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#### PROFESSIONAL OBJECTIVE:

Involvement in start-up companies in areas related to medical device development, cosmeceutical development, tissue engineering and wound healing research. Continued academic teaching and laboratory research related to plastic and reconstructive surgery, wound healing research, tissue engineering and product development.

## **EDUCATION:**

University of the Witwatersrand, Johannesburg, South Africa

MBBCh (MD) - November 1980

Master of Medicine in Plastic & Reconstructive Surgery (MHS equiv) June 1991

Honorary Professor, Plastic Surgery, Wits University Feb 1999 (senate approved for International recognition)

South African College of Medicine

F.C.S. (SA) Plastic & Reconstructive Surgery, October 1989.

Michael and Janie Miller Award 1989 - First plastic surgeon to win this award for the top Witwatersrand University surgical graduate

American College of Surgery -FACS, October 1998.

#### **TRAINING:**

Internship - Hillbrow Hospital, Johannesburg, January 1981-December 1981

Military
 Military Hospital, Pretoria, January 1982-December 1983; Rank - Lieutenant
 Johannesburg and Baragwanath Hospitals, Johannesburg, January 1984-July 1984

Senior House Officer for the Department of Plastic & Reconstructive Surgery

Residency - Natalspruit Hospital Department of Surgery, Johannesburg, July 1984-June 1986 and January 1986-July 1986 Medical

Officer/Registrar - General surgery and 6 months subspecialty maxillofacial and oral surgery.

**Residency** - Natalspruit Hospital Department of Orthopaedics, July 1985-December 1985

Hand Surgical Registrar /resident - Trained in microvascular surgery.

**Residency** - University of the Witwatersrand Department of Plastic & Reconstructive Surgery,

Registrar/resident, *Plastic & Reconstructive Surgery*, August 1986-October 1989

Consultant - University of the Witwatersrand Department of Plastic & Reconstructive Surgery,

Teaching Consultant and Consultant Head plastic surgery division, Hillbrow Hospital, Johannesburg, November 1989-1990

Professor - Honorary - University of the Witwatersrand, Department of Plastic & Reconstructive Surgery, Feb 1999 - present

#### PROFESSIONAL EXPERIENCE:

CHIEF SCIENTIFIC OFFICER Galderma - July 2022 (acquired Alastin Skincare Inc. Dec 2021)

HEAD, Skin Science Center for Innovation - July 2022

HEAD Alastin Innovations - ongoing from 2015, retitled July 2022

CHIEF MEDICAL/SCIENTIFIC OFFICER Alastin SkinCare Carlsbad CA – Start up company – Joined Nov 2015 close to inception. Developed scientific white paper, expanding ongoing scientific development of professional range; presentations, publications. National presence expanding business within professional market (dermatologists, plastic surgeons, aestheticians).

- 2015 developed peri-procedure range with patented peptide technology
- 2016 developed skin maintenance range with adipose volumizing
- 2017 developed neck tightening range with patented elastin stimulation formula
- 2018 developed body product with patented autophagic macrophage activity and skin tightening
- 2019 developed adjunct product to injectables patented, able to mop up red blood cell products
- 2020 developed peri-surgical (invasive) topical first of its kind countering adipocytolysis (patent submission)
- 2021 developed 2 additional disruptive products for launch 2022 (invasive surgical adjunct product for swelling in subcutaneous fibrosis with body contour surgery and skin lightener based on multicellular pathway with novel actives)
- 2022 Ongoing development of new products (for launch 2023) and development of new products within Galderma stable

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**DIRECTOR Sayenza Biosciences Sept 2022 –** start up company dedicated to adipose tissue refinement. Device development aimed at preparing lipoaspirate (tissue derived from liposuction) for reinjection as graft material and mining the regenerative components for use in multiple aesthetic, therapeutic and reconstructive realms. Involved in this project since early development around 2015 and at inception of start-up company to present time.

In addition, multiple ancillary products researched and developed, relating to sun protection, eyelid skin maintenance, retinols etc. Each product associated with multiple publications, clinical trials, presentations and lectures.

Current focus for foreseeable future – development of disruptive, ground breaking new products within Galderma stable.

**DIVISION CHIEF, RESEARCH (2021 onwards)** Center for Tissue Engineering, **ADJUNCT PROFESSOR** Plastic Surgery, Faculty member, Plastic Surgery Dept., University of California, Irvine; July 2012 –present; Planning projects, protocols, funding, regulatory bodies, collaborations, directing fellows and student researcher teams (adipose derived stem cell research, fat grafting, burn wound inflammatory mediators). Overseeing and guiding multiple research teams.

**ADAR SCIENCE Inc.** Irvine CA, USA- **President and Founder** established Dec 2009 – company dedicated to medical device innovations and research

#### PAST

STEM CELL HARVEST CULTURE Course - Stem Cell Research Center, UCI - Dec 2012

PRIVATE PRACTICE, 20yrs Linksfield Clinic, Johannesburg - Plastic Surgery/Cosmetic Surgery- up to Dec09

CEO and founder - Advanced Wound Care Services - 13 Wound Clinics - 2000-2012.

**FOUNDER / DIRECTOR / PARTNER** – ALPHAPLAST (SA), BIOCEUTICALS (SA), ADAR SCIENCE (USA) Developed and produced a successful line of skin maintenance products. Conducts and oversees research and development process, clinical trials, ongoing new developments in cosmeceuticals and medical devices.

**DEVELOPER**, trialed and produced anti SCAR PRODUCTS – Alpha Centella; **ScarScience** (Successfully selling in South African market). Introduced to US market – SkinMedica/Allergan Q1 2012 (**Scar Recovery Gel**, successfully selling US market)

**DEVELOPER** with Southern Medical SA of 'bioflammacide' wound healing gel – **Flavonix** (currently selling SA);

DEVELOPER involved in multiple other wound healing device developments – DermApprox; MATCH; Lavage Drain; CryoFinesse – aided in cryoablation aesthetic technology development (US); Tensile Scar Sheet - burn scar control product (Burnshield Advance – launching South Africa Q3 2018)

**DEVELOPER** original science anti-aging cosmetic range – LeafScience/African peel

DEVELOPER medical devices - nasal comfort cannula - ComfiFlow and IV patch dressing ComfiPlast

**CONSULTANT** to medical device and wound care companies – Smith & Nephew (involved in nanocrystalline technology and background research related to nanocrystalline silver, NPWT etc): Southern Medical; Omnimed; LITHA Healthcare; Sirius Scientific; CryoMedix; SkinMedica, Allergan

Good clinical practice course in clinical research - completed 2005; updated march 2008; mutiple courses completed uci/ular/citi 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019

Medical advisor (plastic surgery) - medscheme group, johannesburg 2000-2009

**Professor –honorary**, university of the witwatersrand, johannesburg (sept1999 on)

Scientific advisory board - longevity magazine, johannesburg

Author bimonthly column - medical chronicle, johannesburg (jan 1998 until jan 2001)

Author monthly wound care course (doctors) - medical chronicle - 2002 + 2003

Editorial board – the specialist forum – from 2002

**EDITOR-in-CHIEF** – Wound Healing Southern Africa –peer reviewed scientific journal - 2008 to Dec 2015.

#### **REVIEWER** – **current reviewer** for the following Journals:

- 1. Aesthetic Plastic Surgery(US)
- 2. Burns
- 3. International Wound Journal
- 4. Journal of Ethnopharmacology
- 5. Diabetologia
- 6. Modern Plastic Surgery
- 7. Plastic Surgery International 8. European Journal of Pain
- 9. Wound Repair Regeneration
- 10. Journal of Plastic & Hand Surgery
- 11. Neural Regeneration Research
- 12. Molecular Biotechnology
- 13. Journal of Diabetes and Metabolism;
- 14. Nanomedicine

- 15. Annals Biomed Engineering
- 16. Journal of Diabetes Research
- 17. Dermatology and Therapy
- 18. Journal of Stem Cell Research & Therapy.
- 19. South African Journal of Surgery
- 20. Science Advances
- 21. Evidence-Based Complementary and Alternative Medicine.
- 22. International Journal of Molecular Science
- 23. Acta Biomaterialia
- 24. Journal of the American Podiatric Medical Association
- 25. Stem Cell Reviews and Reports
- 26. Journal of Diabetes and its Complications
- 27. Current Stem Cell Research & Ther

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## **REVIEWER** – **current reviewer** for the following Institutions

American association for the advancement of science – review of grant applications (Research Competitiveness Program -The program provides expert peer review and guidance to academia, industry, foundations, and government agencies engaged in scientific research, development and innovation in the US and around the world) (2016 – 5 grant applications from Yale U + U of Connecticut);

2021 - NIH Grant Reviewer

2020 – Reviewer of grant application -**The Marsden Fund** invests in investigator-initiated research aimed at generating new knowledge, with long-term benefit to New Zealand.

