

## Robert E. Grove, Ph.D.

**Education:** Ph.D. in Instrumentation (Field of laser applications); MIT, 1975.  
M.S. in Aeronautics and Astronautics; MIT, 1971.  
B.S. With Distinction in Engineering Physics; Cornell University, 1970. Graduated as salutatorian of entire engineering class (EP, EE, ME, ChemE, IndusE).

**Post-graduate training:**  
Post-doctoral associate, Research laboratory of Prof. Shaoul Ezekiel; MIT, 1976.

### Employment Experience:

*ON Light Sciences, Inc. (2013 – 2016)* *Executive Chairman*  
Directed start-up developing transparent gel patches for accelerated tattoo removal with short-pulse lasers. Raised seed-round funding and recruited world-renowned dermatologists for clinical trials. Acquired by Merz North America in August of 2016.

*Intellectual Light, Inc. (2012-2017)* *President and CEO*  
Founded start-up to develop and patent a novel low-cost laser diode source for OTC devices for medical and other applications, with emphasis on patent portfolio.

*Once Again Me, Inc. (2011)* *President and CEO*  
Founded start-up, raised \$300k in seed capital, developed an innovative OTC laser beauty device and associated patent applications. Acquired by TRIA Beauty, Inc. in Dec. 2011.

*TRIA Beauty Inc. (2003 – 2010)* *CEO ('03-'08); CTO ('09-'10)*  
Co-founded start-up to develop, manufacture and market consumer laser devices for permanent hair removal, acne and facial wrinkle treatment at home. Raised ~\$80 million in venture capital, grew worldwide sales to ~\$20M while CEO.

*Coherent Star, Inc. (1999 – 2001)* *President*  
Expanded *LightSheer™* business as part of Coherent Medical. Managed over 100 employees with revenues in excess of \$50 million.

*Star Medical Technologies, Inc. (1993 – 1999)* *President and CEO*  
Co-founded start-up to develop, manufacture and market the first successful Rx laser hair removal system (*LightSheer™*) that remains the gold standard today. Negotiated acquisition by Coherent in 1999 for \$65 million.

*DermaCare, Inc. (1987 – 1990)* *President and CEO*  
Co-founded one of the first laser med-spas in the US; raised \$2.5 million in domestic and foreign investment. Directed operation of two clinics in S. CA with over 400 pts/month.

*Cooper LaserSonics, Inc. (1984– 1987)* *President, Laser Products Division*  
Integrated copper lasers into newly formed Scientific and Industrial Division; identified research clinicians to spur new product development (e.g., laser treatment of port-wine hemangiomas).

*Plasma Kinetics, Inc. (1981 – 1984)*

*President and CEO*

Co-founded world's first commercial copper vapor laser company. Raised funding, established manufacturing operations and led global marketing effort. Negotiated acquisition by Cooper LaserSonics in 1984.

*Lawrence Livermore National Laboratory (1976 – 1981)*

*Project Leader*

Directed Copper Laser Development for the Atomic Vapor Laser Isotope Separation Program. Managed Ph.D. scientists and engineers developing world's largest laser pump source for pulse dye laser uranium enrichment efforts at LLNL.

### **Consulting Experience:**

*Arbonne International LLC (2014 – 2018)*

Conceived, designed and developed with outside firm a novel home-use ultrasound device for topical application.

*JLE Associates (1990 – 1993)*

Worked with two other laser experts to formulate a plan for a new laser business to be founded and owned by Hoya Corporation of Japan.

### **Independent Corporate Board Experience:**

*Ellman International, Inc. (Dec. 2013 – Sept. 2014 acquisition by Cynosure, Inc.)*

Corporate Director for leading manufacturer of advanced radio-frequency products utilized around the world for precision surgical and aesthetic procedures.

### **Corporate Advisor/Advisory Board Experience:**

*Arbonne International, LLC (2018 – present)*

Appointed to company's Scientific Advisory Board.

*American Society for Laser Medicine and Surgery, Inc.*

Appointed to the Nominating Committee by the current ASLMS president, Eric Bernstein, MD (2018 - present).

Elected to position of Industry Research and Development Representative (1995 – 1998);

Elected to second term (2008 – 2011)

Appointed Exhibits Chairperson (1994 – 1998).

Awarded a Presidential Citation at the 39th Annual Conference, Denver CO (2019).

*Joylux, Inc. (2017 – present)*

Advisor to the CEO, minor shareholder of early-stage company developing and marketing through physicians the world's first home-use device for women's intimate wellness incorporating photobiomodulation and thermal energy.

*Candesant, Inc. (2017 – present)*

Advisor to the CEO, minor shareholder of early-stage company developing a safe, in-office, non-drug solution to hyperhidrosis as well as to less severe excessive sweating.

