



SNELL P&OVERVIEW

VOLUME 43, 2007 • A PUBLICATION OF SNELL PROSTHETIC & ORTHOTIC LABORATORY

'Face Forward' in a Changing World

In my opening remarks in our last newsletter, I addressed the importance of embracing change in order to achieve progress, success, and a leadership level of efficiency and service fitness in a competitive world.

Since then, some major and welcome changes have come our way which will certainly impact our patients, clients, and referrals.

First of all, for the first time in more than a decade, we've given our Little Rock office an extensive face-lift—including the reception area, patient rooms and office areas. This cosmetic overhaul does indeed freshen the face we show the world, and presents a smart, savvy, technologically up-to-the-minute image that accurately reflects our philosophy.

Because human nature tempts us to judge a book by its cover, much care and thought must go into creating a "cover" that attracts, invites, and welcomes browsers, inspiring them with confidence in our professional "contents."

Our renovation parallels the timely winds of change that are putting a new face on the character of orthotic and prosthetic service in our state, as well.

A five-year-long initiative of the Arkansas State Orthotic & Prosthetic Association recently resulted in the signing into law of a state licensure act.

The new Arkansas O&P licensure law, which we have strongly supported from Day One, is truly a blessing for those in need of competent and ethical orthotic, prosthetic and pedorthic service, allowing them to identify qualified, reputable service providers who have met the standards to earn a license.

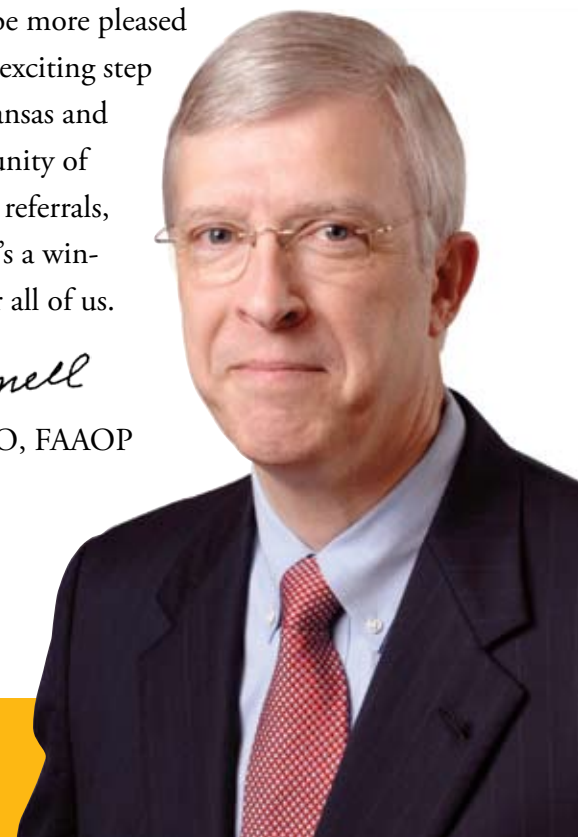
The law not only protects clients, but also protects approximately \$3.5 million of state Medicaid money from being misspent on sub-standard services delivered by unlicensed providers. That protection is far-reaching when one considers the ripple effect: In addition to the initial wasted expenditure, the damage done by an ill-chosen or poorly-fitted orthosis or prosthesis may cost twice as much to un-do and replace, and may also result in needless pain and suffering for those patients struggling in vain to achieve greater mobility and independence with inappropriate tools—a cruel injustice.

The law also provides an avenue to accomplish mandatory continuing education for all licensed practitioners, and provides a method for disciplining unethical or unlawful practitioners, keeping our field 'on its toes', committed to patient service at its honest, informed best.

We couldn't be more pleased to welcome this exciting step forward for Arkansas and its O&P community of patients, clients, referrals, and providers; it's a win-win situation for all of us.

Frank Snell

Frank Snell, CPO, FAAOP
President



"Nothing endures but change." — HERACLITUS



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Patient Profile: Juan Ramon Lanza Mejia

Former nurse Bobby Frach met Juan Mejia four years ago, on her first missionary trip to Honduras with a Little-Rock-based non-denominational group called LT Care Ministries. As a child of about 8, Juan had been run over by a train, and as a result, had lost his left arm below the elbow, as well as most of his left leg and his right heel.

