1. Full Title: Is systolic hypertension of the elderly associated with sleep disordered breathing?
   Abbreviated Title (Length 26): Systolic hypertension and SDB

2. Writing Group (list individual with lead responsibility first):
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3. Timeline:
   August - November 1998

4. Rationale:
   While it is well established that essential (diastolic hypertension) is associated with SDB, systolic hypertension of the elderly has a different pathogenesis, and no information is available as to its relationship with SDB.

5. Main Hypothesis:
   Sleep disordered breathing is associated with isolated systolic hypertension independently of age, BMI, and other risk factors.

6. Data (variables, time window, source, inclusions/exclusions):
   The database for the study would be the SHHS subjects for whom polysomnography data are available (currently >4000). Systolic hypertension would be defined as a home visit systolic blood pressure >160 mmHg together with a diastolic <90 mmHg regardless of whether or not the subjects were taking antihypertensive medication (although they would be subdivided on this). The other inclusion criterion would be age >60 years. Variables for analysis would include age, gender, race, BMI, alcohol intake, smoking history, and diabetes. The comparison group would be subjects with a home visit BP <140 systolic and <90 diastolic in the absence of antihypertensive medication. Thus subjects with essential hypertension (elevations of diastolic pressure), and those under the age of 60 would be excluded from this analysis. (Note - the first step in such analysis would be to determine how many subjects in the currently available SHHS database meet the inclusion criteria. Since there is a high probability that the hypothesis will not be confirmed, we need to be sure that we have a sufficient number.)