# CV for Richard P. Meyst

## **Selected Expertise**

- Medical Product Design / Development
- FDA-GMP Practices
- Market / Patent Research
- Rapid Prototyping
- Tooling / Process Development
- Manufacturing / Industrial Engineering
- Project Planning / Management
- Risk Analysis / Risk Management
- Failure Analysis
- Verification, Validation & Qualification
- Regenerative Medicine Devices

- Blood Filters, IV Filters
- Laparoscopic Surgical Instruments
- Umbilical Cord Blood Collection
- Cell Therapy, Stem cells & bioreactors
- Catheter Based Diagnostics
- Therapeutic Catheters, angioplasty
- Drug Delivery/ Infusion Devices
- High Volume Sterile Disposables
- Medical Device Regulatory Submissions
- Grant Writing
- Expert Witness

### **Biography**

Mr. Meyst is an accomplished engineer/program manager/entrepreneur and has been facilitating the advanced design and development of a wide range of successful medical technology products for the health care industry over the last 40+ years. He has extensive knowledge in product design and development, product prototyping, production startup, manufacturing engineering, risk analysis, strategic planning, grant preparation and market research. He has also provided expert witness assistance in IP cases, product failure analysis, and other medical products cases. He has held various engineering, development, operations and management positions at CR Bard, Fenwal Division of Baxter, IMED and other healthcare and consumer product companies. For the last 25+ years he has been an owner of Fallbrook Engineering. Since 2003 he has been the President and CEO. Selected product experience includes implantable vascular prosthesis, DNA amplifiers, vital signs monitoring, drug infusion pumps and systems, medical lasers, surgical instruments, catheters of all kinds, microprocessor based diagnostic and therapeutic instruments, blood cell collection and processing, filtration devices for blood and IV solutions, as well as stem-cell harvesting and cell expansion systems.

Mr. Meyst was a Principal Investigator on an NIH SBIR grant from the National Heart, Lung and Blood Institute developing a device for the improved collection of Umbilical Cord Blood Stem Cells. He served on the Board of Directors for the Society of Plastics Engineers/Medical Plastics Division and is a long time member. He is a member of the American Association of Blood Banks, the Association for the Advancement of Medical Instrumentation and the American Filtration Society. He is also a member of the Medical Device Steering Committee of BIOCOM. Mr. Meyst has recently been a juror in the UBM/Cannon Medical Design Excellence Awards competition. His Bachelors and Masters degrees in Mechanical Engineering are from the University of Wisconsin, Madison. He has been awarded sixteen US Patents, has over four applications pending and has been an invited speaker, presenting talks at numerous scientific and medical industry meetings.

## **Employment History**

Fallbrook Engineering, Inc. From: 1989

To: Escondido, CA Present

Position: 2003-Present: President/CEO

Fallbrook provides consulting engineering services to client companies in the medical, pharmaceutical, biotech, electronic and consumer product industries. Services include project management, product conception, design and development, product prototyping, design and process validation, manufacturing engineering, production startup, cost reduction, as well as regulatory affairs compliance and submissions. He was also a Principal Investigator on a Phase II NIH SBIR Grant for the development of an improved method for the collection of umbilical cord blood, a source rich in stem cells.

1989-2003: Vice President

Provided consulting engineering services to client companies in the medical, pharmaceutical, cosmetic, electronic and consumer product

industries.

From: 1988 Diatek Corp. To: 1989 San Diego, CA

> Position: Manager, Manufacturing Engineering

> > Designed/developed disposable for "next generation" tympanic electronic hospital thermometer. Designed and implemented high speed automated production equipment to produce 1 MM+ units per day. Supported existing vital signs and operating room product lines. Managed facility and plant

maintenance departments.

1983 From: **Imed Corp.** To: 1988 San Diego, CA

> Position: Manager, Pilot Engineering

> > Ran pilot production facility for new product builds of complex medical electromechanical/electronics and sterile disposables. Managed "Specials" program to offer custom I.V. sets and I.V. pumps per hospital order. Managed team of technicians/engineers to move new products from R&D

into Manufacturing.

