

CALL FOR APPLICATIONS

INSTITUTIONAL KL2 MENTORED CAREER DEVELOPMENT AWARD

Focus: Physiology, pathophysiology and/or treatment of NEPHROTIC SYNDROME

Application Deadline: September 2nd, 2022, at 5:00 PM EST

University of Maryland Baltimore (UMB), Institute for Clinical & Translational Research (ICTR) is seeking applications for one institutional KL2 Mentored Translational/Clinical Research Scholar Award for innovative research on the **prevention and/or treatment of nephrotic syndrome (NS)**. This award will support the career development of one early-career faculty investigator through an inter- or multi-disciplinary mentored research experience so they can become an independent, extramurally funded investigator.

This request for applications is for one scholar from University of Maryland Baltimore (UMB) or from University of Maryland College Park (UMCP). Support, including salary, research funds, tuition fees, and travel funds, is provided for up to three years. Based upon satisfactory progress, support for a third year will be provided. Fundamental elements of the award include: structured, core didactic coursework; training in the design, conduct, and analysis of translational and clinical research in team settings (protocol development, preparation of IRB applications, clinical research/trial management, patient accrual, data collection, analysis, and manuscript writing); conduct of a research project under the supervision of mentors and engagement in related career development activities and seminars that include introduction to innovative methodologic approaches to translational science and regular grant-in-progress presentations.

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I. PURPOSE OF THE KL2

This KL2 award is specific for applications that address eminent issues directly relevant to NS.

NS is a rare, but serious manifestation of kidney diseases caused by increased glomerular permeability and defined by massive proteinuria, hypoalbuminemia, and edema. The disorder may be caused by a disease specific to the kidneys (primary cause) or secondary to a systemic disorder such as diabetes, lupus, infections, or genetic disorders. NS can affect children and adults of all ages and is often associated with various complications such as hyperlipidemia, thromboembolism, increased risk of infection and in some cases end stage renal failure.

The purpose of the KL2 is to provide support for clinical and translational research training and career development of one person from one of six professional schools on the UMB campus (Dentistry, Law, Medicine, Nursing, Pharmacy, and Social Work) or University of Maryland College Park. Translational/clinical research is a complex endeavor that is ideally performed by a multidisciplinary team using an integrated team approach. A multidisciplinary approach brings experts from diverse disciplines (for example, clinician, clinical researcher, clinical trialist, statistician, medicinal chemist, and pharmacologist) to address collectively a common complex problem. There is a well-recognized shortage of well-trained physicians and other health professionals performing translational/clinical research in a rigorous, highly collaborative, team-oriented environment.

II. Application Due Date: September 2nd, 2022, at 5 PM EST

Start Date: February 1st, 2023

III. Eligibility

Applicants must meet each of the following criteria:

- Research or health-professional doctoral degree or equivalent, including but not limited to MD, MBBS, DO, DDS, PhD, PharmD, JD, PsyD, DPH; Epidemiologists, behavioral scientists and nurses with clinically relevant doctoral degrees are eligible as well.
- A full-time junior faculty up to Assistant Professor for less than 5 years, at the University of Maryland Schools of Medicine, Nursing, Pharmacy, Dentistry, Social Work, or Law, or University of Maryland College Park by the date of receipt of the award. Postdoctoral fellows with a pending faculty appointment are eligible to apply. **The faculty appointment cannot be dependent upon receipt of the KL2 award.**
- Scholar is required to devote **at least 75%** effort towards their research. With justification, this can be reduced to 50% for those that are in surgery or surgical subspecialties. Justification will require documentation that more than a 25% clinical commitment is required to avoid loss of competence or credentialing in special clinical.
- A commitment to a career focused on translational/clinical investigation.
- A commitment to additional training including a core didactic curriculum and either:

