

Irving Cooper



Irving S. Cooper (1922-1985), the son of a salesman, worked his way through high school, college, and medical school to become one of the pioneers in [functional neurosurgery](#). He developed several novel techniques for the surgical management of Parkinson's disease and other crippling movement disorders. A keen interest in the physiology of [movement disorders](#) was kindled by his doctoral research and continued during his neurosurgical [training](#). He began to apply this knowledge to surgical practice in 1952 when he began his faculty career as Assistant Professor of Surgery at [New York University](#). At the time, surgical treatment of [parkinsonian tremor](#) focused on various techniques used to interrupt the [pyramidal tract](#). During a [subtemporal approach](#) for a cerebral [pedunculotomy](#), he inadvertently injured and, subsequently, was forced to occlude the [anterior choroidal artery](#). Much to Cooper's surprise, following emergence from [anesthesia](#) the patient's [tremor](#) and [rigidity](#) were abolished without any residual [hemiparesis](#). This serendipitous observation, together with Meyer's earlier work on the role of the [basal ganglia](#) in motor control, helped focus surgical efforts on targets within the basal ganglia and, subsequently, within the [thalamus](#) to alleviate the movement disorders associated with Parkinson's disease. While at New York University, Cooper developed [chemopallidectomy](#) and, later at St. Barnabas Hospital in the Bronx (1954-1977), he used cryothalamectomy as a surgical technique for primary control of tremor in patients with Parkinson's disease. Cooper authored many original papers on surgical techniques and several textbooks on the lives of patients afflicted with Parkinson's disease and other crippling movement disorders. Although considered controversial, this fascinating and complex neurosurgeon made significant contributions to this field ¹⁾.

The [Cooper Stereotactic Device](#) was designed by Dr. [Irving Cooper](#) to provide stereotactic direction of his cryoprobe in stereotactic [thalamotomy](#) in patients with movement disorders.

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Das K, Benzil DL, Rovit RL, Murali R, Couldwell WT. Irving S. Cooper (1922-1985): a pioneer in functional neurosurgery. J Neurosurg. 1998 Nov;89(5):865-73. PubMed PMID: 9817430.

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