Technical Product Manager

Managed I.V. disposables product line projects that resulted in \$4 MM annual savings. Developed organized plan, gained corporate support and supervised implementation. Achieved project objectives through design standardization, process simplification, quality/performance enhancements,

plus multi-national manufacturing operations.

#### Manager, Disposable Design

Managed/directed design & implementation of 6 new I.V. disposable product codes, an enteral product line and numerous new components. Supported research of 3rd generation volumetric pump disposable. Supervised department's growth in handling design/drafting, engineering and technician support.

From: 1979 **Oak Industries** To: 1983 San Diego, CA

Position: Manager of Telecommunications

Consulted to headquarters and domestic operating companies. Managed \$500K annual acquisition and installation of telecom equipment/services. Utilized cost control programs, network optimization and the use of value-added services to save \$350K annually.

### Manager, Training & System Development

Planned and directed implementation of facilities projects for nationwide Pay TV network offices/warehouses in Phoenix, Chicago and Dallas. Designed and supervised training programs for installers, service technicians, phone sales and billing agents. Improved overall efficiency by 40% and saved 20% labor cost. Planned/directed the buying and installation of telecom equipment/services serving 600+ users handling 20,000 calls per day.

From: 1974 **Baxter Travenol Labs, Fenwal Division** 

To: 1979 Round Lake, IL

Position: **Program Manager** 

Supervised and directed experts in design/development of collection, fractionation, storage and administration of human blood component products. Product scope: sterile medical disposables and electronic, electro-mechanical biomedical hardware. Specific products: Membrane Plasmapheresis, Autologous Blood Collection and General Blood Collection & Administration Sets.

#### Section Manager

Directed 6 engineers, physiologists and technicians in R&D for entire blood filtration product line. Simplified several blood set codes with 30% increase in manufacturing yield. Pioneered blood set materials evaluation for conversion from ETO to Gamma Sterilization. Designed nonwoven composite filter cartridge for Cadiotomy Bypass Filter. First of code production achievements: Polyester Mesh Blood Administration Sets, Pediatric Microfilter and a Filtration Leukapheresis Disposable Circuit.

### Senior Biomedical Engineer

Designed/tested and produced a Microaggregate Transfusion Filter product line for worldwide distribution. (Product performance remained tops through 20+ years of product life. Product is now discontinued.) Served on AAMI Microfilter Standards Committee. Redesigned Platelet Administration Set to improve yield 20%. Managed design of an Autologous Blood Collection Set. Developed filter for collecting cryoprecipitate to produce Factor VIII.

### Senior Development Engineer

Reduced Blood Sets' field complaints by 50% through product redesign and manufacturing process modifications. Redesigned existing microfilter to double volume capacity with no cost increase. Introduced ultrasonic assembly techniques for several products to reduce costs and improve reliability.

From: 1972 **USCI, Division of C.R. Bard, Inc.** 

To: 1974 Glens Falls, NY

Position: Product Engineer, Prosthetic Development

Supported Vascular Graft and Cardiovascular Catheter product lines. Instituted program to quantify and control variables affecting product quality. Designed/implemented/evaluated specialty test equipment and testing procedures. Developed/wrote product specifications.

### **Expert Witness, Litigation Experience**

Date 2018 Client: Akin Gump

Case: Aptar v. 3M & Meck Project: Patent Infringement

Date 2017 Client: The Crites Law Firm

Case: Christina Morris Project: Personal Injury

Date 2017 Client: Better Life Technologies

Case: BLT v. Kaiser Permanente
Project: Nondisclosure & Trade Secrets

Date 2017 Client: Klinck Law

Case: Blendermann v. LifeWave Inc.

Project: Patent Infringement

Date 2017 Client: Finnegan, Henderson, Farabow, Garrett &

**Dunner**, LLP

Case: Zimmer Surgical v. Stryker Corp.

Project Patent Infringement

Date: 2016 Client: Perkins Coie, LLP

Case: Fontem Ventures B.V. et al. v. R.J. Reynolds Vapor Co.

