

The art and science of biomechanics is truly the "heart and soul" of the podiatric profession, whether in the realm of custom foot orthotics, bracing, pain management, pediatric footcare, sports podiatry, OTC foot orthotics, footwear, gait analysis, geriatric treatment, or surgery. Here we present a sampling of both new and established biomechanics-related products and services available to the podiatric community.

Superfeet Rx Offers Comprehensive Orthotic Solutions

Superfeet Worldwide, a market leader for over-thecounter insoles, introduces Superfeet Rx, a division dedicated to delivering best-in-class orthotic solutions for the industry's most forward-thinking podiatrists. From comfort to correction, Superfeet Rx offers a range of comprehensive foot care solutions, including leading-edge assessment technology, custom 3D printed orthotics and over-the-counter orthotics.

Building on Superfeet's 45 + years of over-the-counter orthotic leadership, Superfeet Rx combines deep biomechanical history and proven orthotic solutions with best-in-class technology to deliver an optimum patient orthotic program. Industry-leading scanning technology complemented by software-assisted design recommendations enable true anatomical digital casting and precision diagnostics for optimal footcare and improved patient outcomes. When custom orthotics are not necessary, tap into Continued on page 105

Tayco External Ankle Brace Is 96% as Stable as a Walking Boot in a Kinetic State

t the ankle joint, both the TayCo AXAB Brace and orthopedic walking boot significantly reduced ankle motion relative to an unconstrained Shod (cross training running shoes) condition in all three planes-frontal (inversion/eversion), traverse (abduction/adduction), and sagittal (dorsi/plantar flexion)—when walking and negotiating stairs.

The walking boot resulted in different knee and hip movement patterns than both the TayCo XAB and Shod, altering gait. The findings are

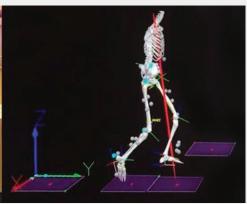
published in a biomechanics research study by Clark Dickin, Director of Biomechanics Laboratory and Associate Professor of Exercise Science at Ball State

Dickins and colleagues analyzed data from 37 total subjects, segmented by younger and older adults. Tasks were assessed using overground walking and stair ascent and descent on a 3-step staircase for each of the three ankle support conditions. Motion data was captured via a 15-camera, 3D-motion system, collected using Vicon Nexus, and processed using Visual-3D.

The authors found that both the XAB and walking boot were able to control ankle motion in all three planes similarly. In terms of overall motion of the lower extremity, the TayCo XAB allowed participations to walk and climb stairs with equivalent amounts of motion in the hip and knee to the Shod condition. Conversely, while the walking boot was able to control ankle motion it also required participants to alter motion at the hip and knee in at least one plane of motion for all three types of motion assessed.

This suggests that relative to a walking boot,





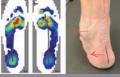
TayCo XAB provides comparable ankle stability and reduced risk of secondary site pain due to changes in gait when walking and negotiating stairs.

About TayCo Brace, Inc.

TayCo Brace is empowering mobility and stability by raising the standard of care for doctors who want to get their patients back to normal faster, with fewer life disruptions, and exceptional outcomes after ankle and hindfoot injuries. They partner with hospitals, medical practices, military organizations and athletic trainers across the country to help them outperform traditional therapies and increase long-term mobility with an external ankle brace. The TayCo Brace has been used by over 20,000 patients, 75 + NCAA football teams, 20 + NFL teams, and special forces. Founded in 2016 as a product of the University of Notre Dame's IDEA Center, TayCo Brace has been listed as a Top 10 Innovation in Podiatry, a winner of the "For Such A Time As This-OrthoChallenge," and received the 1st Source Bank Commercialization Award. Learn more at: taycobrace.com or click here.











the full range of Superfeet OTC orthotics for affordable and proven relief.

Elevate your practice with a superior patient experience, faster objective assessments, and a seamless 100% digital workflow, all contributing to a significant increase in return on investment. Learn more about all Superfeet Rx has to offer at Superfeet-rx.com or click here.

KevinRoot Introduces First-of-its-Kind Digital Ordering Process for Orthotics

KevinRoot Medical, a leading provider of custom foot and ankle foot orthotics, is proud to announce the first-of-its-kind digital ordering process for custom foot orthotics. The latest upgrade to the FootID app includes the ability to fully prescribe orthotic devices directly on your Iphone or Ipad without the use of paper forms. A simple-to-use and intuitive process, once you scan your patient using the camera on your phone or tablet, you fill out the patient demographics, prescribe your preferred orthotic materials, corrections and extra additions directly to your phone via the app, add any additional information, such as accompanying photos, click "send" and your order is complete. All information is stored securely, or can be held to be sent at a later date if desired. This



highly efficient and streamlined orthotic ordering process is intended to increase productivity and bypass the common roadblocks traditionally encountered when ordering prescribed orthotic devices. It is the goal of KevinRoot Medical to maintain its leadership in the foot orthotic industry and trailblaze new innovations to improve clinical outcomes for their clients and patients. Visit https://footid.app or click here for more information.

