**eFigure 1.** GWR coefficient map showing location and strength of significant positive and negative coefficients for the association between county-level average annual PM$_{2.5}$ and PD relative risk that account for age, sex, race, smoking, healthcare utilization, and spatial dependency. Each coefficient represents the absolute difference in the relative risk with each additional decile of PM$_{2.5}$ exposure.

Abbreviations: GWR=geographically weighted regression; PM$_{2.5}$=particulate matter <2.5 micrometers in diameter; PD=Parkinson disease