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Global leader and serial entrepreneur in the medical device industry with many successes in building companies, teams, products and revenues. Experienced at bringing new products to the world market in a high growth dynamic environment. Experienced Board member and Chairman in multiple geographies. Creative Inventor. Effective expert witness (intellectual property, biomedical engineering, medical devices, commercial matters, product liability and others).

***Accomplished Senior Executive with broad wingspan and extensive domain experience***

- Served as CEO of 6 companies – public and private – in 5 countries
- Served as Member of Board of Directors of 13 companies, including Chairman of the Board of 6 companies
- Broad domain experience including Class III implantable medical devices (cochlear implants, pacemakers & leads, ICD, neuromodulation, LVADs), imaging (ultrasound, X-ray), in vitro diagnostics, software, patient monitoring
- Managed intellectual property strategy of several companies.

***Savvy financial manager***

- Raised capital (public and private) >\$200M. IPO 2014 on Euronext Paris and ESM Dublin
- Built revenues from zero to \$30M annual run rate in 3 years with complex new product
- P&L responsibility from small to >\$30M annual expenditure budget
- Sold three companies and participated in sale of three others.

***Acknowledged leader and change agent***

- Proven team leader from small start up to 160-person public company. Effective mentor.
- Turned around and revitalized struggling company (three times)
- Drove culture change from local to global; from science to market; and from development to profit

***Creative Contributor with strategic view***

- Inventor or co-inventor on >50 US patents and built intellectual property portfolio of several companies.
- Many peer-reviewed scientific publications
- Designed and conducted clinical trials for US (FDA) and European (CE Mark) approval of many medical devices.
- Developed and implemented successful global sales and marketing strategies, including building a new sales force.

***Effective Mentor, Board Member and Chairman***

- Recruited senior leadership positions, including CEO.
- Mentored young CEOs several times.
- Contributed to company strategy, corporate finance, and corporate governance
- Knowledgeable about corporate governance requirements for public and private companies

***Experienced Expert Witness***

- Retained consulting and testifying expert. Wrote reports, testified at deposition, arbitration or trial in many cases.
- Areas include intellectual property (patents and trade secrets), corporate governance, M&A disputes, product liability

***Citizenship:*** USA and Australia

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***Professional Experience*****Current Positions**

**CEO and Managing Partner** – Biomedical Business Resources LLC

**Jul 95 – Present**

A consulting and advisory service in the medical device industry, including board services and expert witness work.

**Executive Chairman** – ClinNEXUS Inc (Los Angeles)

**Oct 2020 – Present**

ClinNEXUS is a digital health care services company offering virtual enhanced care management with the aim of reducing hospital readmissions, particularly for high-risk, high-cost patients. <https://clinnexus.com/>

**Chairman of the Board of Directors** – SimTutor, Inc (St. Louis MO)

**June 2019 - Present**

SimTutor is an eLearning company selling simulation and scenario-based training with a primary focus on health care skills training. With authoring tools, bespoke content development, and a large library of existing modules, it sells to many tertiary educational institutions. <https://www.Simtutor.com>.

**Member of Board of Directors – Quench Medical (Minneapolis MN)****2018-present**

Early stage medical device company with a new technology for delivering chemotherapy via an inhaled route.

<http://www.quenchmedical.net/>

**Innovation Advisor – University of California Irvine****2018 – present**

Provide guidance and advice to early-stage companies in the Wayfinder Seed Program (incubator)

**Prior Positions****Chief Executive Officer & Director - Mainstay Medical International PLC, Ireland****Jul 09 – October 2017**

*A medical device company in the field of neurostimulation therapy for chronic low back pain*

Worked for sweat equity refining ideas and raising capital with a \$6M+ Series A financing in 2010. Founded the company, recruited key team, designed Feasibility Clinical Study. Closed over-subscribed \$20M Series B financing in September 2012, and moved Company's HQ from Minneapolis to Ireland. Led successful IPO in April 2014, with dual listing on Euronext Paris and ESM of Irish Stock Exchange. Closed €30M private placement in June 2016. Designed ReActiv8-A clinical trial which led to CE Marking approval in June 2016 and start of commercialization in 2017. Designed ReActiv8-B Clinical Trial which led to PMA approval in 2020. Planned retirement as CEO in October 2017.

