

Entrepreneurship Day – November 18, 2024

Early Commercialization
Resources



Translational Research in Bioengineering

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Unmet Need



Second-Degree Burn Wound



- Antibacterial
- Moist wound healing
- Excessive pain
- Traumatic removal
- Prolonged healing
- Scarring



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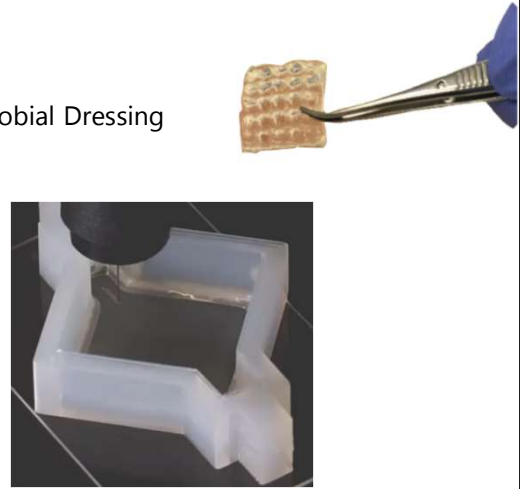
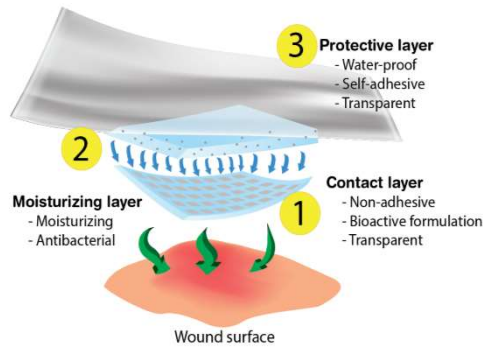
Health 4.0 – Next Generation Health Care Products



LF Printech LLC – Rolla Missouri
Bioprinting and Additive Manufacturing Company

BurnHeal

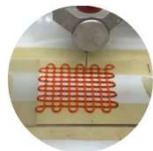
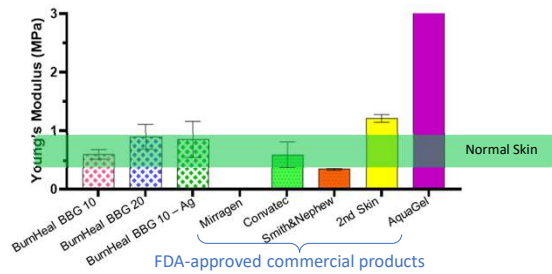
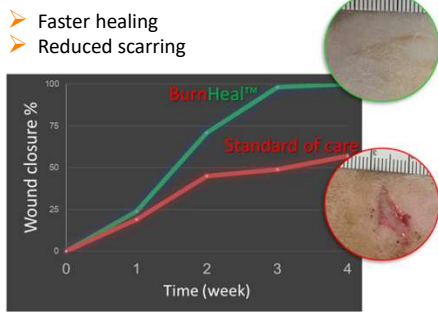
An Advanced 3D-printed Antimicrobial Dressing



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3D-Printed Bioactive Hydrogel Dressings