- MS in an area of clinical research (e.g. Public Health, Informatics, Clinical Epidemiology, Clinical Investigation, Biostatistics, Innovation and Entrepreneurship, or Health Science) if not redundant https://www.umaryland.edu/media/umb/ictr/web-template-style-assets/UMB_MS_Certificate_Programs_update.pdf
- Or certificate in an area of clinical research for applicants with a previous relevant MS degree.
- Identification of and support from at least one, but ideally an interdisciplinary team of UMB, UMCP, and potentially JHU active faculty mentor(s), established and successful in translational/clinical investigation.
- US citizenship, permanent resident (including with pending application), or non-citizen national status (persons born in outlying possessions of the United States) at the time the application is submitted. Individuals on temporary or student visas are not eligible. Proof of residency may be required.
- Have NOT served as Principal Investigator on an NIH R01, sub-project of P-series program project award or U-series research grant or been recipient of any NIH K-series award (this does not include NIH Small Grants (R03) or Exploratory/Developmental (R21) grants or their equivalents).
- Must NOT have an active NIH K-series award application pending. Specifically, this means that K23 applicants may not simultaneously apply for the KL2. KL2 Scholars will be expected to submit an independent career development grant proposal by year 2.
- For additional research projects, the effort not directly committed to the K award (commonly up to 25%), KL2 award recipients may devote effort, with *compensation*, from Federal or non-Federal research projects as principal investigator, or in another role (e.g., co-Investigator), as long the specific aims of the other supporting grant(s) differ from those of the K award.
- Applicant must be able to devote a minimum of three years to the KL2 training program.

IV. Diversity, Equity, and Inclusion

The UMB ICTR is committed to increasing the participation of women and individuals from ethnic or racial groups underrepresented in the biomedical and behavioral sciences. Such groups include American Indian or Alaska native, Asian, Black or African American, Hispanic, or Latino, and Native Hawaiian or Other Pacific Islander. Applications from women and minority candidates are encouraged. In addition, accommodations will be made to assist any individuals with disabilities so those persons who are qualified applicants can complete the program.

V. Types of Research Proposals Accepted

Research areas may include translational and patient-oriented research, epidemiology and behavioral studies, outcomes research, and/or health services research.

Projects may cover a wide range of topics, including but not limited to the representative topics below:

- Identification and study of congenital origin, gene mutations and molecular events involved in renal morphogenesis and differentiation that may lead to progressive loss of renal function or cause severe metabolic imbalances.
- Discovery and validation of biomarkers that are associated with histopathological patterns or defined pathogenic mechanisms to aid in diagnosis, differentiation, and prognosis of NS;
- Identification of risk factors and predisposing factors contributing to the development of minimal change disease, membranous nephropathy, or focal segmental glomerulosclerosis in idiopathic NS or in patients with diabetes, lupus, amyloidosis, reflux nephropathy and other kidney diseases;
- Clinical, cellular, and molecular studies underlying the development and progression of glomerulonephritis, including the molecular changes affecting the glomeruli, alterations of the basement membrane, mechanisms leading to proteinuria, and the biochemistry of the nephron during pathological states;
- Investigation of clinical care disparities (e.g., race, ethnicity, socioeconomic status, rural versus urban) in the diagnosis and prognosis of NS;
- Study of lifestyle interventions (e.g., in dietary or exercise habits) for the prevention and/or treatment of NS;
- Development of animal models to advance understanding and treatment of NS;
- Study aided to prevent, contain, or treat disease-associated (e.g., infections, thromboembolism, anemia, and cardiovascular complications) or treatment-related (e.g., obesity, growth retardation in children, hypertension, alopecia) complication of the NS;
- Improve knowledge of the factors involved in de novo, recurrent or donor-derived glomerular disease in post-kidney transplantation;
- Implementation science or intervention trials to improve care of patients with NS.

VI. Source of Support

This one-time award is provided through the UMB Institutional funding.

- The award will provide funds to cover up to \$150,000 of the scholar's annual salary proportional to effort committed to program activities (required 75%), and fringe on this amount, as well as funds for research expenses (supplies, personnel's salary, etc.), travel, and tuition expenses for up to three years. Ongoing support is contingent upon the Scholar making adequate progress in the program and completing program requirements.
- Tuition fees that are not covered by tuition remission for the master's degree will be supported by this award. It is expected that the scholar completes their master or certificate program by the end of year 3.
- Funds to help with research costs to cover related activities such as (supplies, computers/software, personnel, and other project infrastructure) will also be provided upon approval.
- Funds will be provided to help cover annual travel to attend the required annual Association of Clinical and Translational Science (ACTS) meeting and other National CTSA career

development meetings as well as other relevant scientific meetings and research training opportunities.