When Frach saw him at age 18, “His 10-year-old prostheses were in terrible shape,” she recalls. “His only source of livelihood was to produce arts and crafts, and for a while he had been able to use his original prosthetic arm to weave bracelets and belts. But over the years, both of his prostheses had deteriorated to the point where he could no longer use them. As a matter of fact, the hand was actually taped to the arm; it had fallen off!”

Frach determined to put forth every effort to bring Juan to the United States in order to find help; her first step was to meet with Frank Snell, CPO, FAAOP, who agreed to provide prosthetic assistance if Frach could fight Juan’s way through the red tape to get him to Little Rock for care.

The lengthy and difficult process required the service of an attorney in Honduras to work with the ministry to trace Juan’s mother and create a birth certificate (Honduras does not keep birth records, so Juan is not sure of his exact age). The process also involved a visit from Frach’s son in order to help get Juan a national I.D. card, a bank account, and a passport. To obtain his visa, from among a crowd of 300 visa applicants per day, Frach solicited additional help from Leo Monterry, the liaison for the Latin American affairs for Congressman Vic Snyder, personnel at the American Embassy, and financial support and prayers from many friends.

When at last Juan arrived at Snell Laboratory for care, Frank Snell recalls, “I had never seen anything like it. The prostheses looked like part of a rag doll. The arm was broken at the wrist, held on with duct tape. I’m sure it broke because he was pushing on it, to get up off the floor.

“He walked with a single forearm crutch in his right hand, using the crutch as a second leg, and dragging his hip disarticulation prosthesis behind him like a useless third leg. The suspension belt for his hip socket was broken off, and Juan was using the belt of his jeans to support it. The stress on his natural arm, from using the crutch like a leg, was simply wearing out his elbow joint.”

As his prostheses gradually deteriorated over the years, and he outgrew them and wore them out, apparently Juan simply learned to live with them because there was no alternative.

Snell Laboratory provided Juan with a new hip disarticulated prosthesis with a lightweight state-of-the-art hip joint, polycentric knee, and a SACH foot. For his short below-the-elbow prosthesis, he was fitted with an interchangeable conventional hook and hand. Both prostheses were made to be as durable, simple, and maintenance-free as possible so that they will last longer when exposed to the rugged Honduran terrain.

Snell was also able to fit him with new crutches, which allowed the 22-year-old to walk in an upright and stable position again for the first time in many years.

Witnessing Juan’s first steps with his new prosthesis was a moving experience for Juan as well as observers and well-wishers. There were cheers all around when he threw his old prostheses and crutch into the trashcan.

“It’s such a blessing to that young man,” reports Frach. “Now he can use his hands, because he no longer needs to lean sideways on his crutch. Now he even walks without the cane on flat surfaces.

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“I can’t say enough good things about Frank Snell and his staff,” she adds with feeling. “The day Juan got his leg fitted, the girls in the office got Juan a huge balloon bouquet, and he was just thrilled to death. They had written little congratulatory messages on the balloons, as well—it was just precious.

“Juan kept saying in his broken English, ‘these are the nicest people!’ and ‘I just don’t understand—I can never repay them.’”

As Frank Snell replied, speaking for his team, “Juan, the smile on your face is payment enough.”

“I am a lucky man,” Juan marveled, then corrected himself, “No, I am a blessed man!”

Since Frach makes regular trips to Honduras with LT Care Ministries, she will keep Snell Laboratory apprised of future needs for replacement components and parts. She encourages others to follow her lead by sharing their helping hands—skilled or unskilled—by contacting Jim Phillips at LT Care – 501-765-8477.

Dogs Rule at Team Snell!



The fourteenth annual Team Snell event drew employees from all nine Snell Laboratory locations together at the Gilbreath Center in Little Rock’s Baptist Medical Center for a May 12 experience that mixed education with fun, camaraderie, and the unexpected.

“Take the Lead” was the slogan for the day’s dog-show themed agenda of activities and informative sessions, including presentations by special guest speaker Dr. Ruth Thomas of the University of Arkansas for Medical Science at Little Rock, Lisa Whitworth, Vice President, and Richard Clark, Senior Vice President for Community First Trust; Dawn Bailey of the Hatcher Agency; and a panel of seven distinguished O&P industry leaders and manufacturers.

