

#BuiltByGirls Challenge

*Lenus*WEAR

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an interactive, automated compression sweater

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The Problem

*Lenus*WEAR

57.5 million

people suffer from acute anxiety, attention-deficit disorders and autism - a symptom of which is stress on the nervous system.

The **Solution?**

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- ❖ Compact, comfortable sweaters containing built-in **compression technology**
- ❖ Uses built-in heart monitor connected to app to **sense rising heart rate** associated with anxiety
- ❖ Provides sensory pressure on waist and shoulder area to create a sense of calm and concentration!



The Design



Inserted, flexible
compression
technology
(shoulders and
waist)

Manual off
switch
located
inside wrist
cuff.

Heart rate
monitor and
Bluetooth
sensor
inserted into
wrist cuff.



How does it work?



heart rate
cuff senses
increased
heart rate



bluetooth
sensor
sends
message to
the app



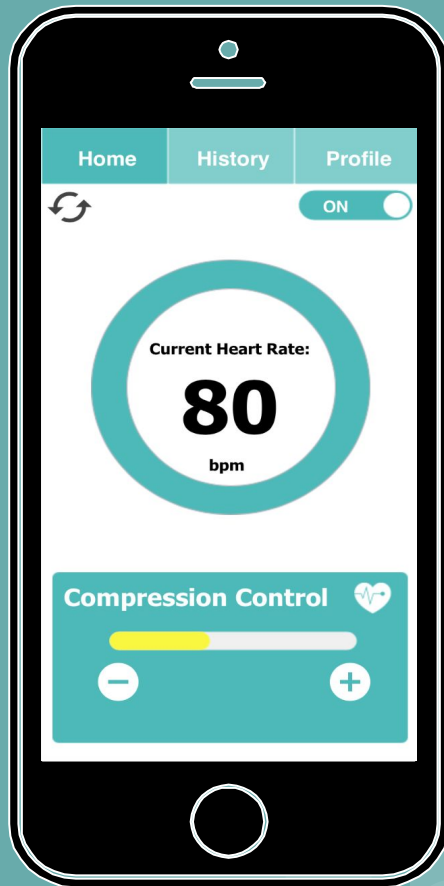
app alerts
owner, offers
option of
activating
compression



compression begins!
(lasts for up to 20
minutes)

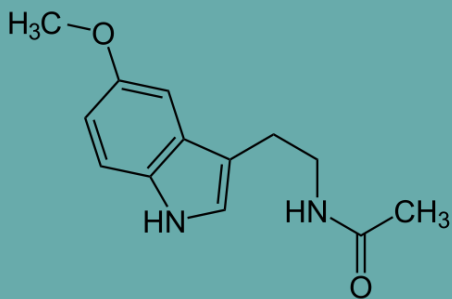
The app

- **Displays** user heart rate at all times
- Sends **alerts** whenever heart rate is indicative of anxiety
- Includes **manual** control switch for compression
- **Controls** compression intensity
- Provides **profile** of past history and settings



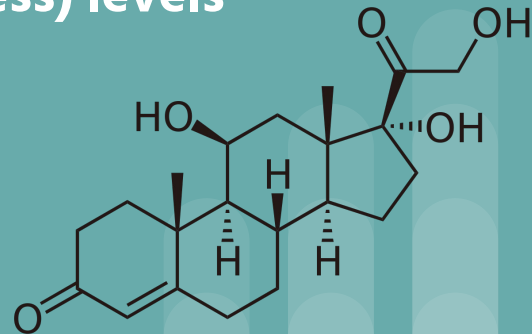
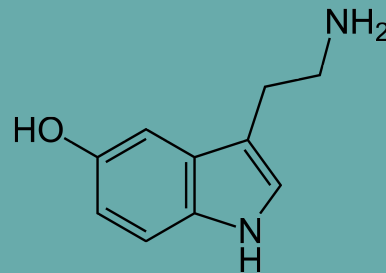
Why does it work?

- Research shows that deep touch pressure stimulation **activates pressure points** around the body



- This activation releases **serotonin** and **melatonin** while decreasing **cortisol** (stress) levels

- The nervous system is **relaxed**, and a sense of increased **calm and concentration** is created



How are we **different**?



- ❖ **Weighted vests**
 - Bulky, heavy
 - Conspicuous
 - Inconvenient to transport
 - Not automated

<https://funandfunction.com/weighted-compression-vest.html>

- ❖ **Other solutions**
 - Compression technology is based on activity sensors, not on heart rate (prevents assistance in stationary stress instances)
 - Expensive
 - Do not notify user when activation is necessary
 - Conspicuous



<http://www.biohug.com/Products>

Business Plan

*Lenus*WEAR

Phase 1
Research, Test,
and Design



Phase 2
Market Entry



Phase 3
Long-Term
Sustainability
and Growth



**Constant
Innovation**



Cost Breakdown

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Component	Cost
Sweater	\$20
Bluetooth Device	\$30
Pressure Technology	\$80
Heart Rate Monitor	\$30
Cost of Production	\$20
Total Cost	\$180

Selling Price: \$250

Total Profit: \$70



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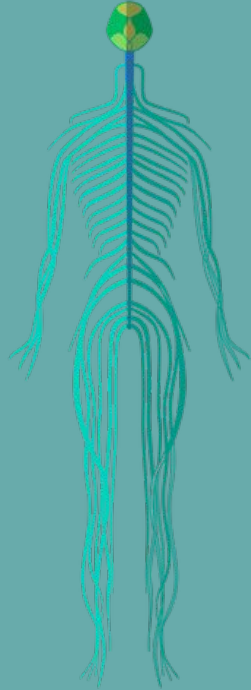
How can we **innovate**?



- ❖ Use gathered data for **large-scale research**
- ❖ Apply LenusWEAR to a **larger audiences** (PTSD, loss, other nervous disorders, etc)
- ❖ Make sure application is available on all interfaces
- ❖ Create **new designs** (T-shirts, vests, etc)

Who can we **help**?

*Lenus*WEAR



- ❖ Currently, LenusWEAR is aimed at those suffering from ADHD, autism, anxiety, and other nervous disorders
- ❖ With time, we hope to expand to those suffering from PTSD, loss, and other issues of which nerves are a symptom

About the **founders**



From left to right:

Sarah Chowdhury

Sarah is passionate about combining medicine and technology. She enjoys Double Chocolatey Chip Frappuccinos and curling up with a good book.

Nastasia Klevak

Nastasia is interested in applying technology to the medical field. She loves spending her time swimming, solving puzzles, and eating green tea ice cream.

Margarita Groisman

Margarita is interested in entering the technology and entrepreneurial field. She loves baking, running, and learning new languages.