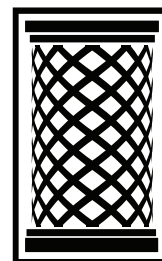


# Adaptive

*Braces*

*2020*



Fellow Tech Enthusiasts,

In 2020, we solidified much of the *Adaptive Braces*' operating procedures. As our company has evolved over the last few years, so have our products and ambitions. At the close of 2017, we announced the first generation of *Adaptive Braces*, which enjoyed an enthusiastic and overwhelmingly positive reception. Within one year, at the close of 2018, we announced the release of the second generation of *Adaptive Braces*, which greatly improved upon the first generation by enhancing the structural design, the durability of the materials, and introducing more color variation. Despite the obstacles associated with a new product launch, we have managed to keep our operating expenses low and have required very little outside funding.

An important highlight for *Adaptive Braces* in 2020 has been an acceleration in the production times. As a new company in a demanding sector, we understand the importance of optimizing speed without compromising the quality that makes our company stand out. We are also excited about a growing interest in our company and the unique technologies that our medical devices contribute. In 2018, the company began by servicing only friends and family because of the time burden of producing each unit. However, we have now extended our outreach through online sales to anyone who can meet with one of our specialists. During 2020, we focused on improving our digital presence, which we believe will be an important part of growing *Adaptive Braces* in the future.

We are also happy to announce that our revamped website has been published and can be found at [www.adaptivebraces.com](http://www.adaptivebraces.com). We are also excited about our new LinkedIn page and our presence on other social media platforms. *Adaptive Braces* is at a phase in its growth where the next step is to increase our brand recognition and support our loyal customers with constant improvements in the quality of our products and services. We are grateful for the constant support and recommendations that we receive from our customers. We are always looking for ways to improve and carefully consider each suggestion.

We are proud of the advances in our company and its products. We are grateful for all the support that we receive from our talented workers and will continue to improve upon our technologies in the hope that we can help more people. Thank you for the support.

Sincerely,

David Kaytner  
Founder, CEO and President

# Who are we?

*Nature is the ultimate innovator. Through billions of years of evolution, nature has found solutions to some of the most challenging problems. It is our goal to identify those solutions and put them to work for the patient.*

We are working to understand how nature has solved the issue of structure. Structures need to be durable but adaptive, resilient but flexible. These characteristics are inherently contradictory and difficult to balance. However, both properties are essential for a successful species or a successful product.

One of the ways that nature has solved the structure paradox is through organic motifs that balance forces and pressures throughout the entire structure.

The voronoi motif has been of particular interest to us because of its consistent reoccurrence in nature across unrelated applications such as dragonfly wings, lizard scales, venation in leaves, and even bubbles.

Our *Adaptive Braces* take advantage of the adaptability, strength, and flexibility of the voronoi structure to maximize comfort and durability in medical grade braces. Our *Adaptive Braces* are light weight, breathable, and can be used anywhere from the soccer field to the pool.

# ADAPTIVE BRACES<sup>®</sup>

## Generation 2.0

### Accessible

Each voronoi pattern has a unique design that accommodates the patient and their situation. Holes are placed over the site of injury to provide easy access during massage, light, or ultra sound therapy.