**Chief Executive Officer & Director - Ventracor - Sydney Australia, USA and Europe****Jan 2005 – April 2009**

*An Australian Public Company developing and commercializing an implantable blood pump, the VentrAssist left ventricular assist device as therapy for patients in end stage heart failure.*

COO from January 2005, CEO from July 2006. Raised ~\$50M in 2006, and ~\$28M in 2007. Built global sales and marketing organizations from scratch, and grew revenue from zero to ~\$30M annual run rate in three years. Leader of ~160 people worldwide. Repositioned company from a relative unknown to the acknowledged second player in the market. Contributed to design and management of a clinical trial which led to European CE Mark regulatory approval. Developed and completed US clinical trial and prepared for PMA submission. While finalizing a \$40M convertible debt financing in mid-2008, financial crisis triggered withdrawal of lead investors. Placed company into Voluntary Administration in March 2009 with a signed term sheet for acquisition.

**Chief Executive Officer & Director - Ischemia Technologies Inc. - Denver, CO****1999-2004**

*A VC-backed company with an in vitro diagnostic blood test for detecting cardiac ischemia.*

Drove product development, clinical trials, regulatory approval, and market launch. Built 35-member team and established a scientific advisory board. Designed and started clinical trials in 1999, obtained CE mark in 2001, Canadian approval in 2002, and FDA clearance in 2003. Expanded patent portfolio from 2 to 10, and drove revenue growth. Raised VC financing of >\$25M in four rounds between 1999 and 2003. Company sold to Inverness Medical Innovations in February 2005.

**Chief Executive Officer, Board Chairman - CardioComm Solutions, Inc. - Victoria BC, Canada****1997-2006**

*A public software development company with products for management of real time ECG and patient data.*

Joined as member of Board of Directors (1997) then became interim President & CEO from 1998. Cut costs and turned around company, restructured management team, raised new equity financing. Brought in new CEO and management team in 1999, and remained as Chairman of the Board until June 2006.

**Chief Executive Officer & Director - NeoVision Corporation - Seattle, WA****1996-1997**

*A medical device company commercializing a new product with 3D ultrasound image guidance of minimally invasive breast biopsy for suspected breast cancer.* Joined as a consultant early 2006, and later appointed as president and CEO. Obtained 2 term sheets for VC financing, but sold the company to US Surgical for \$42 million, yielding a >4x return to shareholders in approximately 18 months.

**Vice President - Teletronics Pacing Systems – Denver, CO****1989-1995**

*A \$200+ million global company in implantable cardiac pacemakers and defibrillators. Sold to St. Jude Medical in 1996*

**VP Business Development****1995**

Led the development of the overall business strategy; strategic alliances; diversification and consolidation opportunities; coordination with potential investors; and management of the intellectual property portfolio.

**VP Research & Technology****1992-1995**

Managed applied research and technology of pacemakers and leads, including IC design, applied research, and biomaterials. Managed patent portfolio and negotiated cross licensing. Managed two major product recalls.

**VP Strategic Planning****1992**

Responsibility for forward planning: product strategy, diversification opportunities, and company structure. Organized customer focus groups and Scientific Advisory Board, and developed the strategic plan.

**VP International Marketing****1991-1992**

Coordinated global product marketing strategies for regions outside USA. Created sales strategies and provided sales support to sales reps and customers.

**VP Tachycardia****1989-1991**

Global project management function, with responsibility for coordination of product development, clinical trial, regulatory strategy, and market launch for the emerging implantable cardioverter defibrillator (ICD) business. Forged relationships between the R&D group and customers in major markets. Presented to FDA PMA panel meeting.

**Chief Executive Officer & Director - Ausonics Pty. Ltd. - Sydney, Australia****1986-1989**

*A \$30M revenue subsidiary of a public company that developed, manufactured, and distributed ultrasound imaging equipment. US distributor of Japanese OEM-sourced X-ray mammography equipment.*

Joined as Chief Executive R&D in 1986, promoted to CEO in 1987. Turned around and revitalized manufacturing and marketing, and improved sales of core products. Negotiated contracts with a Japanese supplier of equipment for U.S. distribution and negotiated to sell the U.S. mammography distribution business to a Finland based company.

