
- May not have been a principal investigator on an individual NIH K or R award (excluding R03 or R21) during or before July 2024. Applicants must provide NIH-formatted Other Support pages listing all current and pending (including submitted) research funding. An applicant with current institutional K (such as a K12), foundation, or industry support is eligible for the JIPGP provided that no budgetary overlap with the funded research is present. The projects, however, may overlap. Please include the budget for projects with project overlap with the JIPGP application and upload with required budgets as merged documents.
- Previous JIPGP awardees can apply for funding of a new project.

Proposal Requirements

- Applications must be submitted electronically by Friday, March 8, 2024, at NOON for a project start date of July 1, 2024. Late submissions (including letters of recommendation or biosketches) will not be accepted, nor will extensions be granted.
- The proposal should clearly delineate the proposed use of CHPS services that can be found on the ITMAT website and the table below. Studies must involve human subjects and must propose to utilize the CHPS major Core areas of service for subject interventions or assessments. Biostatistical support only, informatics support only, samples from studies without the use of a major CHPS Core, or proposals for which the only intervention is a questionnaire or sample analysis will not be accepted. Please contact Dr. Kelly (kellya@chop.edu) at CHOP or Dr. Townsend (townsend@upenn.edu) at Penn if you have any questions regarding adequate usage of CHPS Core services.
- **Penn Submissions:** Penn Investigators must be routed through the Business Administrator that signs off on their grants for approval. Grants will be received once the Business Administrator has approved them. Penn proposals are NOT routed through the institution’s electronic grant system.
- **CHOP Submissions:** Investigators are required to submit the JIPGP application on both the ITMAT site and CHOP’s Sponsored Projects electronic submission: eSPA. *Please note that funding of CHOP-based investigators will be internal and not from Penn.* For ease of submission to eSPA, you may merge all JIPGP documents into one PDF. Go to the eSPA login page to start the grant submission. Contact your Sponsored Project Officer for assistance. In addition, an official **SIFTER** price request is required and must include the cost of all CHPS Core services requested for the study.
- Penn-based applicants can access CHOP-based CHPS Cores. CHOP-based applicants can access Penn-based CHPS Cores for studies recruiting participants age \geq 18 years. If you are using Cores at both institutions, please discuss with Dr. Kelly (kellya@chop.edu).

CHOP CHPS Core services (subsidized costs) – *Informatics and Biostatistics must be bundled with other services
Nursing Outpatient Visits – CHPS Nursing Core provides sample collection, storage and shipping, phlebotomy, PK sampling, and other nursing services. https://www.research.chop.edu/chps-research-nursing-core
Inpatient beds – CHOP CHPS can assist you in accessing inpatient beds for research projects requiring overnight stays. https://www.research.chop.edu/chps-research-nursing-core
Nurse Practitioner – Medical histories, physical exams, EPIC orders. https://www.research.chop.edu/chps-nurse-practitioner-core
Nutrition Assessment – Provides DXA, pQCT, anthropometric measurements. https://www.research.chop.edu/chps-nutrition-assessment-unit
Bionutrition – Diet questionnaires, analysis, 24-hour dietary recalls. https://www.research.chop.edu/chps-bionutrition-unit
Sleep – Polysomnography testing, actigraphy. https://www.research.chop.edu/chps-sleep-core
Cardiovascular – ECGs, ECHOs, vascular testing, ambulatory blood pressure monitoring. https://www.research.chop.edu/chps-cardiovascular-core
Ophthalmology – Eye exams, OCT, Fundus photography. https://www.research.chop.edu/chps-ophthalmology-core
Neurobehavioral testing – Developmental testing. https://www.research.chop.edu/chps-behavioral-neuroscience-core

Digital Health Innovation – Consultation and assistance on telehealth, mobile health, wearable technology, etc. https://www.research.chop.edu/chps-digital-health-innovation-core
*Informatics Services – Resource to investigators in designing and developing a cohesive data management plan and/or database. https://www.research.chop.edu/chps-informatics-core
*Study Design and Biostatistics – Provides planning and analytic services, which include study design, sample size estimation, analysis planning. https://www.research.chop.edu/chps-study-design-and-biostatistics-core