### **Recent presentations at Professional Society Annual Meetings:**

*9<sup>th</sup> 5-Continent Congress, Lasers and Aesthetic Medicine, Barcelona, August 2018.* “Will Vaginal Rejuvenation become the Largest Home-Use Device Market?”.

*American Academy of Dermatology Annual Meeting, San Diego, February 2018.* “Lessons in Entrepreneurship: What I’ve Learned as Founder or Co-founder of Seven Companies”.

### **Patents:**

1. D794,784 *Skin care device*
2. 9,687,671 *Optical sensor and method for identifying the presence of skin and the pigmentation of skin*
3. 9,302,118 *Phototherapy device thermal control apparatus and method*
4. 9,172,210 *Mount for semiconductor devices using conformable conductive layers, and method*
5. 8,965,214 *Manufacturing system and method using IR communications link*
6. 8,792,527 *Mount for semiconductor devices using conformable conductive layers, and method*
7. 8,777,935 *Optical sensor and method for identifying the presence of skin*
8. 8,755,420 *Failure protection apparatus and system*
9. 8,728,063 *Antimicrobial layer for optical output window*
10. 8,681,829 *Compression mount for semiconductor devices, and method*
11. 8,551,104 *Self-contained, diode-laser-based dermatologic treatment apparatus*
12. 8,518,027 *Phototherapy device thermal control apparatus and method*
13. 8,512,322 *Antimicrobial layer for optical output window*
14. 8,340,144 *Compression mount for semiconductor devices, and method*
15. 7,981,111 *Method and apparatus for the treatment of benign pigmented lesions*
16. 7,452,356 *Eye-safe dermatologic treatment apparatus*
17. 7,413,567 *Optical sensor and method for identifying the presence of skin*
18. 7,250,045 *Self-contained, eye-safe hair-regrowth-inhibition apparatus and method*

19. D535,746 *Portable hair removal device*
20. 7,118,563 *Self-contained, diode-laser-based dermatologic treatment apparatus*
21. 6,758,845 *Automatic firing apparatus and methods for laser skin treatment over large areas*
22. 5,835,518 *Laser diode array packaging*
23. 5,743,901 *High fluence diode laser device and method for the fabrication and use thereof*
24. 5,707,403 *Method for the laser treatment of subsurface blood vessels*
25. 5,527,350 *Pulsed infrared laser treatment of psoriasis*

**Published Patent Applications:**

1. 20150057725 *Phototherapy Device Thermal Control Apparatus and Method*
2. 20140334507 *Mount for Semiconductor Devices Using Conformable Conductive Layers, and Method*
3. 20140171929 *Phototherapy Device Thermal Control Apparatus and Method*
4. 20140155876 *Self-contained, Eye-Safe Hair-Regrowth-Inhibition Apparatus and Method*
5. 20140114299 *Eye-Safe Dermatologic Treatment Apparatus and Method*
6. 20130338736 *Antimicrobial Layer For Optical Output Window*
7. 20130058367 *Mount for Semiconductor Devices Using Conformable Conductive Layers, and Method*
8. 20130051414 *Compression Mount for Semiconductor Devices, and Method*
9. 20120239016 *Radiation-Based Dermatological Devices and Methods*
10. 20120232538 *Radiation-Based Dermatological Devices and Methods*
11. 20120232537 *Radiation-Based Dermatological Devices and Methods*
12. 20110098789 *Phototherapy Device Thermal Control Apparatus and Method*
13. 20100069898 *Acne Treatment Method, System and Device*
14. 20090270848 *Optical Sensor and Method for Identifying the Presence of Skin and the Pigmentation of Skin*
15. 20090204109 *Eye-Safe Dermatologic Treatment Apparatus and Method*

16. 20090125006 *Optical Sensor and Method for Identifying the Presence of Skin*
17. 20090097513 *Failure Protection Apparatus and System*
18. 20080310836 *Manufacturing System and Method Using IR Communications Link*
19. 20080027518 *Self-Contained, Eye-Safe Hair-Regrowth-Inhibition Apparatus and Method*
20. 20070032847 *Self-contained, diode-laser-based dermatologic treatment apparatus*
21. 20060009749 *Efficient diffuse light source assembly and method*
22. 20040176824 *Method and apparatus for the repigmentation of human skin*
23. 20040176823 *Acne treatment device and method*
24. 20040176754 *Method and device for sensing skin contact*
25. 20040167592 *Method and apparatus for the treatment of benign pigmented lesions*
26. 20040167502 *Optical sensor and method for identifying the presence of skin*
27. 20040167501 *Self-contained, eye-safe hair-regrowth-inhibition apparatus and method*
28. 20040167500 *Self-contained, diode-laser-based dermatologic treatment apparatus and method*
29. 20040167499 *Eye-safe dermatologic treatment apparatus and method*
30. 20190046286 *Dermatological Laser-Induced Plume inhibition System and Method*