

CURRICULUM VITAE

THOMAS E. SERENA, M.D. F.A.C.S. F.A.P.W.C.A. F.A.C.H.M.

BIRTHDATE: January 23, 1959

MARITAL STATUS: Married, Three Children

CELL: (814) 688-4000

E-Mail: serena@healingwounds.com

Web Site www.serenagroup.net

Home Address: 1390 Quaker Hill Rd.
Warren, PA 16365

EDUCATION:

The College of William & Mary 1977-82
P.O. Box 8795
Williamsburg, VA, 23187-8795
BS – Biology (Highest Honors)

The Penn State University 1982-86
School of Medicine
The Hershey Medical Center
500 University Drive
Hershey, PA. 17033
MD-degree

RESIDENCY:

The Hershey Medical Center 1986-91
Department of Surgery
Hershey, PA
(Administrative Chief – 1991)

SIU School of Medicine 1991-92
Department of Surgery, Division of Plastic & Reconstructive Surgery
(included burn unit)
Springfield, IL

SURGICAL PRACTICE:

Warren Surgeons, Inc. 1992-2002
General and Vascular Surgery
103 St. Clair Street
Warren, PA 16365

THE PENN NORTH CENTERS FOR ADVANCED WOUND CARE

Founder and Medical Director 1997-Present
Penn North Centers for Advanced Wound Care

Administrative Office,
311 Pennsylvania Ave. West
Warren, PA 16365
(814) 688-4000 (PHONE)
(814) 726-5731 (FAX)

WOUND CLINICS

Armstrong County Memorial Hospital 2004-present (Consulting)
The Snyder Institute
One Nolte Drive
Kittanning, Pennsylvania 16201

Bradford Regional Medical Center 2004-present (Consulting)
116 Interstate Parkway
Bradford, PA 16701-0281

Penn North Centers, Butler 2006-present (Private Office)
Brockley Building
99 West Sunbury Dr.
Butler, PA 16001

Grove City Medical Center 2006-present (Consulting)
631 N. Broad Street Ext.,
Grove City, PA 16127

Saint Vincent's Health System 232West25Street Erie, PA 16544	2002-present(Consulting)
Shriner's Hospital for Children-Erie 1645 W. Eighth St. Erie, PA 16505	2006-present (temporary)
Select Specialty Hospital-Erie 252 W 11th St, Erie, PA	2006-present (consulting)
Warren General Hospital 2 Crescent Park West Warren, PA 16365	1992-Present (consulting)
Westfield Memorial Hospital 185 E Main St Westfield, NY 14787	2006-present (consulting)

OXYGEN-8 HYPERBARIC OXYGEN CENTERS

Founder and Chief Medical Officer
Oxygen-8 Hyperbaric Medicine Centers.
Administrative Office
311 Pennsylvania Ave. West
Warren, PA 16365

Saint Vincent's Health System 232West25Street Erie, PA 16544	2004 -present
Warren General Hospital 2 Crescent Park West Warren, PA 16365	2008--present
Armstrong County Memorial Hospital One Nolte Drive Kittanning, PA. 16201	2008-present

New York Methodist 1 Prospect Park West Brooklyn, NY	2008-present
St. Johns Medical Center 1923 S Utica Ave Tulsa, OK 74104	2008-present
Scranton Community Medical Center 1800 Mulberry St. Scranton, PA 18510	2009-present

HEALING WOUNDS

Founder, Healing Wounds, providing care to patients in extended care facilities.

List of Facilities.

Absolut of Westfield
26 Cass St.
Westfield, NY 14787

Avalon Nursing Center
West Pittsburgh Rd.
New Castle, PA 16101

BelAir Nursing Home and Rehabilitation Center
100 Little Rd.
Lower Burrell PA 15068

Chicora Medical Center
160 Medical Center Rd.
Chicora, PA 16025

DuBois Nursing Home
82 North Park Pl
DuBois, PA 15801

Evergreen Nursing Home
191 Evergreen Mill Rd.
Harmony, PA 16037

Golden Living – Erie
2686 Peach St

. Erie, PA 16508

Golden Living - Western Reserve
1521 West 54th St
. Erie, PA. 16509

Jefferson Manor Health Center
RD #5, Box 42
Brookville, P A. 15825

Overlook Medical Clinic
520 New Castle Str.
New Wilmington, PA 16142

Pleasant Ridge Manor
8300 West Ridge Rd.
Girard, PA 16417

Presque Isle Rehab & Nursing Center
4114 Schaper Av.
Erie, PA 16508

Rouse Home
701 Rouse Av.
Youngsville, PA 16371

Sarah A. Reed Retirement Center
227 West 22nd St.
Erie, PA 16502

Saxony Health Center
223 Pittsburgh St.
Saxonburg, PA 16056

Sena-Kean Manor
Rt. 6 P.I.O. Box 3307
Smethport, PA 16749

Silver Oaks Nursing Center
715 Harbor St.
New Castle, PA 16101

St. Barnabas Nursing Home
5827 Meridian Rd.

Gibsonia, PA 15044

St. Paul Homes
339 E. Jamestown Rd
Greenville, PA 16125

Sugarcreek Rest
120 Lakeside Dr.
Worthington, PA 16262

Vincentian Home
111 Perrymont Av.
Pittsburgh, PA 15237

NEWBRIDGE MEDICAL RESEARCH

Founder and Scientific Director
(A non-profit (501(c) 3) research group
dedicated to the science of wound healing)

NewBridge Medical Research
311 Pennsylvania Ave West
Warren, PA 16365
(814) 688-4000

EXPERT WITNESS

I have served as an expert witness in numerous legal cases involving wound care. A list of firms is available on request. Detailed information can be found on my web site: www.serenagroup.net.

PRODUCT DEVELOPMENT CONSULTATION

I have been involved in product development in the wound care space for more than a dozen years. I have thorough knowledge of the unmet needs in wound care, clinical trial design for regulatory approval and reimbursement. Please visit my web site for further information on these consultation services, www.serenagroup.net.

ACADEMIC APPOINTMENTS:

Gannon University, Assistant Professor 1995-present
Lecturer and Research Coordinator
Physician Assistant Department
109 University Square
Erie, PA 16541-0001

INTERNATIONAL POSITIONS

CST Technologies
Director of Clinical Programs, China
International Board on Pain in Wound Healing

CERTIFICATION:

Board Certified in Surgery	1992	
Re-Certified in Surgery	2001	(Valid until 7/1/2012)
Certificate of Training for Medical Research	2003	
Certificate in Hyperbaric medicine	2004	

LICENSES:

Pennsylvania	MD038905E	valid until 12/31/10
New York	228580	valid until 12/10

FELLOWSHIPS:

Fellow American College of Surgeons	1995
Fellow American Professional Wound Care Association	2003
Fellow American College of Hyperbaric Medicine	2008

HONORS & AWARDS (William and Mary):

Alpha Lambda Delta
Freshman Honor Society
Sigma Chi

Biology Honor Society
Phi Beta Kappa, Alpha chapter

GYMNASTICS:

Eleven Time Individual State Champion
Team Captain 1981 & 1982
All American: Division 1 NCAA Gymnast 1982
William & Mary Scholar Athlete of the Year Award 1982
Qualified for Olympic Trials
Hall of Fame, William & Mary 1999

PRESENTATIONS: (College-Residency)

“The Neighborhood Size of the Parasitic Jewel Wasp (Nasonia Vitirpennis)” Highest Honors Presentation The College of William & Mary Williamsburg, VA	1982
“The Effect of Nadolol and Proarolol on Plasma Lidocaine Clearance.” Problem Solving Project Penn State University School of Medicine	1984
“Graves Disease: A Surgical Prospective” Hershey Surgical Society, Hershey, PA	1990
“My Trauma Experience and Myocardial Contusion at the Penn State School of Medicine.” Hershey Surgical Society, Hershey, PA	1991
“The Right Stuff, Nobel Prize Winning Surgeons” Hershey Surgical Society, Hershey, PA	1991
“Limited Arthrodesis for the SLAC Wrist Grand Rounds Presentation SIU School of Medicine Springfield, IL (Also presented at): Illinois Chapter of the American College of Surgeons Peoria, IL	1992

(Also presented at): Midwestern Association of Plastic Surgeons
Bismarck, ND

PUBLICATIONS

1. Serena, T.E., Gifford, RRRM, Neumyer, MM, Thiele, BL., Yang, H.O.:
"Identification of an Intimal Flap with Image-Directed Doppler
Ultrasonography following Renal Transplantation: J. Clin
Ultrasound 19:105-110, Feb. 1991
2. "Josephine," WILD ONIONS: 4:38-39, 1990
(Wild Onions is an annual Literature-In-Medicine publication)
3. "The Scoop on the Scope," Seniors Today, February 1998
4. "Totally Laproscopic Billroth I Gastrectomy in A Rural Community Hospital".
Thomas E. Serena, M.D., Robert H. McLaughlin, M.D., Gary L. McAfoos, M.D., Department of
Surgery, Warren General Hospital, Warren, Pennsylvania; SAGES SCIENTIFIC SESSION, March
1999.
5. "Laprosopic Repair of Para esophageal Hernia in a Rural Community Hospital" Robert H.
McLaughlin, M.D., Thomas E. Serena, M.D., Gary L. McAfoos, M.D., Department of Surgery,
Warren General Hospital, Warren, Pennsylvania; SAGES SCIENTIFIC SESSION, March 1999.
6. "The beneficial Effects of Becaplermin (rhPDGF-BB) in the Treatment of a Dehisced Surgical
Wound." Thomas E. Serena MD. Presented at The Wound Healing Society and European Tissue
Repair Society Meeting, August 1999, Bordeaux, France.
Published in *Wound Repair and Regeneration*. Volume 7 Issue 3 Page 131-195 May
1999.
7. "Graftskin Heals a Chronic Leg Ulcer Complicated by Osteomyelitis." Thomas E. Serena. MD
Presented at the 14th Annual Clinical Symposium on Wound Care. September 1999. Denver,
Colorado.
8. "The Use of Graftskin in The treatment of Diabetic Foot Ulcers Refractory to Standard
Treatment." Thomas E. Serena, MD; Carrie Corbran, CETN. Presented at the Society of Clinical
Vascular Surgery meeting in March 2000. Rancho Mirage, California.
9. "Becaplermin (rhPDGF-BB) in the treatment of a Chronic Vasculitic/Diabetic Neuropathic

Ulcer in a Patient with Rheumatoid Arthritis. Presented at the European Tissue Repair Society Meeting held in Brussels, Belgium, May 2000. Presented in the United States at the American Society of Hospital System Pharmacist meeting in Las Vegas Nevada 12/00.

Published in *Wound Repair and Regeneration*. Volume 8, Number 5 pp A432 September-October 2000.

10. A Comparison of Becaplermin Gel and Myocutaneous Flap Closure in the Treatment of Separate Pressures Ulcers in a Single Patient. Thomas E. Serena MD, Casey Miller PA-S. Presented at the Wound Healing Society meeting in Toronto Canada in June 2000.

Published in *Wound Repair and Regeneration*. Volume 8, Number 2. April 2000.