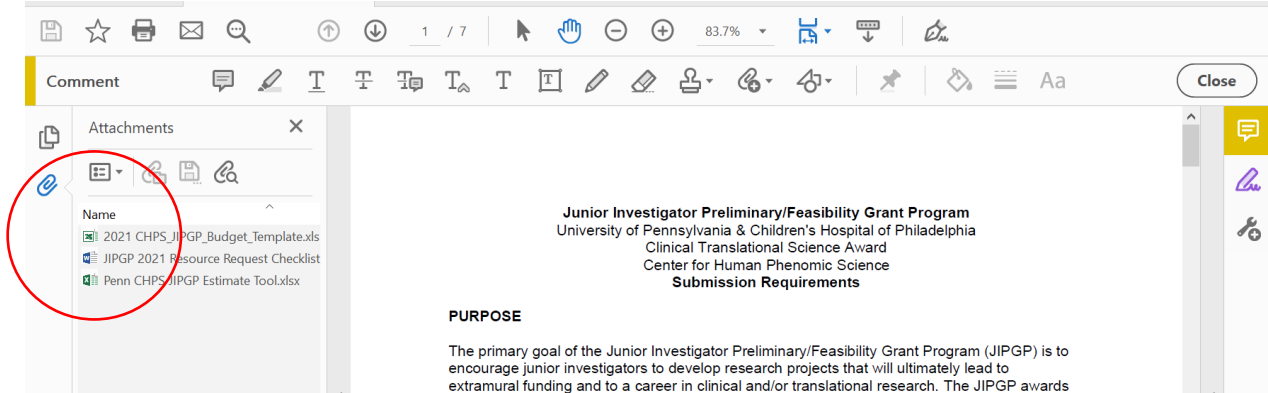
Penn CHPS Services (subsidized costs) – *Informatics, mHealth, and Biostatistical support must be bundled with other services. Subjects must be over 18 years of age to receive services.
Nursing Outpatient Visits - Schedule research subjects in the Penn CHPS outpatient areas at HUP or Presbyterian Hospital for sample collection and conduct of outpatient study procedures. https://www.med.upenn.edu/chps/research-nursing-core-rnc.html
Inpatient beds – Schedule research subjects in the Penn CHPS inpatient area for conduct of inpatient studies. https://www.med.upenn.edu/chps/research-nursing-core-rnc.html
Nutrition – Metabolic kitchen, dietary assessment, and analysis. https://www.med.upenn.edu/chps/nutrition-core.html
Cardiovascular Phenotyping Unit – ECGs, ECHOs, Vascular testing. https://www.med.upenn.edu/chps/cardiovascular-phenotyping-unit.html
Exercise Medicine Unit – Provides structured exercise training interventions, exercise testing, and other related core services; staffed by a full-time exercise trainer. https://www.med.upenn.edu/chps/exercise-medicine-unit-adults-only.html
*Informatics Services – Resource to investigators in designing and developing a cohesive data management plan and/or database. https://www.med.upenn.edu/chps/informatics-services.html
*Study Design and Biostatistics – Provides planning and analytic services, which include study design, sample size estimation, analysis planning. https://www.med.upenn.edu/itmat/sdab/
*mHealth Core – Provides mobile and web application development services. https://www.med.upenn.edu/chps/mhealth-service.html

- Studies should be designed to collect pilot or preliminary data with clear presentation of how results will be used for extramural funding applications. The "analysis" section of the research plan should be 4-7 sentences that explicitly identify: primary outcome measure, statistical test, and power calculation or a statement of how the pilot study will inform future power calculations, such as effect size estimates. (Of note, as a pilot study, most applications will not have adequate study power.)
- One proposal is allowed per investigator per year.
- Review of the protocol by a statistician prior to submission is strongly recommended. A CTSA statistician can be used if the candidate does not have access to a statistician for guidance. Use this link for contact information for CTSA adult and pediatric statisticians: <https://www.med.upenn.edu/itmat/sdab/>
- If this proposal is to fund an existing CHPS or IRB protocol, address in the proposal whether the existing protocol was initiated by the JIPGP applicant or mentor. Proposals to support or supplement existing protocols that have been initiated by the mentor or that are beyond the initial study recruitment target must be discussed with Dr. Kelly (kellya@chop.edu) at CHOP or Dr. Townsend (townsend@upenn.edu) at Penn. If the

JIPGP proposal is or leverages an existing CHPS or IRB protocol, a copy of the IRB approval letter must be submitted.

Required Documents

Proposal Submission: Submit the JIPGP application electronically utilizing ITMAT's Pilot Grant System that can be found at <https://www.med.upenn.edu/apps/itmat/pg/>. **A PennKey is required.** JIPGP submission documents are attached to the 2024 JIPGP Guidelines Submission Instruction PDF file. On the left side of the PDF is a paper clip icon. Click on the paper clip to access the attachments.