Project: Litigation and related IPRs

Date 2016 Client: Greenberg Traurig, LLP

Case B. Braun v. BD

Project: Patent infringement & IPRs

Date: 2016 Client: Perkins Coie, LLP

Case: Fontem Ventures B.V. et al. v. Nu Mark LLC

Project: Litigation and related IPRs

Date: 2016 Client: Gallagher Krich, APC

Case: Cyth Systems v. CareFusion

Project: Contract dispute

Date: 2016 Client: Davis, Grass, Goldstein & Finlay

Case: Beatriz Picon v. San Antonio Regional Hospital

Project: Failure analysis

Date: 2016 Client: Cooley LLP

Case: Medline Industries, Inc. v. C.R. Bard, Inc.

Project: Patent dispute

Date: 2016 Client: Hodgson Russ LLP

Case: Curlin Medical, Inc. v. ACTA Medical, Inc.

Project: Patent infringement

Date: 2016 Client: PJ West and Associates, Inc.

Case: Undisclosed

Project: Medical product failure

Date: 2016 Client: Girardi and Keese

Case: Deirdree Lagewaard v. Medtronic Minimed, Inc.

Project: Medical product failure analysis

Date: 2015 Client: Perkins Coie LLP

Case: Fontem Ventures B.V. et al. v. NJOY Inc. et al.

Project: Electronic Cigarette IP case: Infringement, Validity and IPRs

Date: 2014 Client: Novak Druce Connolly Bove & Quigg LLP

Case: Larry G. Junker, Plaintiff v. Medical Components, Inc. and Martech

Medical Products, Inc., Defendants

Project: Catheter design patent

Date: 2014 Client: Lipeles Law Group

Case: Robinson v Rheingold

Project: Analysis of failed knee brace

Date: 2014 Client: Law Offices of George B. Piggott

Case: Armand Maaskamp v. Theodore Wortrich Project: Technology Ownership and Contracts Dispute

Date: 2014 Client: Knobbe Martens Olson & Bear LLP

Case: Masimo Corporation & Masimo International Sarl v. Shenzhen Mindray

Bio-Medical Electronics., Ltd.

Project: I.P. – Patent Infringement and Validity

Date: 2014 Client: Johnson Moore

Case: Rosenwein v. UCLA Hospital, Bard Access Systems, Inc.
Project: Patient Injury, Root Cause Investigation of Medical Device

Date: 2014 Client: Orrick, Herrington & Sutcliffe LLP

Case: Flextronics v. ICU Medical

Project: Development Project Arbitration Matter

Date: 2014 Client: Leavitt, Yamane & Soldner

Case: Pre-case Evaluation

Project: Patient Injury, Root Cause Investigation of Medical Device

Date: 2012 Client: Weiss & Moy PC

Case: Pacific Bioscience Labs Inc. v. Nutra Luxe MD, LLC

Contact: Jeff Weiss, Atty.

Project: I.P. – Patent Infringement

Tested and analyzed product, wrote expert reports, gave Deposition and

Testimony

Date: 2012 Client: Thomas Whitelaw

Case: Pabban Development, Inc. vs. Kyphon Sarl and Medtronic, Inc.

Contact: James Whitelaw, Atty.

Project: Contract Dispute

Wrote expert reports, gave Deposition and Testimony in court.

Date: 2012 Client: Gwilliam Ivary Chiosso Cavalli & Brewer

Case: Diane Ely vs. Barrx Medical, Inc. et al

Contact: Steve Brewer, Atty.

Project: Patient Injury, Root Cause Investigation of Medical Device

Date: 2011 Client: DLA Piper

Case: Carefusion 303, Inc., Plaintiff-Counterclaim Defendant, v. Sigma

International, Defendant-Counterclaimant.

Contact: John Kinton, Atty.

Project: I.P. – Patent Infringement – Medical Fluid Delivery Device

Analyzed defendants product, conducted engineering analysis, reviewed

patent claims

Date: 2011 Client: Peach & Weathers

Case: Judy Franklin, Michael Franklin v. Ladies Workout, Omron

Contact: Tim Peach, Atty.