11 "Rapid Healing of Fingertip Injury Using Recombinant Human Platelet-Derived Growth Factor-BB (Becaplermin). Presented at the Wound Healing Society meeting in Toronto Canada in June 2000.

Published in *Wound Repair and Regeneration*. Volume 8, Number 2. April 2000.

12. Large, Recurrent Venous Leg Ulcers. A case Study. A teaching monograph published by Novartis Pharmaceuticals.

13 "The Beneficial Effect of Becaplermin (rhPDGF-BB) in the Treatment of Pilonidal cysts." Thomas E. Serena MD C. Corbran COWCN. Presented at the American College of Surgeons meeting in Chicago 10/00.

14."Gastric Bypass in a Community Setting: A Safe and Effective Means of Weight Loss for the Treatment of Clinically Severe Obesity." David Reidel, Thomas E. Serena MD, Jerry Glenn MD PhD, et al., Presented at the Southwestern Surgical Congress in Cancun, Mexico. May 2001.

15 "An Unusual Late Complication of Laproscopic Nissen Fundoplication: an intrawrap Herniation." Thomas E. Serena MD, Gary L. McAfoos MD. Presented at the Society of Gastrointestinal Endoscopic Surgeons meeting in St. Louis, MO. April 2001.

Published *Surgical Endoscopy* Volume 15, Number 1. ppS162. 2001.

16. "Laproscopic Celiac Plexus Neurolysis in a Patient with Intractable Pain Associated With Chronic Pancreatitis" Thomas E. Serena MD, Gary McAfoos MD. Presented at the Society of Gastrointestinal Endoscopic Surgeons meeting in St. Louis, MO. April 2001.

Published *Surgical Endoscopy* Volume 15, Number 1. ppS162. 2001.

17. "Esophageal Manometry Performed By Surgeons at a Rural Community Hospital." Thomas E. Serena MD, Sartaj Amed MS, Robert Pillitrere PAS, et. Al. Presented at The Society for Gastrointestinal Endoscopic Surgeons meeting in St. Louis, MO. April, 2001.

Published *Surgical Endoscopy* Volume 15, Number 1. ppS162. 2001.

18. "Bioengineered Skin (Apligraf) Facilitates Healing In Patients on Long Term Steroids. Thomas

E. Serena MD FACS C. Corbran COWCN. Presented at the Southwestern Surgical Congress in Cancun, Mexico. May 2001.

19. "The Use of Platelet-Derived Growth Factor-BB (Becaplermin) in the treatment of Fingertip Injuries increases the rate of healing and shortens time lost from work." In conjunction with Bruce Freedman MD. Submitted for publication to Plastic and Reconstructive Surgery.

20. "The Combination of Bioengineered Skin and The Subfacial Endoscopic Perforator Surgery (SEPS) results in rapid healing of Venous Stasis Difficult To Heal Venous Stasis Ulcers" Thomas E. Serena MD C. Corbran COWCN. Presented at the Wound Healing Society meeting in May 2001.
Published in *Wound Repair and Regeneration* Volume 9, Number 2. pp 162. March-April 2001.

21. "A Comparison of Becaplermin Gel and Myocutaneous Flap Closure in the Treatment of Two Separate Ischial Pressure Ulcers in the Same Patient" Thomas E. Serena MD, Carrie Corbran COWCN. Presented at the Wound Healing Society Meeting in May 2001.
Published in *Wound Repair and Regeneration* Volume 9, Number 2. pp 162. March-April 2001.

22. "Yersinia Enterocolitis presenting As Acute Appendicitis in a Three Year Old Amish Boy in Rural Northwest Pennsylvania. Michele Kauffman PA-C, Sarah Blazek PA-S, Cheri Zinger LPN, David McConnell, MD, Gary L. McAfoos MD, Thomas E. Serena MD.
Presented at the Pennsylvania Physician Assistant Annual Meeting. Philadelphia 2001.

23. The Use of Bioengineered Skin (Apligraf) To Treat a Complex Wound Created By Ecthyma Gangrenosum and the Persistence of Bioengineered Skin 10 Months after Application. Thomas E. Serena, Kristin Collins, C. Isaacs, J Hardin-Young, P. Bialas, C Corbran. Podium presentation at the Wound Healing Society. Baltimore, MD. May 2002.
Published in *Wound Repair and Regeneration* Volume 10, Number 2. pp 162. March-April 2002.

24. Incorporation of Bioengineered Skin (Apligraf) Into a Diabetic Foot Ulcer Treatment Protocol. TE Serena, S. Kostintinova, M Kauffman, C. Corbran, C. Serena, C. Zinger. Poster presentation at the Wound Healing Society meeting 2002. Baltimore, MD.
Published in *Wound Repair and Regeneration* Volume 10, Number 2. pp 162. March-April 2002.

25. The Use of Apligraf in the Healing of a Fasciotomy Site. Thomas E. Serena MD FACS. Oral presentation at the Focus group meeting of the European Tissue Repair Society, Nice, France. September 2002.

27. The Combination of Becaplermin (PDGF-BB) and The Oxidized Regenerated Cellulose (ORC)-Collagen Matrix Wound Dressing (Promogran) Results in Healing of a Dehisced Sternal Wound.

TE Serena MD. Presented The European Tissue Repair Society Meeting Amsterdam September 2003.

Published in *Wound Repair and Regeneration* Volume 11, Number 5. pp A19. September-October 2003.

28. The Use of Topical Growth Factors (Becaplermin, PDGF-BB) as an Adjunct to Incision and Curettage in the Treatment of Pilonidal Cysts. Thomas E. Serena MD FACS, Colleen Sterner PA-S. Poster Presentation 18th Clinical Symposium of Advances in Skin and Wound Care. Chicago. October 2003.

29. Wound Healing Morphology in an Acute Wound Healing Study T. Serena, on behalf of the Wound Healing Cooperative Group. Poster Wound Healing Society. May 2004. Atlanta, Georgia.

Published in *Wound Repair and Regeneration*. Vol. 12; No. 2 March-April 2004.

30. The Human Forearm Biopsy Model for Acute Wound Healing T. Serena, V. W. Li, W. W. Li, on behalf of the Wound Healing Cooperative Group. Podium presentation Wound Healing Society. May 2004. Atlanta, Georgia.

Abstract published in *Wound Repair and Regeneration*. Vol. 12; No. 2 March-April 2004.

31. The Importance of Arm Dominance in Acute Wound Healing T. Serena, on behalf of the Wound Healing Cooperative Group. Poster presentation Wound Healing Society. May 2004. Atlanta, Georgia. P

Published in *Wound Repair and Regeneration*. Vol. 12; No. 2 March-April 2004.

32. The Upregulation Of Wound Healing Related Genes In Venous Ulcerations Treated With Apligraf, a Possible Mechanism of Action T.E. Serena, C. Finley. Poster presentation Wound Healing Society. May 2004. Atlanta, Georgia.

Published in *Wound Repair and Regeneration*. Vol. 12; No. 2 March-April 2004.

33. The Use of Cilostazol in the Treatment of Raynaud's Disease with Digital Ischemia and Tissue Loss. T. Serena, J. Probst. Podium presentation Wound Healing Society May 2004. Atlanta, Georgia.

Published in *Wound Repair and Regeneration*. Vol. 12; No. 2 March-April 2004.

34. Studies of growth factor therapy for acute wound healing in the human forearm biopsy model.

Thomas E. Serena MD, FACS and Vincent W. Li MD, on behalf of the Wound Healing Cooperative Group (WHCG), and Kevin Briceland PA-S Kate Eckert PA-S Sheila Payne PA-S. William W. Li MD. presentation to the SAWC meeting. Orlando May 2004.

Published in *WOUNDS*. Vol.16, No.4. April 2004.

35. An increased incidence of depression in patients with venous leg ulcerations: subgroup analysis from a recent multi-center clinical trial. Sartaj Ahmed MS-IV Mark Beuger MD, Thomas E. Serena MD, FACS, Tamara Orr, PA-S, Presented at the SAWC meeting Orlando, May 2004.

Published in *WOUNDS*. Vol.16, No.4. April 2004.

Winner Young Investigator's award.

36. The incidence of biopsy-proven infection in patients with venous leg ulcerations; subgroup analysis from a large multi-center clinical trial. Thomas E. Serena MD FACS Diane Cooper PhD Jason Ignatius. Presentation 2nd World Union of Wound Healing Societies. Paris, France. July 2004.
37. Serena TE. Effect of Extensive Debridement and Treatment on the Healing Diabetic Foot Ulcers. *Foot and Ankle Quarterly* Volume 16, Number 2. pp 72-74. Summer 2004
38. Serena TE. Bacteria, Infection and Topical Antimicrobials in Chronic Wounds. *Podiatry Management* July 2004.
39. Healing of Chronic Venous Ulcers Is Not Enhanced by the Addition of Topical Repifermin (KGF-2) to Standardized Care. Martin C. Robson, MD, Jason Hanfnt, DPM, Warren Garner, MD, JeffreyJenson, DPM, Thomas Serena, MD, Wyatt G. Payne, MD, AnthonySussman, MD, Adrian Barbul, MD, Markete Limova, MD, Robert Snyder,DPM, Daniel J. Odenheimer, PhD, Diane M. Cooper, PhD,KGF-2 Venous Ulcer Study Group. *Journal of Applied Research* Volume 4, Number 2. pp 302-312.
40. Ongoing Debridement Using an Interactive Debriding Agent. Elizabeth O'Connell-Gifford RN,CWOCN, Thomas E. Serena MD FACS. *Synergy* Vol. 1. Issue 3. pp.8. Spring-Summer 2004.
41. Planned Serial Debridement. Thomas E. Serena MD FACS. *Synergy* Vol. 1. Issue 3. pp. 11. Spring-Summer 2004.
42. A New Electronic Wound Measurement Device in Clinical Practice: Is it Practical? Thomas E. Serena MD FACS *, David Serena, Nissar Ahmed, Jamie Peterson. Poster presentation Symposium on Advances in Skin and Wound Care. Phoenix, AZ. September, 2004.
43. Dynamics Of Acute Wound Healing Following Topical rhPDGF-BB Therapy. V. Li on behalf of the Wound Healing Cooperative GroupV Driver, W Ennis, R Kirsner, V Li, W Li, T Serena Wound Healing Cooperative Group, The Angiogenesis Foundation, Cambridge, MA USA Presented at the American Academy of Dermatology, 2005.
44. Featured Article "Becalermin Beat Bacitracin In Wound Healing Study" Kerri Wachter. *Dermatologic Therapy*. A review of my research with becaplermin and acute wound healing.
45. Dynamics of Acute Wound Healing Following Topical PDGF-BB Therapy. Vincent Li, Jeffery Ma,Yeuh Jo Ko, Thomas Serena et. al. *J AmAcad Derm*. Vol. 53. Number 3. Jan 2005.
46. Recombinant Human Lactoferrin (rhLF) ay Promote Healing of Diabetic Neuropathic Ulcers. Ernest W. Yankee, Michael Miller, Thomas Serena, Peter Sheehan, et.al. Presented at the American Diabetic Association meeting 2005.

