

Leonhardt Ventures
The Engine of Innovation

2023
Annual Report





Leonhardt Ventures

Annual Report

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Letter to Stakeholders

Dear Stakeholders,

2023 was another great year of progress across our Leonhardt Ventures portfolio! I am extremely proud of our team and very grateful to all the stakeholders that had faith to invest time or their hard earned funds with us. We believe we have with your help developed the ultimate product portfolio for extending holistic healthspan of people.

Progress to Date Summary

1. OVER 700 PATENT CLAIMS

issued, pending, published, licensed,
optioned or in process.

2. Major patent claims issued for bioelectric klotho modulation, klotho expressing MSCs, inflammation management, bioelectric cancer treatment, skin regeneration, stem cell homing, myogenesis, valve regeneration, hair regeneration, blood pressure modulation, kidney regeneration, bladder regeneration, heart regeneration, arteriogenesis, nerve regeneration and more.
3. Patents filed on a whole suite of bioelectric aging reversal protein expressions supported with data including sestrins, sirtuins, LIM, follistatin, BDNF, GDF10, GDF11.
4. Clinical data gathered on 28 products (see listing below) so far. Running about 80% success across all studies with no serious adverse events reported to date.

5. OVER 4,000 LAB EXPERIMENTS

completed with extensive data
gathered in our own R&D labs.

6. Peer reviewed data published on numerous products and bioelectric protein expressions.
7. Winner of Allergan Abbvie Golden Passport Competition for medical aesthetics innovations.
8. Finalist for Octane Technology Award <https://leonhardtventures.com/howard-leonhardt-finalist-for-best-technology-ceo-of-the-year-award-orange-county-hosted-by-octane/>

9. 10 NEW PRODUCTS at full commercialization stage

with supporting FDA clearances and a dozen more coming in the pipeline in 2024!
Since 1986 over 700,000 patients have been treated with Leonhardt inventions.

10. Set to open up 8 locations of our own branded Lionheart Longevity & Wellness MedSpas www.lionheartlongevity.com featuring our patented technologies in 2024. **Technology product (ErectiStim, OrthoStim, SkinStim, HairCell, BodStim etc) stakeholders receive 8% royalty on full retail price sales and 5% royalty on discounted sales.**
11. **We officially entered the \$101 MILLION XPrize competition for HEALTHSPAN extension** <https://www.xprize.org/prizes/healthspan>
12. Commercial sales web site is up and running - Lionheart Health www.lionhearthealthstim.com



In the News....

1. **Allergan Abbvie (\$268 billion valuation) post on our Golden Passport Award >** https://www.linkedin.com/posts/allergan-aesthetics_through-our-support-of-lionheart-health-activity-7141157426929610752-TPU-/
2. **University Lab Partners Press Release on our Golden Passport Award >** <https://www.prnewswire.com/news-releases/university-lab-partners-announces-lionheart-health-as-the-winner-of-golden-passport-pitch-competition-to-accelerate-aesthetics-start-ups-302011849.html>
3. **LSI Emerging Medtech 2023 Presentation on Lionheart Health, Inc. >** <https://youtu.be/XfzXNTcl0Ac?si=1EtJxcwA4xDDFpJG>
4. **Longevity Technology Article on BodStim TM >** <https://longevity.technology/news/bodstim-taking-longevity-wearables-to-the-next-level/>
5. **MedTech Outlook Featured Article on BioLeonhardt Heart Regeneration >** https://www.medicaltechoutlook.com/magazines/November2022/Medical_Device_Startups/
6. **California Business Journal Article on BodStim TM >** <https://calbizjournal.com/bodstim-suits-up-to-revolutionize-fitness-and-shows-significant-promise-for-enhancing-longevity/>
7. **Article on Klotho, KlothoYears and BodStim >** <https://longevity.technology/news/klotho-the-protein-that-could-extend-your-healthspan-and-lifespan/#::~text=The%20tech%20involves%20precise%20bioelectric,volumes%20of%20the%20Klotho%20protein>
8. **Article on Aging Reversal Patent Filings Leonhardt >** <https://longevity.technology/news/leonhardt-ventures-and-lionheart-health-file-patent-for-bioelectric-control-of-antiaging-protein-expression/>
9. **OC Talk Radio Interview on Lionheart Health, Inc >** <https://www.youtube.com/live/qKQfJvrvj7o?si=jfeSvZ-JfaQLumXg>
10. **Leonhardt Ventures Sept. 2023 Video Update >** <https://www.youtube.com/watch?v=G07tNb6GrBU&t=473s>
11. **LSI Emerging Medtech Summit Leonhardt's Launchpads Accelerator Presentation >** https://youtu.be/TzX61nkGHSw?si=IZ73qrJt4N_OL5XY
12. **Video interview Howard Leonhardt Red Carpet LSI Emerging Medtech Summit >** https://youtu.be/UAb6zCy4MdA?si=dFfte_RiSWMbXpc4

