



Christoph Hofstetter

Neurosurgeon

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Christoph Hofstetter, M.D., Ph.D., is a Professor in the Department of Neurological Surgery at the University of Washington. He is a distinguished physician scientist specializing in complex spine surgery, with a particular focus on minimally invasive techniques and the development of biomarkers for acute traumatic spinal cord injury. Dr. Hofstetter obtained his M.D. from the University of Vienna, Austria, and went on to earn his Ph.D. at the Karolinska Institute in Stockholm, Sweden, where he focused on experimental treatment strategies for traumatic spinal cord injuries. He completed his neurosurgery residency at New York-Presbyterian/Weill Cornell Medical Center and Memorial Sloan Kettering Cancer Center. Subsequently, he pursued clinical fellowship training at the Mayo Clinic, followed by a spine fellowship with a specialization in complex minimally invasive spine surgery at the University of Miami.

Dr. Hofstetter's clinical research primarily revolves around the advancement of novel minimally invasive motion-preserving spinal procedures. He is internationally recognized as a leading authority in advanced full-endoscopic spine surgery. Through his innovative work, Dr. Hofstetter has introduced a worldwide nomenclature system, standardized surgical techniques, developed novel tools, and smartphone technology-assisted perioperative patient care. He has spearheaded the establishment of a comprehensive endoscopic spine surgery program at the University of Washington in Seattle and, in 2018, initiated the first full-endoscopic spine surgery fellowship in the United States.

In addition to his clinical research, Dr. Hofstetter is actively engaged in basic science research focused on traumatic spinal cord injury. His particular interest lies in the development of quantitative biomarkers to enhance the understanding and characterization of traumatic spinal cord injury lesions. Dr. Hofstetter firmly believes that these biomarkers will enable better patient stratification for therapeutic interventions and the development of more effective treatments. For patients with chronic spinal cord injuries, he has established a program for electrical stimulation to enhance the signaling of remaining nerve fibers. Moreover, as a faculty member of the UW Institute for Stem Cell & Regenerative Medicine, Dr. Hofstetter's research laboratory investigates various experimental treatment strategies aimed at enhancing nerve fiber plasticity and regeneration following spinal cord injury.

With extensive experience in both clinical and basic science research, Dr. Hofstetter's work is supported by funding from prestigious institutions such as the Department of Defense and the National Institute of Health. He has authored over 100 peer-reviewed publications, contributed numerous chapters to textbooks, and serves as a reviewer for several prominent journals in the fields of neurosurgery and neuroscience.