47. The Use of Apligraf in the Reconstruction of a Complex Abdominal Wound in a Patient with Hepatic Failure. Thomas E. Serena MD FACS, Sartaj Ahmed MS-4, Michele Kaufman PA-C, JD Presented at the Symposium on Advanced Wound Care, San Diego, and CA. April 2005.

Published in *WOUNDS* vol. 17: 4 April 2005.

48. Does the Long-Term Use of a Silver Gel Result In Silver-Resistant Organisms in Clinical Practice? Thomas E. Serena MD FACS, Cynthia E. Serena SC, Cris Beuger MPH. Presented at the Symposium on Advanced Wound Care, San Diego, and CA. April 2005.

Published in *WOUNDS* vol. 17: 4 April 2005.

49. Studies of a Novel Wound Healing Agent, Bismuth Subgallate/Borneol (SSWD), for Acute Wound Healing in the Human Forearm Biopsy Model. Thomas E. Serena MD, FACS*, Carrie Knox PA-C*, Kristen Shay PA-S*, Mike Wilt PA-S,* Melissa Brown PA-S,* Tami Hyziewicz PA-S,* Laura K.S Parnell, x Vincent Li, MD MBA,¹ Michael Miller DO £. §Penn North Centers for Advanced Wound Care/NewBridge Medical Research, * Gannon University, Erie, Pennsylvania, x Parnell Precision Consulting, Missouri City, £ Wound Healing Center, Terre Haute, IN, ¹Brigham and Women's Hospital and the Angiogenesis Foundation. Presented at the Symposium on Advanced Wound Care, San Diego, and CA. April 2005.

Abstract Published in *WOUNDS* vol. 17: 4 April 2005.

Manuscript:

Bismuth Subgallate/Borneol (Suile) Is Superior to Bacitracin in the Human Forearm Biopsy Model for Acute Wound Healing. Thomas Serena , Laura Parnell , Carrie Knox , Julia Vargo , Amanda Oliver , Sarah Merry , Andrew Klugh , Nicole Bubar , Neil Anderson , Lynn Rieman , Wade Walnoha , Holly Smith , Samantha Rice *Adv Skin Wound Care*. 2007 Sep; 20 (9):485-492 17762217

50. The Combination of PDGF-BB and ORC/Collagen heals a Complex Lower Extremity Stingray Injury .Thomas E. Serena MD FACS, Michele Kaufman PA-C, JD Rose Konsel CWOCN, Presented at the Symposium on Advanced Wound Care, San Diego, CA. April 2005.

Published in *WOUNDS* vol. 17: 4 April 2005.

51. A New Silver Alginate with Greater Contribution to Wound Bed Preparation.

Thomas E. Serena MD FACS†, Dorthy M Weir, RN*

Presented at the Symposium on Advanced Wound Care, San Diego, CA. April 2005.

Published in *WOUNDS* vol. 17: 4 April 2005.

52. Apligraf Reduces Pain Associated With Venous Leg Ulcerations: Data From an Ongoing Randomized, Open Label, Multi-Center Study Sartaj Ahmed MS-4§ Thomas E. Serena MD, FACS*, Cris Beuger MPH§, Cynthia E. Serena SC§, Vincent Li, MD MBA,¹ Michael Miller DO £, Michele Kauffman PA-C, JD*

Presented at the Symposium on Advanced Wound Care, San Diego, CA. April 2005.

Published in *WOUNDS* vol. 17: 4 April 2005.

53. The Use of an Electronic Measuring Device to Measure Wound Area in Clinical Trials. Cris Beuger MPH, Sartaj Ahmed MS-4 Thomas E. Serena MD FACS. Presented at the Symposium on Advanced Wound Care, San Diego, CA. April 2005.

Published in *WOUNDS* vol. 17: 4 April 2005.

54. A Novel Fetal Bovine Dermal Matrix Scaffold is Rapidly Incorporated into Animal and Human Wounds Resulting in Wound Bed Stimulation.

Presented at the Symposium on Advanced Wound Care, San Diego, CA. April 2005.

Published in *WOUNDS* vol. 17: 4 April 2005.

55. Interval Analyses of a Randomized Open Label Multi-center Study Comparing Apligraf vs. Standard Multilayer Compression in the Reduction of Pain Associated with Venous Leg Ulcerations. T. Serena* and V.W. Li § on behalf of the Wound Healing Cooperative Group. Presented as a poster at the Wound Healing Society Meeting. Chicago, IL. May 2005

Published in *Wound Rep and Regen* Vol. 13: no. 2. March-April 2005.

56. The Treatment of Venous Leg Ulcerations with a Novel Fetal Bovine Dermal Collagen matrix with a Comparison to Pre-clinical Animal Studies. T. Serena 1, D. Steed 2 NewBridge Medical Research and Penn North Centers for Advanced Wound Care, Warren, PA; 2 Wound Healing and Limb Preservation Clinic, University of Pittsburgh Medical Center, Pittsburgh, PA.

Presented as a poster at the Wound Healing Society Meeting. Chicago, IL. May 2005

Published in *Wound Rep and Regen* Vol. 13: no. 2. March-April 2005.

57. Apligraf Heals a Recalcitrant Pressure Ulcer of 28 years Duration. T. Serena, F. York, V. Hindman. Presented as a poster at the Wound Healing Society Meeting. Chicago, IL. May 2005

Published in *Wound Rep and Regen* Vol. 13: no. 2. March-April 2005.

58. Bismuth Subgallate/Borneol (Suile) vs. Bacitracin in The Human Forearm Biopsy Model for Acute Wound Healing. T. Serena 1, 2, 3 and V.W. Li 2 on behalf of the Wound Healing Cooperative Group; L.K.S. Parnell 4, M. Miller 5, K. Shay 3, M. Brown 3, M. Wilt 3.

1 NewBridge Medical Research and Penn North Centers for Advanced Wound Care, Warren, PA; 2 Wound healing Cooperative Group, The Angiogenesis Foundation, Cambridge, MA 3 Gannon University, Erie, PA; 4 Precision Consulting, Missouri City, TX; 5 The Wound Healing Center, Terre Haute, IN. Presented as a poster at the Wound Healing Society Meeting. Chicago, IL. May 2005

Abstract Published in *Wound Rep and Regen* Vol. 13: no. 2. March-April 2005.

Full manuscript: Serena, Thomas MD, FACS; Parnell, Laura K.S. MS, CWS; Knox, Carrie PA-C; Vargo, Julia PA-S; Oliver, Amanda PA-S; Merry, Sarah PA-S; Klugh, Andrew PA-S; Bubar, Nicole PA-S; Anderson, Neil PA-S; Rieman, Lynn PA-S; Walnoha, Wade PA-S; Smith, Holly PA-S; Rice, Samantha PA-S. Bismuth Subgallate/Borneol (Suile) Is Superior to Bacitracin in the Human Forearm Biopsy Model for Acute Wound Healing. *Advances in Skin & Wound Care*. 20(9):485-

492, September 2007.

59. A New Technology to Address the Ever-Changing Wound Microenvironment. T. Serena MD FACS. *WOUNDS*. August 2005.

60. A Randomized Clinical Trial to Evaluate the Ease of Donning and Removal of Silver-Coated Elastic Compression Stockings Compared to Standard Stockings.
Poster presentation European Tissue Repair Society Meeting. Stuttgart, Germany. September 2005.

61. Negative Pressure Wound Therapy: An option for hard-to-heal Wounds. Michael Miller, Marta Ortegon, Cheryl McDaniel and Thomas Serena. *Nursing Homes: Long Term Care management*. Vol. 55, No.1. January 2006.

62. The Use of Bi-layered Cell Therapy in the Treatment of a Hand Mitten Deformity in Recessive Scarring Epidermolysis Bullosa T. Serena.
Presented at 2006 Symposium of Advanced Wound Care, San Antonio TX. April 2006.

63. The use of clothing containing silver fibers in the treatment of patients with Epidermolysis Bullosa. T. Serena, L. Navarolli
Presented at 2006 Symposium of Advanced Wound Care, San Antonio TX. April 2006

64. The Use of Topical PDGF-BB for the Treatment of a Complex Scrotal Wound, T. Serena
Presented at 2006 Symposium of Advanced Wound Care, San Antonio TX. April 2006

65. The Use of Ultrasonic Therapy in a Painful Burn Wound
T. Serena, J. Lasko, M. Shannon.
Presented at 2006 Symposium of Advanced Wound Care, San Antonio TX. April 2006

66. Gene Chip Analysis of Venous Leg Ulcerations before and After Treatment with Bi-Layered Cell Therapy. Wound Healing Society Lunch Symposium. May 2006.

67. A Case for Empiric Therapy for Chronic Wound Infection. Thomas e. Serena MD FACS
Closure: The Newsletter for Wound Care Clinic Practitioners. June 2006 issue.

68. A Prospective, Randomized, Controlled Trial of Autologous Platelet-Rich Plasma Gel for the Treatment of Diabetic Foot Ulcers Vickie R. Driver, DPM, MS, FACFAS; Jason Hanft, DPM, FACFAS; Carelyn P. Fylling, RN, MSN; Judy M. Beriou, RN, Margaret Do u cet te, DO ; Mich ael Dellacorte, DPM; Robert Fryk berg, DPM; G a briel Ha l peri n , DPM; Robert Kirsner, MD;Mi ch ael Mi ll er,DONeal Mozen, DPM; Jeffrey Pa ge , DPM; Al ex a n der Rey zelman, DPM; Thomas Ro u k i s , DPM; Roger Schech ter, MD; Th omas Seren a , MD; Ji n sup Son g, DPM; and Robert

Snyder, DPM. *Ostomy/Wound Management* 2006;52 (6):68–87.

69. Lack of Reliability of Clinical/Visual Assessment of Chronic Wound Infection: The Incidence of Biopsy-Proven Infection in Venous Leg Ulcers. Serena TE, Robson MC, Cooper DM, Ignatius J. *WOUNDS* 2006; 18(7): 197-202.

70. Evaluation of the Clinical Effectiveness of a Collagen-ORC Antimicrobial Matrix in Venous Leg Ulcerations J.R. Hanft, T. Serena, R. Snyder Podium presentation. European Tissue Repair Society annual scientific meeting. Pisa, Italy. September 14, 2006.

71. Hidden Healing: Restoring the Wound micro Environment. CME Publication. Distributed in *WOUNDS* 2006;

72. Guidelines for the treatment of diabetic ulcers. David L. Steed MD, Christopher Attinger MD, Theodore Colaizzi CPed, COF, Mary Crossland RN, Michael Franz MD, Lawrence Harkless DPM, Andrew Johnson BS, Hans Moosa MD, Martin Robson MD, Thomas Serena MD, Peter Sheehan MD, Aristidis Veves MD, Laurel Wiersma-Bryant RN, BC, ANP. (2006) *Wound Repair and Regeneration* 14 (6), 680–692.

73. Guidelines for the treatment of venous ulcers. Martin C. Robson MD, Diane M. Cooper PhD, RN, Rummana Aslam MD, Lisa J. Gould MD, PhD, Keith G. Harding MBChB, MRCGP, FRCS, David J. Margolis MD, MSCE, PhD, Diane E. Ochs RN, Thomas E. Serena MD, Robert J. Snyder DPM, David L. Steed MD, David R. Thomas MD, Laurel Wiersma-Bryant RN, BC, ANP (2006) *Wound Repair and Regeneration* 14 (6), 649–662.