**R&D Executive - Cochlear Corporation - Sydney, Australia****1981-1986**

*World leader in implantable hearing prostheses, dominant market share, major public company.*

One of the founding team. Several positions in product development, marketing, and manufacturing. Liaised with University of Melbourne for technology transfer. Developed speech processor and speech processor programming system for cochlear implant. Wrote patents, physician manuals, user manuals, and part of PMA regulatory submissions.

**Director, Northern Region Biomedical Engineering Service RNSH Sydney Australia****1978-1981**

Established and managed a Biomedical Engineering Service at a major teaching hospital at the center of a health care region (approx. 3000 beds), with responsibility for procurement and maintenance of medical technology equipment for all departments. Designed and built custom instrumentation for numerous research projects for several specialties.

**Researcher Sydney Eye Hospital, Sydney Australia****1976-1978**

Designed and built equipment for the new laboratory for the founding Professor of Ophthalmology including visual evoked potentials, electroretinography, and electrooculography. Participated in several clinics, and ran training programs for ophthalmology fellows in various topics including vitrectomy, ophthalmic electrophysiology, and intraocular lenses.

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**Other Prior Board Activity****Executive Chairman – Docbot Inc. (Irvine, California)****September 2018 – December 2022**

Docbot is using deep learning artificial intelligence for real-time analysis of colonoscopy images. Multiple publications and patents. <http://www.docbot.ai/> Asset sale to Satisfai Health in December 2022.

**Executive Chairman – CenSyn Inc. (Irvine, California)****May 2020 – April 2022**

An early stage medical device company developing and commercializing an “EEG Pen” to provide quick, efficient and accessible hand-held electroencephalogram (EEG) to monitor brain health during suspected neurological emergencies.

**Chairman of the Board - First Medical - Mountain View, CA****1998-2000**

*Developer of a point of care immunoassay IVD test platform for biochemical markers of cardiac function.* Organized restart and refinancing of the company after original VC investors declined to continue. The Company was sold to Sigma Diagnostics in 2000, yielding approximately 4x return to second round investors in less than two years.

**Member of the Board, Chairman of Audit Committee** – Cardiac Science, Irvine CA**1997-2005**

A public medical device company (NASDAQ:DFIB) commercializing the PowerHeart Automatic External Defibrillator (AED). Merged with Quinton Cardiology Systems in September 2005.

**Chairman, Medical Devices Advisory Board** MDS Capital Corp. and CMDF, Toronto, Canada**1998-1999**

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**Education**

Bachelor of Engineering (Electrical) – University of Melbourne (Australia) 1974

Master of Engineering Science (Biomedical Engineering) – University of Melbourne (Australia) 1976

Fellow of the Australian Institute of Company Directors – AICD Company Director's Course 2006

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**Select Consulting Engagements**

Engaged by a VC firm in February 2020 to assist in due diligence on a potential investment in a medical device company.

Engaged in mid-2022 to mentor a first time CEO of a public medical device company.

Engaged by a venture capital firm in October 2022 to assist in due diligence for a medical device investment.

Engaged by a venture capital firm in November 2022 to assist in due diligence for a medical device investment.

Engaged in early 2023 to mentor a CEO of a medical device company.

Engaged by a PE firm in early 2023 to assist with due diligence on a potential acquisition in the medical device field.

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**Select Expert Engagements and Testimony**

Case: 10-CV-0442 DMS (WMC) in the US District Court for the Southern District of California in 2012 involving an IP dispute between Carefusion (Plaintiff) and Sigma (Defendant). Engaged by the attorneys as an expert witness for the defendant. Wrote report and was deposed. Decided for the defendant.

Case: 11-0097-CK in the Circuit Court for Kalamazoo County, Civil Division, between Stryker Corporation and Joseph P. Errico, et al. Acted for Stryker through its attorneys (Bartlit, Beck, Herman, Palenchar & Scott LLP.) The assignment was to express opinions regarding whether Stryker acted in a manner consistent with a reasonable commercial business in its efforts to achieve U.S. Food and Drug Administration approval and commercial launch of its artificial disc products. Expert report presented in September 2013. Wrote report and was deposed. Summary Judgement for Stryker.

