

ALAN D. WIDGEROW, MBBCh, FCS, MMed, FACS

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

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
Residency	- Johannesburg and Baragwanath Hospitals, Johannesburg, January 1984-July 1984 <i>Senior House Officer</i> for the Department of <i>Plastic & Reconstructive Surgery</i>
Residency	- Natalspruit Hospital Department of Surgery, Johannesburg, July 1984-June 1986 and January 1986-July 1986 . <i>Medical Officer/Registrar - General surgery</i> and 6 months subspecialty maxillofacial and oral surgery.
Residency	- Natalspruit Hospital Department of Orthopaedics, July 1985-December 1985 <i>Hand Surgical Registrar /resident</i> - Trained in microvascular surgery.
Residency	- University of the Witwatersrand Department of Plastic & Reconstructive Surgery, Registrar/resident, <i>Plastic & Reconstructive Surgery</i> , August 1986-October 1989
Consultant	- University of the Witwatersrand Department of Plastic & Reconstructive Surgery, Teaching Consultant and Consultant <i>Head plastic surgery division</i> , Hillbrow Hospital, Johannesburg, November 1989-1990
Professor	- Honorary - University of the Witwatersrand, Department of Plastic & Reconstructive Surgery, Feb 1999 - present

PROFESSIONAL EXPERIENCE:

CHIEF SCIENCE OFFICER Alastin, a Galderma Company (acquired Dec 2021)

CHIEF MEDICAL 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 (yet to be announced)

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; 95% time/effort dedicated to Alastin business.

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,

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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 'bioflamaccide' 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; multiple 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

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.

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

EXAMINER (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, Butech, 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.

PUBLICATIONS

1. **Widgerow AD**, Edinburg M, Biddulph S. An Analysis of proximal phalangeal fractures. *Journal of Hand Surgery (Am)* 12 A, 134, January 1987.
2. 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**. Iatrogenic 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

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6. **Widgerow AD**, Ford TD Prevention of deformity in the neglected burn. *Trauma and Emergency Medicine*, 6, 13, Feb.1989
7. **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.
10. **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- α 2b 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.

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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 36, 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 tissue-derived 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

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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, Aranieso 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-Remodeling Topical 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,

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PATENTS

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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

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

ALAN D. WIDGEROW, MBBCh, FCS, MMed, FACS

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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

- [**Methods for treating scars and aging skin**](#)

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

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**](#)

ALAN D. WIDGEROW, MBBCh, FCS, MMed, FACS

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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

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

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.

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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

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

ALAN D. WIDGEROW, MBBCh, FCS, MMed, FACS

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

Publication date: March 11, 2010

Inventor: Alan David Widgerow

GRANT AND CONTRACT SUPPORT 2013- 2021:

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

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 Widgerow/Nitara 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 adipose 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)**

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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 Rajali under supervision **A D 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.

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.