Team Snell continues to prove that education can be fun, as attendees learned a variety of “tricks” and skills used by working dogs and champion show dogs—ranging from the fancy footwork required to serve clients, to the agility and flexibility to adapt to evolving technologies. They also learned the value of qualifying for that essential license tag! A “Top Dog” game challenged players’ knowledge of patient-care protocols and documentation; and a satellite panel addressed the issues most significant to each branch facility location.

An awards luncheon recognized Holly McCallister and Jake Jacobi as winners of the 2007 Team Player Award; J. J. Hudson received the annual Community Service Award, and this year’s Face to Face Marketing Award was presented to Garry Owens.

Congratulations to all the deserving winners!

Snell Staff Receives Awards



J.J. Hudson
Community Service
Award



Jake Jacobi
Team Player Award
Satellite Office



Holly McClellan
Team Player Award
Little Rock



Garry Owens
Face to Face
Marketing Award

Myo-Orthotics Technology™: WalkAide® Introduces a New Science

For decades, patients suffering from a condition known as ‘dropfoot’ have had limited treatment alternatives; traditionally, they are fitted with an ankle-foot orthosis (AFO) that provides support to prevent the toes from falling at an incorrect angle, and therefore dropping or dragging due to paralysis or weakness of the leg.

Suddenly, however, with the advent of the WalkAide® System from Innovative Neurotronics, it’s a whole new ball game. Twelve years in the making, the WalkAide System was created at the University of Alberta, Canada, by a team led by Dr. Richard Stein. The device uses functional electrical stimulation to re-train the muscles of the leg and ankle to move properly.

The dropfoot condition is not itself a disease, but a symptom of an underlying problem, often caused by an interruption in the signal from the brain to the peroneal nerve, which runs along the outside of the leg below the knee. When the brain’s signal is interrupted, it fails to trigger the appropriate muscular response. People with multiple sclerosis (MS), spinal cord injuries, traumatic brain injuries, cerebral palsy and stroke may experience the effects of the condition.

The WalkAide® System employs built-in electronic stimulation to activate surface electrodes on the skin, so no invasive surgery or implantation is required. The size of a pager, the WalkAide unit is worn inconspicuously under clothing, and can be easily attached to the leg, even by a patient with limited function.

Stimulation to the ankle is based on timing determined by a tilt sensor: When the leg tilts back during walking, the stimulus is turned on; when the leg tilts forward, it’s switched off.

Using a patented sensor technology accelerometer and transmitting data through a Bluetooth connection, the device sends electrical signals to the peroneal nerve, alerting the muscles to raise the patient’s foot at the appropriate time in the gait cycle. The AA battery-operated device does not

require surgery, external wires, or special shoes, thereby maximizing patients’ mobility and freedom.

Although AFO’s serve their purpose by allowing easier and safer ambulation for dropfoot patients, wearers of an AFO device often need to wear a larger size shoe on one foot to accommodate the brace. Plastic AFO’s can also cause the foot to overheat; and while they support the foot, they may allow atrophying of the leg muscles whose job it normally is to lift and support the foot.

Conversely, the WalkAide not only allows the user to build up the leg muscles, but also strengthens the residual

connections of the nerve and muscle; thus it may, in time, build up those natural neural connections to the point where the WalkAide’s stimulation is no longer needed.

An orthotic device that eliminates the need for itself and restores natural functionality to impaired limbs is certainly revolutionary, and unquestionably welcome.

According to Deanna Fish, MS, CPO, and Director of Clinical Support at Innovative Neurotronics, Inc., who trained Snell Laboratory’s practitioners on the WalkAide system, “The provision of advanced Myo-Orthotic systems like the WalkAide requires a professional commitment to education and training. This commitment extends into the patient



care arena by promoting greater achievements for the user by enhancing functional recovery of the dormant neural networks. The practitioners at Snell Orthopedic are dedicated to improving patient successes and have taken another step in continuing to provide exceptional patient care.”

Garry Owens, CO, head of Snell Laboratory’s WalkAide program, began fitting patients in April with gratifying results.