- CHPS Resource Request Checklist (attached): The checklist should identify the Core services that awardees are requesting for their JIPGP submission. The CHPS Cores and examples of services are provided.
- Abstract Page: The abstract page should be no longer than 250 words.
- Budget Template (attached): Please use the excel template budget page and provide detailed expenses for the award amount requested (maximum of \$20,000 total for the award period, minimum duration of 1 year and maximum duration of 2 years). Investigators requesting a 2-year award should submit budgets for Year 1 and Year 2. Examples of JIPGP-funded budget items include purchase of research supplies, core lab assays, subject recruitment expenses, travel expenses to a scientific meeting to present study results, and salary support for awardee and/or study staff.
- CHPS Estimate: The CHPS services that are to be subsidized should also be included (maximum \$10,000 for the award period, minimum duration of 1 year and maximum duration of 2 years). Requests for waived fees beyond that amount will be considered, but must be discussed with Dr. Kelly (kellya@chop.edu) at CHOP or Dr. Townsend (townsend@upenn.edu) at Penn. Investigators should contact John Krall (krallj@chop.edu) for costs of CHOP CHPS services and Tracey Caputo (caputot@upenn.edu) for costs of PENN CHPS services.
 - Penn Submissions: Complete the attached Penn CHPS JIPGP Estimate Tool (attached). Please be sure to include total number of participants, total number of visits, and total quantity of services requested for all participants/visits. Please contact Tracey Caputo (caputot@upenn.edu) for questions about the estimate tool.
 - CHOP Submissions: a SIFTER Price Request is required and must include the cost of all CHPS Core services requested for the study. The price request information should be sent to John Krall, CHPS Administrative Director,

(krallj@chop.edu). If you have questions about CHPS services and how to access them, please contact Mr. Krall.

- Budget Justification: Please provide a short justification for all personnel, supplies, equipment, and services performed outside the CHPS that will be expensed to this project. Also, provide a list of the services being requested from the CHPS Cores.
- NIH Biosketch: An NIH Biosketch must be submitted for the applicant and the mentor. If the applicant has co-mentors, biosketches from all mentors can be combined and uploaded as one PDF. Form and instructions at <https://grants.nih.gov/grants/forms/biosketch.htm>.
- NIH Other Support: Submit page for the applicant. Form and instructions at <https://grants.nih.gov/grants/forms/othersupport.htm>.
- Research Proposal: Maximum of three single-spaced pages. The description of the project should include a brief background, hypothesis and aim(s), subjects, methods, analysis, study feasibility, and recruitment sections, as well as a paragraph on how you plan to use CHPS resources. Your proposal must clearly indicate the CHPS resources you wish to utilize. Please indicate the importance of this funding for the successful implementation of your research proposal, as well as the feasibility of completing this project within one to two years. Appendix material is not allowed. **Please use 1-inch margins and Arial 11 font.**
- References: Scientific literature references should be uploaded separately and will not count toward your three-page proposal limit.
- Mentor's Support Letter: A letter from a senior faculty member who agrees to serve as a research mentor for the project. For projects proposing co-mentors, a single letter signed by the co-mentors should be submitted. This letter should be a minimum of one page and maximum of two pages and should include:
 - An outline of the resources available to the applicant
 - Protected time for research
 - Clear plan for candidate's career development
 - Candidate's current academic appointment
 - Candidate's future academic plans
 - Discussion of institutional commitment. If the candidate is a fellow, a clear plan for participation in clinical research post-fellowship should be given.

Evaluation of Proposals

Applications will be reviewed by the JIPGP Review Committee and scored based on:

- Originality and scientific merit
- Potential for future funding
- Qualifications of applicant and mentor
- Use of CHPS resources
- Subject recruitment and feasibility – ability to recruit subjects and the potential to complete the study within a 1-to-2-year time frame
- Addressing CTSA themes: multidisciplinary research, translational research, and research across age groups

All protocols are reviewed and discussed using an NIH review format. Protocols will be reviewed to ensure scientific validity and maximal patient safety. Applicants will receive a written critique.

OTHER JIPGP PROGRAM INFORMATION

Please discuss and plan your CHPS services and JIPGP budget with the appropriate institutional administrative staff (contact information listed below). A summary of CHPS services can be found in the tables above and the respective Penn (<https://www.med.upenn.edu/chps/>) and CHOP (<https://www.research.chop.edu/chps>) websites. The attached Resource Checklist identifies which services awardees will utilize for their submission.