Council Grant Reviewer United Kingdom; 2019 – **Dutch Burn Association Grants** 2017 –**Harvard Catalyst** | The Harvard

<u>EXAMINER</u> (Past – up to 2009) **College of Medicine** -Plastic Surgery Fellows degree (FCS), **Medical University of South Africa** – Masters degree in Plastic Surgery, **University of Pretoria** – Masters degree in Plastic Surgery, **University of Cape Town** – Masters degree in Plastic Surgery; **Clinical and Translational Science Center** – review project proposal

## PROFESSIONAL AFFILIATIONS, RECOGNITION & AWARDS:

- Nominated member Dept of Plastic Surgery Leadership Council Diversity Committee, 2020 on
- Winner Distinguished Faculty Mentor Award 2018 Institute for Clinical and Translational Science, UCI
- Mentor for Design Team winner annual biomedical engineering device design UCI Innovations competition, Bubtech, micronanobubble project, June 2018 \$15000
- Professor Plastic Surgery, Director Laboratory for Tissue Engineering, Plastic Surgery Dept., University of California, Irvine; July 2012
   present
- Association of Plastic & Reconstructive Surgeons of Southern Africa:
  - President 1996-1998, Secretary 1994-1996, Executive Committee Member 1992 2000
- Honorary/Emeritus Professor University Witwatersrand, Plastic Surgery Feb 1999 present
- Nominated for Investec Bank award for a Considerable Contribution in a Career / Profession 2010
- Nominated to Scientific Board for Africa, World Society of Aesthetic Surgery, May 1998
- European Tissue Repair Society 2007-2010
- Wound Healing Society (US) 2011 on
- Exco member Wound Healing Assoc of South Africa (WHASA) 2004-2010
- Elected to the Faculty of Plastic and Reconstructive Surgery of the College of Medicine of South Africa, 1998 – 2001: 2005 - 2008
- New York Academy of Sciences (1996)
- Listed in Who's Who in The World, 1997on & Who's Who in Medicine & Healthcare, 1996on
- Nominated as convener and examiner for the final examination F.C.S. (SA) Plastic & Reconstructive Surgery Part II for the College of Medicine of South Africa, May 1996-2009 and for the University of Pretoria Masters MMed degree in Plastic and Reconstructive Surgery, May 1999 2009.
- Winner publication of the year APRSSA (Plastic Surgery Association) 2004
- Winner publication of the year APRSSA (Plastic Surgery Association) 2003
- Winner publication of the year APRSSA (Plastic Surgery Association) 2001
- Winner publication of the year APRSSA (Plastic Surgery Association) 2000
- Nominated for Phillip Tobias & Convocation **Distinguished Teachers Award** judged by Dean's selection committee for the University of the Witwatersrand, 1999.
- Winner publication of the year APRSSA (Plastic Surgery Association), 1997
- Michael and Janie Miller Award 1989 First plastic surgeon to win this award for the top
  Witwatersrand University surgical graduate based on exam scores and overall resident curriculum
  (inclusive of general surgery, orthopedics, otolaryngology, plastic surgery, ophthalmology, urology).
- Plastic Surgery Resident Representative 1988 & 1989, University of the Witwatersrand
  - Awarded
- U.S. Green Card Status, 1995, in the Category of "Exceptional Academic Merit.

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#### **PUBLICATIONS**

- 1. **Widgerow AD**, Edinburg M, Biddulph S. An Analysis of proximal phalangeal fractures. *Journal of Hand Surgery (Am)* 12 A, 134, January 1987.
- Edinburg M, Widgerow AD, Biddulph S. Early post-operative mobilization of flexor tendon injuries using a modification of the Kleinert Technique. American Journal of Hand Surgery, 12A, 34 January 1987 (second author). Also appears in the Year Book of Plastic Surgery 1988.
- 3. Widgerow AD, Murray J. Fibrosarcoma of the Hand. S.A. Journal of Surgery, 26,118, Sept 1988
- 4. **Widgerow AD.** latrogenic instrumentation-induced plastic surgical referrals. *Plastic & Reconstructive Surgery*, 82, 1083, Dec 1988.
- 5. **Widgerow AD.** Shaving and dermabrasion of the facial lesions in tuberous sclerosis. S.A. Medical Journal, 76, 169, August 1989
- 6. **Widgerow AD,** Ford TD Prevention of deformity in the neglected burn. *Trauma and Emergency Medicine*, 6. 13. Feb.1989
- Widgerow AD. Full house/ spaghetti wrist injuries —analysis of results. S.A. Journal of Surg, 28,6, March 1990.
- 8. Widgerow AD. Klippel Feil Anomaly, Cleft palate and Bifid Tongue. Annals of Plast Surg, 25, 216, April 1990.
- 9. Ford T, Widgerow AD. Umbilical keloid—an early start. Annals of Plast Surg, 25, 214, April 1990.
- Widgerow AD, Ford TD, Botha M. Burn Contracture preventing Uterine Expansion. Annals of Plast Surg, 27, 269, Sept 1991.
- 11. Widgerow AD. Keloids and hypertrophic scars. Diseases of the Skin, 6, 39, May 1992
- 12. Chait LA, Widgerow AD. Horse bites of the ear. Trauma and Emergency Medicine, 637, July/August 1992.
- 13. Widgerow AD.. Abdominoplasty following colostomy. Annals of Plast Surg, 29, 454, Nov 1992.
- 14. **Widgerow AD,** Chait LA. Degloving injuries and flap viability assessment. S.A. Medical Journal, 83, 97, February 1993.
- 15. Widgerow AD. Plastic Surgery- more than just a nip and tuck -OPINION. S.A. Medical Journal, 84,7, Jan 1994.
- 16. **Widgerow AD,** Ritz M, Song C. Load cycling closure of fasciotomies following puff adder bites. *Eur Journal of Plastic Surgery*, 17,40, 1994
- 17. **Widgerow AD,** Brink AJ, Koornhof HJ. Atypical *Mycobacterium* and breast surgery. Annals of Plast Surg.35, 205, August 1995.
- 18. Widgerow AD. Cosmetic surgery—the quest for zero defect. Review Diseases of the Skin, 11,33, Oct 1996.
- 19. Reyneke JP, **Widgerow AD** Nasomaxillary osteotomy for the correction of Binder's Syndrome (nasomaxillary dysplasia) *Int Journal of Adult Orthognathic Surgery*, 11,117, 1996.
- 20. **Widgerow AD,** Sacks L, Greenberg D, Becker PJ. Intergroup comparisons of carpal tunnel dimensions. *Journal of Hand Surgery* (Am), 21A, 357, May 1996.
- 21. **Widgerow AD**, Song C, Ritz M, Potgieter E. Wound modulation via sclerotherapy and tissue adhesion observation and discussion. *S. A. Journal of Surg 35, 88, May 1997.*
- 22. **Widgerow AD.** Blepharoplasty lateral internal suspension suture: Bliss technique. *Aesthetic Plast Surg* 22,130, 1998.
- 23. **Widgerow AD** and Chait L. Aesthetic Perspectives Regarding Physically and Mentally Challenged Patients. *Plast & Reconstr Surg.* Vol 105, No 6, 2251, May 2000.
- 24. Chait L and Widgerow AD. In Search of the Ideal Nose. Plast & Reconstr Surg. Vol 105, No 7, June 2000.
- 25. **Widgerow AD** and Braun S .Post-laser Hypersensitivity and the Atopic patient. *Plast & Reconstr Surg.* Vol 106, No 1, 155, July 2000.
- 26. **Widgerow AD**, LA Chait, R Stahls and P Stahls. New Innovations in Scar Management. . *Aesthetic Plast Surg* 24; 227-234, 2000
- 27. **Widgerow AD**, C Ladas, Anatomical Attachments to the proximal phalanx a case for fracture stability? *Scand J Plast Reconstr & Hand Surg* 35;85-90,2001
- 28. **Widgerow AD** Revision Otoplasty: The Contracted Antihelical Fold. *Plast & Reconstr Surg.* Vol 110, No 3, 827, September 2002.
- 29. **Widgerow AD.** Upper Blepharoplasty with lateral segmental orbicularis excision. *Annals Plast Surg.* Vol 50, No 5,471, May 2003
- 30. **Widgerow AD**, Jackson L: Irritable Bowel Syndrome and Abdominoplasty. *Plast & Reconstr Surg*. Vol 113, No 3, 1050, March 2004.

- 31. Widgerow AD, First Signals Editorial; Plast & Reconstr Surg. Vol 113, No 7, 2206, June 2004.
- 32. Widgerow AD, Breast reduction with inferior pedicle fascial suspension Aesth Plast Surg Nov/Dec 2005
- 33. Widgerow AD, Management of Infection in Plastic Surgery The Specialist Forum, Vol 6 No2, 40, Feb 2006
- 34. Potgieter A, Candy G, Leong CV, Widgerow A.Topical Interferon-α2b and Keloid Treatment: A Place for Pretreatment? Plast Reconstr Surg 117(5): 1645-1646. 2006.
- 35. **Widgerow AD, Murdoch M, Edwards G, Norval C Patient-Controlled Expansion: Applying a New Technique to Breast Reconstruction;** *Aesth Plast Surg;* 31, 299, 2007.
- 36. **Widgerow AD,** Wittstock C, Candy G; Lavage drain extension for local anaesthetic instillation into abdominal wounds; SA Journal of Surgery Vol46,No 1 Feb 2008.
- 37. **Widgerow AD,** Chait LA, Stals P Multi-modality Scar Management Program; Poster Congress -World Union of Wound Healing Societies Toronto 2008
- 38. **Widgerow AD**, Wound Care in South Africa Defining the specialty and its reimbursement; Journal of Wound technology: 66, No4, April 2009.
- 39. **Widgerow AD**, Chait LAC; Stals R; Stals P; Candy G; Multimodality Scar management program Aesthetic Plastic Surgery; Vol 33; No 4; 533, 2009.
- 40. **Widgerow AD,** Nanocrystalline silver, gelatinases and the clinical implications, Burns <u>36,</u> 7, Pages 965-974 November 2010
- 41. **Widgerow AD,** Cellular/extracellular matrix cross talk in scar evolution and control Wound Rep Reg. 19; 117–133, 2011.
- 42. Roberts C, Ivins I, **Widgerow AD**, ACTICOAT™ AND ALLEVYN™ made easy, Wounds International, 2011, 2,2, S7-S12
- 43. Widgerow AD, Scar management the principles and their practical applications WCET Journal 31; 1; 18-21; 2011.
- 44. Widgerow AD, Chronic wound exudate thinking outside the box Wound Repair Reg 19; 287-291; 2011
- 45. **Widgerow AD** and Grekin S; Effecting Skin renewal a multi-faceted approach Journal of Cosmetic Dermatology; 10, 2, 126-130. June 2011.
- 46. **Widgerow AD**, Current concepts in scar evolution and control Aesthetic Plastic Surgery: Volume 35, Issue 4 (2011), Page 628-635.
- 47. **Widgerow AD,** Toxic Epidermal Necrolysis management issues and treatment options; Int J Burn Trauma 2011;1(1):42-50.
- 48. **Widgerow AD,** Scar management practice and science a comprehensive approach to controlling scar tissue and avoiding hypertrophic scarring– Advances in Skin and Wound Care (US) 2011; 24;12; 555-521.
- 49. Leak K, **Widgerow AD**, Johnson S, Pilonidal sinus (Jeep's disease): an improved model of care, Wounds UK, 2011, Vol 7. No 2, 72-77.
- 50. Widgerow AD, Cellular resolution of inflammation Catabasis; Wound Repair & Regen; 2012; 20;1;2-77.
- 51. Widgerow AD, Deconstructing the 'stalled wound' Wounds 2012; 24 93): 58-66.
- 52. **Widgerow AD,** Kalaria S; Pain mediators and wound healing establishing the connection Burns 38 (2012), pp. 951-959.
- 53. **Widgerow AD**, Bioengineered matrices Part 1: Attaining structural success in biologic skin substitutes Ann Plast Surg. 2012 Jun;68(6):568-73.
- 54. **Widgerow AD** Bioengineered matrices Part 2: Focal adhesion, integrins and the fibroblast effect critical factors affecting the healing matrix and impacting on bioengineered matrix design Ann Plast Surg. 2012 Jun;68(6):568-73.
- 55. **Widgerow AD**. Chronic wounds is cellular 'reception' at fault? Examining integrins and intracellular signalling. Int Wound J 2013; 10:185–192.
- 56. **Widgerow AD**, Bachman M, Klopfer M, Zaldivan F, Bernal N, Ferreira TS, Afzel H, Awad A, Evans GRD. Signaling Profile of Thermal Trauma (SPoTT): Exudate Analysis in Acute Burn Patients. ICTS Poster Presentation. The University of California, Irvine. Irvine California, June 3, 2013.
- 57. Salibian A, **Widgerow AD**, M Abrouk and Evans RD. Stem cells in plastic surgery: a review of current clinical and translational applications. Archives in Plastic Surgery, Vol. 40 / No. 6 / November 2013.
- 58. **Widgerow AD**, Salibian A, Lalezari S, Ferreira T and Evans G. Neuromodulatory nerve regeneration adipose tissuederived stem cells and neurotrophic mediation in peripheral nerve regeneration; Journal of Neuroscience Research Volume 91, Issue 12, pages 1517–1524, December 2013