Case: 6:09-cv-06041-EAW) in the New York Western District between Bausch and Lomb (Plaintiff) and Dr. Mona Sarfarazi (defendant). Engaged in April 2015 as an expert for the Plaintiff through Plaintiff's attorneys, Nixon Peabody. Expert assignment to provide opinions in an Expert Report as to the usual, customary and routine practices in the medical device industry and whether B+L acted in a manner consistent with a reasonable commercial business in its efforts to achieve the "development milestones." Wrote report and was deposed. Decided for the Plaintiff.

A matter between two medical device companies A and B. A acquired certain assets of B and agreed to use "commercially reasonable efforts" to achieve milestones which would trigger milestone payments to B. The milestones were not met, the payments were not made, and B sued A for failure to use "commercially reasonable efforts." Engaged by the attorneys for A, Williams and Connolly LLP. The assignment was to evaluate whether A acted consistently with their obligation to use commercially reasonable efforts to complete the milestones. Wrote report and appeared before 3 judge panel of the American Arbitration Association in New York in November 2017. Decided for A.

Case number 2:18-cv-08103 in the District Court for the central district of California between the Securities and Exchange Commission (Plaintiff) and Mr. Hani Zeini, the ex-CEO of Sientra, Inc. regarding adequate public disclosure of potentially price sensitive information. Engaged in May 2019 by the defendant's attorney, Munger, Tolles & Olson LLP., and the case settled through mediation not long after.

Case: 18-cv-00691-STV. A case between plaintiff Wright Medical, Inc., and Defendant Paragon 28, Inc. Plaintiff alleges misappropriation of intellectual property including trade secrets. Engaged by the attorneys for the plaintiff in June 2019, Duane Morris. The assignment is to opine on what in the medical device industry is considered IP (confidential and/or trade secret information), and how such IP is protected and used. Wrote expert report and rebuttal report, was deposed in 2021 as a 30b(6) witness and was deposed in 2022 as an expert. Case was resolved on terms plaintiff found favorable, <https://www.sec.gov/ix?doc=/Archives/edgar/data/1531978/000095017023005826/fna-20221231.htm>

Case: 1:19-cv-00325-UNA. An intellectual property dispute between Nevro Inc. (plaintiff) and Stimwave Inc. Engaged as a consulting expert by the attorneys for plaintiff, Morrison & Foerster, in 2019. Case settled before trial.

A case in the US Tax Court Docket number 6944-11 between Medtronic Inc (Petitioner) and the Internal Revenue Service (Respondent). Engaged by the IRS in 2019. Wrote expert report, was deposed, and testified at trial in June 2021.

Case:19-cv-03140-ECT-DTS in the US District court, District of Minnesota between former members of Caisson Interventional LLC (Plaintiff) and LivaNova PLC (Defendant). Engaged as a consulting and testifying expert in 2019 by the attorneys for the plaintiff, Fox Rothschild, to provide opinions as to whether defendant met its obligations under an acquisition agreement. Wrote expert report, rebuttal report, and was deposed. Summary judgment granted to Defendant in May 2022.

Case: 1:20-cv-03214-JPC in the US District Court, Southern District of New York, between INSPIRX Inc. (Plaintiff) and Lupin Atlantis Holdings SA (defendant). Engaged as a consulting expert in September 2020 by the defendant's attorneys, Holland and Knight LLP.

Case: 1:20-cv-00291-CFC-JLH. An intellectual property dispute between Nevro Inc. (plaintiff) and Nalu Inc. Engaged in March 2021 as a consulting expert by the attorneys for plaintiff, Morrison & Foerster. Wrote declaration for IPR. Case settled before trial.

Case Inv. No. 337-TA-1262 in the International Trade Commission (ITC). Engaged by attorneys K&L Gates, in June 2021 to provide consulting services on behalf of InMode regarding patent litigation involving InMode and ILOODA Co., Ltd. and Cutera, Inc. ("Respondents") in the investigation filed pending in the International Trade Commission, styled *In the Matter of Certain Skin Rejuvenation Resurfacing Devices, Components Thereof, and Products Containing the Same*. Details subject to PO.