A 30-year-old stroke patient who had problems with her foot dragging and inverting, for example, was able to walk out of the office without wearing the AFO she came in with, notes Owens.

(Myo-Orthotics Technology - continued on next page)



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“People respond,” says Owens. “They love the WalkAide. It’s something that they don’t put on expecting to wear it for the rest of their lives; they have hopes of improving, and regaining some of their natural function.”

Said one WalkAide patient, “It’s given me my life back: my mobility, my independence. It’s indescribable. If you can go from not walking to walking—it’s quite an experience.”

Candidates for the WalkAide System are evaluated by testing with a peripheral nerve stimulator called a MiniStim. “It takes about ten minutes to determine whether they’re a viable candidate,” says Owens.

The hand-held MiniStim unit resembles a meat thermo-meter with two short prongs. It is applied to the patient’s leg, where a mild stimulation, barely detectable, is administered. If the foot moves as a result of the stimulus, the potential for the nerve to carry an artificial stimulus to the muscle is present.

Each of Snell Laboratory’s nine facilities throughout the state has a MiniStim device for testing and evaluation.

During the evaluation process, patients don the unit and walk in it under Owens’ careful supervision. Owens programs the device to fire stimuli appropriately, based on their individual gait. “As far as training them to walk with it,” says Owens, “there’s really no training to do. The device does all the work of applying the stimulus that automatically results in natural, functional walking.”

People with central nervous system injuries such as strokes and head injuries are potential candidates; peripheral nerve injuries do not respond to this therapy, however.

Because it is such a new product, no L-code has yet been assigned to the WalkAide, thus it is not recognized for reimbursement by third-party payers. It is currently classified by the FDA as a non-returnable Class 2 medical device; such devices are ordered under a patient’s name and must be delivered to that patient only.

If you are aware of a patient who might be a candidate for the WalkAide System, please contact Snell Laboratory and ask about payment plans available through CareCredit.



Officially launched in the United States in May, 2006, the WalkAide System earned Frost & Sullivan’s prestigious 2006 Orthopedics Products of the Year Award. Innovative Neurotronics recently received clearance to begin selling the WalkAide to 25 nations in the European Union.

Specializing in the field of functional electrical stimulation, Innovative Neurotronics, Inc. identifies emerging Myo-Orthotics Technologies™ developed at research centers and universities throughout the world that use neuromuscular stimulation to improve the functionality of an impaired limb. The WalkAide System is the company’s first product.

Snell Laboratory Patient Featured in Promise Magazine



When Snell Laboratory client Robert Byrd was featured in our newsletter, the news spread quickly. (Byrd, who wears a C-Leg prosthesis fabricated and fitted by Snell Laboratory, also coaches Little League baseball games all over Arkansas, and was pictured doing so in the November 2006 issue of Snell P&Overview.)

A former cancer patient at St. Jude’s Children’s Hospital, Byrd notified his case manager of the story, which led to a request from Promise magazine, a St. Jude publication, to reprint the photo in an upcoming issue. Watch for it soon!

Congratulations to Robert; we’re delighted to see him receive this additional well-deserved recognition for his accomplishments! And congratulations to his Snell Laboratory-sponsored youth baseball team, too: His 8-year-olds have qualified to play in the USSSA World Series in Edmond, OK, the week of July 8!



Little Rock

625 North University Avenue
Little Rock, Arkansas 72205
(501) 664-2624
1-800-342-5541

Russellville

2300 West Main Street
Russellville, AR 72801
(479) 968-1713

Fort Smith

1411 Dodson Avenue
Fort Smith, AR 72901
(479) 785-1881

Mountain Home

333 Highway 5 North, Suite 4
Mountain Home, AR 72653
(870) 424-7010

Fayetteville

1792 East Joyce Street, #2A
Fayetteville, AR 72703
(479) 442-4435

Hot Springs

3810 Central Avenue, Suite B
Hot Springs, AR 71913
(501) 525-7943

North Little Rock

4420 East 43rd Street
North Little Rock, AR 72117
(501) 945-5462

Jonesboro

900 Professional Acres Drive
Jonesboro, AR 72401
(870) 268-0001

El Dorado

416 B West Main Street
El Dorado, AR 71730
(870) 875-9900

An Arkansas 'First': The Bionic Ankle

The new Proprio Foot from Ossur is one of those pieces of innovative technological genius that make you say, “Wow!” and reminisce about Lee Majors and Lindsay Wagner and the olden days when bionic limbs were the stuff of fantasy.