- 59. **Widgerow AD**, New Advances in Widespread Burn/Scar Management; Expert Reviews in Dermatology 2013 Expert Review of Dermatology, December 2013, Vol. 8, No. 6, Pages 589-592.
- 60. **Widgerow AD.** Ischemia Reperfusion Injury Influencing the microcirculatory and cellular environment Ann Plast Surg. 72;2; 253-261, Feb 2014.
- 61. **Widgerow AD.** Bioengineered skin substitute considerations in the Diabetic Foot Ulcer Ann Plast Surg. Aug;73(2):239-44, 2014
- 62. **Widgerow AD**, Salibian A, Kohan E, Ferrira T, Afzel A, Tham T and Evans G. Strategic Sequences in Adipose Derived Stem Cell Nerve Regeneration; Microsurgery 34:324–330, 2014.
- 63. Banyard DA, Ferreira TS, **Widgerow AD** and Evans GRD; Poster: Primed to Perform: Adipose-Derived Stem Cell Proliferation and Secretome Function in Neuronal-Conditioned Media, Poster AAPS meeting Miami 2014
- 64. Banyard DA, Tocco Tussardi I, **Widgerow AD**, Evans GRD: Burn Wound Exudate: Depth of Burn Predicts Cellular Recruitment; Poster American Burns association April 2014.
- 65. Tocco- Tussardi I, **Widgerow AD,** Lalezari S, Banyard D, Shaterian A, Evans RD Lipotransfer: The Potential from bench to bedside; Annals of plastic surgery 2014; 72(5):599-609.
- 66. Thomas S, **Widgerow AD**, Lakey J, Banyard D, Salibian A, Evans GRD; Adipose derived stem cells and diabetic wound healing a promising therapeutic modality CellR4 2014; 2 (6): e1309
- 67. Banyard D, Salibian A, , **Widgerow AD,** Evans RGD; Implications for Human Adipose-Derived Stem Cells in Plastic Surgery J. Cell. Mol. Med. Vol 19, No 1, 2015 pp. 21-30
- 68. **Widgerow AD**, Tocco-Tussardi I, King K, Banyard D, Chiang R, Awad, A, Malkumyan S, Bhatnager S, Afzel H, Evans RD. The Burn Wound Exudate an under-utilized resource, Burns 41 (2015), pp. 11-17.
- 69. Guo J, **Widgerow AD**, Banyard D, Toranto J, Wirth GA, Paydar K, Tocco Tussardi I, Evans GRD. Strategic Sequences in Fat Graft survival, Annals of Plastic Surgery Volume 74, Number 3, March 2015.
- 70. Klopfer M, Campos K, Widgerow AD, and Bachman M. Microbubble Technology for Wound Care and Health Applications. Poster Center for Advanced Design and Manufacturing of Integrated Microfluidics (CADMIM) 2015.
- 71. Banyard DA, Martin J, **Widgerow AD**, Evans GRD. Regenerative Biomaterials: A Review; Plast Reconstr Surg 135; 6; 1740–1748, 2015.
- 72. Dalal S, **Widgerow AD** and Evans RD. The plantar fat pad and the diabetic foot ulcer. Int Wound J Dec2015; 12: 636–640
- 73. Nguyen A, Guo J, Fadavi D, Banyard D, Toranto J, Wirth G, Paydar K, Evans G and **Widgerow AD**, Stromal Vascular Fraction a regenerative reality? Part 1 Currents Concepts and review of the literature. JPRAS 2016; 69; 170-179
- 74. Guo J, Nguyen A, Fadavi D, Banyard D, Toranto J, Wirth G, Paydar K, Evans G and **Widgerow AD** Stromal Vascular Fraction a regenerative reality? Part 2 Mechanisms of regenerative action- JPRAS 2016; 69; 180-188
- 75. Banyard DA, Adnani BO, Melkumyan S, Araniego CA and **Widgerow** AD. Endothelial Progenitor Cells and Burn Injury Exploring the Relationship, Burns& Trauma 2016, 4:4:2-7
- 76. Klopfer M, Banyard D, Li G-P, **Widgerow AD**, and Bachman M. A fluid collection system for dermal wounds in clinical investigations. Biomicrofluidics 10, 024113 (2016); doi: 10.1063/1.4943133
- 77. Banyard DA, Borad V, Amezcua E, Wirth GA, Evans GRD and **Widgerow AD** Preparation, Characterization, and Clinical Implications of Human Decellularized Adipose Tissue Extracellular Matrix (hDAM): A Comprehensive Review. Aesthetic Surgery Journal 2016, Vol 36(3) 349–357
- 78. **Widgerow, A.**, Fabi, S., Palestine, R., Rivkin, A., Ortiz, A., Bucay, V., . . . Chasan, P. (2016). Extracellular Matrix Modulation: Optimizing Skin Care and Rejuvenation Procedures. *Journal of Drugs in Dermatology, 15 (Suppl4)*, s63-s71.
- 79. Chiang RS, Borovikova AA, King K, Banyard D, Lalezari S, Toranto JD, Paydar KZ, Wirth GA and Evans GRD, Widgerow AD. Current concepts Related to Hypertrophic Scarring in Burn Injuries, Wound Rep Reg (2016) 24 466–477
- 80. Banyard, DA, Sarantopoulos CN, Borovikova A, Qiu, X, Wirth, GA, Paydar, KZ, Haun JB and Evans GRD, **Widgerow AD**. Phenotypic Analysis of Stromal Vascular Fraction After Mechanical Shear Reveals Stress-induced Progenitor Populations, Accepted Plast & Reconstr Surg 138; 237e Aug 2016
- 81. Salibian, A. A., Rosario, A. T., Severo, L. A., Nguyen, L., Banyard, D. A., Toranto, J. D and **Widgerow, A. D**. Current concepts on burn wound conversion-A review of recent advances in understanding the secondary progressions of burns. *Burns*. (2016) 42; 1025-1035
- 82. Lalezari S, Lee C, Borovikova AA, Banyard DA, Paydar K, Wirth GA and **Widgerow AD**. Deconstructing Negative Pressure Wound Therapy, Int Wound J 2017, Aug;14(4):649-657
- 83. Maksim V. Plikus, Christian F. Guerrero-Juarez, Mayumi Ito, Yun Rose Li, Priya H. Dedhia, Ying Zheng, Mengle Shao, Denise L. Gay, Raul Ramos, Tsai-Ching His, Ji Won Oh, Xiaojie Wang, Amanda Ramirez, Sara E. Konopelski, Arijh