2023 Finances Review

Early Look at Year End Preliminary Numbers

R&D & Startup Development spending in 2023***

- Cal-X Stars Business Accelerator, Inc.
operating Leonhardt's Launchpads = **\$835,660.23**
- Leonhardt Ventures LLC = **\$1,697,711.45**
- Second Heart Assist, Inc = **\$4,190,000.00**
- OrthodontiCell, Inc. = **\$76,479.65**
- Lionheart Heath, Inc. = **\$442,286.48**
- Valvublator, Inc. = **\$5,000.00**

**Grand Total Funded in
2023 Across Portfolio
= \$7,247,137.8**

**** Totals are cash only preliminary numbers and do not include any services paid for in shares or share options or other accounting adjustments. Accounting teams should have final fully adjusted year end financials by the end of the 3rd week of January.*

Intellectual Property

Leonhardt Patents and Patents Pending Published > <https://patents.justia.com/inventor/howard-j-leonhardt>

Schuler Patents and Patents Pending Published > <https://patents.justia.com/inventor/eleanor-schuler>

Patent Licenses by Scope > <https://leonhardtventures.com/leonhardt-ventures-llc-patent-licenses-2022/>

Klotho Expresssing MSCs > <https://patents.google.com/patent/WO2016135295A1/en>

Note - Not all Leonhardt and Schuler patents are licensed to current portfolio holdings. For a detailed list specific only to our current portfolio please email us at howard@leonhardtventures.com

Key Patents Listing by Main Purpose of Use

Main Purpose	Issued U.S. Patents	Patents Pending	Protein Expressions
Stem Cell Homing via SDF1 and PDGF	7,483,749 10,646,644 10,960,206	20210236817	SDF1, PDGF
Muscle Regeneration (Myogenesis)	7,483,749 8,308,708 10,646,644, 10,960,206 11,110,274 11,433,231 11,471,686	20220023623 20220226643 20210236817 20210228870 20200000709 20230133737 20220409894 20220370791 20180037868 20110098783 20050288732 20050251061 20040260360 20140350637 20120136412	SDF1, PDGF, klotho, follistatin, S100A, sonic hedgehog, BMP9, IGF1, EGF, PRF, bioelectric stimulator, pump, biologics composition, stem cell competition, collagen, elasticity, inflammation reduction, klotho expressing MSCs
Improving Circulation (Arteriogenesis)	8,308,708 10,646,644 10,960,206 11,052,247 11,110,274 11,471,686	20200000709 20220409894 20180037868	VEGF, SDF1, PDGF, eNOS, HIF1a, EGF, klotho, BDNF, inflammation reduction, klotho expressing MSCs
Nerve Regeneration	10,646,644 10,960,206 11,433,231 11,110,274 11,471,686	20200000709 20200324106 20220023623 20220226643 20220370791 20210236817 20230071154 20230133737 20180037868	Sonic hedgehog, LIM muscle, IGF1, SDF1, PDGF, BMP9, klotho, BDNF, GDF10, GDF11, VEGF, klotho expressing MSCs
Skin Regeneration	10,646,644 10,960,206 11,052,247 11,110,274	20200000709 20210228870 20210339018 20200324106 20230133737 20180037868	COL17A1, Stem Cell Homing, Klotho, Tropoelastin - elasticity, GDF10, EGF, collagen, inflammation reduction, klotho expressing MSCs
Sexual Health including Erectile Dysfunction and Testosterone	8,897,877 10,646,644 10,960,206 11,110,274 11,433,231 11,471,686	20200000709 20190125932 20200324106 20210228870 20210136817 20220023623 20220370791 202301133737 20220226643 20220409894 20230071154 20180037868	Stem Cell Homing SDF1 and PDGF, circulation VEGF, muscle regeneration, nerve regeneration, brain path connections, eNOS, elasticity, HIF1a, sonic hedgehog, LIM muscle, klotho, testosterone, BDNF, GDF10, klotho expressing MSCs
Hair Regeneration	10,646,644 10,960,206 11,052,247 11,110,274	20200000709 20210228870 20210339018 20200324106	COL17A1, Stem Cell Homing SDF1 PDGF, circulation, inflammation reduction, RANKL, BMP9, PRF, Sonic hedgehog, klotho expressing MSCs