Powerstep Dynamic Ankle Support Sock Gives Patients Freedom to Stay Active

The PowerStep® Dynamic Ankle Support Sock, or DASS, was released in June and is a truly innovative addition to the ankle support market.

DASS is a unique solution to ankle pain and instability that can give patients the freedom to stay active. The flexible design provides compression, support, and stability to help protect against ankle sprains, eversion and inversion injuries, and prevent reinjury. DASS is a compression sock and ankle brace in one with a low-pro-



file design that easily fits most shoes without compromising functionality—meaning that it supports like a brace, wears like a sock.

DASS has a sleek compression sock base designed to offer graduated compression that supports the arch, promotes blood flow, and helps reduce swelling. Its low-profile design fits easily into most shoes without compromising fit or functionality.

The ankle support cage helps align the ankle and provides the support and flexibility needed to allow for more safe, natural movement. Patients enjoy a healthy range of motion and anatomically correct positioning while being protected from ankle injuries.

Soft ankle stability straps hug the foot and ankle for customized tension and a perfect fit. Positioned to prevent injury and improve overall ankle stability, the straps provide a blend of flexibility and resistance on all sides. The design is like figure 8 ankle taping without the hassle.

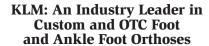
Visit https://powerstep.com/pages/powerstep-dynamic-ankle-support-sock or click here for more information.

Continued on page 106









KLM Laboratories is an industry leader in the manufacture of custom and OTC foot and ankle foot orthoses. Since 1973, KLM Labs has developed cutting-edge

technology for the capture of lower extremity anatomy, and for the design of prescription orthotics to improve foot and ankle function. KLM's prescription options and manufacturing pro-



cesses are grounded in the

biomechanical function of the foot and ankle. Founded by Dr. Howard Marshall DPM, KLM continues in his tradition of teaching non-weight bearing casting to physicians, proper digital casting techniques, and the logic behind designing a successful prescription foot orthotic. Says KLM, "If you've never tried KLM Labs, give us a call at 800-556-3668 or email us at cservice@klmlabs. com and find out how you can improve your footcare practice with KLM orthotics. Streamline your casting and ordering processes. Experience the benefits of cost-effective products and KLM's highly experienced orthotic technicians on your side. We look forward to working with you!" Click here for more information.

Moore Balance Brace (MBB) Signature Edition

In partnership with Dr. Jonathan Moore, podiatric physician and creator of the Moore Balance Brace, Orthotica Labs is excited to present the Moore Balance Brace (MBB) Signature Edition, a significant upgrade to the original Moore Balance Brace. Orthotica Labs is the exclusive fabricator and distributor of this new and improved Continued on page 107

UCLA Study Supports Shoes as Source of Pain Relief

GDEFY shoes dramatically reduce knee pain

ne in four American adults suffering from chronic knee pain¹, so a non-surgical solution should be welcome news for many. A recent study out of UCLA indicates that GDEFY* medically engineered shoes could be that solution. In fact, study participants wearing the GDEFY shoes with patented VersoShock* technology reported an average reduction in knee pain of 85%, as

well as significant decreases in other common conditions.

The Journal of the American Podiatric Medical Association published the study's findings in their March 2022 issue. The study showed wearing GDEFY shoes with VersoShock soles decreases knee pain by up to 85% vs. wearing shoes with conventional soles during prolonged standing and walking.

Alexander Elnekaveh founded Gravity Defyer Medical Technology Corporation in 2008 after his 14-year-old

nephew was diagnosed with a cancerous growth in his heel. Even after successful heel replacement surgery, physical therapy, and help from leading doctors in pain management, Elnekaveh's nephew had little chance of walking pain-free again. But Elnekaveh, an inventor, wasn't satisfied with that prognosis, so he assembled a team of top podiatrists, physical therapists, biochemical and material engineers (Impact Research Technology Group) to help him develop the first Gravity Defyer (GDEFY*) shoe with VersoShock* technology.

"Our mission is to maximize comfort and boost performance for people who have foot biomechanics that keep them from walking properly, and to

> enable normal pronation," said Elnekaveh. "This study proves what we've known all along—that our breakthrough VersoShock technology provides the ultimate pain relief protection for the entire body in a way no other shoe can."

> To accommodate customers at work, home, and fort preference.

play, GDEFY men's and women's footwear come in several styles, widths and sizes. All shoes come with a polyurethane removable insole to adjust to one's com-

GDEFY footwear is available online at www.gdefy. com or in GDEFY stores throughout the country, as well as in multiple comfort shoe stores, specialty stores, and other online retailers. Click here for more information.

https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3408027/.











balance AFO, first introduced in 2011

The Moore Balance Brace Signature Edition is one of the most advanced products for seniors and others at risk of falling. Exclusively fabricated and distributed by Orthotica Labs, the MBB Signature Edition device is a substantial improvement over Dr. Jonathan Moore's original MBB. The MBBSE is a flex-

ible, light weight AFO whose proven effectiveness will keep seniors independent, active and healthy, while significantly reducing health

Clinical Indications for the MBB Signature Edition includes: History of falls; Balance deficits; Muscle weakness; Postural instability; Chronic ankle Instability; Arthritic ankle; Foot drop; Diabetic peripheral neuropathy.

care costs.

