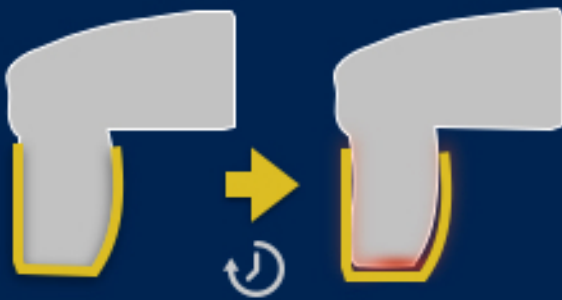# the perfect fit

One major issue with prosthetics is the fit of the socket. The residual limb is a sensitive body part confined in an uncomfortable environment - hard walled sockets.

Prosthetic sockets today are custom-made to fit the user's residual limb, but do not accommodate for the changes in volume and height of the amputee over time.

"[Fit is] the biggest problem. The socket's static, it's solid, it doesn't change shape and it doesn't move. But your body does... it moves a lot! It moves from the morning to the evening."

–Stephen Spinetto, below the knee amputee

team silver

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Aleksya Aguirre	Kiele Miller Oana
Alexander Lukas	Kyle Veldman
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Chris Cook	Mohammed Al-Zayer
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staff & mentors

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Professor Warren Seering
Alison Olechowski
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Jeffrey Senez
Victor Lesniewski
Wincy Du

thank you

Stephen Spinetto
Bob Emerson
Catherine H.
Ian Gray
Jerry Scandiffio
Judi Gray
Mike Benning
Ryan Cannon

team silver presents

contour
reshaping prosthetics

product

Contour is an adjustable prosthetic socket that conforms to a user's residual limb with granular jamming technology.

Shell
constructed of fiberglass, supports
the user at key load-bearing points
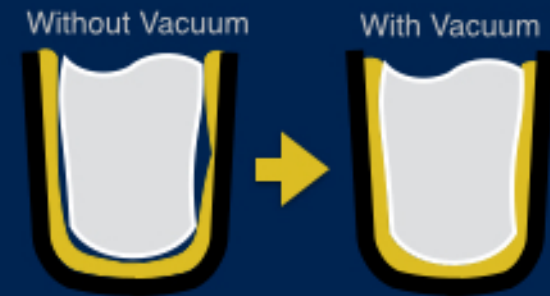
Electronics Housing
- Battery
- Vacuum Pump
- Ball Valve

Granular Sleeve
filled with grains that conform to the residual limb using granular jamming

Granular Jamming
used to evacuate the sleeve, causing the grain to jam into a rigid structure that keeps shape of residual

Without Vacuum → With Vacuum

market

Clear target market:
Below the knee amputees

Large market potential:
0.5 M US below the knee amputees
Growing by 40k each year

$ Projected Price:
$ 6500

contour
reshaping prosthetics

Small adjustments
make a **big** difference