		20230133737 20180037868	
Blood Pressure Modulation	6,957,106 6,681,136 10,960,206 11,471,686 11.433,231 11.167,141	20190022396 20210236817 20040236238 20030216791	
Diabetes Management	10,646,644 10,960,206 11,471,686 11,110,274	20230191128 20230071154 20210236817 20220409894 20180037868 20230133737	klotho expressing MSCs, FABp4 down regulation, klotho up regulation, BDNF
Bladder Health	10,646,644, 10,960,206 11,110,274 11,433,231 11,471,686	20220023623 20220226643 20210236817 20210228870 20200000709 20230133737 20220409894 20220370791 20180037868 20050113879	Muscle regeneration, brain connections, nerve regeneration, stem cell homing, elasticity restoration, klotho, S100a, follistatin, IGF1, sonic hedgehog
Mental Health	10,646,644 10,960,206 11,110,274 11,433,231 11,471,686	20210236817 20220409894 20230071154 20230133737	Stem cell homing SDF1 PDGF, improved circulation, BDNF, GDF10, Serotonin, Sirtuins, Sestrins, NANOG, klotho
Joint Health – Osteoarthritis	11,471,686 11,433,231 11,110,274 10,960,206 10,646,644	20220370791 20220409894 20220226643 20220023623 20200324106 20210228870 20210236817 20200000709 20210236817 20230133737 20230071154 20220409894 20220370791	Klotho, BMP9, Follistatin, S100a, eNOS, HIF1a, Stem cell homing, Inflammation reduction, improved circulation, sonic hedgehog, GDF10, Sirtuins, Sestrins, NANOG, COL17A1, bioelectric enhanced PRF, COL17A1, BDNF, VEGF
Bone Density Health	10,646,644 10,695,563 10,960,206	20200000709* 20200330753 20200330759 20210228870	OPG, BMP9, Klotho Sestrins, Sirtuins, Nanog, Bioelectric enhanced PRF
Cancer	11,691,007 11,185,691 11,471,686 11,110,274 10,960,206 10,646,644 9,707,403 9,636,507 9,492,478 9,440,083 9,295,835 9,032,964 8,831,738 8,656,930 8,315,712	20210236817 20200330759 20180037868 20140228910 20170259073 20150313537 20150231243 20110130754 20100286689	Custom tumor reading and treatment, changing surface proteins and charge to illicit an immune response, re-programming cancer cells, starving tumors of blood supply, OPG, klotho, sestrins, sirtuins, NANOG, organ regeneration after tumor eradication, klotho expressing MSCs