74. Addressing the Pain. Thomas Serena MDFACS, Becky Fry CWOCN *OWM* December 2006.

75. The Use of a Silver Calcium Alginate in the Treatment of Burns. Podium presentation. North American Burn Society meeting. Vail, CO. January. 2007.

76 Talactoferrin alfa, a recombinant human lactoferrin promotes healing of diabetic neuropathic ulcers: a phase 1/2 clinical study. Thomas E Lyons , Michael S Miller , Thomas Serena , Peter Sheehan , Lawrence Lavery , Robert S Kirsner , David G Armstrong , Amber Reese , Ernest W Yankee , Aristidis Veves *Am J Surg.* 2007 Jan ;193 (1):49-54 17188087

77. Bismuth Subgallate/Borneal (suile) vs. Acticoat 3 in the Human Forearm Biopsy Model for Acute Wound Healing. Serena TE, Parnell, L, et. al. Podium presentation Wound Healing Society annual meeting. Tampa, FL. April 30, 2007.

Abstract published in *Wound Repair and Regeneration*

78. Maxorb Ag a Novel Treatment for Pediatric Burns. Serena TE., Zinger, C., Kauffman M., Poster presentation. Symposium of Advanced Wound Care. Tampa, FL. April 2007.

79. A New Silver Alginate with Greater Contribution to Wound Bed Preparation. Serena TE., Zinger, C., Kauffman M., Poster presentation. Symposium of Advanced Wound Care. Tampa, FL. April 2007.

80. Wound Closure and Gradual Involution of an Infantile Hemangioma Using a Noncontact, Low-frequency Ultrasound Therapy. Serena, TE. *Ostomy and Wound Management* 2008; 54 (2):68-71.

Awarded best poster Symposium on Advanced Wound Care. April 2008.

81. The Lack of Reliability of Clinical Examination in the Diagnosis of Wound Infection: Analysis of a Venous Leg Ulcer Clinical Trial. Serena TE, Hanft J., Synder R., *International Journal of Lower Extremity Wounds*.

82. Wound Related Pain: The patient experience. Serena, TE, Podium presentation. Symposium on Advanced Wound Care annual meeting. San Diego, CA. April, 2008.

83. The Successful Use of a Novel Antimicrobial Silver Fabric Dressing in Combination with Negative Pressure Wound Therapy in the Treatment of Stage III and IV Pressure Ulcers. Serena TE, Poster presentation. Symposium on Advanced Wound Care annual meeting. San Diego, CA. April, 2008.

84. Is the Incidence of Skin Cancer in Venous Leg Ulcerations Overestimated?: Subgroup Analysis from Two Multi-Center Clinical Trials. Serena TE et. al. Poster presentation. Symposium on Advanced Wound Care annual meeting. San Diego, CA. April, 2008.

85. Bismuth Subgallate/Borneol (Suile) Results in Less Scarring then A Topical Antimicrobial: Follow up analysis of a randomized clinical trial. Serena TE. et. al. Poster presentation. Symposium on Advanced Wound Care annual meeting. San Diego, CA. April, 2008.

86. Bismuth Subgallate/Borneol (Suile) is well tolerated in the Treatment of Diabetic Foot Ulcerations. Serena TE. et. al. Poster presentation. Symposium on Advanced Wound Care annual meeting. San Diego, CA. April, 2008.

87. The Efficacy of Bismuth Subgallate/Borneol (Suile) in the Treatment of Partial Thickness Wounds in the Skilled Nursing Setting. Serena TE. et. al. Poster presentation. Symposium on Advanced Wound Care annual meeting. San Diego, CA. April, 2008.

88. Clinical Assessment is Inaccurate and Unreliable in Making the Diagnosis of Infection in Chronic Wounds: Analysis of Two Randomized Clinical Trials. . Serena TE. et. al. Poster presentation. Symposium on Advanced Wound Care annual meeting. San Diego, CA. April, 2008.

89. Cryopreserved Bi-Layered Cellular Matrix (Orcel) is Superior to Standard of Care in the

Treatment of Venous Ulcers: Results of a Prospective, Randomized, Controlled, Multi-Center Clinical Trial. Serena TE on behalf of the Orcel Study Group. Podium presentation. Wound Healing Society annual meeting. San Diego, CA. April 2008.

Abstract publication:

Cryopreserved Bi-Layered Cellular Matrix (Orcel) is Superior to Standard of Care in the Treatment of Venous Ulcers: Results of a Prospective, Randomized, Controlled, Multi-Center Clinical Trial. Serena TE on behalf of the Orcel Study Group. Serena TE. on behalf of the Orcel Study Group. *Wound Repair and Regeneration* 16 (2), A22.

90. Guidelines for the prevention of diabetic ulcers. David L. Steed, MD; Christopher Attinger, MD; Harold Brem, MD; Theodore Colaizzi, CPed, COF; Mary Crossland, RN; Michael Franz, MD; Lawrence Harkless, DPM; Andrew Johnson, BS; Hans Moosa, MD; Martin Robson, MD; Thomas Serena, MD; Peter Sheehan, MD; Aristidis Veves, MD; Laurel Wiersma-Bryant, RN, BC, ANP *Wound Repair and Regeneration*, Volume 16, Issue 2, Page 169-174, Mar 2008,

91. Guidelines for the prevention of venous ulcers. Martin C. Robson, MD; Diane M. Cooper, PhD, RN; Rummana Aslam, MD; Lisa J. Gould, MD, PhD; Keith G. Harding, MBChB, MRCP, FRCS; David J. Margolis, MD, MSCE, PhD; Diane E. Ochs, RN; Thomas E. Serena, MD; Robert J. Snyder, DPM; David L. Steed, MD; David R. Thomas, MD; Laurel Wiersema-Bryant, RN, BC, ANP *Wound Repair and Regeneration*, Volume 16, Issue 2, Page 147-150, Mar 2008.

92. Bismuth Subgallate/Borneol (Suile) Results in less Scarring than a Topical Antimicrobial in the Human Forearm Biopsy Trial for Acute Wound Healing. Thomas E. Serena MD, Michelle Kauffman PA-C JD. Poster presentation and Podium Presentation., 2nd Scar Meeting. Montpieller France. September 25, 2008.

93. The Impact of Noncontact, Non-thermal, Low-Frequency Ultrasound on Bacterial Counts in Experimental and Chronic Wounds. Thomas Serena MD FACS; S. Kwon Lee MS FACS et. al. *Ostomy Wound Management* 209;55(1):22-30.

94. The Sound of Healing. Jeff Lasko MPT, Joe Kochik PTA, Thomas Serena MD. *ADVANCE for Physical Therapists & PT Assistants* July 13, 2009 edition, Volume 20 Issue 14.

95. Persistence of Bi-Layered Living Cell Therapy 10 Months after Application: A Case Report. TE Serena, P Bialas. *Ostomy Wound Management*. 2009;55(10) pp.

96. *Podiatry Today*

ON-LINE COURSES

Wound Care Boot Camp

2009

EDITORIAL BOARDS

International co-editor Chinese Journal of Burn and Wound Care.
Editor, European Journal of Wound Management

2006-present

2010-present

EDITOR

Archives of Dermatology

Wound Repair and Regeneration

CLINICAL TRIAL EXPERIENCE:

Clinical Trial Training

- Certificate of Training for Medical Research July 2003 (WIRB)
- NIH certification on-line 2004
- Certificate in Site Operations and SOPs August 2005 (WIRB)
- University of Pittsburgh Medical Center. Certification in Good Clinical Practices
- IBC Approval for biosafety level 2 trials. 2008
- Sanofi-Aventis GCP Training 2008.

Clinical Trials

1. Principle Investigator, CLOSURE Trial

A Randomized Double-Blinded Parallel-Group Placebo-Controlled, Multicenter Study To Evaluate The Efficacy And Safety Of Repifermin (KGF-2) In Subjects With Venous Stasis Ulcers. Closed November 2002. Third highest enrollment in United States.

2. Principle Investigator, VER001-5 Trial

Phase II Pilot, Randomized, Open Label, Multi-center Study to Evaluate the Safety and Efficacy of Dalbavancin (V-Glycopeptide) Versus Investigator/Physician Designated Comparator in Skin and Soft Tissue Infection. Closed May 2002. Highest enrollment in United States.

3. Principle Investigator' Phase III Study of Tamoxifen versus Toremifene as Adjuvant Therapy for Women with Carcinoma of the Breast. Completed and closed May 2002.

4. Principle Investigator. US-09.

The Mechanistic Action of Apligraf vs. Compression in the Treatment of Venous Leg Ulcerations. Closed in September 2002.

5. Principle Investigator, VER001-8 Phase III Trial

Phase III, Randomized, Double-Blind, Multi-Center Study to Evaluate the Safety and Efficacy of Dalbavancin versus Cephazolin in the Treatment of Uncomplicated Skin and Soft Tissue Infections with Suspected or Confirmed Gram-Positive Bacterial Pathogens Completed and Closed.

6. Principle Investigator, VER001-9 Phase III Trial

Phase III, Randomized, Double-Blind, Multi-Center Study to Evaluate the Safety and Efficacy of Dalbavancin Versus Linezolid in the Treatment of Complicated Skin and Soft Tissue Infections with Suspected or Confirmed Gram-Positive Bacterial Pathogens. Completed and Closed.

7. Lead Investigator and Protocol Author, Wound Healing Cooperative Group Protocol 03001

A Randomized Open Label Multi-center Study to Evaluate the Safety and Efficacy of Combination therapy with Becaplermin (PDGF-BB) and Oxidized Reduced Cellulose (ORC) versus Standard Multilayer Compression in the Treatment of Venous Leg Ulcerations. Closed.

8. Lead Investigator and Protocol Author, the Wound Healing Cooperative Group 03002

A Randomized, Investigator-Blind, Pilot Study to Evaluate the Efficacy of Topical Bacitracin and Becaplermin at Different Dosing Frequencies in Acute Wound Healing in Normal Healthy Volunteers. Completed and closed.

9. Principle Investigator.

Treatment of Diabetic Foot Ulcers with a Protease Inhibitor, Doxycycline. University of Florida. Closed.

10. Principle Investigator

Phase 2 Study of Safety and Efficacy of Topical Administration of Recombinant Human Lactoferrin to Patients with Lower Extremity Diabetic Neuropathic Ulcers. Completed and Closed.

11. Protocol Author and Lead Investigator.

The Determination of Persistence of Apligraf in Chronic Wounds using Polymerase Chain Reaction Technology. Completed and Closed.

12. Protocol Author and Lead Investigator.

A Randomized, Open Label, Multi-center Study to Evaluate Apligraf versus Standard Multilayer Compression in the Reduction of Pain Associated with Venous Leg Ulcerations. Completed and Closed.

13. Protocol Author and Lead Investigator

A Randomized, Investigator-Blind, Pilot Study to Evaluate the Efficacy of Topical Sulbogin / SUILE (Ointment) vs. Bacitracin in Acute Wound Healing in Normal Healthy Volunteers. Completed and Closed.

