

IPNA Clinician Scientist Academy

Call for Clinical Research Fellows



Background

Pediatric Nephrology is an emerging discipline which now requires greater capacity among its members for clinical research to both ensure that there continue to be advancements in the care and outcomes of children with kidney disease, and to attract learners who will invest time and energy into building research programs to generate new knowledge. There is inequitable access to clinical research capacity across pediatric nephrology groups globally, largely defined by income of countries and jurisdictions rather than need or commitment to clinical research.

The leadership of IPNA at the Calgary 2022 Congress has identified that “Generating new knowledge: Using the global IPNA network for clinical research” is a new and key priority. The development of a IPNA Clinician Scientist Academy would be one component of advancing this mission, through the development of clinical research methods capacity in defined cohorts of pediatric nephrologists globally.

The People

The central component is a group of 20 emerging clinician researchers ('Fellows'), supported by a group of approximately 20 faculty members who are research leaders within Pediatric Nephrology. Please [see link to view committed faculty mentors](#) within the Academy.

Selection Criteria

Selection criteria for Fellows would include 1) equity (geography and gender), 2) membership of IPNA, 3) early career, 4) evidence of institutional support, and strong letter of endorsement, 5) demonstrated potential for leadership in clinical research and commitment to incorporate research within a clinical career.

Training Program Activities

A structured training program of 1 year duration would be offered for successful applicants, with an optional one-year support in building up or completing a clinical research study. The training program would include:

- 1) Access to online training materials sourced from various countries with existing research training infrastructure
- 2) A monthly online core seminar series on a broad range of clinical research methodologies outlined below; and run in two different time slots to facilitate global attendance. See attached timetable for core lectures.

3) More advanced and specialized monthly *research in progress* seminar series to commence in the second half of the year which would provide more advanced skills, including group workshops for participants to develop their own research proposals with input from experts and other fellows. Peer to peer feedback and feedback from mentors will be provided during the sessions.

4) One on one support from a pool of approximately 20 faculty mentors will be available for project development and implementation. Faculty are intended to be co-investigators or collaborators on any Fellow project. Fellows may indicate which faculty they would like to receive support from, and co-Chairs of the program may also suggest additional resources or mentors to contact.

Funding

Fellows or faculty will not receive any remuneration for their participation. Travel grants will be provided to Fellows to attend a yearly in-person workshop (usually concurrent with an IPNA sponsored international meeting)

Small grants of \$1000 USD will be provided to kick start Fellow-led research projects after a review process by Faculty within the Academy.

Certificate of Completion

Fellows who complete the program will be provided with a certificate of completion from IPNA. Certificate of completion will be contingent on the Fellow submitting a completed and actionable clinical research protocol at the end 2-year time period.

Assessment of the Academy

Surveys pre and post academy would be used to assess the effectiveness of the Program.

Other tangible benefits to participation will be to foster research collaboration, and provide opportunities for project development with international colleagues.

Inquiries and Information

All inquiries should be directed to the IPNA Office (office@theipna.org), who will direct queries to co-Chairs Jonathan Craig and Susan Samuel.

Tentative Timetable:

This is a recommended/draft list of topics. Sessions will be scheduled as per the availability of speakers, and expressed needs from learner and mentor cohort.

Title of potential sessions	Topics to be covered	Speakers	Date and Time (Aus/E. Asia/N. America)	Date and Time (Europe, Africa, Central/S. Asia)
Introduction and networking meeting	Roles, responsibilities, expectations, resources, introductions to mentors and learners	Jonathan Craig Susan Samuel	October 2024	October 2024
Getting Started: Basics of clinical research	Scientific method, hypothesis testing, sampling, understanding error, research waste, introduction to reporting guidelines	Jonathan Craig Susan Samuel	October 2024	October 2024
Research question and Study designs, ethics	Developing the question, choosing the study design (introduction to various designs) Ethics (GCP etc)	TBA	November 2024	November 2024
Engaging patients in research	Patient engagement and co-design of research, principles, practice, power	TBA	January 2025	January 2025
Study design boot camp	More in depth regarding most common designs <ul style="list-style-type: none"> - Diagnostic test evaluation (including screening programs) - Cohort studies (prospective/retrospective) - Randomized controlled trials 	TBA	IPNA Congress, Cape Town Will discuss cohort studies in depth Others to follow later in the year	IPNA Congress, Cape Town Will discuss cohort studies in depth Others to follow later in the year

Biostatistics made simple	<ul style="list-style-type: none"> - Descriptive statistics, common summary and dispersion measures - Simple hypothesis testing (for each type of outcome variable), with consideration for repeated measures - Regression models (linear, logistic, time to event), introduction to adjustment - Understanding effect estimates, p values, confidence intervals - Power, sample size - Review Type 1 and 2 error 	TBA	IPNA Congress, Cape Town	IPNA Congress, Cape Town
Qualitative research	<ul style="list-style-type: none"> - Basics of qualitative studies, including design, sampling considerations, analyses - Writing a qualitative paper 	These sessions will be scheduled after the IPNA Congress.		
Systematic reviews and meta analysis: the basics	<ul style="list-style-type: none"> - Basics of literature search and synthesis - Meta regression, pooling, heterogeneity - Pitfalls 			
Data collection and databases	<ul style="list-style-type: none"> - Planning measurements, precision, accuracy, validity - Storage and databases 			
Writing workshop Part A: Grant writing	<ul style="list-style-type: none"> - Writing tips for grants and papers, workshop - General scientific writing 			

Writing workshop Part B: Manuscript writing	<ul style="list-style-type: none">- Writing a quantitative study design paper
Knowledge Translation and moving evidence to practice including guidelines	<ul style="list-style-type: none">- Imperative for KT- Frameworks – KTA cycle, etc- Moving to guidelines, introduction to GRADE
Peer review (optional)	<ul style="list-style-type: none">- Manuscript peer review- Grant review
Getting it done	<ul style="list-style-type: none">- Finding funding- Managing your team- Managing your time (personal effectiveness), to think and write, protecting your clinical time
Communicating your science	<ul style="list-style-type: none">- Elevator pitch – all learners to present their research in a creative oral or visual manner