Case: 20-cv-01507-NEB-ECW in the US District Court for the District of Minnesota, between Sleep Number Corporation. (Plaintiff) and Steven Young, Carl Hewitt and UDP Labs Inc. (Defendants), in a case involving claims for breach of contract and trade secret misappropriation. Engaged in mid-2021 as a consulting and testifying expert by the attorneys for Plaintiff, Fox Rothschild. Submitted expert report and was deposed. Case is pending as to Young/Hewitt, but stayed as to UDP Labs, Inc. due to bankruptcy filing.

Case: 6:21-CV-986 in the US District Court for the Western District of Texas. A patent infringement dispute between the plaintiff University of Pittsburgh and defendant Cochlear Limited. Engaged as an expert by attorneys for defendant (Shook Hardy and Bacon) in February 2022. The case was settled between the parties in May 2023 before trial.

Cases: 21-258-CFC, 18-644-CFC, 16-1163-CFC (D. Del.), and related proceedings. (IPR2022-00509 and IPR2022-00510) brought by petitioner Boston Scientific against patent owner Nevro Corp. Engaged by Sidley Austin, attorneys for patent owner, in April 2022. Submitted two IPR declarations for the PTAB in May 2022. The parties settled all disputes between them in August 2022

A case in front of the American Arbitration Association between a medical device company that suffered a catastrophic loss due to water ingress and the insurance carrier regarding adequate compensation for the loss. Retained by attorneys for the Company in July 2022 to provide opinions on usual and customary steps to bring a new medical device to market and an assessment of the state of the Company before the loss. Drafted expert report. The case was settled between the parties on terms acceptable to the Company.

Case L.A.S.C. Case No BD 652 917. Engaged in July 2022 by attorney for the Petitioner, Royston Family Law, to review and comment on a report regarding the value of future royalty Income arising from sales of medical devices to which respondent contributed intellectual property, and to review and comment on certain statements made by the parties. Wrote declaration, wrote report, and appeared at court.

Case No. 21STCV30687 in the Superior Court for Los Angeles County, California. Engaged in October 2022 by attorney for defendant Pasadena Advanced Surgery Institute to opine on the likely cause of injury to the Plaintiff during a plastic surgery procedure. Reviewed records, examined electrosurgery equipment, and wrote declaration for Motion for Summary Judgement.

Case 62-CV-20-790 in the District Court of Ramsey County, Minnesota brought by Patrick Spearman and several shareholders of Envoy Medical Inc. who allege breach of fiduciary duty by the Directors of Envoy Inc. in certain financing transactions. Retained in March 2023 by Fredrikson, attorneys for defendants (Envoy and current and former directors) to opine on customary practices and terms for financing transactions for early-stage medical device companies, and to analyze the actions of the Board of Directors regarding discharge of fiduciary duty. Wrote Report, Opposition Report, and Rebuttal Report. The case was settled in August 2023 through mediation prior to deposition or court appearance.

Case 1:20-cv-12225-DPW in the U.S. District Court, District of Massachusetts. A securities class action lawsuit brought against Boston Scientific Corporation ("BSX") and certain officers of BSX alleging misrepresentations of material facts concerning the Lotus Edge device. Engaged by the attorneys for the Lead Plaintiff (Bernstein Litowitz Berger &

Grossmann LLP) in March 2023 as a consulting and testifying expert. Matter settled following mediation in October 2023 before trial.

Case 337-TA-1356 in the International Trade Commission in the matter of Certain Dermatological Treatment Devices and Components Thereof. Retained in April 2023 by Latham and Watkins (Washington DC), attorneys for Complainant (Serendia, LLC), to review patents, inspect accused products, opine on infringement and other matters. Wrote Initial Expert Report and Rebuttal Report, was deposed for 2 days, and testified at trial (twice). Serendia won on all issues. Re-engaged in early 2025 to provide a declaration in support of POPR in IPR2024-00383 and was deposed.

Retained in October 2023 in a matter regarding a license agreement between a university and an in vitro diagnostics company. Retained by the attorneys for the Company (Duane Morris) to provide opinions regarding the license agreement, to write expert report and testify if necessary.