14. Protocol Author and Lead Investigator

Sulbogin/ SUILE (Ointment) Wound Dressing in the Treatment of Wagner Grade II Diabetic Foot Ulcerations. Completed and Closed.

15. Principle Investigator

A Randomized, Blinded Assessor, Placebo Controlled Study of NVC-101 in the Treatment of Chronic Non-Healing Venous Stasis Ulcers. Completed and Closed.

16. Protocol Author and Principle Investigator

A Randomized, Investigator-Blind, Study to Evaluate the Safety and Efficacy of Topical Sulbogin / SUILE (Ointment) vs. Acticoat in Acute Wound Healing in Normal Healthy Volunteers. Completed and closed 2005.

17. Principle Investigator

A prospective Randomized, Controlled Pivotal Study of Apligraf for the Treatment of Pressure Ulcers. Completed and closed 2006.

18 Principle Investigator

A Study to Evaluate the Clinical Effectiveness of a Collagen ORC Antimicrobial Matrix (CAM) in Venous Leg Ulcers. Completed and closed. 2005.

19. Principle Investigator

A Study to Evaluate the Clinical Effectiveness of a Collagen-ORC Antimicrobial Matrix in Full-thickness, Neuropathic Diabetic Foot Ulcers. Completed and Closed.

20. Principle Investigator

A Prospective, Randomized, Controlled, Blinded, Multi-center Pivotal Trial of AutoloGelSM Versus Control When Added to the Standard of Care in the Treatment of Non-healing Diabetic Non-healing Foot Ulcers. Completed and Closed.

21. Protocol Author and Principle Investigator.

A Randomized Clinical Trial to Evaluate the Ease of Donning and Removal of Silver-Coated Elastic Compression Stockings Compared to Standard Stockings. Unrestricted Educational Grant from Juzo. Completed and Closed..

22. Principle Investigator

A Confirmatory Study to evaluate the safety and Efficacy of Cryopreserved Bilayered Cellular Matrix (Orcel) for the Treatment of Venous Leg Ulcerations. PROTOCOL 100-VLU-02-CLN. Completed and Closed.

23. Principle Investigator

A Comparative Prospective, Randomized, Double-Masked, Parallel Group, Sham-Controlled Trial of MIST Therapy for the Reduction of Pain in Chronic Lower Extremity Ulcers. Completed and

Closed.

24. Principle Investigator.

A Prospective, Randomized, Controlled, Unmasked, Multiple Treatment, Multi-Center Clinical Trial to Evaluate the Efficacy and Safety of an Interactive Wound Dressing Containing Cultured Keratinocytes versus Conventional Wound Therapy for the Treatment of Diabetic Foot Ulcers. Open

25. Principle Investigator

Randomized Study Using Yamax Digi-Walker™ Pedometers to Evaluate Activity Levels (Steps) in Healthy Volunteers. Gannon University Grant. Completed and Closed.

26. Principle investigator

A Multi-center, Randomized Study of the Safety and Preliminary Efficacy of Topical Low Dose Nicotine Gel (AT G002) in Patients with PLANTAR Diabetic Foot. Closed.

27. Principle Investigator.

A Multi-Center, Double-Blind, Randomized, Parallel, Vehicle- and Standard Care-Controlled, Dose-Ranging Study Assessing the Safety and Efficacy of MRE0094 Gel When Applied Topically for 90 days to Subjects with Diabetic, Neuropathic, Foot Ulcers” Closed

28. Principle Investigator. RS03-2004

Pivotal Study to Evaluate the Efficacy and Safety of Dermal – Living Skin Replacement (Dermal – LSR) in the Treatment of Chronic Diabetic Foot Ulcers. Completed and Closed.

29. Principle Investigator. CVBT-W2005-01

A Phase 1, Open Label, Dose Response, Pilot Study to Evaluate the Safety and Tolerability of Human Fibroblast Growth Factor-1 (FGF-1) in Patients with Diabetic or Venous Stasis Ulcers” Completed and Closed.

30. Principle Investigator. 02-VLU-003

A Prospective, Multi-Center, Double Blind, Randomized, Placebo Controlled Trial to Evaluate the Safety and Efficacy of ICXP007 in a Phase III Trial with Four-Layer Therapeutic Compression, for the Treatment of Non Infected Skin Leg Ulcers, due to Venous-Insufficiency. Completed.

31. Principle and Lead Investigator

A Sub-study to determine Persistence of bioengineered skin. Adjunct to A Prospective, Multi-Center, Double Blind, Randomized, Placebo Controlled Trial to Evaluate the Safety and Efficacy of ICXP007 in a Phase III Trial with Four-Layer Therapeutic Compression, for the Treatment of Non Infected Skin Leg Ulcers, due to Venous Insufficiency. Closed 2/5/09.

32. Principle Investigator Protocol Number: Cell08-01

A Prospective Evaluation of the Effects of MIST Therapy® on Bacteria Reduction in Pressure

Wounds. Completed and Closed.

33. Principle Investigator.

A Randomized, Double-Blind, Placebo-Controlled, Dose-Response Study of the Safety and Efficacy of Thymosin Beta 4 in the Treatment of Patients with Pressure Ulcers.

Phase I/II Dose escalation. Completed and Closed.

34. Principle Investigator.

A Randomized, Double-Blind, Placebo-Controlled, Dose-Response Study of the Safety and Efficacy of Thymosin Beta 4 in the Treatment of Patients with Epidermolysis bullosa.

Open.

35. Principle Investigator PUMA

Open, non-comparative, multi-centre investigation evaluating the effect of an absorbent foam dressing containing silver (Mepilex Ag) when used in chronic ulcers.(PUMA) Completed and Closed.

36. Principle Investigator (United States organizer).

International Pain Survey of patients with chronic wounds. Closed and completed.

37. Principle Investigator (Gene Therapy Trial)

A Randomized, Double-Blind, Placebo-Controlled, Single- and Double-Dose, Comparator Arm (Standard of Care), Multicenter Phase 2b Study of Topical GAM501 (Ad5PDGF-B/bovine type I collagen gel) in the Treatment of Non-Healing Diabetic Ulcers of the Lower Extremity. Open.

38. Principle Investigator (FC6145-TAMARIS)

A randomized Double-Blind Placebo-Controlled Parallel Group Study of the Efficacy and Safety of Four Administrations of XRP0038/NV1FGF 4mg at Two Week Intervals on Amputation or Any Death in Critical Limb Ischemia Patients with Skin Lesions. Open

39. Principle Investigator

The Mechanism of Action of Unite™ Biomatrix in Diabetic Foot Ulcers. Open.

40. Principle Investigator

The Mechanism of Action of Unite™ Biomatrix in Venous Leg Ulcers. Open.

41. Principle Investigator

Evaluation of A Medical Food For Chronic Wounds. Sponsor Abbott. Open.

42, Principle Investigator

A clinical trial to Evaluate the Healing of Diabetic Ulcers Using a Herbal Extract Impregnated Dressing. Open.

43. Principle Investigator. NIH Grant: RFA A1-07-037

A Study to Determine the diagnostic accuracy of the ExpressDetect® wound pathogen diagnostic test relative to the gold standard in diabetic foot ulcers, pressure ulcers, or chronic wounds caused by venous insufficiency. Pending.

44. Principle Investigator

A Prospective, Phase III, Multi-center, Randomized, Controlled Clinical Investigation of Dermagraft® in Patients with Venous Leg Ulcers. Open.

45. Lead and Principle Investigator

A Case Study Evaluation by Clinicians Treating and Patients Receiving Serial, On-Demand, Point-of-Care, Customized PolyFIT Wound Dressings fabricated by Poly-Remedy WoundStation vs. Subjects with Similar Wounds Receiving Currently Marketed Wound Dressings. Completed.

46. Lead and Principle Investigator

Analysis of Connexin Distribution in Various Skin Wounds. NEX-ULC-006. Ongoing.

47. Principle Investigator

A Randomized, Double-Blind, Vehicle-controlled, Parallel Group, Dose-Ranging, Multi-center Study of the Efficacy and Safety of Nexagon® in the Treatment of Participants with Venous Leg Ulcers. Open.

48. Principle Investigator

A Randomized Trial of the Flexitouch® System as an Adjunctive Treatment for Venous Stasis Ulcer. Pending.

49. Principle Investigator

To Evaluate The Healing Of Diabetic Ulcers Using A Herbal Extract Impregnated Dressing. Ongoing.

FDA Audits

February 2008. Orcel Trial. No 483s issued.

FEDERAL GRANTS

NIH Sponsored Clinical Trial: Phase 2 Study of Safety and Efficacy of Topical Administration of Recombinant Human Lactoferrin to Patients with Lower Extremity Diabetic Neuropathic Ulcers

NIH Sponsored Clinical Trial: A Randomized, Double-Blind, Placebo-Controlled, Single- and Double-Dose, Comparator Arm (Standard of Care), Multicenter Phase 2b Study of Topical GAM501 (Ad5PDGF-B/bovine type I collagen gel) in the Treatment of Non-Healing Diabetic

Ulcers of the Lower Extremity

NIH Grant: 1R43GM079834-02 Diagnostic Tool for the Detection of Infection in Chronic Wounds.

BOOKS

American Suction Wound Therapy and Advance Wound Healing. Published by Peking University Health Science Center. 2005.

Chapter 11 Suction Wound Therapy for Acute Wounds, Burns Trauma and Surgical Incisions.

Chapter 24: Wound Infections

INTERNATIONAL VOLUNTEER ORGANIZATIONS

AAWC Global Alliance/ Health Volunteers Overseas

Program Director, Health Volunteers Overseas, Cambodia 2008-present

Volunteer Phnom Penh, Cambodia: January 2008

World Alliance for Wound and Lymphedema Care (WAWLC)

Attendee inaugural meeting Geneva Oct. 2009

Member 2009-present

PROFESSIONAL SOCIETIES AND ORGANIZATIONS

The Hershey Surgical Society 1982 – Present

The Warren County Medical Society 1992 – Present

The Pennsylvania Medical Society 1992 – Present

The American College of Surgeons	1992- Present
The NW Chapter of the American College of Surgeons	1992- Present
The American Society of General Surgeons	1996- Present
The Wound Healing Society	1998- Present
Delegate to the Pennsylvania Medical Society	1996- 2003
The European Tissue Repair Society	2002-Present
American Professional Wound Care Association	2003 –Present
The Association for the Advancement of Wound Care	2004-Present
The Society of Undersea and Hyperbaric Medicine	2004-Present
President, Warren County Medical Society	2001- Present
American College of Hyperbaric Medicine Board of Directors	2008-present
The Association for the Advancement of Wound Care Board of Directors	2009-present
Vice-President, American College of Hyperbaric Medicine	2009-present

COMMITTEE MEMBERSHIPS LOCAL

Credentials Committee	1996 – 1998
Medical Executive Committee	1997 – 2001
American Cancer Society Board	1993 – 1997
Vice-chairman, Department of Surgery	2001- 2003
Chairman, Utilization Review/ Quality Assurance committee.	2001- 2003

Chairman, Education Committee 2001- Present

COMMUNITY ORGANIZATIONS & ACTIVITIES

President and Founder: Kinzua Youth Soccer Club 1995 – 1999

Under 14 Age Group Commissioner Northwest District
Pennsylvania West Soccer 1997 – 1998