VII. Award Stipulations

The KL2 Scholar Program is a **three-year** commitment. Award is initially awarded as a two-year grant but renewable to the third year based on performance. Surgical or Surgical subspecialty trainees, if receiving prior justification for 50% research effort, can continue their prior effort into the third year. Much of year one is devoted to didactic studies. Year two is devoted to the research project, any remaining academic requirements, and submission of K or other appropriate career development award. Year three is a continuation of research efforts, additional grant writing and, if needed, K or another career development award resubmission.

- Scholars are required (unless redundant) to complete structured, didactic coursework, leading to an advanced degree. Scholars are expected to maintain good academic standard, a minimum semester GPA of 3.0.
- Potential MS or Certificate programs: https://www.umaryland.edu/media/umb/ictr/web-template-style-assets/UMB_MS_Certificate_Programs_update.pdf
- Scholars are expected to submit a K23 Mentored Patient-Oriented Research Career Development Award or equivalent NIH K award application or an NIH R application by the end of the second year
- Annual participation in the Association for Clinical and Translational Science meeting is required
- Participation in required program activities over the three-year period of combined support – including monthly Grants-in-Progress meetings and Collaborative Approach to Training Advances and Learning Innovations in the Science of Translation (CATALiST) Seminar Series.
- Demonstration of ongoing participation in mentors' multidisciplinary translational/clinical research team(s).
- Scholars are required to submit biannual progress reports to the ICTR.
- Extensions of support or leaves of absence are possible only under exceptional circumstances.
- Scholars are expected to update the program on publications, grants, intellectual property disclosures and awards during and after appointment.

VIII. KL2 Mentor(s) Expectations

The KL2 program places special emphasis on multidisciplinary and interdisciplinary research, which must be reflected in the research, training, and mentorship plans. Proposed mentors will be expected to:

- Meet with the KL2 scholar mentee at least every 2 weeks to supervise the development and implementation of the scholar's project,
- Provide feedback, and guide the scholar's career development,
- Submit biannual mentor reports,
- Attend the Scholar's annual Grant in Progress presentation, and to
- Participate in Mentor Skills Development Workshop(s).

IX. Application Process

Applications and ALL required documents must be submitted electronically **no later than September 2nd, 2022, at 5 pm.**

- UMB applicants must use their UMID to log into the electronic application link found [HERE](#) in the **How to Apply** section.
- University of Maryland College Park (UMCP) applicants must submit a request for an electronic application. The link for requesting an application can be found [HERE](#) in the **How to Apply** section.

Please note that some items (transcripts, test score reports) may take weeks to be sent by other institutions.

A letter of intent is not required. However, all faculty interested in this program should contact Dr. Teodolinda Petrillo at tpetrillo@umaryland.edu while preparing their applications.

A completed application must include:

1. Cover letter

2. Personal statement (2-3 pages) detailing accomplishments to date plus career goals and plans.

This statement should specifically address:

- Background information relevant to the applicant's interest in clinical/translational research; we encourage projects that have a clear translational component.
- Long-term career goals.
- How the KL2 award would advance these goals.
- Need for additional training to achieve goals and which specific MS or Certificate program applicant chooses to pursue if awarded KL2 award.
- Interactions to date with potential mentors within the sponsoring translational/clinical division or department including any prior or ongoing research experience and/or plans for identifying and selecting a mentor/preceptor for the program's research requirement.

3. Research Plan (2-5 pages) describing ongoing or proposed clinical/translational research project. **Please include Project Title.** Appendices are not allowed in the Research Plan.

Research Plan should include:

- Specific Aims - objectives of your research project, what you want to accomplish; should be driven by the hypothesis you set out to test; make sure they are highly focused.
- Background/Significance/Innovation - justify your study with background information about the field, explain how your research is innovative/is from a fresh point of view/develops or improves technology;
- Preliminary Data - may consist of your or others' publications, unpublished data from your own laboratory or from others; make sure it is clear which data are yours and which others reported.
- Research Design/Methods - describe the design and procedures in sufficient details to demonstrate feasibility; provide rationale.