Staff Petition for relief ("SPR") I-2018-00036 dated March 28<sup>th</sup>, 2023, brought by the Bureau of Securities Regulation for the Secretary of State of New Hampshire against Advent Medical Products alleging misrepresentation of information in solicitations for funding. Engaged in January 2024 by the attorneys for the Bureau. Wrote Expert Report, was deposed, and testified at hearing. The Bureau won on all counts.

Case 21STCV11779 in the Superior Court for the State of California, County of Los Angeles. A case between multiple Plaintiffs and Defendant Medtronic Minimed alleging that problems with the Minimed wearable Insulin Pumps led to damages to Plaintiffs. Retained in February 2024 by attorneys for Plaintiffs to provide opinions on several matters, including but not limited to the engineering root cause of the problem, Medtronic's conduct in dealing with complaints, and customary practices regarding recall of medical devices.

IPR2025-00096 (and 5 others) Abbott Laboratories (Petitioner) v Miracor Medical S.A. Engaged in June 2024 by attorneys for Petitioner (Winston and Strawn) to provide opinions and Declarations for IPRs on US Patents 11,351,356, 11,351,357, 11,376,415, 11,572,879, 11,674,517 and 11,754,077. PTAB instituted IPR in May 2025. Wrote expert declaration and was deposed.

Case No. 37-2021-00000872-CU-NP-CTL in the Superior Court of the State of California, StemExpress LLC (Plaintiff) v Molly Kent and AllCells LLC (Defendants). Engaged by Glaser Weil (attorneys for Plaintiff) in January 2025 to provide opinions and appear at trial on the subject of alleged misappropriation of trade secrets. Was deposed in April 2025 and appeared at trial in front of a jury in June 2025. Jury found in favor of Defendants.

IPR2024-01209 (and 3 others) Avanos Medical v Stratus Medical LLC (Patent owner). Retained by Laurence and Phillips IP Law, attorneys for patent owner in March 2025 to provide expert opinions on four IPR petitions covering three patents. Wrote expert report and was deposed.

Case 337-TA-1444 in the International Trade Commission in the matter of Certain Nasal Devices and Components Thereof. Retained in May 2025 by Goodwin Proctor LLP (Washington DC), counsel for Respondent Rhino Systems Inc. Assignment is to review patents and opine on validity. Wrote Opening Expert Report. Case settled before trial.

Civil Action No. 2284CV-00969-BLS2 in the Superior Court of Massachusetts between Plaintiffs former shareholders of TwistDx and Defendants Alere Inc. and Innovacon (since acquired by Abbott) alleging that Defendants failed to use commercially reasonable efforts to support TwistDx leading to lost milestone payments. Retained in September 2024 by Winston and Strawn (attorneys for Defendants) to provide various opinions regarding the case, assisted by Cornerstone Research. Wrote Expert Report.

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## **Issued US Patents**

- 12,285,612 Systems and methods for restoring muscle function to the lumbar spine
- 12,168,130 Systems and methods for restoring muscle function to the lumbar spine
- 12,121,728 Systems and Methods for Enhancing Function of Spine Stabilization Muscles Associated with a Spine Surgery Intervention
- 12,097,365 Electrical Stimulator for Treatment of Back Pain and Methods of Use
- 12,048,844 Modular stimulator for treatment of back pain, implantable RF ablation system and methods of use
- 11,951,310 Systems and methods for restoring muscle function to the lumbar spine
- 11,786,725 Systems and methods for restoring muscle function to the lumbar spine and kits for implanting the same
- 11,684,774 Electrical Stimulator for Treatment of Back Pain and Methods of Use
- 11,684,241 Autonomous and Continuously self-improving Learning System