- Elzein, Anne Wang, Rarinthip June Supapannachart, Hye-Lim Lee, Chae Ho Lim, Arben Nace, Amy Guo, Elsa Treffeisen, Thomas Andl, Ricardo N. Ramirez, Rabi Murad, Stefan Offermanns, Daniel Metzger, Pierre Chambon, **Alan D. Widgerow**, Tai-Lan Tuan, Ali Mortazavi, Rana K. Gupta, Bruce A. Hamilton, Sarah E. Millar, Patrick Seale, Warren S. Pear, Mitchell A. Lazar, George Cotsarelis. Regeneration of fat cells from myofibroblasts during wound healing. *Science* 17 Feb 2017:Vol. 355, Issue 6326, pp. 748-752
- 84. Calame A and **Widgerow AD**, Histological Changes Associated with Extracellular Matrix-RemodelingTopical Therapy. Dermatol Case Rep 2, 126, 2017
- 85. Sarantopoulos CN, Banyard DA, Ziegler ME, Sun B, Shaterian A and **Widgerow**, **AD**. Elucidating the Preadipocyte and its Role in Adipocyte Formation: A Comprehensive Review, Stem Cell Reviews and reports Stem Cell Rev and Rep 2018; 14:27–42
- 86. Sayadi LR, Banyard DA, Ziegler ME, Obagi Z, Prussak J, Klopfer M, Evans GRD and **Widgerow AD**. Topical Oxygen Therapy & Micro/nanobubbles: A New Modality for Tissue Oxygen Delivery; Int Wound J. 2018;15:363–374.
- 87. Borovikova AA, Ziegler M, Banyard DA, Wirth GA, Paydar KZ, Evans GRD and **Widgerow AD**, Adipose-derived tissue in the treatment of dermal fibrosis: antifibrotic effects of adipose-derived stem cells. Annals of Plastic Surgery, Volume 80, Number 3, March 2018
- 88. Lohrasb R. Sayadi, MD; Zaidal Obagi, MS; Derek A. Banyard, MD, MBA; Mary E. Ziegler, PhD; Jordyne Prussak; Luke Tomlinson; Gregory R.D. Evans, MD, FACS; and **Alan D. Widgerow**, Platelet-Rich Plasma, Adipose Tissue, and Scar Modulation. *Aesthetic Surgery Journal*, Volume 38, Issue 12, December 2018, Pages 1351–1362,
- 89. Lohrasb R Sayadi, Mustafa Chopan, Kevin Maguire, Derek A Banyard, Zachary Ehret, Gregory R D Evans, and **Alan D Widgerow**. A Novel Innovation for Surgical Flap Markings Using Projected Stencils. *Plast Reconstr Surg 2018* 09:142(3):827-830
- 90. **Widgerow**, **AD**, Jiang, LI, Calame, A. A single-center clinical trial to evaluate the efficacy of a tripeptide/hexapeptide antiaging regimen. J Cosmet Dermatol. J Cosmetic Dermatology 2019 Feb;18(1):176-182
- 91. Fijany A, Sayadi LR, Khoshab N, Banyard, DA, Shaterian, A, Alexander M, Lakey, JRT, Paydar, KZ, Evans, GRD and Widgerow, Alan D. Mesenchymal stem cell dysfunction in diabetes. *Mol Biol Rep. 2019 Feb;46(1):1459-1475*
- 92. Lohrasb R Sayadi, Alexandra Naides, Maddie Eng, Arman Fijany, Mustafa Chopan, Jamasb J Sayadi, Ashkaun Shaterian, Derek A Banyard, Gregory R D Evans and **Alan D Widgerow**. The New Frontier: A Review of Augmented Reality and Virtual Reality in Plastic Surgery.; Aesthet Surg J 2019 Aug;39(9):1007-1016
- 93. **Widgerow AD,** Moradi A, PoehlerJ, A double blind randomized controlled trial evaluating the efficacy and tolerability of a topical body treatment in combination with cryolipolysis procedures. J of Drugs in Derm, 18,4, April 2019
- 94. **Widgerow AD,** Kilmer SL, Garutto JA, W G Stevens, Non-surgical fat reduction and topical modulation of adipose tissue physiology. J of Drugs in Derm, 18, 4, April 2019
- 95. **Widgerow AD**, Cohen SR, and Fagien S. Preoperative Skin Conditioning: Extracellular Matrix Clearance and Skin Bed Preparation, A New Paradigm, Aesth Surg J, 2019, Vol 39(S3) S103–S111
- 96. Wong DE, Banyard DA, Santos PJF, Sayadi LR, Evans RD and **Widgerow AD** Adipose-derived stem cell extracellular vesicles: a systematic review, JPRAS 72., 7, July 2019,1207-1218
- 97. Sayadi LR<sup>-</sup> Alexander M<sup>2</sup>, Sorensen AM<sup>1</sup>, Sarantopoulos N<sup>1</sup>, Lau H<sup>2</sup>, Klopfer M<sup>3</sup>, Ziegler ME<sup>1</sup>, Banyard DA<sup>1</sup>, Evans GRD<sup>1</sup>, Lakey JRT<sup>2</sup>, and **Widgerow AD<sup>1</sup>**. Micro/nanobubbles: Improving Pancreatic Islet Cell Survival for Transplantation Annals of Plastic Surgery Volume 83, Number 5, November 2019
- 98. Sayadi LR, Alhunayan D, Sarantopoulos N, Kong C, Condamoor S, Sayadi J<sup>1</sup>, Banyard DA, Shaterian A, Leis A, Evans GRD, and **Widgerow AD.** The Molecular Pathogenesis of Dupuytren Disease: Review of the Literature and Suggested New Approaches to Treatment. Annals of Plastic Surgery Volume 83, Number 5, November 2019
- 99. Ziegler ME, Sorensen AM, Evans GRD, and **Widgerow AD**. Understanding the Mechanism of In Vitro Chondrogenesis Using a Coculture System for Generating a Tissue-engineered Cartilage Construct. *Plast Reconstr Surg Glob Open*. 2019;7(8 Suppl ):133-133. Published 2019 Sep 10. doi:10.1097/01.GOX.0000584996.98383.36
- 100. **Widgerow AD,** A Practical Precaution Relevant to Facial Injections, JAMA Facial Plastic Surgery Published online October 24, 2019
- 101. Sayadi L, Rowland R, Banyard DA, Evans GA, Durkin AJ and ,Widgerow AD Micro/Nanobubbles: A Novel Modality for Burn Oxygenation and Healing <u>Plast Reconstr Surg Glob Open</u> 2019 Aug; 7(8 Suppl ): 128-128. Published online 2019 Sep 10. PMCID: PMC6750499
- 102. **Widgerow AD**, Garruto JA. Gene expression studies pertaining to extracellular matrix integrity and remodelling: Nuances and pitfalls of in vitro investigations. J of Drugs in Derm. 18;12; 1255-1258 Dec 2019.
- 103. **Widgerow AD,** Palm MD, Jacob C, Garrutto JA, Bell M. Developing a Topical Adjunct to Injectable Procedures J of Drugs Derm 19, 4, April 2020

- 104. Ziegler ME, Claytor B,Bell M, Casas L and **Widgerow AD.** Gene Expression Changes in the Skin of Patients Undergoing Medial Thigh Liposuction With Pre-Surgical and Post-Surgical Application of Topical Products. Aesth Surg J online ahead of print July 2020
- 105. Evans G and **Widgerow AD**. Stem cells and tissue engineering in plastic surgery: an update. Plast Aesthet Res 2020;7:28
- 106.Ziegler, Mary E.; Sorensen, Alexandria M.; Banyard, Derek A.; Evans, Gregory R. D..; **Widgerow, Alan D.** Improving In Vitro Cartilage Generation by Co-Culturing Adipose-Derived Stem Cells and Chondrocytes on an Allograft Adipose Matrix Framework, Plastic and Reconstructive Surgery: January 2021 Volume 147 Issue 1 p 87-99
- 107. **Widgerow AD** and Napekoski K. New approaches to skin photodamage histology-Differentiating 'good' versus 'bad' Elastin. J Cosmet Dermatol. 2021;20:526–531.
- 108. Claytor B,, Casas L, Ziegler M, **Widgerow AD**. Bell B. Evaluating the Efficacy, Tolerability and Outcomes of Topical Tripeptide/ Hexapeptide Formulations Before and After Liposuction of the Medial Thighs, Aesthetic Surgery Journal Aesthetic Surgery Journal Open Forum 2021, 1–11
- 109. Casas LA, Bell M, Claytor BV, Ziegler ME, **Widgerow AD**, An Analysis of Patient Reported Recovery Outcomes of Topical Tripeptide/Hexapeptide Formulations Utilized in a Prospective Randomized Double-Blind Split Neck and Body Study, *Aesthetic Surgery Journal Open Forum*, Aesthetic Surgery Journal Open Forum 2021, 1–9
- 110. Carruthers J, Bourne G, Bell M, **Widgerow A**. Prospective, Randomized, Comparative Study of the Cutaneous Effects of a Topical Body Treatment Compared to a Bland Moisturizer. Aesthet Surg J. 2021 Aug 13;41(9):NP1188-NP1198
- 111. Widgerow AD, Ziegler, ME, Casas, LA. Topical Skin Treatment and Its Influence on Surgical Healing: Review of Literature and Underlying Physiology, Aesthetic Surgery Journal Open Forum, Volume 3, Issue 3, September 2021, ojab029, <a href="https://doi-org.eres.qnl.qa/10.1093/asjof/ojab029">https://doi-org.eres.qnl.qa/10.1093/asjof/ojab029</a>
- 112. Sayadi LR, Chopan M, Sayadi JJ, Samai A, Arora JS, Anand S, Evans G, **Widgerow AD**, Vyas R. Operating Room Stencil: A Novel Mobile Application for Surgical Planning. Plast Reconstr Surg Glob Open. 2021 Sep 17;9(9):e3807. doi: 10.1097/GOX.0000000000003807. PMID: 34549002; PMCID: PMC8448029.
- 113. Sayadi, L. R., Rowland, R., Naides, A., Tomlinson, L., Ponticorvo, A., Durkin, A. J. & **Widgerow, A. D.** A Quantitative Assessment of Wound Healing With Oxygenated Micro/Nanobubbles in a Preclinical Burn Model. *Annals of Plastic Surgery, Oct 2021- 87* (4), 421-426.
- 114. Ziegler, Mary E. Ph.D.; Sorensen, Alexandria M. B.S.; Banyard, Derek A. M.D., M.B.A., M.S.; Evans, Gregory R. D. M.D.; Widgerow, Alan D. M.B.B.Ch., M.Med. Reply: Improving In Vitro Cartilage Generation by Co-Culturing Adipose-Derived Stem Cells and Chondrocytes on an Allograft Adipose Matrix Framework, Plastic and Reconstructive Surgery: December 2021 Volume 148 Issue 6 p 1063e-1064e doi: 10.1097/PRS.00000000000008551
- 115. Khan, N, Willette, D, Melkonian, J, Ziegler, M, and **Widgerow AD.** Patient-Reported Satisfaction After Autologous Auricular Reconstruction in Patients with Microtia: A Systematic Review. 2022 Nov-Dec;24(6):478-486. doi: 10.1089/fpsam.2021.0265. Epub 2022 Jan 25. PMID: 35076253.
- 116. **Widgerow**, **AD**, Ziegler, ME, Garruto, JA, et al. Designing topical hyaluronic acid technology—Size does matter.... *J Cosmet Dermatol*. April 2022; 21: 2865–2870. doi:10.1111/jocd.15027
- 117. Melinda Lem, Jason Pham, Nawal Khan, Daniel Zaki, Wendy Brown, Jerry Hu, Mary Ziegler, Kyriacos Athanasiou, Gregory Evans and **Alan Widgerow** Poster ASPS 2022-Title: Biomechanical Characterization of Human Normal Auricular and Microtia Cartilage
- 118. Robinson, DM, Vega, J, Palm, MD, Bell, M, **Widgerow, AD,** Giannini, A. Multicenter evaluation of a topical hyaluronic acid serum. *J Cosmet Dermatol*. Sept 2022; 21: 3848-3858 10.1111/jocd.15241
- 119. **Widgerow AD**, Ziegler, ME, Garruto JA, Bell M. Effects of a Topical Anti-aging Formulation on Skin Aging Biomarkers. *Clin Aesthet Dermatol.* 2022;15(8):E53–E60.
- 120. Casas LA, Claytor RB, Zeidler KR, Shridharani SM, Cohen SR, Khanna JJ, Gould DJ, Yates EK, Lultschik S, Bell M and **Widgerow AD**. A Multicenter, Randomized, Double-Blind, Split-Body Clinical Trial Evaluating the Efficacy and Outcomes of a Topical Product Pre and Post Aesthetic Surgical Body Procedures, Aesthetic Surgery Journal Open Forum, Volume 4, 2022, ojac054, <a href="https://doi.org/10.1093/asjof/ojac054">https://doi.org/10.1093/asjof/ojac054</a>
- 121. **Widgerow AD**, Wang JV, Ziegler ME, Fabi SG etal, Advances in Pigmentation Management: A Multipronged Approach *Drugs Dermatol.* 2022;21(11):1206-1220. doi:10.36849/JDD.7013
- 122. Lombardo JA, Banyard DA, **Widgerow AD**, Haun JB. "Fluidic device system for mechanical processing and filtering of human lipoaspirate ex vivo enhances recovery of mesenchymal stem cells in comparison to standard nanofat processing.". Plast Reconstr Surg. 2022 Oct 7. doi: 10.1097/PRS.0000000000009798. Epub ahead of print. PMID: 36205654.