Kidney Health	10,646,644 10,960,206 11,110,274 11,471,686 11,446,488 11,433,231	20200000709 20200389820 20210236817 20230133737 20230071154 20220409894 20220226643 20180037868	Klotho, klotho expressing MSCs, inflammation reduction, stem cell homing
Gut Microbiota Health	11,471,686 11,110,274 10,960,206	20210236817	Klotho, bioelectric stimulator, inflammation reduction
Aging Reversal – HealthSpan Increase	11,471,686 11,433,231 11,185,691 11,167,141 11,110,274 11,052,247 10,960,206 10,646,644 11,466,488 11,433,231 11,154,238	20220226643 20220152195 20210236817 20210228870 20200000709 20180037868 20190125932 20230191128 20230133737 20230071154 20220409894 20220370791 20220226643 20220152195 20220023623 20210353223 Patent applications have been filed for sirtuins, sestrins, NANOG, LIM Muscle that have not been published yet.	Klotho, sestrins, sirtuins, NANOG, follistatin, GDF10, inflammation reduction, stem cell homing, improved circulation, blood pressure modulation, gut microbiota health, immunity strength, bioelectric enhanced PRF, klotho expressing MSCs, joint health, BDNF, BMP9, immunity strength
Immunity Strength	11,110,274 10,960,206 11,471,686	20210236817	





Portfolio Key Clinical Studies or Post Market Evaluations through 2023 that enrolled patients and gathered valuable data...

PressureStim™ <http://www.pressurestim.com>
KidneyCell™ <http://www.kidney-cell.com>
BladderCell™ <http://www.bladdercell.com>
B-Alive™ <http://www.b-alive.com>
BodStim™ <http://www.bodstim.com>
KlothoYears™ <http://www.klothoyears.com>
EyeCell™ <http://www.eye-cell.com>
SkinStim™ <http://www.skin-stim.com>
ErectiStim™ <http://www.erectistim.com>
Lionheart HTM EMPower™ <https://htmeletronica.com.br/en/produtos/25818/>
Lionheart HTM Acrus™ <https://htmeletronica.com.br/en/produtos/acrus-3/>
Lionheart HTM Stimulus Face Maxx™ <https://htmeletronica.com.br/en/produtos/stimulus-face-maxx-facial-multi-therapies-device/>
Lionheart HTM StimHair™ <https://htmeletronica.com.br/en/produtos/stim-hair-trichology-device/>
Lionheart HTM Sonic Compact Maxx™ <https://htmeletronica.com.br/en/produtos/sonic-compact-maxx-3/>
Lionheart HTM CriuSculpt™ <https://htmeletronica.com.br/en/produtos/criusculpt-en/>
HairCell™ <http://www.haircellstim.com>
OrthoStim™ <http://www.ortho-stim.com>
SpineStim™ <http://www.spine-stim.com>
TestiStim™ <http://www.testistim.com>
BreatheStim™ <http://www.breathestim.com>
DepressiStim™ <http://www.depressistim.com>
InStim™ <http://www.instimcell.com>
Stem Cell Bra™ <http://www.stemcellbra.com>
Second Heart Assist™ <http://www.secondheartinc.com>
DentaCell™ <https://dentacellaccelerator.com/>
OrthodontiCell™ <http://www.orthodonticell.com>
ImplantStim™ <http://www.implanstim.com>
RegenaLung™ CovdiStim <https://leonhardtventures.com/regenalung/>
VascuStim™ <https://vascustim.com/>





Development Stage

Leonhardt Ventures LLC product
pipeline update with early 2024
stage of development...

Pre-Clinical

Heart & Cardiovascular

BioLeonhardt LTP* <http://www.bioleonhardt.com> - total heart regeneration

Vavublator, Inc. <http://www.valvublator.com> - heart valve regeneration

AortaCell LTP <https://leonhardtventures.com/aortacell/> - aorta regeneration

BioPace LTP <https://bio-pace.com/> - biological pacemaker

VibroCell LTP <https://leonhardtventures.com/vibrocell/>

- vibrational blood clot and plaque prevention

** Leonhardt led team previously completed and published Pilot, Phase I, Phase II and Phase II/III clinical studies with one time injection of muscle stem cells. New round of studies utilize klotho expressing MSCs, muscle stem cells, bioelectric enhanced PRF, amnio fluid, adipose stromal fraction, Wharton's Jelly, selected exosomes and nutrient hydrogel delivered daily via under skin re-fillable infusion pump and supported by implanted bioelectric stimulator with patent signals for stem cell homing, muscle regeneration, arteriogenesis and inflammation modulation.*