Project: Personal Injury – Product Liability – Body Fat Analyzer

Performed research and conducted testing on a body fat analyzer,

prepared declaration

Date: 2011 Client: Beeler, Walsh and Walsh

Case: Walker v. Southwest Imaging

Contact: Micky Walsh, Atty.

Project: Personal Injury – Product Liability

Performed research, conducted testing on insulin pump, prepared report

Date: 2011 Client: Perkins Coie

Case: Currently Confidential Contact: Joseph Hamilton, Atty.

Project: I. P. Patent Infringement - unnamed device

Performed testing/evaluation/analysis of competitive devices, prepared

report

Date: 2010 Client: Thon Beck Vanni Callahan & Powell

Case: Jackson v. Ossur Contact: Daniel P. Powell, Atty.

Project: Personal Injury - Product Liability - Cold Therapy System

Performed research of: FDA requirements for labeling, misbranding, Maude database for similar products and did evaluation of product

labeling and directions for use, gave Deposition

Date: 2010 Client: Schuering Zimmerman & Doyle, LLP

Case: Fonti v. Wilmarth

Contact: J. Hawken Flanagan, Atty.

Project: Personal Injury – Product Liability – Electrosurgical Device

Performed background research provided expert review and did product

testing and evaluation

Date: 2009 Client: San Diego IP Law Group

Case: I-Flow, Inc. v. Apex Medical Technologies

Contact: Trevor Coddington, Ph.D., Atty.

Project: I.P. – Patent Infringement – Medical Fluid Delivery Device

Prepared Declaration, gave Deposition and Testimony

Date: 2008 Client: Weston Herzog LLP Attorneys

Case: Staley v. Ukiah Valley Medical Center, Adventist Health, Allen Medical

Systems, Inc., et. al.

Contact: William Weston, Atty.

Project: Personal Injury - Product Liability - Operating room table accessory

Performed test and evaluation of product function and failure modes, prepared Expert Report, Declaration, gave Deposition and Testimony

Date: 2008 Client: McKool Smith

Case: Medtronic Vascular, Inc., Medtronic USA, Inc., v. Boston Scientific Corp.

Scimed Life Systems Inc., and Boston Scientific Scimed, Inc.

Contact: Joshua Budwin, Atty.

Project: I.P. – Patent Infringement - Angioplasty balloon/stent catheter

Developed test methods, tested product, analyzed data and prepared

reports

Date: 2007 Client: The Law Offices of Morris & Player

Case: Pre-case evaluation Contact: Lea A. Player, Atty.

Project: Personal Injury - Implantable drug infusion port

Product research, background information gathering

Date: 2007 Client: Holman Law

Case: Joseph Falagan v. Valley Medical Center, also known as Public Hospital

District No. 1 of King County, a municipal corporation; Valley Medical Center Clinic; Kim B. Wright M.D. and Jane Doe Wright, M.D., his wife;

Seattle Systems, Inc.; Camp, Inc.; United States Manufacturing Co.;

Trulife Healthcare, a.k.a. Trulife Group

Contact: James Holman, Atty.

Project: Personal Injury - Neck brace

Provided expert review, analysis, Risk Analysis, prepared Declaration

Date: 2007 Client: Giovanniello & Michels LLP

Case: Russ Whitmeyer v. Invacare Corporation, Apria Healthcare, Inc.

Contact: Helen S. Peltekci, Atty.

Project: Personal Injury - Oxygen concentrator

Provided expert testing overview for Apria Healthcare

Date: 2006 Client: Perkins Coie LLP

Case: Venetec International, Inc. v. Medical Device Group

Contact: Joseph Hamilton, Atty.

Project: I. P. Patent Infringement - Foley catheter securement device

Performed patent analysis, claim construction, prepared Expert

Declaration & Rebuttal Report, gave Deposition

Date: 2006 Client: Sanders Simpson Fletcher & Smith L.C.

