

Dr. Siqin Ye

The proposed K23 Career Development Award will enable Dr. Siqin Ye to establish an independent career with expertise in conducting patient-centered outcomes research in cardiovascular medicine. Dr. Ye is a general cardiologist whose long term goal is to create, test and implement evidence-based interventions to effectively and efficiently communicate information about risks and benefits of cardiovascular treatments to individual patients. He has a strong background in patient-oriented research, and his quantitative skills and intellectual capabilities make him uniquely suited for the proposed interdisciplinary research, which combines cardiovascular epidemiology, cognitive psychology, and biomedical informatics to create a new approach for assessing patient preference for health information and then will tailor communication about risks and benefits of statin therapy to such preferences. Specifically, the proposed research will (1) develop an easy-to-administer, point-of-care instrument to assess patient preference for amount of health information; (2) validate the resulting instrument for patient information preference through a pilot RCT of patients eligible for primary prevention statin therapy; and (3) construct an electronic health records module that identifies eligible patients and creates individualized educational material tailored to both information preference and cardiovascular risk. The results of this research will also generate pilot data and prepare informatics infrastructure for Dr. Ye's subsequent program of research in this area.

To conduct this research and acquire the necessary methodological skills for his career development, Dr. Ye has assembled a multidisciplinary team of mentors and advisors to provide him training in the following areas: (1) Patient Reported Instrument Development, Health Communication & Quantitative Methods; (2) Clinical Trials Design; (3) Biomedical Informatics; and (4) Research Dissemination & Professional Development. They will meet with Dr. Ye regularly, and will ensure Dr. Ye's progress with his research and training goals. Dr. Ye will also enroll in relevant courses at the Columbia University Mailman School of Public Health, and will regularly participate in a number of research meetings, seminars, and conferences.

The proposed research has immediate public health impact, as it can improve patients' understanding of what they might expect from statin therapy. Furthermore, the proposed research has the potential to be applied to physician-patient communication for other treatments in cardiovascular medicine that have complex considerations of risk-benefit trade-offs. The proposed K23 award will thus improve patient care while advancing the evidence basis for patient-centered communication, while positioning Dr. Ye to accomplish his goals of becoming an independent investigator in patient-centered outcomes research that focuses on creating, testing and implementing evidence-based interventions to effectively and efficiently communicate information about risks and benefits of cardiovascular treatments.