9 Waterway Irvine CA, 92614; Tel 1- 949- 394 5059

- 123. Mraz Robinson D, Giannin A, Rahman SM, Bell M and **Widgerow AD**. A Single Center, Randomized, Double-Blind Study to Evaluate TransFORM Body Treatment with TriHex Technology in Combination with Radiofrequency Microneedling to the Suprapatellar Region. J Clin Exp Dermatol Res, Vol.13 Iss.4 2022 No:1000618
- 124. Weinstein Velez M, Prezzano J, Bell M, Widgerow A. A Single Center, Prospective, Randomized, Blinded Study to Evaluate the Efficacy and Safety of a Topical Tripeptide/Hexapeptide Anhydrous Gel When Used Pre- and Post- Hybrid Fractional Laser for the Treatment of Acne Scars. *Clin Cosmet Investig Dermatol.* 2022;15:2763-2774 https://doi.org/10.2147/CCID.S392459
- 125. Ziegler ME, Sorensen AM, Banyard DA, Sayadi LR, Chnari E, Hatch MM, Tassey J, Mirzakhanyan Y, Gershon PD, Hughes CCW, Evans GRD and **Widgerow AD.** "Deconstructing Allograft Adipose and Fascia Matrix to Treat Soft Tissue Defects: The Addition of Fascia Matrix to Adipose Matrix Improves ```Angiogenesis, Volume Retention and Adipogenesis in a Rodent Model". Plast Reconstr Surg. Vol151, No 1, Jan 2023
- 126. Wendy W Lee, MD, Steven Fagien, MD, FACS, Jennifer Murdock, MD, Michaela Bell, BS, MBA, **Alan D Widgerow**, MBBCh, MMed, FCS, FACS, A Multi-Center Evaluation of Restorative Eye Treatment and INhance With Trihex Technology to Improve Aesthetic Outcomes When Used Pre- and Post-Blepharoplasty, *Aesthetic Surgery Journal Open Forum*, Volume 5, 2023, ojac089, <a href="https://doi.org/10.1093/asjof/ojac089">https://doi.org/10.1093/asjof/ojac089</a>
- 127. Wang JV, Fabi SG, Mraz Robinson D,Bajaj, Geronmeus R, Bell M and **Widgerow AD** A multi-center, randomized, blinded clinical study evaluating the efficacy and safety of a novel topical product for facial dyschromia. J Drugs Dermatol. 2023;22(4):333-338. doi:10.36849/JDD.7340.
- 128. Mary E. Ziegler, Andres Staben, Melinda Lem, Jason Pham, Leonardo Alaniz, Faris F. Halaseh, Sabine Obagi, Amber Leis, and **Alan D. Widgerow**, Targeting Myofibroblasts as a Treatment Modality for Dupuytren Disease, The Journal of Hand Surgery, 2023, ISSN 0363-5023, https://doi.org/10.1016/j.jhsa.2023.06.007. Published online first
- 129. Ziegler, M E; Khabaz, K; Khoshab, N; Halaseh, F; Chnari, E; Chen, S; Baldi, P; Evans, G.R.D. MD; **Widgerow, A D.** Combining Allograft Adipose and Fascia Matrix as an Off-the-Shelf Scaffold for Adipose Tissue Engineering Stimulates Angiogenic Responses and Activates a Proregenerative Macrophage Profile in a Rodent Model. Annals of Plastic Surgery 91(2):p 294-300, August 2023. | DOI: 10.1097/SAP.0000000000003587
- 130. Widgerow AD, Markowitz O, Carruthers J, Jacob C, Robison T. Dermatoporosis: Strategies for Rebuilding the Extracellular Matrix of the Skin *J Drugs Dermatol.* 2023;22(9): doi:10.36849/JDD.7549
- 131. Humphrey S, Croll N and **Widgerow AD**., Single Center Evaluation of Restorative Neck Complex with TriHex Technology® in Aging Skin of the Neck and Décolleté. J Clin Dermatol Ther 2023, 9: 0127DOI:10.24966/CDT-8771/10012
- 132. Shantharam R, Behr K, Robison T, Bell M, **Widgerow AD**. A Split Body Evaluation of a Topical Body Product Applied Pre and Post Liposuction with Helium Plasma and Radio Frequency J Clin Dermatol Ther 2023, 9: 0128 DOI: 10.24966/CDT-8771/100128
- 133. **Widgerow**, **AD**, Ziegler, ME, Garruto, JA, Shafiq, F. Antioxidants with proven efficacy and elastin-conserving vitamin C—A new approach to free radical defense. *J Cosmet Dermatol.* 2023;22:3320–3328.
- 134. Alaniz, Leonardo; Melkonian, Jacklyn; Halaseh, Faris; Pham, Jason; Shay, Madelyn; Ziegler, Mary; Evans, Gregory; Widgerow, Alan. Therapeutic Consistency of ADSC Secretomes for Wound Healing, Scar Modulation, and Autoimmune Disease. Plastic & Reconstructive Surgery-Global Open 11(10S):p 135, October 2023. | DOI: 10.1097/01.GOX.0000992600.40109.24
- 135. Moradi, A, Shafiq, F, Robison, T, Colvan, L, Poehler, J, Widgerow, AD. Multicenter evaluation of a topical antioxidant serum. J Cosmet Dermatol. 2023; 00: 1-9. doi:10.1111/jocd.16067

#### Wound Healing Southern Africa (Editor-in-chief 2008-2015):

- 136. **Widgerow AD**, THE WHASA WHEEL Integrating multiple specialties in patient management with Wound Healing as the common basis. Wound Healing Southern Africa, Vol 1 No.1, May 2008.
- 137. **Widgerow AD**, Persistence of the Chronic Wound Implicating biofilm. Wound Healing Southern Africa, Vol 1 No.2, Oct 2008.
- 138. Widgerow AD, Deconstructing the Chronic Wound. Wound Healing Southern Africa, Vol 2 No.1, April 2009.
- 139. Widgerow AD, A new look at Venous ulceration; Wound Healing Southern Af Vol 2, 2. 1-4, 2009
- 140. **Widgerow AD,** Review: Scar management marrying the practical with the science. Vol 3 No 1. Wound Healing Southern Africa, 2010
- 141. **Widgerow AD, Leak K,** Hypergranulation evolution, control and potential elimination; Wound Healing Southern Africa, 3, 2, 1-3, 2010.

9 Waterway Irvine CA, 92614; Tel 1- 949- 394 5059

- 142. **Widgerow AD** Wound fluid intervention: influencing wound healing from the outside; Wound Healing Southern Africa, Vol 4, No 1 (2011)
- 143. **Widgerow AD.** Stevens-Johnson syndrome and toxic epidermal necrolysis: topical treatment influencing systemic response; Wound Healing Southern Africa, Vol 4, No 1 (2011).
- 144. Widgerow AD, 'When healing stops' Wound Healing Southern Africa Vol 4; 2; 2011
- 145. Widgerow AD Bioengineering and the diabetic foot ulcer; Wound Healing SA Vol5; 2; 2012 64-67.
- 146. Widgerow AD, Hypertrophic burn scar evolution and management. Wound Healing SA; 6, 2.2013.
- 147. **Widgerow AD**, Tussardi IT; Banyard DA, King K, Chiang R, Wirth G, Evans GRD, Burn wound fluid: an important diagnostic source; Wound Healing SA, Vol 7, 1; 9-12, 2014
- 148. Chiang RS, King K, Banyard S, Lalezari S, Tocco Tussardi I, Toranto JD and **Widgerow AD**, Evans RD. An exploration of the relationship of fatty tissue, burn injury and scarring; Wound Healing Southern Africa 2014; 7(2):66-69.

