

# OptoVibronex: Executive Summary

## Unmet Market Need

- Current procedures diagnosing & treating skin cancer are **invasive, time-consuming, imprecise and inefficient**
  - Initial diagnoses performed visually
  - Biopsy results can take hours to days to obtain
  - Subsequent Mohs Surgery can take as many as 8 cuts and 4 to 8 hours to diagnose and remove tumors
  - Dermoscopes lack accurate depth measurement
- **No method to determine exact skin lesion margin**
  - Excisions are performed in stages until the area is deemed tumor-free
  - Unnecessary scarring/removal of healthy tissue
  - Potential for incomplete removal of tumor
- **6-12 months' wait time** for a patient to get an appointment with a dermatologist
  - Economic benefit in freeing up surgeons' time

## Market Opportunity

- **Initial market:** dermatology / Mohs surgeons
  - Mohs Surgeries increased 469% from '96-'13
  - Number of Mohs surgeons increased 600% in 10 years
  - **Reimbursable:** code-0470T and -0471T
  - Market potential:
    - 10,000 dermatologists currently in the US
    - 5.9M Medicare reimbursed skin biopsies in the US in '15
    - \$8.1B in estimated annual cost of treating skin cancer
  - Our team has **expertise** and **access to KOLs** in dermatology
  - We see pathway to **\$25M-\$50M in recurring sales**
- **Platform technology**
- Technology can be used in other therapeutic and surgical procedures on both surface and internal tissues, including cosmetic surgeries and others.
- It can also be used for industrial applications or biofilm-caused infection identification

## "THE ASK"

- We are looking for a **seasoned executive:**
  - To **lead commercialization efforts**, including refining market direction & strategy
  - Coordinate relevant **regulatory approval** efforts
  - Help **raise dilutive and non-dilutive capital**
  - **Long-term:** find partnerships/sub-licensing opportunities for non-dermatology-related fields of use
- We also welcome partnerships with clinicians and industry participants with deep, relevant knowledge

Contact us at: [fsilverfh@yahoo.com](mailto:fsilverfh@yahoo.com); 610-428-2173

## Our Solution



Near Infrared Light  
(OCT 3D Imaging)



Traverse Audible Sound  
(Stiffness)

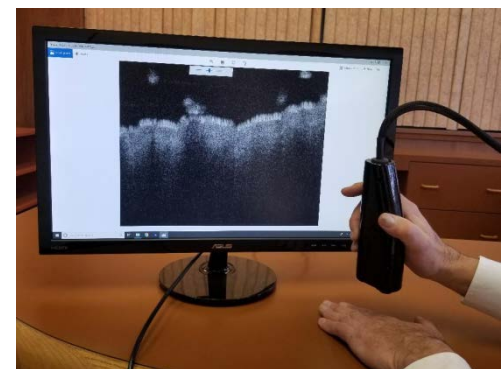
### **VOCT Virtual Biopsy**

(*Vibrational Optical Coherence Tomography*)

- Accurately define skin lesion margins
- Instantaneous imagery: a virtual biopsy can be performed in 15 minutes
- Measures biomechanical characteristics in 3D
  - Non-invasive and non-destructive

## Current State of Technology

- **Nationalized PCT patent granted July 2019**
  - Covers systems and methods (US)
  - Also filed in EU
- Multiple publications in leading journals
- Validated market need via Rutgers I-Corps Program and MD Anderson Cancer Center Regional I-Corps program
- **Developed and Tested Commercial VOCT**
- Co-Founders collectively invested ~\$100,000 to-date into the technology.



## Current Team

- **Co-Founder: Fred Silver, PhD**
  - Professor of Pathology at Robert Wood Johnson Medical School, Rutgers University
- **Co-Founder: Lisa Lutz Silver**
  - Former Sales Executive at IBM
- **Medical Advisor and KOL: Dom Benedetto, M.D.**
  - Ophthalmologist for 35 years