The 18th Annual Cutting Edge Wound Care Symposium

November 14, 2025

2:45 PM - 3:45 PM

Beyond the Bedside: Exploring What's Next in Wound Care

Franco Kraiselburd, Founder & CEO, Asclepii

Franco represents the next generation of biomedical innovators. As the CEO and Founder of Asclepii Inc., he has led the development of a diverse pipeline of six medical technologies spanning seven countries and research institutions. Under his leadership, the company has secured over US$1 million in non-dilutive translational grant funding, all driven by a shared mission to create impactful and globally accessible medical devices.

Franco designed his first biomedical prototype at just 14 years of age while conducting research at the University of São Paulo's Medical School. Having witnessed the challenges of a strained healthcare system firsthand, he has devoted his career to improving healthcare access across Latin America, translating cutting-edge research into real-world solutions that make a difference for patients and communities alike.

Northeast Surgical Wound Care

Cutting Edge Wound Care: Today and Beyond

Where does the future of Wound Care lie?

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R&D Partners:

CASE WESTERN RESERVE UNIVERSITY

USP Universidade de São Paulo

Tecnológico de Monterrey

source: Crain's Cleveland Business 20 in their 20s

Funded & Supported by:

NSF

NIH

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CASE WESTERN RESERVE UNIVERSITY

Bachelor of Science & Engineering.
Biomedical Engineering
'24

Franco Kraiselburd
CEO & Founder, Asclepii Inc.

source: Crain's Cleveland Business 20 in their 20s

MIT Technology Review Innovators Under 35

2024

20 in their 20s Crain's Cleveland Business

2024

Wound care statistics: what is the current landscape?

130 MM+
Diabetics & Pre Diabetics at risk (US only)

Reduced Blood Flow

Permanent Nerve Damage

10.5 MM
Chronic wounds
85% are 65 yrs +

Chronic Skin Wounds

1 in 4 Result in Infection (3M wounds)

30%
Mortality rate of chronic wounds in US (Cancer is 31%)

5M+ Preventable Hospitalizations

US$30k+ per Amputation

Sources: ADA (2023) | Fife et. al (2012) | Burgess et. al (2021) | UMichigan Medicine (2023) | Edmonds, et al 2021 | CDC 2023

Wound care statistics: what is the current landscape?

50%
of patients admitted to hospital are affected by wounds

1500
Specialty Wound Care Centers across US

$100 B
cost per year

Amount of visits, lack of cost-effective solutions, and low patient compliance driving cost of care

8.2 MM
Medicare beneficiaries

Broad sites of application (inpatient, outpatient, at-home) makes payment & compliance harder

Sources: Ongarora, et. al.

The bottom line:

Wound needs are intricate and expensive:

- Low patient compliance
- High patient comorbidity
- **Shifting reimbursement landscape**
- High patient & wound variability

Source: https://www.neotrelpilot.com/contents/library/ultrasan-therapy/

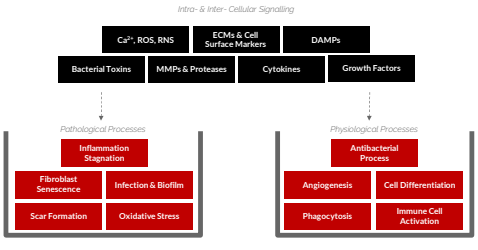
How will technology meet these needs?

$127 per sq cm reimbursement
for Skin Substitutes

(vs $1,500 avg on ASP + 6%)

How will technology meet these needs?

Wound Healing is a constant struggle for balance



Non-Healing Factors **Healing Factors**

Wound needs & complexity vary by stage

I
hemostasis

Coagulation cascade
Prothrombin & Fibrin activation

Hemostatic control
Whole blood absorption

Infection control

IV
maturation

Cell maturation
Tissue signaling & growth

Scarring reduction
Tissue hydration & collagen reduction

II
inflammation

Infection control
Biofilm prevention & combat

Debridement
Wound cleaning & MMP regulation

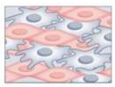
Cell response enhancement

III
proliferation

Cell growth, migration & proliferation
Fibroblast & Keratinocytes

Offloading/Pressure
Tissue irrigation, angiogenesis

Diagnostics

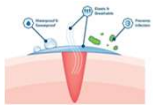


I
Nanomaterial Sealants

Hemostasis & pain relief

Minimal cell damage

Site regulation



IV
Wearable Tech

Enhanced compliance

Scarring reduction

Risk prevention

II
Bioengineered Skin Substitutes

Cell optimization

Vascularization

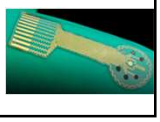
Live diagnostics

III
Smart Bandages & Wound Diagnostics

Tissue stimulation

Controlled care & data collection

"Digital Twin" compatibility



Diving deeper: Swift Ray 1™

AI-Powered Wound Care

Thermal Imaging
No-contact, quantifiable heat maps

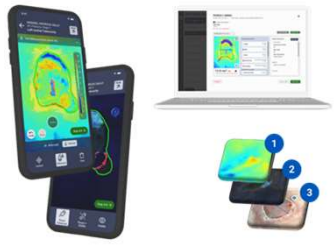
Seamlessly Connected
Integrates to iPhone and some Androids as well

Bacterial; Imaging
Instant visualization of bacteria

SWIFT

Diving deeper: Swift Ray 1™

AI-Powered Wound Care



Working principle:

- Compiled wound care data to enable proactive decision-making
- Connect interdisciplinary clinicians to increase visibility and collaboration
- Optimize clinician efficiency and improve documentation consistency

Diving deeper: Next-Gen Dressings & Skin Substitutes

Artemis™

End-to-end care - from Dressing to Skin Substitute, Hostile to Healed

ARTEMIS™ - Advanced Wound Matrix

Superior Cell organization & growth

Antibacterial + Antifungal effect

Platform capabilities

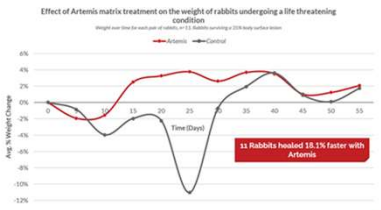
Pipeline that builds on itself

Diving deeper: Next-Gen Skin Substitutes

Artemis™

Live animal model shows Artemis heals 20% faster

- 20% Faster Healing*
- 90% less scarring**
- Superior, multidimensional wound management



Fuentes et al., "The effect of an autologous cellular gel-matrix integrated implant system on wound healing" (2010) Link | *in rabbit study **when using Artemis cell therapy variant, data available upon request

Diving deeper: Next-Gen Skin Substitutes

Artemis™

Additives Usable with Artemis

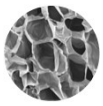
Cells
- Autologous Cells
- Platelet-Rich-Plasma (PRP)

Therapeutics
- Vasodilators
- Antidiabetics
- Novel Drugs

Bioactives
- Nanoparticles
- Plant Extracts
- Bioglass

Biosensors
- Reporters
- Aptamers

Multifunctional Patented Semi-Synthetic Cellular Scaffold

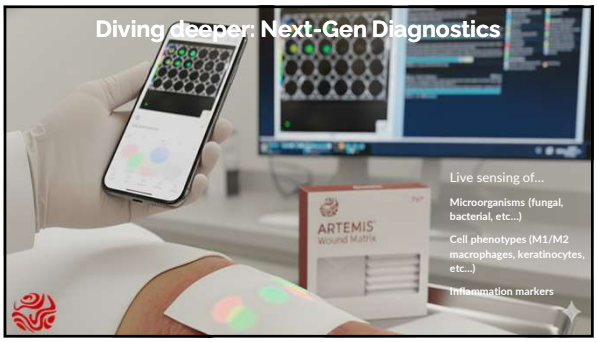


Cellular Scaffolds are 3-Dimensional Biomaterials that provide space and structure for cells to grow

Wound Healing Mechanisms

- Angiogenesis
- Mobilization of Progenitor Cells
- Cellular Migration
- Immune Modulation
- Growth Factor Promotion

Diving deeper: Next-Gen Diagnostics



Live sensing of…

Microorganisms (fungal, bacterial, etc…)

Cell phenotypes (M1/M2 macrophages, keratinocytes, etc…)

Inflammation markers

Diving deeper: Next-Gen Skin Substitutes

Artemis™

Fully compatible…

Kidneys

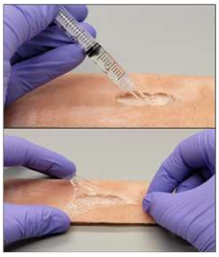
Livers

Pancreases

…more?

Diving deeper: Cleragel™

Inflammation control at first contact



'Pausing' Inflammation
Allowing for wound to 'pause' until appropriate care is available

Elastic Conformity
Unlike traditional gels, its novel structure allows for easy manipulation and adhesion to healthy skin only

Platform Potential
Ability to mix therapeutic compounds into gel

Diving deeper: Smart Wearable Sensors

Oura™

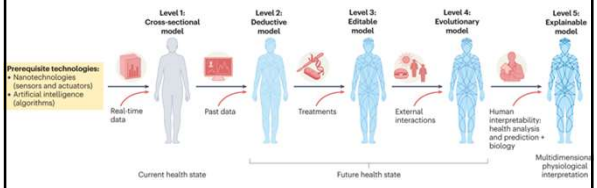
AI-Powered, Smarter Than Watches
Powered by machine learning, measuring 50+ metrics like sleep, heart rate, and activity 24/7 for effortless wellness insights. Tracks stress, recovery, women's cycles, pregnancy, and menopause—delivering personalized scores and tips to boost sleep quality, energy, and overall health.

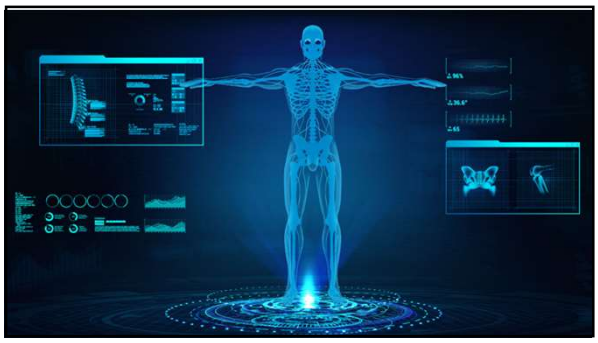
Easy compliance & communication
Connecting 50+ metrics to wound outcomes can accelerate prognosis and diagnosis

Digital Twin potential at the 'tip' of your fingers?

Digital Twins - the future of care?

how current technologies play into the long run





What is needed for this innovation to happen?

What is needed for this innovation to happen?

YOU!

Thank You!

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We understand wounds better than ever, and tech will accompany this growth