#### **Medical Newspaper publications:**

- 149. Widgerow AD. Balanced perspective on silicone breast implants. Medical Chronicle, September 1993
- 150. Widgerow AD. Australia & South Africa-combined Plastic Surgical experiences, Med Chron, Jan 1998
- 151. Widgerow AD. In strong defense of silicone implants, Medical Chronicle, Feb 1998.
- 152. Widgerow AD. Vitality Medicine a sign of things to come? *Medical Chronicle*, March 1998.
- 153. Widgerow AD. Vitamin E and scars the giant marketing myth. Medical Chronicle, April 1998.
- 154. Widgerow AD. Breast reduction the weight of the matter. Medical Chronicle, May1998.
- 155. Widgerow AD. Dr Fickle and Mr Pride. Medical Chronicle, June1998.
- 156. Widgerow AD. Just put that nail back! Medical Chronicle, July1998.
- 157. Widgerow AD. Open injuries of the hand. Medical Chronicle, May, 1999
- 158. Widgerow AD. Don't just lick your wounds moisten them. Medical Chronicle, August1998.
- 159. Widgerow AD. Wound dressings revisited. Medical Chronicle, March, 1999.
- 160. Widgerow AD. What's this beast called cellulite? Medical Chronicle, Sept,1998.
- 161. Widgerow AD. Breast reconstruction the whole story. ? Medical Chronicle, Jan, 1999.
- 162. Widgerow AD. Hair, there and everywhere. Medical Chronicle, July, 1999
- 163. Widgerow AD. Scar management breakthrough. Medical Chronicle Sept, 1999
- 164. Widgerow AD. The wound clinic concept. Medical Chronicle Nov 1999
- 165. Widgerow AD. The anti-aging revolution. . Medical Chronicle March 2000
- 166. Widgerow AD. The final word on silicone. Medical Chronicle May 2000
- 167. Widgerow AD. The problem scar; part 1 Keloid Medical Chronicle July 2000
- 168. Widgerow AD. The problem scar; part 2 Hypertrophic scar Medical Chronicle Sept 2000
- 169. Widgerow AD. APRSSA Congress 2000 Medical Chronicle Nov 2000
- 170. Widgerow AD. Wound Care Course for 2003 Medical Chronicle Nov 2002
- 171. **Widgerow AD.** The vanity indictment. *Medical Chronicle* Jan 2000
- 172. Widgerow AD, Don't just lick your wounds moisten them. The Specialist forum Vol 1;5;4-8, Oct 2001.
- 173. **Widgerow AD,** Injury may not be the final nail in the coffin *The Specialist forum* Vol 2;2;337-40, Feb 2002.
- 174. **Widgerow AD.** The Physiology of Wound healing Part 1 *Medical Chronicle* Jan 2003
- 175. Widgerow AD. The Physiology of Wound healing Part 2 Medical Chronicle Feb 2003
- 176. Widgerow AD. Wound assessment Medical Chronicle March 2003
- 177. Widgerow AD. Selection of Dressings -Part 1 Medical Chronicle April 2003
- 178. Widgerow AD Selection of Dressings -Part 2 Medical Chronicle May 2003
- 179. Widgerow AD The Infected Wound, Medical Chronicle June 2003.
- 180. Widgerow AD Venous Ulcers, Medical Chronicle July 2003
- 181. Widgerow AD Arterial Ulcers, Medical Chronicle August 2003.
- 182. Widgerow AD Pressure Ulcers, Medical Chronicle Sept 2003.
- 183. Widgerow AD Chronic Wounds, Medical Chronicle Oct. 2003.
- 184. Widgerow AD Cosmetic Surgery Considerations The Specialist Forum Vol 4. No.9 2004
- 185. Widgerow AD, What's new in Plastic Surgery Research The Specialist Forum Nov 2005.
- 186. Widgerow AD Update on Venous Ulceration Medical Chronicle Aug 2005
- 187. Widgerow AD The Diabetic Foot Ulcer Medical Chronicle Sept 2005
- 188. Widgerow AD, The Diabetic foot ulcer -a unique wound care problem The Specialist Forum, Vol 6 No11, Nov 2006
- 189. Widgerow AD, The Diabetic foot ulcer 2 The Specialist Forum, Vol 7 No.6, 5, June 2007.

9 Waterway Irvine CA, 92614; Tel 1- 949- 394 5059

- 190. Widgerow AD. Pressure Ulcers: Important prevention Strategies Medical Chronicle Jan 2007
- 191. Widgerow AD. Venous and arterial Ulcers; The Specialist Forum, Vol 7 No.9, 5, Sept. 2007
- 192. Widgerow AD. Wound assessment; The Specialist Forum, Vol 7 No.11, November. 2007
- 193. Widgerow AD The Infected Wound The Specialist Forum Vol 8. April 2008
- 194. Widgerow AD. Pressure Ulcers: pathophysiology Medical Chronicle April 2009

#### **PUBLISHED BOOKS:**

- 1. A Cut Above The Rest PSP Publications; Author Professor Alan D Widgerow, 2004
- 2. Advanced Wound Care Med Chronicle Publications; Author Prof Alan D Widgerow, 2004; monologue

## **Chapters:**

- Widgerow AD: Surgical Wounds. In: Flanagan M (ed). Wound Healing and Skin Integrity Principles and Practice: Wiley & Blackwell, West Sussex UK 2013: pp 224-239
- Banyard DA, Sarantopoulos C, Tassey J, Ziegler M, Chnari E, Evans GRD and Widgerow AD. Preparation, characterization, and clinical implications of human decellularized adipose tissue extracellular matrix. – Editor Melvin Shiffman REGENERATIVE MEDICINE IN PLASTIC SURGERY, 2019
- Mary E. Ziegler, Alan D. Widgerow, and Gregory R.D. Evans; Stem cell research in tissue engineering
  and translational medicine in Tissue Engineering Current Status and Challenges Chandra P
  Sharma (editor), Thomas Chandy (editor), Vinoy Thomas (editor), Finosh G. Thankam (editor)

#### **PATENTS**

Alan David Widgerow has filed for patents to protect the following inventions. This listing includes patent applications that are pending as well as patents that have already been granted by the United States Patent and Trademark Office (USPTO).

COMPOSITIONS AND METHODS FOR INVASIVE AND NON-INVASIVE PROCEDURAL SKINCARE

Publication number: 20210205405

**Abstract:** Compositions and methods for skincare treatment are provided. The invention relates more generally to skin care treatment and more particularly, to compositions and methods for promoting healthy skin, skin regeneration, skin repair, skin bed preparation, and enhanced wound healing.

Type: Application Filed: March 4, 2021

Publication date: July 8, 2021

Inventors: John A. GARRUTO, Alan David WIDGEROW

Peptide compositions and methods for ameliorating skin laxity and body contour

Patent number: 11052032

**Abstract:** Compositions and methods for amelioration of skin laxity and body contour are provided. Provided herein are compositions comprising a combination of peptides.

Type: Grant

Filed: September 13, 2019

Date of Patent: July 6, 2021

Assignee: Alastin Skincare, Inc.

Inventors: Alan David Widgerow, John A. Garruto

COMPOSITIONS AND METHODS FOR INVASIVE AND NON-INVASIVE PROCEDURAL SKINCARE

Publication number: 20200338154

**Abstract:** Compositions and methods for skincare treatment are provided. The invention relates more generally to skin care treatment and more particularly, to compositions and methods for promoting healthy skin, skin regeneration, skin repair, skin bed preparation, and enhanced wound healing.

Type: Application Filed: May 8, 2020

Publication date: October 29, 2020

Inventors: John A. Garruto, Alan David Widgerow

Compositions and methods for invasive and non-invasive procedural skincare

Patent number: 10688147

9 Waterway Irvine CA, 92614; Tel 1- 949- 394 5059

**Abstract:** Compositions and methods for skincare treatment are provided. The invention relates more generally to skin care treatment and more particularly, to compositions and methods for promoting healthy skin, skin regeneration, skin repair, skin bed preparation, and enhanced wound healing.

Type: Grant

Filed: March 5, 2019

**Date of Patent:** June 23, 2020 **Assignee:** Alastin Skincare, Inc.

Inventors: John A. Garruto, Alan David Widgerow

COMPOSITIONS AND METHODS FOR AMELIORATING SKIN LAXITY AND BODY CONTOUR

Publication number: 20200069550

Abstract: Compositions and methods for amelioration of skin laxity and body contour are provided.

Type: Application

Filed: September 13, 2019 Publication date: March 5, 2020

Inventors: Alan David WIDGEROW, John A. GARRUTO

LIPOSOMAL COMPOSITIONS AND METHODS OF USE

Publication number: 20200038325

**Abstract:** Provided herein are liposomal compositions for improved delivery and penetration into the skin. Liposomal compositions as provided herein comprise one more peptides. Also provided herein are compositions and methods for targeting dermal white adipose tissue to improve fat reduction and anti-aging effects. Compositions and methods for targeting dermal white adipose tissue may comprise administering a composition comprising liposomes.

**Type:** Application **Filed:** August 1, 2019

Publication date: February 6, 2020

Inventors: John A. GARRUTO, Alan David WIDGEROW

METHODS FOR TREATING SCARS AND AGING SKIN

Publication number: 20190381066

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

**Type:** Application **Filed:** August 30, 2019

**Publication date:** December 19, 2019 **Inventor:** Alan David Widgerow

Peptide compositions and methods for ameliorating skin laxity and body contour

Patent number: 10493011

**Abstract:** Compositions and methods for amelioration of skin laxity and body contour are provided. Provided herein are compositions comprising a combination of peptides.

