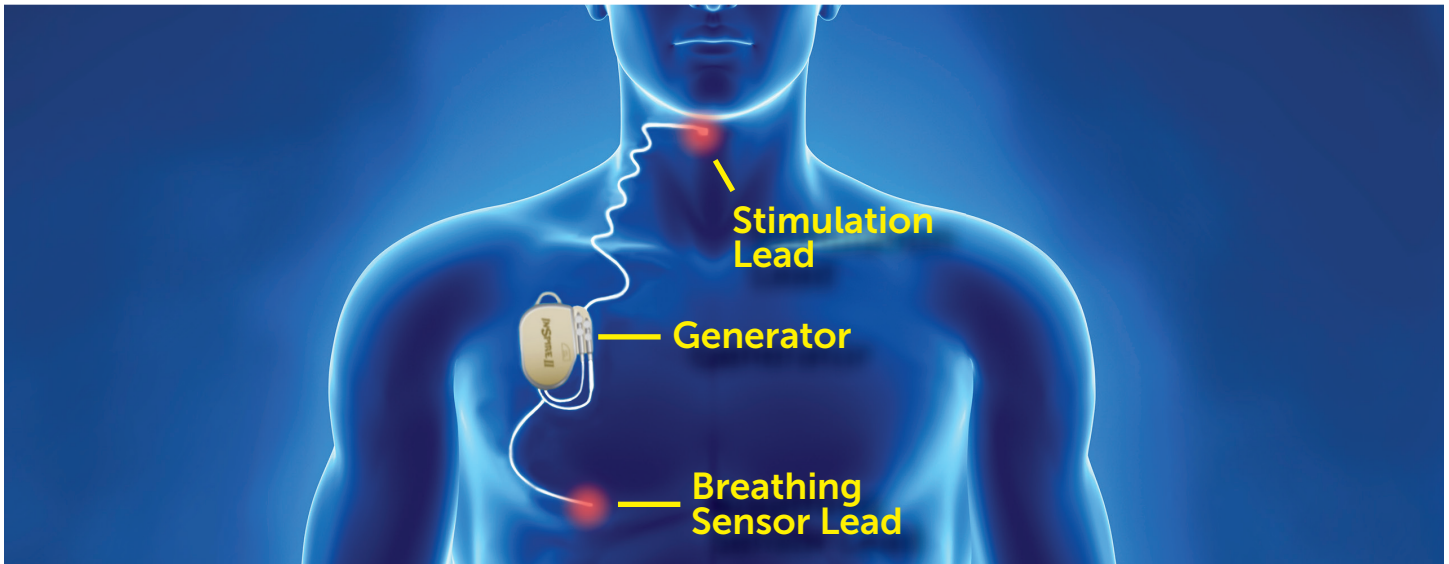


# Research & Innovation

## Struggling with CPAP Masks for Obstructive Sleep Apnea? Jefferson Offers Something New.



Jefferson’s Department of Otolaryngology – Head and Neck Surgery, in collaboration with the Sleep Disorders Center, is excited to announce a new treatment for Obstructive Sleep Apnea (OSA). Jefferson is the first hospital in the Philadelphia region and one of only a few in the nation to offer this innovative therapy.

Obstructive Sleep Apnea is a disorder in which cycles of airway collapse occur during sleep. The episodes result in poor sleep with decreased oxygen to the brain, which can result in major medical problems, including high blood pressure, heart disease, stroke, diabetes, depression and even death. Common symptoms are snoring, daytime sleepiness, morning headaches, poor mental clarity and depression.

Treatment typically uses a device called Continuous Positive Airway Pressure (CPAP), which involves a mask that allows pressurized air to be delivered through the nostrils to keep

the airway open. While CPAP is highly effective, it is often poorly tolerated, and many patients seek treatment alternatives such as oral appliances, various nasal and oral devices, and upper airway surgery.

### HOW INSPIRE THERAPY WORKS:

- It is fully implanted
- Senses breathing
- Delivers mild stimulation to key airway muscles
- Turns on and off with a handheld remote

In 2014, the FDA approved an innovative therapy, Upper Airway Stimulation, for OSA patients who can’t tolerate CPAP. Upper Airway Stimulation involves a small, surgically implanted device that delivers mild stimulation

to muscles that keep the airway open during sleep. It’s simple and easy to use, and no mask is required. A handheld remote allows patients to turn the therapy on before going to bed and off upon awakening.

Patients qualify for the therapy if they have been diagnosed with moderate to severe OSA, have failed CPAP treatment and have a body mass index of 32 or less, that is, are not obese.

Patient evaluation for the therapy involves analysis of sleep complaints and severity of Sleep Apnea. Patients are then assessed with a sedated sleep endoscopy, a minor procedure in which the mechanism of airway collapse is analyzed to determine candidacy for Upper Airway Stimulation or other sleep surgeries.

Implanting the device preserves the natural anatomy of the upper airway and involves outpatient surgery that is less painful than traditional procedures. Most patients have a full recov-

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ery within two weeks.

“I characterized this first-generation device as a Model T,” observed one of our patients, “but I was wrong. This is a Lamborghini, and I am really happy

to have one driving my breathing every night. It’s making a big difference in my life. I now have enough energy in the evening that I’m taking a yoga class that starts at 8 p.m. On January

29, 2015, the day I was implanted, that would have been impossible because I would have been wiped out before 5:30 p.m. What a gift!”

Dr. Karl Doghramji is a nationally recognized expert in sleep disorders.

He oversees the medical aspects of device programming and optimization.

Dr. Maurits Boon is the surgeon who places the implant. He is one of only a few Ear Nose and Throat surgeons nationally who are trained in Upper Airway Stimulation and was the first in the Philadelphia area to implant this breakthrough therapy.



Karl Doghramji, MD is a professor of Psychiatry, Neurology, and Medicine in the Sidney Kimmel Medical College and director of the Sleep Disorders Center at Jefferson. For nearly two decades, he has been the director and lecturer for courses pertaining to sleep disorders. He has been Chief Editor for the *Jefferson Journal of Psychiatry*. Doghramji earned his medical degree from Jefferson, completed his internship in internal medicine at Presbyterian-University of Pennsylvania Medical Center, and his residency in psychiatry at Jefferson. He also completed a clinical research fellowship in sleep disorders medicine and polysomnography at Montefiore Medical Center/Albert Einstein College of Medicine.



Maurits S. Boon, MD is an assistant professor in the Department of Otolaryngology and co-director of the Voice and Swallowing Center at Jefferson. He is boarded in both Otolaryngology and Sleep Medicine and has been in practice for 15 years. He lectures regionally and nationally on topics related to surgical treatment of sleep apnea as well as surgical treatment of swallowing disorders. Boon earned his medical degree from SUNY at Buffalo School of Medicine and completed his internship and residency at Jefferson.