

## Introduction to SOF and SOF Online

### The Study

The multi-center Study of Osteoporotic Fractures (SOF) has 20 years of prospective data about osteoporosis that has served as the basis for many findings about osteoporosis and aging in women  $\geq$  age 65. In addition to adjudication of fractures, SOF has tracked cases of incident breast cancer, and total and cause-specific mortality. The data include serial measures of bone mineral density, measurements of sex and calcitropic hormones, tests of strength and function, cognitive exams, sleep measurements, use of medication, health habits and much more. Most data are available in the current release. See *"Data Availability for Public Data Release"* for more details.

In 1986, SOF enrolled 9,704 primarily Caucasian women and continues to track these women with clinical visits approximately every 2 years. Data from all nine completed visits are now available to the public. At the sixth visit in 1997, SOF enrolled an additional 662 African-American women who are now seen with the original cohort. Baseline data fields particular to these African-American women are prefaced with "AA" before the field name instead of the standard "V#".

### The Website

The public website was originally designed to release anonymized documentation on SOF data to the broader research community. In August 2011, downloadable data sets and a "data explorer" were added to the website. The site provide interactive documentation on over 6000 variables collected over nine principal visits of this unique cohort of more than 10,000 older women. Users can browse variables by category or perform variable searches, viewing search results in a convenient longitudinal format of variable availability across visits. Users may link to the study data collection forms, as well as view descriptive statistics (e.g., means or frequency distributions).

After electronically signing a Data Use Agreement, users now have access to downloadable data sets, organized by measurement category and visit. Users may also access the Data Explorer feature to generate further statistics, such as cross tabs and descriptive statistics or cross tabs on subsets. See ***Data & Documentation*** for more information.

We expect that investigators in many fields will continue use the website to conduct analyses of SOF data. Investigators may continue to participate in the SOF publications process, where they may submit an analysis plan for review and approval and benefit from statistical support and peer review of any abstracts, presentations and manuscripts that result from the plan. Users may search approved analysis plans and published papers on the website to avoid overlap with previously submitted plans. Analysis plans may be submitted directly online or sent to [sfonline@sfcc-comc.net](mailto:sfonline@sfcc-comc.net). Users may also simply explore, download and analyze the data without submitting an analysis plan. As of August 2011, over 350 publications, including a substantial proportion by external researchers, have already been published using SOF data. We hope that the enhanced and expanded website will prove increasingly fruitful by providing online access to new investigators who may pursue unique research topics to be studied in SOF.