4. **Literature Cited** (will not count toward page limit) - Refer to the literature thoroughly and thoughtfully but not to excess. The publications you cite need not be exhaustive but should include those most relevant to your proposed research
5. **Plans for Proposed Advanced Training** (1-2 pages). A description of the plans for advanced training must be included. Acceptance into an advanced didactic training program in clinical research (Public Health, Informatics, Clinical Epidemiology, Clinical Investigation, Biostatistics, Innovation and Entrepreneurship, or Health Science Master's at UMB) is expected. An alternative plan for training outside of a degree program based on individual needs will be considered for applicants with prior relevant MS degrees.
6. **Concurrent graduate school application *HERE***. Concurrent application should be submitted to the UMB Graduate School for either a MS Degree or Certificate Program. For questions regarding Graduate School application please email gradapply@umaryland.edu.
7. **Curriculum vitae** including list of publications and current/prior grant support.
8. **Nomination letter**
 - Written by the primary mentor and the Division/Department Director (though separate letters are acceptable). Nomination letter should be submitted directly from nominators to ICTR-navigator@umaryland.edu no later than September 2nd, 2022, at 5 pm. The letter should address:
 - Career development plans for the candidate and how the award would facilitate these plans.
 - Candidate's promise for a successful academic career in translational/clinical investigation and listing of any supporting past accomplishments.
 - Mentor's/division's commitment to the candidate's career development, including what commitment and/or plans there are for the nominee should a KL2 Award NOT be made.
 - Provisions (if any) made for faculty advancement, mentoring, space, and other support.
9. **Proposed mentor(s) NIH formatted biosketch** including current research support. Applicants without a mentor should submit a letter explaining this and outlining potential identifiable mentors.
10. **Two letters of recommendation and reference forms** from faculty, past mentors/advisors who can assess the candidate's ability. These letters are in addition to the Nomination letter and should not be written by your primary mentor or Department/Division directors. Letters of recommendation should be submitted **directly from recommenders** to ICTR-navigator@umaryland.edu no later than September 2nd, 2022, at 5 pm.
11. **Unofficial Transcripts** from *all* degree granting academic institutions.

X. **Formatting Guidelines**

- a. Font size: Must be 11 points or larger. Smaller text in figures, graphs, diagrams, and charts is acceptable, if it is legible when the page is viewed at 100%. If you are converting to PDF, some PDF conversion software reduces font size. It is important to confirm that the final PDF document complies with the font requirements.
- b. Font types: Arial, Georgia, or Helvetica
- c. Type density: Must be no more than 15 characters per linear inch (including characters and spaces).



- d. Line spacing: Must be no more than six lines per vertical inch.
- e. Text color: black
- f. Name of the applicant (Last name, First name) should appear in the top right-hand corner of each page.
- g. Page numbers should appear on the bottom right-hand corner of each page.
- h. Paper Size and Margins
- i. Standard letter paper size (8 ½" x 11").
- j. Provide at least one-half inch margins (½") - top, bottom, left, and right - for all pages.

XI. Regulatory Requirement/Approval

Projects cannot start or funding be released until all required regulatory documents (IRB Determination/Approval Letters, IACUC approval letters, etc.), training certificates (CITI, HIPAA, GCP), and biosketches/resumes of all study team members are provided.

XII. Review and Selection Process

Our goal is to select candidates who, with proper career development and clinical and/or translational research training, have potential to become independently funded, successful and ethical clinical investigators. A committee of faculty from the UMB Schools and UMCP, including a Diversity Advocate, will review applications, interview candidates, and select awardees. Decisions will be based on the strength of the application materials submitted, the overall potential of the applicant and the record of accomplishment of the mentor(s).

XIII. Contact ICTR

Applicants and/or nominating sponsors are encouraged to contact Dr. Teodolinda Petrillo or the KL2 Associate Director or Program Director to discuss eligibility requirements, obtain guidance about any special circumstances or discuss other aspects of the KL2 award and its terms.

Teodolinda Petrillo, MS, PhD

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