- 11,679,262 Systems and methods for restoring muscle function to the lumbar spine
- 11,679,261 Systems and methods for Enhancing Function of Spine Stabilization Muscles Associated with a Spine Surgery Intervention
- 11,478,124 System and Methods for Enhanced Automated Endoscopy Procedure Workflow
- 11,471,670 Electrical Stimulator for Treatment of Back Pain and Methods of Use
- 11,376,427 Systems and Methods for Restoring Muscle Function to the Lumbar Spine and Kits for Implanting the Same
- 11,331,488 Systems and methods for Enhancing Function of Spine Stabilization Muscles Associated with a Spine Surgery Intervention
- 11,191,423 Endoscopic System and Methods Having Real-Time Medical Imaging
- 11,103,706 Systems and Methods for Enhancing Function of Spine Stabilizing muscles associated with spine surgery intervention
- 11,100,373 Autonomous and continuously self-improving learning system
- 10,926,083 Stimulator for Treatment of Back Pain Utilizing Feedback
- 10,925,637 Methods of Implanting Electrode Leads for use with Implantable Neuromuscular Electrical Stimulator
- 10,828,490 Systems and methods for restoring muscle function to the lumbar spine
- 10,661,078 Modular stimulator for treatment of back pain, implantable RF ablation system and methods of use
- 10,471,268 Systems and Methods for Monitoring Muscle Rehabilitation
- 10,471,193 Implantable Medical Devices
- 10,449,355 Systems and Methods for Restoring Muscle Function to the Lumbar Spine and kits for Implanting same
- 10,016,603 Systems and Methods for Restoring Muscle Function to the Lumbar Spine
- 9,999,763 Apparatus and Methods for Anchoring Electrode Leads Adjacent to Nervous Tissue
- 9,950,159 Systems and methods for restoring muscle function to the lumbar spine and kits for implanting the same
- 9,861,811 Electrical Stimulator for Treatment of Back Pain and Methods of Use
- 9,474,906 Systems and methods for restoring muscle function to the lumbar spine
- 9,248,278 Modular stimulator for treatment of back pain, implantable RF ablation system and methods of use
- 9,108,053 Apparatus and methods for rehabilitating a muscle and assessing progress of rehabilitation
- 9,079,019 Apparatus and methods for anchoring electrode leads for use with implantable neuromuscular electrical stimulator
- 9,072,897 Systems and methods for restoring muscle function to the lumbar spine
- 8,876,685 Blood pump with an ultrasound transducer
- 8,858,416 Implantable medical devices
- 7,074,194 Apparatus and method for risk stratification of patients with chest pain of suspected cardiac origin
- 7,063,782 Electrochemical detection of ischemia
- 6,770,487 Bar code readable diagnostic strip test
- 6,217,744 Devices for testing fluid
- 6,106,524 Methods and apparatus for therapeutic cauterization of predetermined volumes of biological tissue
- 6,027,457 Apparatus and method for securing tissue during ultrasound examination and biopsy
- 5,851,180 Traction-inducing compression assembly for enhanced tissue imaging
- 5,820,552 Sonography and biopsy apparatus
- 5,807,234 Myostimulator control using metabolic demand and muscle performance
- 5,720,770 Cardiac stimulation system with enhanced communication and control capability
- 5,693,000 Cardiomyoplasty simulator with feedback control
- 5,476,486 Automatic atrial pacing pulse threshold determination utilizing an external programmer and a V-sense electrode

- 5,458,623 Automatic atrial pacing threshold determination utilizing an external programmer and a surface electrogram
- 5,391,192 Automatic Ventricular pacing threshold determination utilizing an external programmer and a surface electrocardiogram
- 5,311,607 Facsimile machine for printing documents all with corresponding edges aligned but without requiring scanning
- 5,292,340 Physiologically-calibrated rate adaptive, dual chamber pacemaker
- 4,532,930 Cochlear implant system for an auditory prosthesis
- 4,522,209 Cochlear prosthesis test system