Type: Grant

Filed: August 2, 2018

**Date of Patent:** December 3, 2019 **Assignee:** Alastin Skincare, Inc.

Inventors: Alan David Widgerow, John A. Garruto
<a href="Methods for treating scars and aging skin">Methods for treating scars and aging skin</a>

Patent number: 10398640

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

Type: Grant

Filed: November 9, 2015

Date of Patent: September 3, 2019

9 Waterway Irvine CA, 92614; Tel 1- 949- 394 5059

Inventor: Alan David Widgerow

## • COMPOSITIONS AND METHODS FOR INVASIVE AND NON-INVASIVE PROCEDURAL SKINCARE

Publication number: 20190262418

**Abstract:** Compositions and methods for skincare treatment are provided. The invention relates more generally to skin care treatment and more particularly, to compositions and methods for promoting healthy skin, skin

regeneration, skin repair, skin bed preparation, and enhanced wound healing. **Type:** Application

**Filed:** March 5, 2019

Publication date: August 29, 2019

Inventors: John A. Garruto, Alan David Widgerow

• SKIN WRINKLE TREATMENT
Publication number: 20190183562

**Abstract:** A method for treating skin may first involve contacting an applicator of a skin heating device with an epidermal layer of the skin. The applicator may be activated to generate high-frequency alternating magnetic fields. The applicator may be used to heat a dermal layer of the skin, with the high-frequency alternating magnetic fields, to a temperature of less than 40 degrees Celsius, to stimulate a release of heat shock protein in the dermal layer to promote collagen generation. The method may also involve limiting heating of the dermal layer of the skin to less than 40 degrees Celsius.

Type: Application

Filed: December 13, 2018

Publication date: June 20, 2019

Inventor: Alan David WIDGEROW

Compositions and methods for invasive and non-invasive procedural skincare

Patent number: 10286030

**Abstract:** Compositions and methods for skincare treatment are provided. The invention relates more generally to skin care treatment and more particularly, to compositions and methods for promoting healthy skin, skin regeneration, skin repair, skin bed preparation, and enhanced wound healing.

Type: Grant

Filed: June 8, 2018

Date of Patent: May 14, 2019 Assignee: Alastin Skincare, Inc

Inventors: John A. Garruto, Alan David Widgerow

COMPOSITIONS AND METHODS FOR AMELIORATING SKIN LAXITY AND BODY CONTOUR

Publication number: 20190038539

Abstract: Compositions and methods for amelioration of skin laxity and body contour are provided.

Type: Application Filed: August 2, 2018

Publication date: February 7, 2019

Inventors: John A. Garruto, Alan David Widgerow

COMPOSITIONS AND METHODS FOR INVASIVE AND NON-INVASIVE PROCEDURAL SKINCARE

Publication number: 20180289767

**Abstract:** Compositions and methods for skincare treatment are provided. The invention relates more generally to skin care treatment and more particularly, to compositions and methods for promoting healthy skin, skin regeneration, skin repair, skin bed preparation, and enhanced wound healing.

**Type:** Application **Filed:** June 8, 2018

Publication date: October 11, 2018

Inventors: John A. Garruto, Alan David Widgerow

Compositions and methods for invasive and non-invasive procedural skincare

Patent number: 10086035

**Abstract:** Compositions and methods for skincare treatment are provided. The invention relates more generally to skin care treatment and more particularly, to compositions and methods for promoting healthy skin, skin regeneration, skin repair, skin bed preparation, and enhanced wound healing.

Type: Grant

Filed: February 2, 2017

9 Waterway Irvine CA, 92614; Tel 1- 949- 394 5059

**Date of Patent:** October 2, 2018 **Assignee:** ALASTIN SKINCARE, INC.

Inventors: John A. Garruto, Alan David Widgerow

COMPOSITIONS AND METHODS FOR INVASIVE AND NON-INVASIVE PROCEDURAL SKINCARE

Publication number: 20170224760

**Abstract:** Compositions and methods for skincare treatment are provided. The invention relates more generally to skin care treatment and more particularly, to compositions and methods for promoting healthy skin, skin regeneration, skin repair, skin bed preparation, and enhanced wound healing.

**Type:** Application **Filed:** February 2, 2017

Publication date: August 10, 2017

Inventors: John A. Garruto, Alan David Widgerow

METHODS FOR TREATING SCARS AND AGING SKIN

Publication number: 20160058816

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

Type: Application

Filed: November 9, 2015

**Publication date:** March 3, 2016 **Inventor:** Alan David Widgerow

METHODS FOR TREATING SCARS AND AGING SKIN

Publication number: 20160058693

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

Type: Application Filed: November 9, 2015

Publication date: March 3, 2016 Inventor: Alan David Widgerow

Methods for treating scars and aging skin

Patent number: 9180158

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

Type: Grant

Filed: August 20, 2013

**Date of Patent:** November 10, 2015 **Inventor:** Alan David Widgerow

Methods for treating scars and aging skin

Patent number: 9180157

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

Type: Grant

Filed: November 11, 2011

Date of Patent: November 10, 2015

9 Waterway Irvine CA, 92614; Tel 1- 949- 394 5059

Inventor: Alan David Widgerow

METHODS FOR TREATING SCARS AND AGING SKIN

Publication number: 20130337088

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

**Type:** Application **Filed:** August 20, 2013

**Publication date:** December 19, 2013 **Inventor:** Alan David Widgerow

Aesthetic treatment of scars and aging skin

Patent number: 8591961

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

Type: Grant

Filed: November 10, 2011

Date of Patent: November 26, 2013

**Assignee:** Allergan, Inc. **Inventor:** Alan David Widgerow

METHODS FOR TREATING SCARS AND AGING SKIN

Publication number: 20120058167

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

Type: Application
Filed: November 11, 2011
Publication date: March 8, 2012
Inventor: Alan David Widgerow

AESTHETIC TREATMENT OF SCARS AND AGING SKIN

Publication number: 20120058076

**Abstract:** Beneficial topical compositions for treating scar or aging skin are provided. In one embodiment, the compositions include Bulbine frutescens, Centella asiatica and a phenol derived from olives, such as oleuropein. The composition may be used in the treatment of scars formed during surgery. The composition may also be used cosmeceutically in the treatment of aged skin, and may include phosphatidylserine, vitamins, and other beneficial anti-aging ingredients.

Type: Application

Filed: November 10, 2011

Publication date: March 8, 2012

Inventor: Alan David Widgerow

Treatment of damaged skin

Patent number: 8071139

**Abstract:** A medicament for treating skin is described. It comprises essentially of bulbine frutescens, centella asiatica and a phenol derived from olive oil preferably oleuropein. The medicament may be used in the treatment of scars formed during surgery. It may also be used cosmeceutically in the treatment of aged skin where it may be used with phosphatidylserine. The medicament can also act in conjunction with anti-acne treatment to diminish scarring from the acne condition.

Type: Grant

Filed: September 4, 2009

9 Waterway Irvine CA, 92614; Tel 1- 949- 394 5059

**Date of Patent:** December 6, 2011 **Inventor:** Alan David Widgerow

ABLATION TECHNIQUE FOR COSMETIC SURGERY

Publication number: 20100106145

**Abstract:** A method of non-invasive treatment of the human body is described by ablating a muscle or a nerve controlling the muscle. The method comprises stimulating a muscle to emit an electromyographic signal. The electromyographic signal is detected to ascertain the location of the said muscle or alternatively the nerve. The muscle or nerve is heated by means of optical energy while cooling the skin in the vicinity of the said muscle or nerve. Then radio frequency energy is applied to the muscle or nerve to ablate or partially to ablate said muscle or nerve.

Type: Application Filed: March 18, 2008

Publication date: April 29, 2010
Inventor: Alan David Widgerow
TREATMENT OF DAMAGED SKIN

Publication number: 20100062085

**Abstract:** A medicament for treating skin is described. It comprises essentially of bulbine frutescens, centella asiatica and a phenol derived from olive oil preferably oleuropein. The medicament may be used in the treatment of scars formed during surgery. It may also be used cosmeceutically in the treatment of aged skin where it may be used with phosphatidylserine. The medicament can also act in conjunction with anti-acne treatment to diminish scarring from the acne condition.

Type: Application

Filed: September 4, 2009

**Publication date:** March 11, 2010 **Inventor:** Alan David Widgerow

#### **GRANT AND CONTRACT SUPPORT 2013- 2023:**

2023: Madelyn Shay, Undergraduate Research Opportunities Program (UROP) Faculty Advisory Board has selected you as a UROP Fellow for the 2022-2023 academic year 'Reversing Dupytrens contracture' biochemically

Vy Cao, Undergraduate Research Opportunities Program (UROP) Faculty Advisory Board has selected you as a UROP Fellow for the 2022-2023 academic year. "vascular metabolomics of fat graft and adipose derived stem cells"

#### 2022

American Foundation for Surgery of the Hand. "Targeting Myofibroblasts as a Novel Treatment Modality for Dupuytren's Contracture" (Award 3945) has been approved as the 2022 Andrew J. Weiland Basic Science grant for funding in the amount of \$20,000 for a one-year grant.

#### 2021

2nd round funding: Jacklyn A. Melkonian, Neel Bhardwaj: Undergraduate Research Opportunities Program (**UROP**) Faculty Advisory Board has recommended your appointment as a UROP Fellow at UCI for the 2020-2021 academic year. "Using Adipose-Derived Stem Cells and Platelet-Rich-Plasmas to Induce Fibroblast Adipogenesis in vitro," under the supervision of Dr. Alan Widgerow.

Neel Bhardwaj, Jacklyn A. Melkonian: Undergraduate Research Opportunities Program (UROP) Faculty Advisory Board has recommended your appointment as a **UROP** Fellow at UCI for the 2020-2021 academic year. "Utilizing Oxygenated Micro/nanobubbles (MNBs) to Enhance Fat Graft Retention in vivo," under the supervision of Dr. Alan Widgerow.

