

CTTC Center for Technology Transfer & Commercialization

VANDERBILT UNIVERSITY

BIOMEDICAL PHOTONICS Portfolio

www.vanderbilt.edu/cttc

BIOMEDICAL PHOTONICS

	Basic Research	Feasibilit	ГҮ	Technology Development	De	Technology emonstration	IP Status
Lead Inventor	Discovery and Ideation	Invention and Prototyping	Lab Prototype Validation	Animal Model Validation	Clinical Trials	Regulatory Process	Type/Status/ Serial #
Mahadevan-Jansen	Near Infrared Fluore Identification (Portfo	scence for Parathyro blio)	id				Portfolio of Multiple Patents
Mahadevan-Jansen	Breast Tumor Margin	י ם Detection System U an Spectroscopy נוסיים	Jsing_				Portfolio of Multiple Patents
Joos	Miniature Optical Co Real-Time Monitorir	: oherence Tomograph ig of Surgery :	y Probe for				Portfolio of Multiple Patents
Jansen & Mahadevan-Jansen	Systems and Methor Neural Tissues (Port	ds for Optical Stimula folio) i	ation of				Portfolio of Multiple Patents
Mahadevan-Jansen	Non-Invansive Skin Using Raman Spectr	Cancer Detection oscopy-OCT System					Portfolio of Multiple Patents
WEISS	Porous Silicon Mem Sensitivity Detection Biological or Chemic	brane Biosensors for n of Low Molecular W al Targets	High Veight				Issued U.S. 8,506,887 8,920,729
WEISS	Eunctionalized Option	cal Sensors Comprisi on Porous Silicon Str	ng ructures				Issued U.S. 8,349,617
Mahadevan-Jansen	E Polarized Diffuse Re Intraoperative Nerve	: flectance Spectrosco e Visualization :	py for				Published U.S. 20200330034A1
Mahadevan-Jansen	Non-Invasive, Real-T Middle Ear Infection	<mark>"ime Bacterial Identif</mark> <u>s</u>	ication for				Issued U.S. 10,914,683
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BIOMEDICAL PHOTONICS (CONT.)

	Basic Research	Feasibili	ТҮ	Technology Development		Technology emonstration	IP Status
LEAD Inventor	Discovery and Ideation	Invention and Prototyping	Lab Prototype Validation	Animal Model Validation	Clinical Trials	Regulatory Process	Type/Status/ Serial #
HICKS	Low-Level Light The Treating Diabetic Fo	rapy Device for ot Ulcers					Published U.S. 20180304094A1
Jansen	infrared Modulation						Published U.S., EPO 20200324141A1
JANSEN	Systems and Methor Reversible Nerve Blo	ds for Fast and ock					Portfolio of Issued U.S. patents
Mahadevan-Jansen	Image-Guided Probe Raman Spectroscop	e-Based Dual Wavele y for Biological Applic	ngth cations				Patent Pending
Mahadevan-Jansen	Dual Wavelength Co High Wavenumber S Spectroscopy	ombined Fingerprint a patially Offset Rama	and n				Patent Pending
Mahadevan-Jansen	Characterization of Sali Surface-Enhanced Ram Detect Eosinophilic Esc	ivary Biomarker Via an Spectroscopy to ophagitis					Patent Pending
JANSEN	Selective Inhibition Axons Using Infrared	of Small-Diameter d Light					Published U.S., EPO 20210128913A1
JANSEN	Modulating Neural A Brainstem Circuitry	Activity in with Light					Published U.S., EPO US20200406057
Mahadevan-Jansen	Infrared Neural Stim Intraoperative Nervo	ulation for e Monitoring					Patent Pending
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WHO WE ARE

The Center for Technology Transfer and Commercialization (CTTC) provides professional technology commercialization services to the Vanderbilt community, so that we may optimize the flow of innovation to the marketplace and generate revenue that supports future research activities.

CTTC accomplishes this by serving as an efficient and effective conduit for the transfer of promising Vanderbilt intellectual property to industry; contributing to regional economic development by licensing locally and supporting new venture creation; and encouraging collaboration between academia and industry.

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INDUSTRY COLLABORATION

Key to carrying out the mission of CTTC is the ability to form collaborative and professional relationships with companies in a variety of industries including space exploration, education, pharmaceuticals, healthcare/patient care, robotics, energy, environmental preservation, engineering, and many more. CTTC does this through:

Strategic Negotiation

Timely transactions are as critical for us as they are for our industry partners. We pay careful attention to negotiation timelines and work to ensure high levels of responsiveness and rapid closing of negotiations

Reasonable Diligence

Licenses must include reasonable diligence provisions to ensure that products based on Vanderbilt technology are developed and commercialized in a timely fashion for our benefit and the benefit of the public

Societal Benefit

Our motivations for commercializations are deeply rooted in benefiting individuals and patients on a global scale

Protection leads to Commercialization

CTTC views IP protection as a means to an end. The real focus is on commercialization of technologies

Focused on Transactions

CTTC's experienced team of licensing professionals are highly transactionally focused

Collaborative Research

CTTC highly encourages industry collaboration, either along with a license or as a precursor

Quality Driven

High quality contracts lay the foundation for strong and lasting partnerships. Repeat business is important to us

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VANDERBILT RESEARCH QUICK FACTS



Vanderbilt University is ranked 14th among the best national universities.



Vanderbilt is home to one of the oldest Biomedical Engineering Departments in the country, dating back to 1968.



The School of Engineering ranks 41st for graduate engineering programs.



Vanderbilt sponsored research and project awards total \$824 million in FY20.



The close proximity of the Vanderbilt School of Engineering and Vanderbilt University Medical Center enables a culture of interdisciplinary collaboration in research and education. The addition of the Engineering and Science building in 2016 brings further opportunity for collaboration with seven floors of state-ofthe-art research spaces and an innovation center called the Wond'ry.

