

Virginia W. **Chang** (M.D., Medicine, Michigan, 1994; Ph.D., Sociology, Chicago, 2003) is Assistant Professor of Medicine and Assistant Professor of Sociology. She is a Senior Fellow at the Leonard Davis Institute of Health Economics, and an Attending Physician at the Philadelphia VAMC. She has received a Career Development Award from NICHD, a Measy Foundation Award, and a New Investigator Award from the RWJ Foundation.

Scientific Accomplishment. Chang's research integrates perspectives from medicine, sociology, and epidemiology to study relationships between health and various aspects of socio-cultural life. Much of her research has focused on obesity, engaging topics such as historical shifts in the medical conceptualization of obesity; the role of health in class stratification; secular trends in the relationship between obesity and poverty; and the relationship between weight status and key features of the residential environment (e.g., racial segregation, income inequality, and neighborhood disorder). (1) In a paper in *J Am Med Assn*, 4 cross-sectional, nationally representative surveys were examined for trends in the prevalence of overweight among adolescents aged 12 to 17 years by family poverty status. In 12- to 14-year-old adolescents, prevalence did not significantly differ by family poverty status in any of the surveys; however, among non-Hispanic black adolescents, overweight prevalence increased faster in nonpoor vs poor families. A widening disparity that disfavored adolescents from poor families was present in the 15- to 17-year-old adolescents. This trend was similar among male, female, non-Hispanic white, and non-Hispanic black adolescents, resulting in an overall prevalence of overweight in 1999-2004 more than 50% higher among adolescents in poor vs nonpoor families. (2, 3) 2 papers in *Soc Sci Med* using US census data show that local income inequality is generally not associated with a variety of weight statuses, but that racial segregation is associated with higher body mass indexes among African-Americans (but not whites). (4) NHANES data from 1971-2002 show (*Arch Intern Med*) that although obesity is frequently associated with poverty, recent increases in obesity may not occur disproportionately among the poor. For example, among black men, the increase in obesity is 21.1% for those at the highest level of income, but only 4.5% for the near poor and 5.4% for the poor. (5) In a study of disabled US Medicare beneficiaries (in *Health Affairs*, with **Polsky**): ~1/4th are obese; obesity rates are not only double the rates in other aged beneficiaries but also substantially higher than those reported in the general US adult population <65. The burden of obesity and obesity-related health problems in Medicare beneficiaries is high and is increasing. Studies of the health benefits, risks, costs, and cost-effectiveness of anti-obesity treatments in this population are urgently needed to inform future Medicare coverage decisions.

Present and Future. Chang's working papers include: "Neighborhood Racial Isolation, Disorder, and Obesity"; "Obesity's Changing Impact on Disability over the 1990s" (with D. Alley- current RWJ H&S Scholar); "Being Poor and Coping with Stress: Health Behaviors and the Risk of Death" (with P. Krueger- former RWJ H&S Scholar); "The Impact of Patient Complexity on Compliance with Performance Measures"; "A Multilevel Analysis of Weight Status and the Contextual Restaurant Environment (with N. Mehta, a PSC graduate student); "Mid-Life Weight Status and Mortality" (also with Neil Mehta); "Glucose Control and Social Capital"; "Income Disparities in High Cholesterol: Reversal of Fortune with the Introduction of Statins"

PSC and Research. Chang is the PI on an NHLBI R01 (**Allison** and **Elo**, Co-Investigator) on "Dynamic Relationship of BMI and SES over the Life Cycle and Between Generations", on a VA IIR (**Schnittker**, Co-Investigator) on "Influence of Obesity on Veterans' Quality of Care", and on a grant from the RWJ Foundation on "Weight Status and Quality of Care among Older U.S. Adults."; is a Co-Investigator on NCI P50 (**Armstrong**, PI); and is a Scholar on an NICHD K12. Her research has benefited from her affiliation with the NICHD T32 (**Smith**, PI) and NICHD T32 (**Soldo**, PI) as she has drawn research assistants from both training programs and from her affiliation with **Schnittker** and others in the RWJ Health & Society program, where she mentors D. Alley, who was recruited into this program in large measure through the PSC and has been provided research space within the PSC. She is currently the PI on a RWJ Foundation grant on "Predictors and Outcomes Associated with Changes in Weight over the Life Course. Her externally funded research program benefited from a developmental Trio Award from the PSC. She is an active colloquium participant who has drawn heavily on the CITID core, for various bibliographic services and for secure data processing and data access arrangements between her School of Medicine offices and PSC servers in the McNeil Bldg. In all respects, she is an advertisement for the ability of the PSC to integrate fully research associates not housed in the McNeil Bldg. She will serve as a member of the CITID Oversight Committee.