Case: Ayers v. Lafayette Regional Health Center

Contact: Walter Simpson, Atty.

Project: Personal injury - central venous catheter

Performed consulting research, Product Failure Analysis, Expert Report

preparation and gave Deposition

Date: 2006 Client: Spencer Fane Britt & Browne LLP

Case: NOXID Limited Company, et al. v. Mallinckrodt Inc., et al.

Contact: Eric Solverud, Atty.

Project: Contract compliance for best efforts in product development - Solution

Warmer

Did product research, prepared Expert Report, gave Deposition

Date: 2006 Client: Mead & Mead

Case: Rohde v. Smiths Medical, et. al.

Contact: Katherine Mead, Atty.

Project: Personal Injury - Central line port

Performed consulting research on product failure

Date: 2005 Client: Knobbe Martens Olson & Bear LLP

Case: Applied Medical v. Synthion

Contact: Joe Jennings, Atty.

Project: I.P. – Patent Issues- Ligating clip applier

### Expert Report preparation, gave Deposition

Date: 2005 Client: Luvera Law Firm

Case: Singh v. Providence Health & Edwards Lifesciences

Contact: Joel Cunningham, Atty.

Project: Personal Injury- Thermal dilution catheter for cardiac output

Performed research & review of documentation, participated in Failure

Analysis, prepared Declaration

Date: 2003 Client: Tuverson & Hillyard

Case: Luzmilla v. Richard Allen Medical, Imagyn Medical Technology &

Conmed Corp.

Contact: Mario Iorillo, Atty.

Project: Personal Injury- Laparoscopic dissector/clip applier

Performed consulting research, gave Deposition and Testimony

Date: 2002 Client: Payne & Fears

Case Pelagalli v. Premier Laser & Collette Cozan

Contact: Mark Butler, Atty.

Project: I.P. Ownership issues – Laser for dental applications

Provided research, prepared Expert Report & Rebuttal Report

Date: 2001 Client: Levdig Voit & Mayer, Ltd.

Case: Pall Corporation v. Hemasure

Contact: Mark Phelps, Atty.

Project: I.P. – Patent Issues – Leukodepletion blood filter

Research, claim construction, prepared Expert Report, gave Declaration

Date: 1999 Client: Sanford Ehrmann, Esq.

Case: Cohen v. Abbott

Contact: Sanford Ehrmann, Atty.

Project: "Personal" Injury - Over-the-needle IV catheter

Failure Analysis, Expert Report, catheter in race horse

Date: 1997 Client: Jaman, Kahn & Associates

Case: Auzenne v. Park Davis Contact: Cori Steinberg, Atty.

Project: Personal Injury - Glass drug ampule

Product research, performed Risk Analysis, gave Deposition

## **Patents**

Patent Number	Date Issued	Title
8,522,839	2013	Adapters for use with an anesthetic vaporizer
8,033,306	2011	Adapters for use with an anesthetic vaporizer
7,784,504	2010	Adapters for use with an anesthetic vaporizer
6,669,092	2003	Display apparatus
6,440,110	2002	Apparatus and method for collecting blood from an umbilical cord
6,190,368	2001	Apparatus and method for collecting blood from an umbilical cord
5,993,429	2001	Apparatus and method for collecting blood from an umbilical cord
5,919,176	2001	Apparatus and method for collecting blood from an umbilical cord
RE34,599	1994	Disposable probe cover assembly for medical thermometer
D336,862	1993	Probe cover holder for medical thermometer
5,056,682	1991	Container for fan-folded sheets
4,911,559	1990	Disposable probe cover assembly for medical thermometer.
4,736,736	1988	Cervical traction assembly having head cradle w/ occipital shelf
4,283,289	1981	Blood filter for leukocytes
4,170,056	1979	Blood filter
4,157,967	1979	Blood filter

#### Education

Year	College/University	<u>Degree</u>
1972	University of Wisconsin, Madison, WI	MS, Mechanical Engineering
1971	University of Wisconsin, Madison, WI	BS, Mechanical Engineering