### Durable

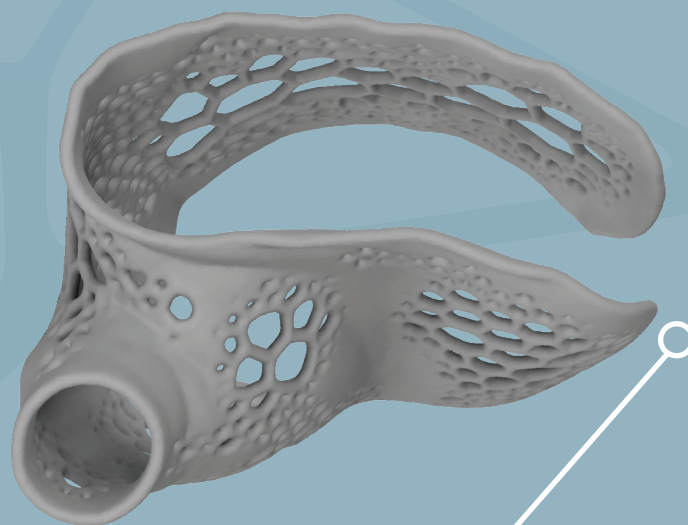
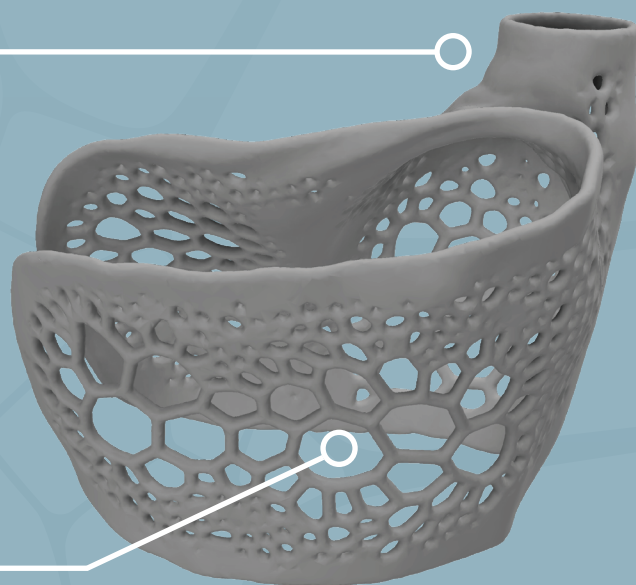
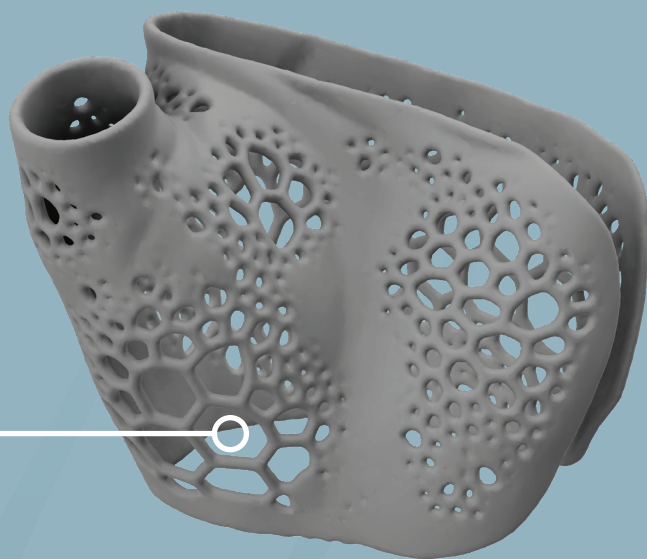
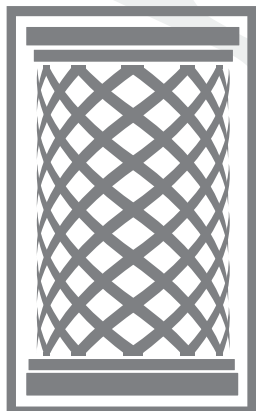
Areas that are under high stress are reinforced with additional material. The thumbs, palm, and edges are designed to distribute force evenly across the brace during high intensity activities and is perfect for athletes and exercise enthusiasts.

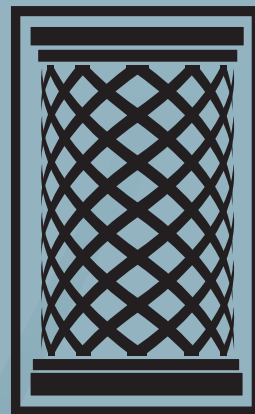
### Breathable

The voronoi pattern makes our braces strong, flexible, lightweight, and breathable. All our products are designed with convenience in mind. The waterproof coating allows patients to shower with the protection of their brace.

### Strapless

A unique feature of our braces is that they are strapless. Each brace is custom made for the patient from a 3D scan and is a guaranteed perfect fit every time. Our braces also benefit from the flexibility of PLA and are more comfortable than conventional braces.





“

Putting evolution to work for you.

