The University of Rochester Center for Leading Innovation and Collaboration (CLIC) is the coordinating center for the Clinical and Translational Science Awards (CTSA) Program, funded by the National Center for Advancing Translational Sciences (NCATS) at the National Institutes of Health (NIH), Grant U24TR002260.

Hub: Rutgers Biomedical/Health Sciences
Grant: KL2
Category: Other – Effects of COVID-19 on Junior Faculty
Contact Info: Tracey Sharp, KL2 Program Administrator – sharptk@rwjms.rutgers.edu

Issue Being Addressed: For clinical scientists, especially those in the early stages of their career, the COVID-19 pandemic has presented challenges that are a threat to their longer-term career goals of remaining in research. At a critical junction in their careers, junior faculty have lost time, have had childcare or family issues, and thus their research progress has slowed which threatens their future. An often unrecognized effect has been the psychological stress associated with caregiving and decreased productivity. Junior faculty funded by our KL2 career-development program were surveyed to determine the immediate impact of the COVID-19 pandemic on training and early careers. The most negative impact was lack of access to research facilities, clinics, and human subjects, lack of access to team members, and need for homeschooling of their children.

As we enter the post-pandemic period, we acknowledge the psychological trauma associated with the twin pandemics - COVID and Structural Racism - and their impact on wellbeing. This, in turn, affects the resilience, drive, and sense of purpose of junior faculty, and in particular, women and underrepresented minority researchers with personal demands. Underrepresented minorities have been further hampered by structural racism and sexism.
**Approach Implemented:** An institutional focus has been placed on the specific needs of each group with the launching of programs addressing bias, racial dialogue, and women in science.

- We met with our cohort of two KL2 Scholars funded during the initial grant period and our second cohort currently receiving funding as well as other junior faculty to hear their personal stories.
- Clinical departments have recognized the disproportionate sacrifice of junior faculty by releasing them from additional clinical duties to allow them to focus on their scholarly and caregiving activities.
- Junior investigators were permitted to apply for a tenure clock extension with equity in mind, recognizing that fathers’ careers may have benefited while mothers’ may not. Promotions committees will evaluate candidates taking into account the impact of the pandemic.
- In response, the institution provided resources for faculty that include a hotline to a psychiatrist, ‘movie-nights’, and seminars to discuss coping mechanisms.

Although we have responded by mobilizing resources and developing novel programs to support junior investigators during this critical juncture in their career, initiatives will need to continue long into the future as the impact will not end with the pandemic if we are to retain and advance an inclusive clinician scientist workforce.

A task force of senior leaders and experienced translational scientists has been established to oversee the career development and satisfaction of clinical scientists; construct tools to support them to overcome the challenges caused by the pandemic; provide mentoring tools to support mentors and mentees; and evolve school specific education, policies, practices and collaborations that mitigate challenges associated with caregiving.

**Outcome Measures Used to Determine Success:** The long-term success of our institutional programs aimed at relieving the burden of the pandemic on junior faculty depends on the continued academic achievement of these faculty. Building on a solid foundation, we seek to leverage our strengths and develop additional infrastructure and resources. The academic task force has been meeting weekly and on an ad hoc basis since. Through faculty surveys, extensive 1:1 conversation with faculty, and meetings with Chairs/Institute directors we have identified a pool of possible vulnerable faculty and have developed an aggressive timeline. We will subsequently provide oversight of their training experiences, and serve as contacts regarding the goals, resources and services. In addition, the task force will continue to promote the careers of diverse junior faculty, recognizing the disproportionate effects of COVID-19. We will secure continuing input and advice pertaining to the operation of the program through: (1) regular solicited feedback from the selected junior faculty in monthly meetings; (2) regular discussions with the mentors of vulnerable faculty members and updates of their Individualized Development Plans (IDP), and (3) guidance and advice from peer faculty and institutional officials.

The institution has committed an initial $100,000 to provide junior faculty with COVID relief support. The junior faculty must have 1) at least 50% effort devoted to translational research; 2) appointment as
instructor, assistant professor or first year associate professor on the tenure track or clinician scholar track and either one of the following: 3) a career development award from the NIH K08, K23, KL2, or foundation/chancellor fund, or 4) NIH RO1 or equivalent grant. Funding will be focused primarily on MD or MD/PhD candidates who have completed a residency and/or fellowship training, and either be certified by the relevant accrediting Board or be eligible for the accrediting exam. PhD candidates who have a strong research portfolio focused on translational research with impact on human health will also be considered. Candidates will be identified after discussions with Department Chairs.

Faculty who are women, Black, African American, Hispanic or Latino, Native peoples, people with disabilities, or as having grown up at economic disadvantage will be prioritized. Selection will be based not only on the individual’s qualifications, interests, and identified needs, but also on their potential and commitment to problems related to human disease. Other key considerations are faculty who are single parents without a support network, have pre-teen children, experienced challenges to childcare, children with medical conditions, mental health issues or disabilities, and care for elderly family members with co-morbidities that affect activities of daily living. The task force will rank candidates, and funds will be awarded based on rank order until all funds are utilized. These decisions are based on the identified priority faculty categories, perceived quality of the candidate, their need for support, the level of commitment to an academic career and potential for success in research.

Records will be kept of the number of faculty identified, their gender, minority group affiliation, medical (graduate) school, residency and fellowship program, success rate of external funding and conversion from K (training) to R (independent investigator) grants; number of publications and scholarly productivity; and number and types of additional degrees completed. Awardees will have details from their curriculum vitae entered into a Red-cap database in the administrative office and these data will serve as baseline. They will be updated quarterly for the first year and thereafter biannually.

All junior faculty who have participated the program will be asked to evaluate the strengths and weaknesses of the intervention as they perceive it in their current environment. Specific questions include feedback on whether the program met expectations, whether the program presented novel opportunities, whether the direction of the research changed with program participation, whether the program support was appropriate to the faculty member’s needs, and whether the mentoring and program oversight met expectations. Our program will follow faculty with a yearly survey to assess professional career trajectory, participation in national professional organizations, and engagement in clinical and translational research. The task force will evaluate institutional programs and coordinate integration of career development opportunities for individual awardees.