Sayenzas' proposal has been selected to receive a \$5K **Startup Launch Grant sponsored by the Richard Sudek Entrepreneurship Fund.**American Association for Hand Surgery, project entitled, "Investigation into a Novel Treatment Modality for Dupuytren's Contracture" was selected to receive the **2021 AAHS Annual Research Grant** in the amount of \$10,000.- Leis, Ziegler, Sayadi, **Widgerow UROP(**Undergraduate Research Opportunities Program)

1st round funding: Jacklyn A. Melkonian, Neel Bhardwaj: Faculty Advisory Board has recommended your appointment as a **UROP Fellow** at UCI for the 2020-2021 academic year, "Using Adipose-Derived Stem Cells and Platelet-Rich-Plasmas to Induce Fibroblast Adipogenesis in vitro," under the supervision of Dr. Alan Widgerow.

Neel Bhardwaj, Jacklyn A. Melkonian: Faculty Advisory Board has recommended your appointment as a **UROP Fellow** at UCI for the 2020-2021 academic year, "Utilizing Oxygenated Micro/Nanobubbles (MNBs) to Enhance Fat Graft Retention in vivo," under the supervision of Dr. Alan Widgerow.

#### 2020

Faris Halaseh, Jordan Tang Undergraduate Research Opportunities Program (**UROP**) Faculty Advisory Board has recommended your appointment as a UROP Fellow at UCI for the 2019-2020 academic year. *Improving Lipotransfer Viability in Mice with Oxygenated Micro/nanobubbles (MNBs)*," under the supervision of Professor Alan Widgerow. **2019** 

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Tech Surge Award - P- flaps team - R Sayadi, A Majumder etal - Widgerow AD Mentor 2018-2019 UC Irvine "New Venture Competition for Tech Surge" - placed 2nd \$5000

Musculoskeletal Transplant Foundation Award 2019 - PI - A D Widgerow - \$221,000 - 2019; Deconstructing Adipo-induction in Acellularized Adipose Matrix (AAM)

UROP

Jordan Tang-SURP Fellow at UCI for Summer 2019. UROP- "Oxygenated Micro/Nanobubbles: A Novel Approach to Improving Fat Graft Volume Retention."under the supervision of Professor Alan Widgerow

Luke M. Tomlinson, Waseem N. Abdou, Hayel Baqal, Jordan N. Tang (UROP) 2018-2019 academic year., "Effects of Oxygen-Filled Micro/Nanobubbles on Excisional Wounds," under the supervision of Dr. Alan Widgerow and Dr. Lohrasb Sayadi.

#### 2018

Design Team winner annual biomedical engineering device design UCI Innovations competition. Bubtech, micronanobubble project, June 2018 Mentor Dr Widgerow - \$15000

Marjan Farid, MD - Eye Bank Association of America (EBAA) grant proposal entitled "Micro/nanobubbles: A New Modality for Corneal Transplant Preservation" and has selected it for funding. You will be awarded \$4400 to complete this project. Mentor/collaborator Alan WidgerowNitara Tariqi, Keenan Ferguson, Nikita Ganeshan, Lauren S. Lastra, Stephanie J. Yeh: Undergraduate Research Opportunities Program (UROP) Faculty Advisory Board has recommended your appointment as a UROP Fellow at UCI for the 2017-2018 academic year. We are awarding \$600 in support of your proposed research project. "A Micro/Nanobubble Generator Designed to Promote Wound Healing and Tissue Preservation." under the supervision of Dr. Alan Widgerow, Professor G.P. Li and Dr. Michael Klopfer.

Alexandria M. Sorensen: Undergraduate Research Opportunities Program (UROP) Faculty Advisory Board has recommended your appointment as a UROP Fellow at UCI for the 2017-2018 academic year. "Micro/Nanobubbles: Quantification of Bubble Oxygen Content," under the supervision of Dr. Alan Widgerow.

ASERF Interim Research Grant; Ross Sayadi - Fellow CTE - \$6670 - "New Innovation For Projected Flap Design" - Mentor AD Widgerow Nov 2017-Nov2018

NATIONAL INSTITUTE OF DIABETES AND DIGESTIVE AND KIDNEY DISEASES Mechanical Activation of Adipose-Derived Stem Cells for the Treatment of Diabetic Foot Ulcers Using a Novel CD-Microfluidic Device 09/15/2017 - 08/31/2018; Grant # 1R43DK116389-01; Principal Investigator(s): Alan D Widgerow, MBBCh (CTE) Ahmed Nabil Zobi (Syntr Health) - \$300,000

Musculoskeletal Transplant Foundation Award 2017/2018 - PI - A D Widgerow - \$215,625 - 2017/2018; Deconstructing Adipo-induction in Allograft Adipose Matrix (AAM)

#### 2017

PSEF Research Grant Award 2017 - Banyard DA, Evans GE, Widgerow AD (CTE laboratory) - \$50,000 - Activated adipopse stem cells for the prevention/treatment of diabetic foot ulcers - 2017/2018

. Undergraduate Research Opportunities Program (UROP) Research proposal entitled " Time Dependent CD34 Expression In Shear Stressed Mesenchymal Stem Cells." Nikolaos Sarantopoulos under the supervision of Professor Alan Widgerow awarded an UROP Fellowship for the 2017-2018 academic year (\$500).

PSEF/MTF Dermal Tissue Research Grant Award 2016/2017 - A D Widgerow PI - \$50,000 - Tissue Engineered 3-D cartilage construct Musculoskeletal Transplant Foundation Award 2016/2017 - collaborative projects - 3 yrs - PI - A D Widgerow - \$215,000 - 2016/2017; Deconstructing Adipo-induction in Acellularized Adipose Matrix (AAM)

Sponsored by STEMCELL Technologies, (TranScience, the reviewers) - Christos Sarantopoulos, D Banyard, supervised by A D Widgerow. Your proposal is the most scientifically sound and feasible out of 5 applications Reagents/beads supply value of \$2500 2016

UCI Deans Summer Research UROP stipend Ramin Raiali under supervision AD Widgerow. D Banyard – Human derived adipose matrix analysis – 2015 The Summer Undergraduate Research Program (SURP)/Undergraduate Research Opportunities Program (UROP) Research proposal entitled "Evaluation of Cellular Stressors on Adipose Tissue-Derived Stromal Vascular Fraction Components for Enhancing in vivo Fat Grafting Survival." Christos Sarantopoulos under the supervision of Professor Alan Widgerow awarded an Honorary SURP Fellowship for the 2015-2016 academic year Undergraduate Research Opportunities Program (UROP) award 2014/2015 Christos Sarantopoulos \$300 "Identification of Adipose Tissue Derived Stromal Vascular Fraction Components Essential to Regenerative Cell Therapy using Various Methods for Optimal Component Isolation," under the supervision of Professor Alan Widgerow and Dr. Derek Banyard.

California Institute for Regenerative Medicine (CIRM) Training Grant (Award # TG2-01152) for Derek Banyard – Mentors:

Evans GRD, **Widgerow A**. Sept 1, 2014 – Aug 31, 2015. **\$89,000**Institute for Clinical and Translational Science Pilot Grant: 'SPoTT – Signaling profile of thermal trauma – exudate analysis in acute burn patients' \$27,500. National Center for Research Resources and the National Center for Advancing Translational Sciences, National Institutes of Health, through Grant UL1 TR000153 Widgerow AD, Evans GRD. 2014. Institute for Clinical and Translational Science Pilot Grant: 'Reprogramming of ADSCs to iPS and further differentiation to neuronal cells for the treatment of peripheral neuropathy.' **§29,400**. **Widgerow AD**, Evans GRD. 2011-2013. Undergraduate Research Opportunities Program. "Signaling Profile of Thermal Trauma (SPoTT): Exudate Analysis in Acute Burn Patients." (Proposal 89793m2) Awad A, Widgerow A, Evans GRD. 2013-2014.

Institute for Clinical and Translational Science. "Neuronal regeneration with adipose derived adult stem cells." IRB 2011-8236. SPID #8030. Tadeu Sartini, Alan Widgerow, Evans, GRD.. 2013-2014.

UROP Fellow. Hassaan M. Afzel. "In Vitro Adipose-derived Stem Cell Viability in Nerve Blast Medium." Supervisor Widgerow AD, Mentor Evans, GRD. 2012-13.

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7/20/2018

Alan D. Widgerow: 2018 Mentor of the Year

# UCI School of Medicine News and Events

## Alan D. Widgerow: 2018 Mentor of the Year

Like

Alan D. Widgerow, MBBCh (MD), MMed (MHS), FCS, FACS, was announced as the 2018 Mentor of the Year by the Institute for Clinical and Translational Science. Dr. Widgerow was recognized for his outstanding commitment to mentoring, advising, and support of clinical and translational science research.

"Dr. Widgerow is an exceptional professor who is passionate about teaching. His students and mentees were consistently inspired by his infectious enthusiasm for science and research. He is an accomplished innovator who has made significant contributions to healthcare in the areas of tissue engineering and wound healing, and is a role model for UCI faculty in guiding the next generation of clinical and translational researchers," said Dr. Dan Cooper who leads the ICTS

Dr. Widgerow was appointed to the faculty of the Department of Plastic Surgery as professor and director of the Center for Tissue Engineering (CTE) in July 2012.

At CTE, he has developed a multi-staffed laboratory and introduced multiple projects related to adipose derived stem cell functional analysis, adipose decellularized matrix utilization in a range of projects, nanobubble wound healing and transplantation investigation and burn wound mediator analysis. Under his direction, CTE has been awarded multiple grants, won numerous awards and has published widely. In addition, Dr. Widgerow has developed and licensed multiple products to the US and South African markets and is currently chief medical officer of ALASTIN Skincare, Inc.

During his more than 30 years of experience in plastic surgery, Dr. Widgerow has published more than 140 articles and two books. He served as editor-in-chief of *Wound Healing Southern Africa* from 2007-2016.