- > Bioactive formulation
- > 3D-printed custom-fit



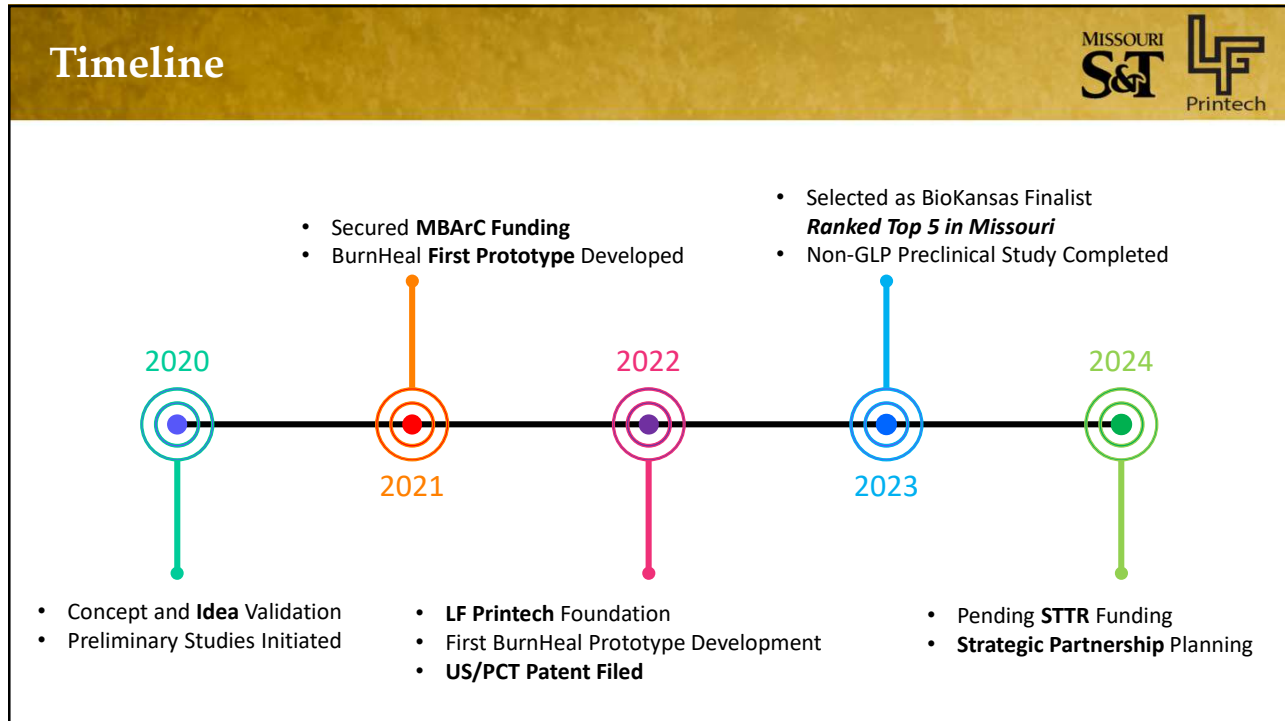
- > Transparent contact
- > Porous contact



- > Non-adhesive contact
- > Non-traumatic dressing removal

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Acknowledgement

MISSOURI S&T **LF Printech**

- **Missouri S&T**
 - Dr. Greg Hilmas
 - Richard Watters
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 - Dr. David Greenhalgh
- **South Shore Hospital, Weymouth MA**
 - Dr. Lisa Gould
- **Charles George VA Medical Center, Asheville, NC**
 - Dr. Igor Melnychuk

MISSOURI S&T Center for Biomedical research

NIH **REACH**
NIH Research Evaluation & Commercialization Hubs

Cayman CHEMICAL

StageBio

NOBLE LIFE SCIENCES
PASSION · INTEGRITY · INNOVATION
MEDICEPT
Trusted Solutions, Rapid Response

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Tips for Early-Stage Bioinnovators



- Ask yourself:
 - Is there a real unmet need?
 - Who cares about it?
 - Who is going to use it?
 - Who pays for it?
- Secure IP ASAP!
- Work with TechTransfer office.
- Find the right CROs.
- Identify the regulatory pathway.
 - Ask FDA or NIH SEED Office.

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Thank You!

Visit us at

www.lfprintech.com



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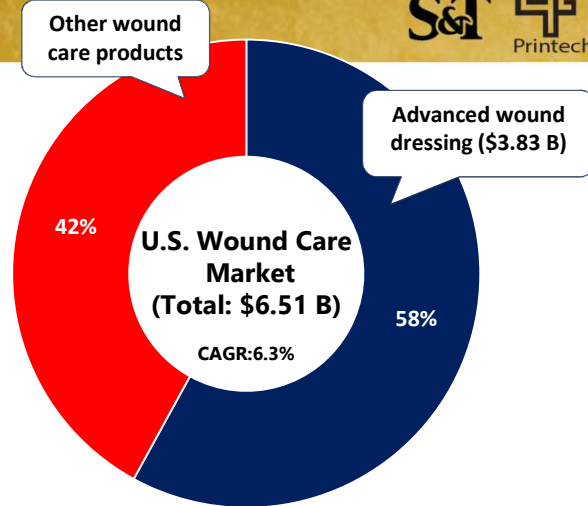
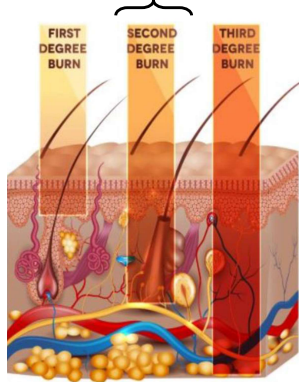
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BurnHeal Market Size



Each day, over 300 children are treated in ER for burn injuries

Target Market: 60% of burn patients registered in U.S. hospitals ~ 660,000



Burn wound dressings account for 10% of advanced wound dressing market:

U.S. Target Market: \$383 M

<https://ameriburn.org/wp-content/uploads/2018/12/nbaw2019>
<https://www.fortunebusinessinsights.com/u-s-wound-care-market-107611>