Seismological Society of America
201 Plaza Professional Building
El Cerrito, California 94530
(510) 524-5474 • Fax (510) 525-7204

News Release News Release News Release News Release News Release News Release

For Immediate Release

Contact: Nan Broadbent
408-431-9885, press@seismosoc.org

Miaki Ishii honored with Richter Early Career Award

Harvard professor recognized by Seismological Society of America

SAN FRANCISCO -- Since her first forays into studying earthquakes, Miaki Ishii has successfully tackled seismological problems that would likely intimidate even the most seasoned researchers.

In her young career, Ishii, an assistant professor of earth and planetary science at Harvard University, has made two groundbreaking discoveries in geophysics that have fostered intense debate and subsequent research that has changed the understanding of deep Earth seismology.

For her work, the Seismological Society of America (SSA) will honor the 33-year-old Ishii with its Charles F. Richter Early Career Award, which honors outstanding contributions to the goals of the Society by a member early in her or his career. She will receive the award at a special ceremony at the SSA annual meeting on April 8 in Monterey, CA.

Since she entered Harvard to begin her doctoral work in the late 1990s, Ishii has shown a knack for answering big questions. Shortly after her arrival at Harvard, she researched the driving force behind plate tectonics -- lateral variations in mantle density. The research inferred that the slowest parts of the lowermost mantle are denser than average, rather than lighter as most had assumed. The findings flew in the face of the long-held theory of a homogenized mantle and generated significant subsequent research and debate. Recent research is beginning to confirm Ishii's observations.

Her second groundbreaking find built on her previous study with Harvard's Adam Dziewonski. Ishii discovered what is now known as the "innermost inner core," a region 300 kilometers in radius at the center of the Earth that has anisotropic properties distinct from the rest of the inner core.

This work has broad implications, including raising questions about the early evolution of the Earth and the development of both the core and the planetary magnetic field.

After graduating from Harvard, Ishii broadened her research by developing a new technique for determining earthquake characteristics using data from regional seismic networks. In 2005 she became the first author of research applying this method to image the rupture history of the Sumatran earthquake.

Seismological Society of America
201 Plaza Professional Building
El Cerrito, California 94530
(510) 524-5474 • Fax (510) 525-7204

In addition to her research, Ishii is known for her diligence and has shown a talent for presenting her research well -- a talent that earned her Student Paper Awards from the American Geophysical Union in 1998 and 1999.

SSA is a scientific society devoted to the advancement of earthquake science. Founded in 1906 in San Francisco, the Society now has members throughout the world representing a variety of technical interests: seismologists and other geophysicists, geologists, engineers, insurers, and policy-makers in preparedness and safety.

###