### **Publications / Presentations**

- 1. "Effective Strategic Alliances", Tech Coast Life Science Innovation Conference, September 28, 1999
- 2. "Effective Strategic Alliance Tactics", Tech Coast Life Science Innovation Conference, September 28, 2000, Irvine, CA.
- 3. "Strategies for Optimal Outsourcing Alliances", MD&M West 2001, January 9, 2001, Anaheim, CA.
- 4. "Winning Strategies for Commercialization", Tech Coast Life Science Innovation Conference, November 13, 2001, Irvine, CA.
- 5. "Seeing Green: Finding Money for Product Development" A Presentation for the 2002 Medical Design & Manufacturing Conference, Jan., 2002, Anaheim, CA.
- 6. "Running the Hurdles with NIH SBIR's" A Presentation for the 4th Annual NIH SBIR/STTR Conference, June 21, 2002, Bethesda, MD
- 7. "Running the Hurdles with NIH SBIR's", A Presentation for the 5th Annual Winter Conference, Association of University Research Parks, January 17, 2003, Newport Beach, CA
- 8. "NIH Grant \$ for Your Med Device/Biotechnology Project", Medcon, Conference for the Design and Manufacturing of Medical and Biotech Devices, April 28, 2004, Del Mar, CA
- 9. "NIH Grant \$ for your Nano-Biotechnology Project", A Presentation for the nanoSIG<sup>TM</sup> Forum, Commercial Applications in Nano-Bio Technology, February 26, 2004, San Diego, CA
- 10. "It's a risky world out there. Using Risk Management as a tool to ensure success in medical product design and development." A Presentation to the 2005 AOAC Two-Day cGMP Conference on Pharmaceuticals and Medical Devices, March 10 & 11, 2005, FDA Offices, Irvine, CA
- 11. "It's a risky world out there. Using Risk Management as a tool to ensure success in medical product design and development." A presentation for Medcon Expo April 28, 2005, Del Mar Fairgrounds, San Diego, CA
- 12. "Development of a new medical device for the efficient, safe and easy collection of umbilical cord blood." A presentation at the BIOCOM Medical Device Quarterly Event, August 11, 2005, San Diego, CA
- 13. "Risk Assessment: It's a Risky World out There" A presentation to the San Diego Regulatory Affairs Network, March 16, 2006, San Diego, CA

- 14. "Device & Diagnostic Development: Concept to Bedside" Panel member at the BIOCOM Medical Device Quarterly Event, October 22, 2008, San Diego, CA
- 15. "Risk Assessment: It's a Risky World out There" A presentation to a Masters Class at San Diego State University, April 2011, San Diego, CA
- 16. "Risk Assessment: It's a Risky World out There" A presentation to a Masters Class at the University of California, San Diego, August 2011, San Diego, CA
- 17. "Bioresorbable Polymers with Medical Devices A (Still) Emerging Field" A presentation to the Medical Device and Design West Conference, February 13, 2012, Anaheim, CA
- 18. "Cellect 250<sup>TM</sup>, The Safest, Fastest and Most Effective Umbilical Cord Blood Collection System" A presentation to National Heart, Lung, and Blood Institute Innovation Conference, June 11, 2013, San Diego, CA
- 19. "Secrets to a Successful Startup" a panel member at 30th anniversary MD&M West Conferences, February 11, 2015 in Anaheim, CA

### **Professional Associations and Additional Activities**

- Sr. Member, Society of Plastics Engineers (SPE), Medical Plastic Division
- Member, AAMI, Association for the Advancement of Medical Instrumentation
- Member, AABB, American Association of Blood Banks
- Member, AACC, American Association for Clinical Chemistry
- Member, American Filtration and Separations Society
- Member, BIOCOM, San Diego
- Member, The Designers Accord
- Member, SDRAN, San Diego Regulatory Affairs Network
- Served as a juror in the UBM/Cannon Medical Design Excellence Awards competition
- Served as a judge in a San Diego CONNECT Capital Competition for start-ups
- Advisor to Valley Center High School Computer Aided Design (CAD) program