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**Scientific Publications**

- Russo, M., Deckers, K., Eldabe, S., Kiesel, K., Gilligan, C., Vieceli, J., & Crosby, P. 2018. Muscle Control and Non-specific Chronic Low Back Pain. *Neuromodulation : Journal of the International Neuromodulation Society*, 21(1), 1–9. <https://doi.org/10.1111/ner.12738>
- Wu, A. H. B., Crosby, P. A., Fagan, G., Danne, O., Frei, U., Mockel, M., & Keffer, J. 2003. Ischemia-Modified Albumin, Free Fatty Acids, Whole Blood Choline, B-Type Natriuretic Peptide, Glycogen Phosphorylase BB, and Cardiac Troponin. In *Cardiac Markers* (pp. 259–277). <https://doi.org/https://doi.org/10.1007/978-1-59259-385-9>
- Goldman, B.S. et al 1996 Management of Intracardiac Device Recalls: A Consensus Conference *PACE* 19:7-17
- Steinhaus, B. M., Smith, R. E., & Crosby, P. 1994. Role of telecommunications in future implantable device systems. *Annual International Conference of the IEEE Engineering in Medicine and Biology - Proceedings*, 16(pt 2)
- Crosby, P.A. 1994 Polyurethane in Cardiac Pacing Leads At 15th Ann Conf of North American Society of Pacing and Electrophysiology, Nashville
- Crosby, P., & Singer, I. 1991 The initial clinical experience with a third generation cardioverter defibrillator/antitachycardia pacemaker. *PACE - Pacing and Clinical Electrophysiology*, 14(10), 1554–1555.
- Crosby, P. A., Malachowski, G. C., Hall, B. R., Stevens, V., Gunn, B. J., Hudson, S., & Schlosser, D. 1985. Workstation Approach To Laboratory Computing. *Proceedings - Annual Symposium on Computer Applications in Medical Care*, (July 1985), 25–29.
- Crosby, P. A., Seligman, P. M., Patrick, J. F., Kuzma, J. A., Money, D. K., Ridler, J., & Dowell, R. 1984. The nucleus multi-channel implantable hearing prosthesis. *Acta Oto-Laryngologica. Supplementum*, 411, 111–114. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/6596833>
- Clark, G. M., Tong, Y. C., Patrick, J. F., Seligman, P. M., Crosby, P. A., & Kuzma, J. A. 1984 A Multi-Channel Hearing Prosthesis for Profound to total hearing loss. *Journal of Medical Engineering and Technology*, 8(1), 3–8.
- Seligman, P. M., Patrick, J. F., Tong, Y. C., Clark, G. M., Dowell, R. C., & Crosby, P. A. 1984 A Signal Processor for a Multiple Electrode Hearing Prosthesis. *Acta Otolaryngol Supple*, 411, 135–139. <https://doi.org/6596837>
- Clark, G. M., Tong, Y. C., Patrick, J. F., Seligman, P. M., Crosby, P. A., & Kuzma, J. A. 1984 A Multi-Channel Hearing Prosthesis for Profound to total hearing loss. *Journal of Medical Engineering and Technology*, 8(1), 3–8.
- Clark, G. M., Crosby, P. A., Dowell, R. C., Kuzma, J. A., Money, D. K., Patrick, J. F., ... Tong, Y. C. 1983 The Preliminary Clinical Trial of a Multichannel Cochlear Implant Hearing Prosthesis. *Journal of the Acoustical Society of America*, 1911(74)



- Wood, S. L., & Crosby, P. A. 1981 A Real-time On-line digital computer method for monitoring myocardial supply demand ratio. *Anaesthesia Intensive Care*, 9(1), 28–33.
- Crosby, P.A. 1981 Rotatable Raster Generator for Visual Research *Med & Biol Eng & Comput* 19:71-74
- Donaghue, K. D., & Crosby, P. A. 1979 Comparison of Recording Methods for Clinical Electroretinography. *Aust J Ophthalmology*, 7, 225–228.
- Uren, S. M., Stewart, P., & Crosby, P. A. 1979 Subject cooperation and the visual evoked response. *Investigative Ophthalmology & Visual Science*, 18(6), 648–652.
- Crosby, P. A. 1979. Microwaves and Ocular Pathology. *Aust J Ophthalmology*, 7, 163–166.
- Crosby, P. A. 1978. Use of Surface Electromyogram as a measure of dynamic force in human limb muscles. *Med & Biol Eng & Computing*, 16, 519–524.
- Crosby, P.A. 1978 Three Channel Tape Recorder Modulation Scheme for Biological Signals *Med & Biol Eng & Computing* 16:223-225
- Dewhurst, D.J., Crosby, P.A., Cameron, J.D., Shankly, K.H., Kirsner, R.L.G. 1976 Active and Passive Control of Human Limb Movements *Dig 11th In. Conf. On Med & Biol Eng Ottawa*

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**Other Publications**

“Balance of Risks – A Novel” ASIN B08X3YJCXK 21 Feb 2021 (Amazon Kindle)

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**Other Qualifications**

Commercial pilot (ASEL, AMEL, ASES, IA). Certificated Flight Instructor single and multi-engine (expired).