MARATHONS

Marine Corps Marathon 1995 & 1996

Buffalo Marathon 1998, 2007

Boston Marathon 2000

Pittsburgh Marathon 2002

NATIONAL ORGANIZATION COMMITTEE MEMBERSHIP

Membership Committee, Wound Healing Society 2002-2005 (acting Chairman 2003)

Board of Directors; Wound Healing Society 2003-2006

Co-Founder, Wound Healing Cooperative Group 2003

Chairman, Clinical Trials Course
Wound Healing Society 2005

Lecturer Wound Care course,
American College of Surgeons 2004

Guidelines for Chronic Wounds. Venous Leg Ulcer
Section. (Wound Healing Society). 2005

Guidelines for Chronic Wounds. Diabetic Foot Ulcer
Section. (Wound Healing Society). 2005

Chairman, Industrial Relations Committee
Wound Healing Society 2005-present

Chairman, Pre-session symposium Wound Healing Society	2006
Chairman, Research section Symposium on advanced wound care	2006
Fellowship Director, American College of Hyperbaric Medicine	2008
Board of Directors, Association for the Advancement of Wound Care (AAWC)	2009
Vice-President American College of Hyperbaric Medicine	2009

GOVERNMENT POSITIONS

Advisor to Pennsylvania's Medicare Carrier Committee, Wound Care (drafted the policies for the use of bioengineered skin products in Pennsylvania)

Physician reviewer Quality Insights	2003-Present
Pennsylvania Pressure Ulcer Partnership	2008-present
Alliance for Wound Care Stake Holders Antimicrobial policy NPWT policy Guidance document for Clinical research	2009-present

INDUSTRY CONSULTANT AND BOARDS

3QMatrix Consultant, Advisory Board	2009-present
Agennix Incorporated Clinical Trial investigator/NIH	2004-2006
Arthrocare Consultant, Product development.	2009-present

Apopharma Clinical Trials Investigator	2006-2008
Celleration Consultant, Clinical Trial Investigator. Advisory Board.	2005-present
CardioVascular BioTherapeutics Clinical Trial Investigator, Consultant	2006-present
CoDa Consultant, Clinical Trial Investigator.	2008-present
CoMentis Clinical Trial Investigator	2006-present
Covidien Clinical Advisory Board	2008-present
Cytomedix Clinical Trial Investigator	2004-2006
Derma Sciences: Consultant, Advisory Board, Clinical Trial Investigator.	2006-present
Gerson Lehman Consultant	2005-present
Gliamed Consultant	2008-present
Intercytex Consultant, Clinical Trial Investigator	2006-present
Ivivi Technologies, Inc.: Advisory Board	2006-present
Health Point Consultant, Speaker's Bureau, Medical Advisory Board	2005-present
Hedonist Biochemical Technologies. Clinical Trial Investigator, Product development, Consultant.	2004-present
Johnson & Johnson Wound Management Worldwide.	2003-2008

Consultant, Speaker's Bureau, Clinical Trial Investigator,
Product Development. Medical Advisory Board.

Juzo 2005-present
Clinical Trial Investigator, Research grants.

Kerakure. 2005-present
Clinical Trial Investigator

King Pharmaceuticals 2005-2008
Clinical Trial Investigator

Krog and Partners 2006-2008
Consulting

Medline Industries. 2000-present
Consultant, Speaker's Bureau, Clinical Trial Investigator,
Research grants

Milliken & Company 2006-present
Consultant. Product development

Mölnlycke Health Care: 2004-present
Consultant, Speaker's Bureau, Clinical Trial Investigator,
Advisory Boards (USA & International)

Novacal Pharmaceuticals 2006-2007
Consultant, Clinical Trial Investigator

Organogenesis. , 1998-present
Consultant, Speaker's Bureau, Clinical Trial Investigator,
Research grants.

Ortec 2005-2009
Consultant, Clinical Trial Investigator

Ortho McNeil, 1997-2003
Speaker's Bureau and consultant

Otsuka Pharmaceuticals. 1997-2004
Speaker's Bureau, Consultant

PolyRemedy Inc. 2008-present
Consultant, Medical Advisory Board,

Clinical Trial Investigator

RegeneRx Biopharmaceuticals, Inc 2006-present
Clinical Trial Investigator, Consultant

Smith and Nephew. 2004-2006
Visitrak development

Steifel Podiatry: 2006-2007
Consultant, Speaker's Bureau

Systagenics 2009-present
Clinical Advisory Board

Tactile Systems Technology 2009-present
Clinical Trial Investigator

Tissue Repair Company 2007-present
Clinical Trial Investigator

* HCC Guidelines for Professional Speakers and Trainers course 2007.

MULTIMEDIA PRESENTATIONS

WSEE Erie Evening News "Wound Healing" 2005

JCHO Instructional Video "Pressure Ulcer Care and Prevention" March 2006.

WSEE Erie Evening News Special Hyperbaric Oxygen for the Diabetic Foot" May 11. 2006

WJET Focus on Erie Medicine. "Wound Healing." July 16th 2006.

WICU Erie News. Hyperbaric Oxygen for Carbon Monoxide Poisoning. December 7, 2006.

WSEE Erie Evening news. Diabetic Foot Ulcers. December 14, 2007.

WICU Erie Evening News. Diabetic Ulcers. December 14, 2007.

WJET Erie Evening News Diabetic Ulcers and Gene Therapy. December 14, 2007.

Fox Erie Evening News. Diabetic Foot Ulcers. December 14, 2007.

Wound Institute Online Course. Infection in Chronic Wounds. 2007.

Carbon Monoxide Poisoning: Dangers and Treatment, *WJET* December 23, 2008.

INVITED PRESENTATIONS, GRAND ROUNDS AND LECTURES

1. "Advances In the Treatment of Diabetic Foot Ulcerations" Grand Rounds. Holy Family Hospital. Grand Rounds. Altoona, PA. December 14, 1998.
2. "New Treatment Options For Diabetic Foot Ulcerations" New England Podiatric Society. Hartford, CT. January 20, 1999.
3. "Integrating New Approaches in the Treatment of Diabetic Foot Ulcers" Sayre, PA. January 27, 1999.
4. "The Old and New in the Treatment of Chronic Wounds." Grand Rounds. Hamot Hospital. Erie, PA. February 27, 1999.
5. "Advances in Wound Healing" Medical Center of Beaver. Beaver, PA. March 3, 1999.
6. "New Treatment Strategies in Diabetic Wound Care & the Medicoeconomic Relevance." Grand Rounds. St. Francis Hospital. March 19, 1999.
7. The Complicated Wounds Advisory Panel Meeting. The R.W. Johnson Pharmaceutical Research Institute. Short Hills, NJ. April 23-24, 1999.
8. "Wound Care for the Next Century." Grand Rounds. Warren, PA. April 4, 1999.
9. "The Role of Platlet-Derived Growth Factors in Wound Healing" Rosemont, IL. April 27, 1999.
10. "Advances in Wound Care" Johnstown, PA. April 28, 1999.
11. "New Treatment Strategies or Chronic Wounds." Altoona, PA. May 12, 1999.
12. "Current Concepts IN the Treatment of Chronic Wounds." New Hampshire Medical Society. Nashua, NH. May 26, 1999.
13. "Advances in Wound Healing." Grand Rounds. St. John's Regional Health System, Springfield, MO. May 20, 1999.

14. "Advances in Wound Care" Lake Ozark, MO. May20, 1999.
15. "Diabetic Foot Ulcers: Wound Healing Challenges and New Treatment Options." Central New York Academy of Medicine. Utica, NY. June 16, 1999.
16. "Advances in Wound Healing." Grand Rounds. Togus VA Hospital. Togus, ME. June 25, 1999.
17. "Wound Care." Grand Rounds. Hamot Medical Center. Erie, PA July 15, 1999.
18. "Chronic Wound Care and the Emerging Role of Platlet-Derived Growth Factor." Oshkosh, WI. July 27, 1999.
19. Innovative Treatments in Wound Care." Muncie, IN. July 28, 1999.
20. "Advances in Wound Care." Elkhart Medical Society. Elkhart, IN. July 29, 1999.
21. "New Treatment Strategies for Chronic Wounds." Stevensville, MI. August 12, 1999.
22. "Wound Healing and New Treatment Options For Chronic Wounds." Grand Rounds. Missouri Baptist Medical Center, St. Louis, MO. September 8, 1999.
23. "Innovative Treatment Strategies in Wound Healing." Richmond, IN. September 8, 1999.
24. "New Treatment Strategies for Chronic Wounds." Loveland, CO. September 13, 1999.
25. "Advances in Chronic Wound Healing." Boulder, CO. September 13, 1999.
26. "Innovative Treatments in Wound Healing." Johnson Medical Society. Franklin, IN. September 15, 1999.
27. "Innovative Wound Healing Treatment Options." Indianapolis, IN. September22, 1999.
28. "The Role of Growth Factors in Chronic Wound Healing." Jacksonville, FL. September 29, 1999.
29. "Wound Healing Challenges & New Treatment Options." Wheeling, WV. October 6, 1999.
30. "Wound Healing Challenges & New Treatment Options." 2nd Annual Continuing Education Program. Massena Memorial Hospital. Massena, NY. October 23, 1999.
31. "Wound Challenges & New Treatment Options." Suffern, NY. October 27, 1999.

32. "Growth Factor Therapy in Clinical Practice." Chattanooga, TN. November 18, 1999.
33. "The role of Growth Factors in the Chronic Wound." Grand Rounds. Chattanooga, TN. November 19, 1999.
34. "Taking Wound Healing to the Next Level." Denver, CO. December 1, 1999.
35. "The assessment of Chronic Wounds and Treatment Options." The Pennsylvania Association of Assistants Region 1. Pittsburgh, PA December 2, 1999.
36. "Current Concepts in Wound Healing and the Care of Chronic Wounds." Grand Rounds. Detroit Medical Center. Detroit, MI. December 9, 1999.
37. "Current Concepts in the Treatment of Chronic Wounds." Grand Rounds. Nalle Clinic. Charlotte, NC. December 17, 1999. "Growth Factor Therapy in the New Millennium." Newark, NJ. January 11, 2000.
38. "Wound Healing Challenges & New Treatment Options." Elkhart General Topics at Snowmass VIII. Snowmass, CO. February 6, 2000.
39. "Vascular Evaluation of the Diabetic Foot." Elkhart General Topics at Snowmass VIII. Snowmass, CO. February 7, 2000.
40. "New Advances in Wound Care." Southern Ohio Association of Podiatry. Grand Rounds. Dayton, OH. February 21, 2000.
41. "Bioengineered Skin (Apligraf) in the Treatment of Chronic Wounds." Canton, OH. February 23, 2000.
42. "New Treatment Options For Difficult to Heal Wounds." John J. Kane County Nursing Home Annual Meeting. Pittsburgh, PA. March 1, 2000.
43. "Advances in Wound Healing: Growth Factor Technology." Rutland Regional Medical Center. Grand Rounds. Rutland, VT. March 2, 2000.
44. "Advances in Wound Healing" Cedar Grove, NJ. March 7, 2000.
45. "The role of Growth Factors in Advanced Wound Care." Pensacola Surgical Society. Pensacola, FL. March 13, 2000.
46. "Advances in Wound Management." Curative Health Services. Weirton, WV. April 18, 2000.