Visit https://orthotica.com/mbb/ or click here.

ProLab Welcomes Dr. Kevin Kirby as Biomechanics Director

Dr. Kevin Kirby joined the ProLab Orthotics team this year as their Biomechanics Director. He started writing a series of monthly newsletters exclusively for ProLab Orthotics. Through his newsletters, Dr. Kirby helps practitioners gain a better understanding of foot biomechanics to achieve better patient outcomes.

Dr. Kirby is a renowned expert in lower extremity biomechanics. He is a prolific author, having written five books on the subject, and authored or co-authored 29 articles in peer-reviewed journals. Dr. Kirby serves as a member of the editorial advisory board for the *Journal of the American*

Podiatric Medical Association, is an Adjunct Associate Professor in the Department of Applied Biomechanics at the California School of Podiatric Medicine at Samuel Merritt University, and has had a private podiatric biomechanics and surgical practice for 37 years.

Providing relevant educational resources is one of the many ways ProLab shares its expertise with clients. Staying true to their founding principles, ProLab is here to help clinicians provide the most effective treatment for their patients. Additionally, their Medical Consultant Dr. Dianne Mitchell-Pray and Medical Director Dr. Larry Huppin are available to discuss cases and make recommendations based on the latest medical research for effective orthotic therapy. Their quality custom products are hand crafted in the USA.

For more information on ProLab Orthotics, visit Pro-LabOrthotics.com, call 800.477.6522, or click here.

PCC Launches System to Significantly Increase Highly Profitable Orthotics Sales

Custom orthotics and medical-grade OTC orthotics represent some of the highest profit margin items podiatrists can sell in their offices—yet they're often treated as afterthoughts.

To awaken DPMs to the potential of this under-utilized profit center and dramatically increase the number



of pairs of orthotics doctors dispense each month to patients, Podiatry Content Connection (PCC) has developed a new system, called *Sole Marketing*[™].

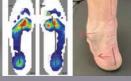
After consulting with DPMs who've rocked their orthotics sales (\$90K + per year) by applying PCC's marketing expertise, clients of the new marketing system can expect:

- An orthotics presence on the homepage of their website, complete with a slideshow or quick link access
- A custom orthotics page on the website, which can also serve as a landing page from linked ads
 - Video tutorials to help doctors sell more orthotics
- Digital signage for CC TV, print signage for your office
 - Downloadable ebook for patients
 - Blogs and articles about orthotics
- Photo Spot Campaign linked to your appointment book
 - Email campaign
 - Monthly image for Instagram

"In terms of orthotics pricing, service and helping people, you can rise above the competition," said PCC National Director Randy Rosler. "And yes, I mean the Continued on page 108





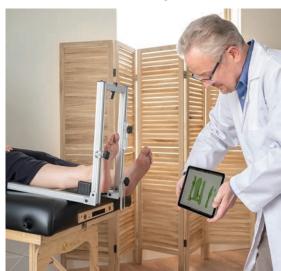


Good Feet Store, Amazon and Dr. Scholl's!"

For more information or to participate in a beta test of Sole Marketing[™], text or call Randy Rosler at 917-527-5088, or click here.

Superior Scanning with SmartCast®

Northwest Podiatric Laboratory's SmartCast* app now offers the ability to scan patients for custom orthotics and braces using the front-facing TrueDepth camera on the iPad Pro and most iPhone models. Upgrading from traditional casting methods (plaster, slipper socks, or impression foam) to an accurate digital solution has never been easier or more affordable. The SmartCast* app on iPad Pro/iPhone combines with Northwest Podiatric Laboratory's patented SmartCast Foot Positioning System* to allow a single practitioner to perfectly position and quickly capture no-compromise scans. Plus, the no-charge SmartCast* app goes beyond simply scanning and provides users with a fully integrated solution



to create patient records, complete prescription forms, and instantly submit orders.

Podiatrists who utilize SmartCast* love the increased in-office efficiency, reduced shipping time, money saved

> on supplies, and excited patients who appreciate the ease of the process (and the cool 3D models of their feet). Most importantly, SmartCast* provides real savings while maintaining (and improving upon) the foot pain solutions leading podiatrists have trusted for their patients since 1964. Whether you currently scan for custom orthotics and braces or are interested in exploring scanning technology for the first time, Northwest Podiatric Laboratory is ready to partner with you.

> Learn more about Northwest Podiatric Laboratory and Smart-Cast* at www.nwpodiatric.com/ smartcast or click here.