Brain

CerebraCell LTP <https://cerebracell.com/> - brain regeneration stroke TBI recovery

Major Organ Regeneration

PancreaCell LTP <https://leonhardtventures.com/pancreacell/>

- Pancreas regeneration

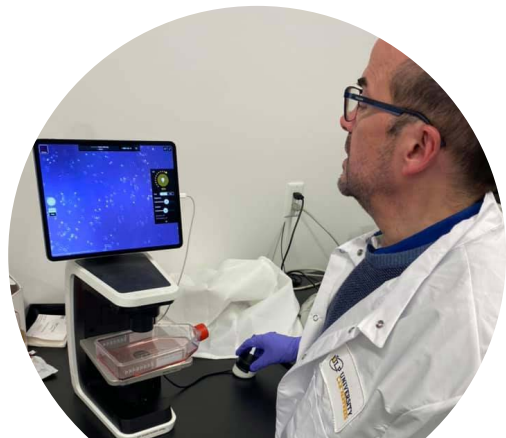
EarCell LTP <https://ear-cell.com/> - Hearing regeneration

LiverCell LTP <https://livercellstim.com/> - Liver regeneration

RegenaLung LTP <https://leonhardtventures.com/regenalung/> - Lung regeneration

BioLeonhardt Whole Body LTP <https://leonhardtventures.com/bioleonhardt-whole-body/>

- Whole body regeneration



Clinical Phase I Pilot Stage

Heart & Cardiovascular

Second Heart, Inc. <https://secondheartinc.com/> - circulatory assist aortic stent

Brain

AddictiStim LTP <http://www.addictistim.com> - Bioelectric addiction treatment

TremorStim LTP <https://tremorstim.com/> - Bioelectric essential tremor control

Second Brain LTP <https://secondbrainstim.com> - Bioelectric
gut microbiota health management

Cosmetic & Personal Care

TestiStim LTP <https://testistim.com/> - Bioelectric testosterone management

ArchStim LTP <https://archstim.com/> - Bioelectric arch expansion

Major Organ Regeneration

InStim LTP <https://instimcell.com/> - Bioelectric
inflammation management (bowel disorders)

BodStim D - <http://www.bodstim.com> - Bioelectric stimulation for diabetes management

KlothoPod™, KlothoPatch™ and Klotho Implant™ - Bioelectric
aging reversal technologies based on klotho

Cancer

CancerCell LTP <https://cancercellinc.com/> - Bioelectric,
klotho and biologics cancer treatment

BodStim C - <http://www.bodstim.com> - Bioelectric suit cancer tumor suppression

Clinical Phase II Pivotal

Heart & Cardiovascular

VascuStim LTP <https://vascustim.com/> - Diabetic ulcer healing and lower limb ischemia

PressureStim LTP <https://pressurestim.com/> - Bioelectric blood pressure modulation

BodStim HF - <http://www.bodstim.com> - Bioelectric stimulation for heart failure recovery

Brain

DepressiStim LTP <https://depressistim.com/> - Bioelectric depression treatment

MemoryStim LTP <http://www.memory-stim.com> - Bioelectric memory enhancement

SpineStim LTP <https://spine-stim.com/> - Bioelectric spine injury recovery pain management

Major Organ Regeneration

OrthoStim LTP <https://orthostim.lionhearthealthstim.com/>

- Bioelectric and biologics joint recovery

BladderCell LTP & B-Alive <https://bladdercell.com/> -

Bioelectric and biologics bladder recovery

KidneyCell LTP <https://kidney-cell.com/> - Bioelectric and biologics kidney regeneration

EyeCell LTP <https://eye-cell.com/> - Bioelectric vision regeneration

BodStim AGE <http://www.bodstim.com> - Bioelectric aging reversal by biomarkers



Commercialization Stage

He BodStim LTP* - <http://www.bodstim.com> - Bioelectric exercise enhancement for muscle and health