47. "Advances in Chronic Wound Care." Parkersburg, WV. April 26, 2000.
48. "New Treatment Strategies for Chronic Wounds." Grand Rounds. Hermitage, PA. May 17, 2000.
49. "Recent Advances in Wound Care." Grand Rounds. Elk Regional Health Center. St. Mary's, PA. June 14, 2000.
50. "Advances in the Treatment of Chronic Wounds." Visalia, CA. June 20, 2000.
51. "Wound Healing Challenges and New Treatment Options." Fresno, CA. June 21, 2000.
52. "The Role of Topical Growth Factors in Chronic Wound Healing." Ventura, CA. June 22, 2000.
53. "The Chronic Wound: A Multidisciplinary Approach." Belle Vernon, PA. November 15, 2000.
54. "Advances in Wound Care" Grand Rounds Bon Secours Hospital. Detroit, MI. October 10, 2000.
55. An Overview of the Phase II clinical trial testing the Safety and Efficacy of Repifermin in the Treatment of Venous Stasis Ulcerations. Grand Rounds presentation. Warren County Medical Society. January 16, 2001.
56. The Use of Apligraf in the treatment of Diabetic Foot Ulcers. William L. Goldfarb Memorial Lecture. Temple University School of Podiatric medicine. Philadelphia, PA. January 26, 2001.
57. Vascular Evaluation of the Diabetic Foot. William L. Goldfarb Memorial Lecture. Temple University School of Podiatric Medicine. Philadelphia, PA. January 26, 2001.
58. Setting a New Standard in Wound Care: Apligraf (Graftskin). Apligraf in Diabetic Foot Limb Salvage. Orlando FL. February 2-4, 2001.
59. "A Whirlwind Tour through the Wonderful World of Wounds" Grand Rounds presentation. The Warren County Medical Society. March 19, 2001.
60. "Development of a Comprehensive Wound Care Program" Mon Valley Hospital. September 26, 2001.
61. "The Evolution of Apligraf (Graftskin) use in a Wound Care Center" Apligraf Standard of Care Conference. Hershey, PA. November 10, 2001.

62. Becaplermin Treatment of a Chronic Vasculitic/Diabetic Neuropathic Ulcer in a Patient with Rheumatoid Arthritis. Presentation for the American Society of Hospital Pharmacists. Las Vegas NV December 4, 2001.
63. Apligraf vs. Autograft. Presented at Apligraf (Graftskin) in Clinical Practice: A new Standard in Wound Care. Palm Beach, FL. December 8, 2001.
64. Apligraf reimbursement in 2002. Presented to the Medicare Carrier Committee. Harrisburg, PA. February 6, 2002.
65. Overview of Apligraf Use. Tissue Engineering Consulting Network meeting of Western Pennsylvania and West Virginia. February 27, 2002.
66. The Clinical Role of Apligraf (Graftskin) in Surgical Practice. Meeting moderator. Presentation: Apligraf as a Concomitant in Limb Salvage. Chicago, I March 1-2, 2002.
67. Advances in Wound Care. Grand Rounds Corry Memorial Hospital. Corry, PA. March 12 2002.
68. Regranex revisited: Case studies using Becaplermin in The treatment of Chronic Wounds. Dallas, Texas. April 19-20 2002.
69. Graftskin (Apligraf) in the treatment of Chronic Wounds. Standard of Care Meeting. Virginia Beach, VA. April 25, 2002.
70. "Aches and Pains in the Pipes and Drains: the use of medications in the treatment of peripheral vascular disease" Warren County Medical Society. Grand Rounds August 2003.
71. "Aches and Pains in the Pipes and Drains: the use of medications in the treatment of peripheral vascular disease" Dubois Medical Group. February 2003.
72. Aches and Pains in the Pipes and Drains: the use of medications in the treatment of peripheral vascular disease" St. Mary's PA., April 2003.
73. Diagnosis, Management and Treatment of Patients Suffering from Intermittent Claudication. June 25, 2003. Erie Pennsylvania.
74. The Art of Wound Healing: Advances in Wound Care. The American Association of Medical Transcriptionists meeting. Warren, Pennsylvania. August 2, 2003.
75. Advances in Wound Care and Limb Preservation in the diabetic patient. Patriots Day Lecture. Erie Veterans Administration Hospital. September 10th, 2003.

76. Quality Insights, Improving Patient Safety. First Annual Blair Safety Lecture. Conewango Club. Warren, Pennsylvania. September 12, 2003
77. Advances in the Treatment of Peripheral Arterial Disease. Franklin, Pennsylvania. September 26, 2003.
78. Advances in the Treatment of Peripheral Arterial Disease. Warren County Medical Society Meeting. Conewango Club. October 11, 2003.
79. New Technologies in Wound Healing: a Focus on Growth Factors and MMP Inhibitors. Albany Medical Society meeting. Albany NY. November 18, 2003.
80. New Technologies in Wound Healing: a Focus on Growth Factors and MMP Inhibitors. Buffalo Podiatry Society Meeting. Buffalo New York. January 13, 2004.
81. The Science of Silver: From the lab bench to the bedside. Thomas E. Serena MD FACS FAPWCA Podium presentation at the annual meeting of the American Professional Wound Care Association. Philadelphia, PA March 26, 2004.
82. Diagnosis and Management of Peripheral Arterial Disease. Erie PA April 21st 2004.
83. Advanced Wound Care in the Hospice Setting." Pennsylvania Hospice Network Annual Meeting and Conference. Erie PA April 26, 2004.
84. New Technologies in Wound Healing: a Focus on Growth Factors and MMP Inhibitors. UPMC Horizon Hospitals. At the Tara, Hermitage PA. May 2004.
85. The diagnosis and management of peripheral arterial disease. Butler, PA. June 25th 2004.
86. New Technologies in Wound Healing: a Focus on Growth Factors and MMP Inhibitors. Grand Rounds. Mercy Hospital. Pittsburgh, PA. July 28, 2004.
87. The Diagnosis and medical management of peripheral Arterial Disease" Erie, PA August 25, 2004.
88. Patient Safety and the Prevention of Pressure Ulceration. Second Annual Blair Safety Lecture. Warren, PA September, 2004.
89. Patient Safety and Hyperbaric Oxygen. When is it indicated? Second Annual Blair Safety Lecture. Warren, PA. September 17th 2004.
90. Advances in the treatment of Venous Leg Ulcerations. Wound care for the Practicing Surgeon. American College of Surgeons. Clinical Congress. October 2004. New Orleans,

LA.

91. Bilayered Cell Therapy: unveiling the mystery of Apligraf. New Cardiovascular Horizons. New Orleans LA. October 16, 2004.
92. The Sigma Tau Nursing Honor Society Annual lecture. "Advances in Wound Healing." Gannon University. October, 28 2004.
93. Advances in Wound Healing. Warren, Ohio. Nov. 2nd 2004.
94. New Technologies to Address the Ever-changing Wound Microenvironment. Ft. Lauderdale, Fl. April 2005.
95. New Technologies to Address the Ever-changing Wound Microenvironment. National Physicians Training Meeting. Las Vegas, NV. April 2005.
96. New Technologies to Address the Ever-changing Wound Microenvironment National Physicians Training Meeting-II. Orlando, FL. April 2005.
97. New Technologies to Address the Ever-changing Wound Microenvironment. Minneapolis, MN. April 19th, 2005.
98. New Technologies to Address the Ever-changing Wound Microenvironment. Satellite Symposium. Symposium on Advanced Wound Care. San Diego, CA. April 21st 2005.
99. Understanding Infection and Bacterial Colonization in Chronic Wounds. Presentation for the Medical Director Advisory Panel. April 20, 2005. San Diego, CA.
100. New Technologies in Wound Care. Grand Rounds. St. Vincent's Health Center. Erie, PA. July 8, 2005.
101. New Technologies to Address the Ever-changing Wound Microenvironment. Regional meeting of the WOCN. Forbes Hospital. Pittsburgh, PA. July 21, 2005.
102. Wound Infection in The World of Chronic Wound Care. Managing Infection Risk in Tissue Repair: Clinical Perspectives and Potential Solutions. Somerville New Jersey. August 23, 2005.
103. The Biochemistry of Wound Healing. Detroit Medical Center annual Podiatric Seminar. September 24th, 2005.
104. Basics in Wound Healing. Blackburn's Wound Healing Symposium. Erie, PA September 19th 2005.

105. Advances in Wound Healing. Blackburn's Wound Healing Symposium. Erie, PA September 19th 2005.
106. Advances in Wound Care. Hazelton, PA. September 27th 2005.
107. Do No Harm: pain reduction in Wound Care. Northeast Regional WOCN Conference. Hershey, PA October, 22nd 2005.
108. Introduction to Wound Care. Mercy Hospital, Pittsburgh, PA. Grand Rounds. February, 22, 2006.
109. Wound Care Essentials and Pediatric Wound Care. Grand Rounds Shriners Hospital. March 8, 2006.
110. Healing Wounds in the 21st Century. Erie, PA. March. 2006
111. Advances in Wound Healing. Kittanning, PA. March 2006.
112. Managing the Wound Microenvironment. Breakfast Conference, Symposium on Advanced Wound Care. San Antonio, TX. May 1, 2006.
113. Clinical Trials for FDA use--studying an agent vs. treating a patient. Symposium on Advanced Wound Care. San Antonio, TX. May 3, 2006.
114. Investigator Initiated, Industry Sponsored Clinical Trials. Symposium on Advanced Wound Care. San Antonio, TX. May 3, 2006.
115. Wound Care: the emerging specialty. American Association of Physicians Assistants National Meeting. San Francisco CA. May 27, 2006.
116. Advances in Wound Care. HCR Wound Care Conference. Rochester, NY. June 7, 2006
117. Bi-Layered Cell therapy. York, PA. June 8, 2006.
118. Wound Healing: Developing a Hospital Wound Care Program. Annual Meeting of the Northwestern PA Pharmacists. June 14, 2006. Erie, PA.
119. Wound Healing: Looking to the Future. Chautauqua Institute Invited Lecture. July 6, 2006.
120. Hyperbaric Medicine. St. Vincent's Health System Grand Rounds. July 7, 2006. Erie, PA.