Complementary

## Business Divisions

20%

Consulting

20%

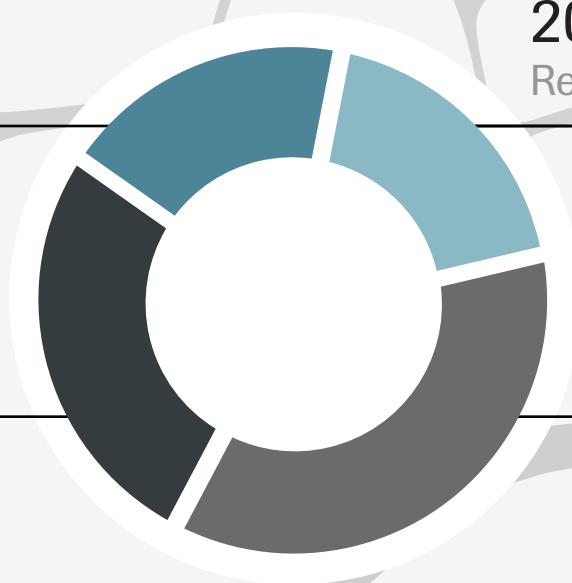
Research and Development

30%

Other Devices

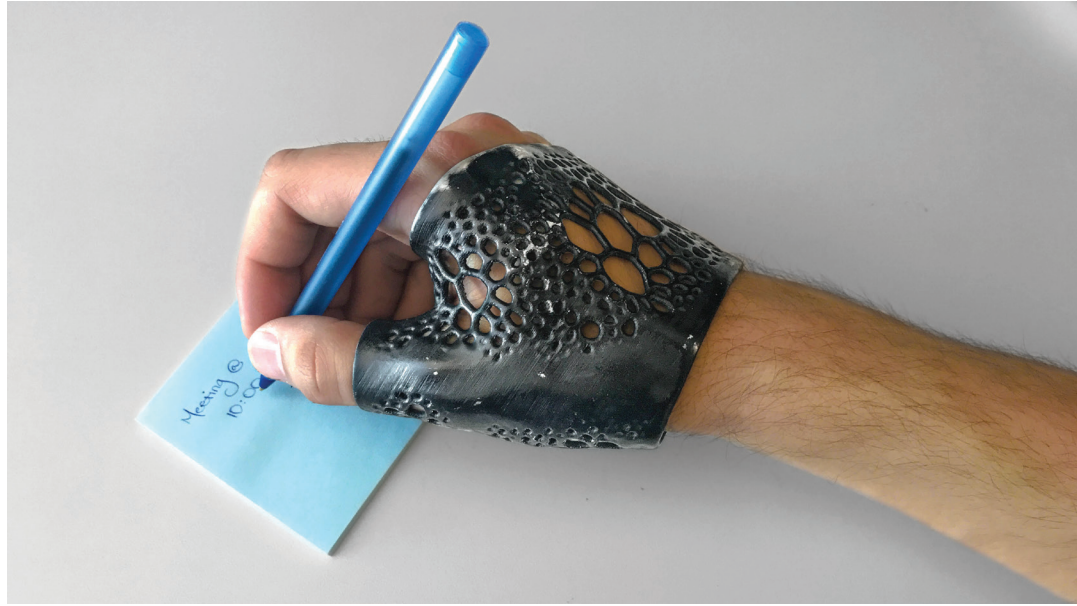
40%

Adaptive Braces



## Our Purpose

*At Kahyton, our purpose is to improve the lives of patients. Our products accomplish this by introducing doctors to new technology, complimenting physical therapy, and working to decrease healthcare expenses.*



### New Technology

The focus of our research division is to identify new structures and materials inspired by nature that can be translated into innovative medical applications. We are currently focusing on developing durable and breathable braces.



### Complimenting Physical Therapy

Adaptive Braces are unique in that the openings created by the voronoi motif can be strategically placed over injuries to increase accessibility during physical therapy. Adaptive Braces allow patients to receive massage, light, or ultrasound therapy without having to remove their brace.



### Reducing Costs

Adaptive Braces focuses on 3D printing technology because it allows for the cost effective creation of custom orthopedic devices. Each brace is custom made for the patient at a fraction of the cost of other custom made medical-grade exoskeletons.



# Science and Technology

*At the heart of every Kahyton product is a desire to better understand the world. Nature has already solved many of the most challenging problems and we believe that it is our job to uncover those solutions to help patients.*



## Biostructures

The focus of our research division is to identify new structures and materials inspired by nature that translate into innovative medical applications. There is no end to the possible applications of natural structures and designs. The difficulty is having the persistence and creativity to find them.



## 3D Printing

Each Adaptive Brace is 3D printed using the latest in 3D printing technology and comes in a variety of materials such as polylactic acid (PLA). The medical applications of 3D printers are expanding rapidly and have the potential to revolutionize the industry.



## Computational Approaches

Adaptive Braces is constantly working to improve the way we interface with software and maximize the efficiency of our algorithms. Many of the motifs that we use in our products are too complex to be designed by hand every time and therefore depend on computational solutions to maximize their effectiveness.



Adaptive Braces, LLC.  
Cambridge, Massachusetts

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[www.adaptivebraces.com](http://www.adaptivebraces.com)  
[www.kastner.io](http://www.kastner.io)

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