ErectiStim by MyoStim ED LTP - <http://www.erectistim.com> - Bioelectric and biologics male sexual health

SkinStim™ <http://www.skin-stim.com> - Bioelectric and biologics skin regeneration

HairCell™ <http://www.haircellstim.com> - Bioelectric and biologics hair regeneration

OrthoStim™ <http://www.ortho-stim.com> - Bioelectric and biologics joint health

BioPRF™ <http://www.bio-prf.com> - Bioelectric enhanced PRF biologics

KlothoYears <http://www.klothoyears.com> - Klotho blood test service (BETA STAGE LAUNCH)

**BodStim includes OnnaFit with BodStim, SlimPlus with BodStim, WiemsFit with BodStim and BodStim Pro TM.*

Commercialized by Lionheart Health, Inc. <http://www.lionhearthealthstim.com> with 8% royalty on full price sales and 5% royalty on discounted sales going to product technology stakeholders.

Lionheart Health, Inc. Target Goal Capital Raising Plans

2023 - \$3 million term sheet received Dec. 2023 at \$27 million pre-money valuation.

2024 - \$20 million at target valuation \$60 million

2025 - \$200 million post roll-up of key suppliers and medspas at target valuation \$780 million hopefully via an IPO.

All above at no dilution to technology platform royalty receiving stakeholders ie; SkinStim, HairCell, ErectiStim by MyoStim ED, OrthoStim, Stem Cell Bra, TestiStim, DepressiStim, Second Brain, BladderCell, PressureStim etc.

Distributed products

Vivace RF Microneedling - <https://www.realself.com/nonsurgical/>

vivace - Radio frequency micro needling

Saebo Stimulators - <http://www.saebo.com> - Bioelectric stimulators for stroke recovery and more

Axiobionics <http://www.axiobionics.com> - Bioelectric stimulators for pain and inflammation relief

Axolotl Biologix - <http://www.axolotlbio.com> - Amnio fluid membranes for wound healing and more

HTM Electronics MedSpa Products* - [https://htmelectronica.com.br/wp-](https://htmelectronica.com.br/wp-content/uploads/2022/05/Catalogo_2022_Atualizado_Ing.pdf)

[content/uploads/2022/05/Catalogo_2022_Atualizado_Ing.pdf](https://htmelectronica.com.br/wp-content/uploads/2022/05/Catalogo_2022_Atualizado_Ing.pdf)

HTM Sports Medicine Physio Therapy Products* - [https://htmelectronica.com.br/](https://htmelectronica.com.br/wp-content/uploads/2023/05/Catalogo-Fisio-2023-Ing_compressed.pdf)

[wp-content/uploads/2023/05/Catalogo-Fisio-2023-Ing_compressed.pdf](https://htmelectronica.com.br/wp-content/uploads/2023/05/Catalogo-Fisio-2023-Ing_compressed.pdf)

KlothoSkin™ - <https://klothoskin.com/>

Regen Aesthetics Beauty - <https://regenaesthetics.beauty/>

Revivv Hair Serum - <https://revivv.co/>

ElectroGear Healables - <http://www.electrogear.com> - Microcurrent healing wearables

**HTM products are pending FDA registrations in process under Lionheart Health, Inc. name.*

Also we believe forward we will improve the performance of a number of these products by adding our patented bioelectric signaling sequences for controlled protein expressions.

We look forward to 2024 being a breakthrough year with heightened focus on commercialization of key products and further development of our healthspan extension technology platform.



Sincerely Yours,

Howard J. Leonhardt

Executive Chairman & CEO

Lionheart Health, Inc.

Leonhardt Ventures LLC

1 Kent Court

Mission Viejo, CA 92694

<http://www.leonhardtventures.com>

<http://www.lionhearthealthstim.com>

<http://www.lionheartlongevity.com>

R&D Lab

Leonhardt's Launchpads powered by

Cal-X Stars Business Accelerator, Inc.

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