121. American Podiatric Medicine Association. Annual Meeting. Breakfast Symposium. Podiatric Complications of Diabetes. August 8 2006.
122. American Podiatric Medicine Association. Annual Meeting. The Use of Silver in the Treatment of Chronic Wounds. Oral Abstract. August 9, 2006.
123. Advances in Wound Care. Butler PA. August 29, 2006.
124. Managing Difficult to Heal Wounds: Extracellular Matrix. Pittsburgh, PA. September 21, 2006.
125. Managing Difficult to Heal Wounds: Extracellular Matrix. New Orleans, LA. October 5, 2006.
126. The role of Extracellular Matrix in Wound healing. Presentation for the open discussion on the draft policy for skin equivalents. Harrisburg, PA October 11, 2006.
127. From basic to advanced wound healing. Keynote lecture. Blackburn's annual wound care conference. Erie, PA. October 19, 2006.
128. For all the wounds I've loved before. Blackburn's annual wound care conference. Erie, PA. October 19, 2006.
129. Hyperbaric Oxygen Therapy. Annual Blair Lecture Series. Warren, PA. October 21, 2006.
130. Advances in Wound Care. Allegheny General Hospital Annual Wound Conference. Keynote Lecture. Pittsburgh, PA. October, 26 2006.
131. Tissue engineering in the 21st century. Allegheny General Hospital Annual Wound Conference. Pittsburgh, PA. October, 26 2006.
132. Managing Difficult to Heal Wounds: Extracellular Matrix. Long Island, NY. November 1, 2006.
133. Managing Difficult to Heal Wounds: Extracellular Matrix. Manhattan, NY. November 2, 2006.
134. What every WOCN should know about the diabetic foot. Regional WOCN Conference. Pittsburgh, PA. November 4, 2006.
135. Managing Difficult to Heal Wounds: Extracellular Matrix. Philadelphia, PA. November 9, 2006.

136. Managing Difficult to Heal Wounds: Extracellular Matrix. Chicago, IL. November 13, 2006.
137. Managing Difficult to Heal Wounds: Extracellular Matrix. Baltimore, MD. November 14, 2006.
138. The role of the Extracellular Matrix in Wound Healing. Vieth Symposium. Manhattan. NY November 15, 2006.
139. Tissue Engineering. The Achilles Symposium. Pittsburgh, PA. January 15th 2007.
140. Carbon Monoxide Poisoning. Grand Rounds. St. Vincent's Health Center, Erie, PA. February 2, 2007.
141. Wound Care Course: Basics of Wound Care. Health Point National Training Meeting. Albuquerque, New Mexico. March 6, 2007.
142. The Extracellular Matrix in Wound Healing. Philadelphia, PA. March 15, 2007.
143. Advances in Wound Healing: Growth Factors. Pittsburgh, PA April 10, 2007.
144. Controversies in Hyperbaric Medicine. American Professional Wound Care Association Session. Philadelphia, PA. March 19, 2007.
145. Collagen in Wound Healing. Main Session. American Professional Wound Care Association. Philadelphia, PA April 20, 2007.
146. All my Trials and Tribulations: Clinical trials from the investigator's prospective. Pre-Conference presentation. Wound Healing Society annual meeting. Tampa FL. April 28, 2007.
147. Venous Leg Ulcer Prevention Guidelines. Presentation for open forum. Wound Healing Society annual meeting. Tampa, FL. April, 20, 2007.
148. 147 Meet the Mentors. Wound Healing Society forum. Wound Healing Society annual meeting. Tampa, FL. April 21, 2007.
149. American Association of Wound Management Research forum. Tips on medical publishing. Symposium on Advanced Wound Care. Tampa, FL. May 1, 2007.
150. Advances in Tissue Engineering. Cumberland MD. May 3, 2007.
151. Advances in the Treatment of Diabetic Foot Ulcerations. VHA annual conference.

Cambridge Springs, PA. May 9, 2007.

152. Advances in Wound Healing and Tissue Engineering. Pittsburgh, PA. May 21, 2007. Sponsored by Organogenesis.
153. Comprehensive Wound Healing and Hyperbaric Oxygen. AAPA's 35th Annual Physician Assistant Conference, Philadelphia, PA. May 26, 2007.
154. Advances in Wound Healing and Tissue Engineering. Canton, OH May 30, 2007. Sponsored by Organogenesis.
155. Wound Healing Basics. Blackburn's Annual Wound Care Symposium. Butler, PA. June 13, 2007.
156. Advanced Wound Healing. Blackburn's Annual Wound Care Symposium. Butler, PA. June 13, 2007.
157. Advances in Wound Healing and Tissue Engineering. Carbondale, PA July 10, 2007. Sponsored by Organogenesis.
158. Clinical Best Practices for the Care of Lower Extremity Wounds. Best Practices in Wound Care. Conference sponsored by 3M. Warrendale, PA August 1, 2007.
159. Clinical Trials in Wound Healing: Advances in Wound Healing Research. A NewBridge educational conference. Erie, PA. August 2, 2007.
160. Advances in Wound Healing. Sponsored by Johnsons & Johnson Wound Management World Wide. Cleveland OH. September 18, 2007.
161. The Matrix in Wound Healing. Grand Rounds. Murfreesboro Wound Care Center. Murfreesboro, TN. Lecture and rounds. Murfreesboro, TN October 10, 2007.
162. Tissue Engineering. Presentation for wound care specialists. Clarks Summit, PA. November, 7, 2007.
163. Wound Care in the Long Term Acute Care Setting. Grand Rounds. Greenville, SC December 7, 2007.
164. Advanced Wound Care Technologies (Promedica conference). For all the Wounds I have Loved Before. Toledo, Ohio. February 7. 2008.
165. Introductory Course to Wound and Hyperbaric Medicine. UHMS certifying course. Warren, PA. April 5-10, 2008.

166. Bi-Layered Cell Therapy. Boston, MA. April 10, 2008.
167. Wound Care Basic to Advanced. AORN Annual Meeting. Erie, PA April 12, 2008.
168. Basic Wound Care Course. Miami Valley Hospital. April 19-20, 2008.
169. Sound Evidence for Ultrasound. SAWC annual meeting. San Diego, CA. April 26, 2008.
170. Growth Factors in Wound healing. Promotional presentation. Greensburgh, PA. May 22, 2008.
171. The Matrix in Wound Healing. CME Presentation. Houston, TX, June 3, 2008.
172. Arterial Disease in the Diabetic Patient. Invited Lecture. World Union of Wound Healing Societies. Toronto, Canada. June 5, 2008.
173. Introductory Course to Wound and Hyperbaric Medicine; UHMC Certification Course. NY Methodist and Kingsbrook Jewish Medical Centers. NY,NY. June 8-13, 2008.
174. Pennsylvania Pressure Ulcer Partnership. (1) State of the Commonwealth (2) Documentation. Pittsburgh Pennsylvania October 15, 2008.
175. Pennsylvania Pressure Ulcer Partnership. (1) State of the Commonwealth (2) Documentation. Philadelphia, Pennsylvania October 21, 2008.
176. Pennsylvania Pressure Ulcer Partnership. (1) State of the Commonwealth (2) Documentation. Harrisburg Pennsylvania October 23, 2008.
177. Antimicrobials and bacteria in chronic wounds. Copenhagen Denmark. Invited lecture. November 7, 2008.
178. Introduction to Hyperbaric Medicine. Erie, Pennsylvania. December 5-8. UHMS Certification Course.
179. New Approaches to Personalized Medicine Using Inflammation, Healing, and Regeneration as Prototypes. Sponsored by the Wound Healing Society and University of California-Riverside. January 9-10, 2009.
180. Limb Preservation: the role of Hyperbaric Medicine. NY Podiatric Meeting. Manhattan, NY. January 23-25, 2009.
181. Venous Leg Ulcers. NY Podiatric Meeting. Manhattan, NY. January 23-25, 2009.

182. Tissue Engineering in Wound Healing. NY Podiatric Meeting. Manhattan, NY. January 23-25, 2009.
183. Noncontact, Non-thermal, Low Frequency Ultrasound. NY Podiatric Meeting. Manhattan, NY. January 23-25, 2009.
184. Noncontact, Non-thermal, Low Frequency Ultrasound: A Vascular Surgeon's prospective. Celleration National Sales Meeting. January 28, 2009.
185. Moderator, Personalized Medicine Session. University of California-Riverside. January 10, 2009.
186. Hyperbaric Oxygen: Evidenced-Based Medicine. Grand Rounds. Scranton Community Medical Center. March 3, 2009.
187. Advanced Wound Care; Evidenced Based Medicine. Lackawana Podiatric Society. Olde Forge, PA. March 18, 2009.
188. Advances in Wound Healing and Regenerative medicine. The Snyder Institute for Vascular Health and Research Spring Conference. Kittanning, PA. April 14, 2009.
189. Venous Leg Ulcer Disease. Session Moderator. Wound Healing Society. May 27, 2009.
190. An overview of Non-contact Non-Thermal Ultrasound in the treatment of Chronic Wounds. Symposium of Advanced Wound Care (SAWC). Dallas, TX. April 27, 2009.
191. An overview of Non-contact Non-Thermal Ultrasound in the treatment of Chronic Wounds. Symposium of Advanced Wound Care (SAWC). Dallas, TX. April 28, 2009.
192. The Role of Hyperbaric Oxygen Therapy in the Treatment of Radiated Injured Tissues. ACMH/AGH Oncology Conference. May 19, 2009.
193. Introduction to Hyperbaric Medicine: Basic Course. NY Methodist Medical Center. Brooklyn, NY. May 27-31, 2009.
194. The Crucial Role of Hyperbaric Medicine in Limb Preservation. The Snyder Institute for Vascular Health and Research. Annual Nursing Conference. Armstrong County Memorial Hospital. Kittanning, PA. June 2 2009.
195. Advances in Wound Care. Amedysis wound care conference for home health nursing. Cannonsburg, PA June 3, 2009.

196. Introduction to Hyperbaric Medicine Course for UHMS Certification. June 25-28. Tulsa Oklahoma.
197. How to Effectively Manage Your Wound Care Center and Overcoming Challenges with the Center's Budget: Pre-Conference Workshop (Four Hours). World Research Congress and American College of Hyperbaric Medicine. Chicago, IL. June 30, 2009.
198. Integrating new technologies into the wound care center. World Research Congress and American College of Hyperbaric Medicine. Chicago, IL. June 30, 2009.
199. Hyperbaric Oxygen Practice. Questions and Answers. World Research Congress and American College of Hyperbaric Medicine. Chicago, IL. July 1, 2009.
200. Wound Healing. Weigao Wound Care Conference. Weihai, China. July 11, 2009. Visiting Professor lecture.
201. Bacterial burden and the action for topical Antimicrobials in chronic wounds. Proposed Medicare Coverage for Antimicrobial Wound Care Dressings meeting. Columbia, SC. August 7, 2009.
202. The Evidence for Non-Thermal Non Contact Ultrasound in wound healing and Bacterial Reduction. Chicago, IL. August 12, 2009.
203. Critical Limb Ischemia. Pre-Conference Clinical Symposium for Advances in Skin and Wound Care. October 22, 2009. San Antonio, Tx.
204. Pressure Ulcer Assessment: Is It a Pressure Ulcer or Something Else? A WebEx presentation sponsored by Quality Insights of Pennsylvania. September 23, 2009.
205. The Crucial Role of Hyperbaric Medicine in Limb Salvage. Lunch and Learn. September 25, 2009. Scranton, PA.
206. For All The Wounds I've Loved Before: unusual wounds. Clinical Symposium for Advances in Skin and Wound Care. October 22, 2009. San Antonio, Tx.
207. Infection and Antimicrobials in Chronic Wounds. Mt Nittany Medical Center Conference. October 30, 2009. State College, PA.
208. Advanced Wound Care. Mt Nittany Medical Center Conference. October 30, 2009. State College, PA.

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