If a delay in study initiation and or recruitment occurs, a one-year, no-cost extension can be requested after the initial period of funding.

Important Dates

- Application Receipt Deadline: March 8, 2024, at Noon
- Notification of Award (tentative): April 19, 2024
- Funding Period: July 1, 2024 – June 30, 2025/6

PennKey

Both CHOP and Penn applicants will need a PennKey logon and password to access the Pilot Grant System. Please note that PennKeys cannot be processed without social security numbers. In addition, a few days are required for the PennKeys to be activated. Please plan accordingly and request the PennKey well in advance of the submission date to ensure that you can submit your proposal.

Penn Staff: If you do not have a PennKey, please contact Charlie Molli (cmolli@upenn.edu) or Tracey Caputo (caputot@upenn.edu). Please submit this request at least two weeks in advance.

CHOP Staff: Go to CHOP PennKey Administration on the CHOP Research intranet: <https://www.research.chop.edu/services/chop-pennkey-administration>.

Post Award Requirements

- The local IRB and CHPS Review Committee must approve the project before funds can be utilized. A completed IRB application is required within 4 months of grant award notice. If an awardee is unable to accomplish this, or needs guidance on the IRB submission process, the awardee should contact either Dr. Kelly (kellya@chop.edu) at CHOP or Dr. Townsend (townsend@upenn.edu) at Penn for further direction. Full IRB approval must be received within the first year of the grant for release of funding.
- The JIPGP review will serve as the Scientific Review Committee approval. Awardees should contact either Dr. Kelly (kellya@chop.edu) at CHOP or Dr. Townsend (townsend@upenn.edu) at Penn when assistance is needed to complete the appropriate documentation for the IRB submission.
- Awarded JIPGP protocols submitted to the IRB and CHPS must reflect the same aims, goals, sample size, and use of resources as initially submitted in the JIPGP proposal. Do not add or increase resources or change aims without prior approval from CHPS. If the proposal is to support/supplement an existing IRB approved study, the awarded JIPGP project should be written (if possible) as a new unique submission to the IRB and CHPS.
- Any resulting publications in peer-reviewed journals must acknowledge the support of the CTSA grant as follows: "The project described was supported by Grant Number UL1TR001878 from the National Center for Advancing Translational Sciences, National Institutes of Health; the content is solely the responsibility of the authors and does not

necessarily represent the official views of the NIH". In addition, if support is provided by other grants or centers those specific citations should be included (contact the relevant program for citation content). Copies of publications should be sent to John Krall (krallj@chop.edu) at CHOP or Tracey Caputo (caputot@upenn.edu) at Penn.

- All publications utilizing CTSA/CHPS resources must have a Pub Med Central (PMC) ID number when applicable. Please arrange for PMC submission at the time your manuscript is accepted by the journal via the NIH Manuscript Submission System at <http://nihms.nih.gov/db/sub.cgi>.
- JIPGP awardees are required to provide annual progress reports. Awardees will receive an automated notification from the ITMAT Pilot Grant System.

PILOT GRANT SYSTEM

- The applicant for the proposal should log in at www.med.upenn.edu/apps/itmat/pg. Do not wait until the last minute.
- Project Title: Title is limited to 250 characters
- Funding Program: Choose the appropriate funding mechanism: " Junior Investigator Preliminary/Feasibility Grant Program"
- Business Administrator: Click "Apply," add Administrative Reviewer/BA (post-submission), and then search by name (last name first) for the business administrator who normally signs off on your grants. For CHOP applicants, please select Michael Campbell, Raylonda King, Megan O'Karma, or Prema Sundaram.
- Personnel: Click the "Proposal Participants" button and then click "Add Participant" for each mentor, then search for them by name, select "Mentor" under "Relationship," and upload NIH Biosketch as a PDF.
- Save and Continue Later: Click the "Save" on the "Basic info" tab if you are working on this proposal in stages.
- Submit: Click the "Submit" button only after you have uploaded all documents. You cannot make changes to your application after clicking this button. Note, documents do not need to be uploaded all at once – BUT click this button only after you have uploaded them all.

For questions, please contact:

- Penn: Tracey Caputo, Penn CHPS Administrative and Financial Officer, 215-898-8264, caputot@upenn.edu
- CHOP: John Krall, CHOP CHPS Administrative Director, 267-425-1790, krallj@chop.edu