Today, however, soldiers from the war in Iraq are returning with limb loss, and deserve the best treatment our country can provide; and if we have to seize it from the future, then so be it.

The Proprio Foot is an “intelligent” prosthesis, whose microprocessor technology allows it to closely mimic the action of a human foot. It uses motion sensors, actuators, and software to replace lost muscle function and keep track of where it is in space.

As the world’s first intelligent foot module, the Proprio Foot thinks for itself, responding to changing terrain, transforming the approach to stairs and slopes, and, naturally, taking level-ground walking easily in stride. By angling itself appropriately, it also helps amputees to sit and stand up easily and more naturally.

A wide and automated range of ankle flexion in the Proprio Foot, unlike any previous design, allows function as close as today’s technology can get to that of an actual human foot.

Aside from its obvious physiological benefits, the psychological benefits to the wearer of the Proprio Foot are immense. The freedom from the need to consciously plan and execute each step safely is an advantage amputees have never before enjoyed from a prosthetic foot/ankle unit.

According to the manufacturer, the wearer also experiences a feeling of improved proprioception with a more balanced, symmetric and confident gait, with reduced wear and tear on the wearer’s back, hips and knees—which often have to work harder to compensate for the inabilities of traditional ankle-foot prostheses.

The initial release of the foot in the United States was begun through the Department of Defense, which made possible the fitting of the Proprio Foot on between 40 and 50 Iraqi War veterans.

By special invitation, however, Snell Laboratory recently became one of the first 12-15 private prosthetic firms to be selected for the introduction of the Proprio Foot in mainstream prosthetic practice, following the completion of an Ossur-presented certification course by Frank Snell, CPO, FAAOP.

Snell is enthusiastic about the virtues the Proprio Foot offers to below-knee amputees, and notes that the first two Arkansas candidates he has fitted with the foot are pleased and progressing satisfactorily after several months of wear.

Thanks to the support and cooperation of the Veterans Administration, who aggressively and proactively pursued the possibility of bringing this new technology (formerly used only at Walter Reed Army Hospital) to regional candidates, the second Arkansas patient approved to benefit from the new Proprio Foot is a veteran of earlier military service.

Snell explains that what makes the Proprio Foot so special is its ability to recognize differences in terrain using a capability called LGGR—Level Ground Gait Recognition. The on-board computer processes that information 1600 times per second, then rapidly (faster than the eye can catch!) makes adjustments to the foot-ankle relationship in order to accommodate the situation.

“If you’re walking uphill, the foot will stay in a dorsiflexed attitude, where the patient feels like they’re walking on level ground, even though they are walking uphill,” he explains. “And if they’re walking downhill, the opposite is true.”

(The Bionic Ankle - continued on next page)



(The Bionic Ankle - continued from previous page)

The foot works like a sound foot by plantar flexing in a seated position, and dorsiflexing during stair climbing, stair descent and during swing phase, allowing up to an extra 1" of toe clearance to prevent tripping. It also provides extended-foot flat contact on up and down ramps to promote safety and prevent falls.

Every breakthrough has its flaws, but the Proprio Foot's drawbacks are minimal—and, as Ossur engineers continue to tweak and perfect, hopefully temporary. Although the foot adjusts for a variety of heel heights, Snell points out that it weighs 2.2 pounds, which is about twice as heavy as a normal foot. And its power source—a somewhat bulky external lithium-ion battery pack the size of a deck of cards—must also be connected to the ankle by a flexible cable that can't be covered, yet needs to be protected from wetness.

Cost is also "a little steep," says Snell. "Right now the average Proprio Foot—just the foot and ankle unit—is selling at retail for about \$14,000. The base cost of the prosthesis itself must still be added to arrive at the total cost to the patient."

And until CMS assigns an L-code to the Proprio Foot, reimbursement may be difficult to come by from third-party payers (e.g. insurance companies, Medicare, etc.)

But when that cost code is approved, possibly as early as January 2008, Snell predicts that we'll be seeing a lot more of the Proprio Foot. "They'll become as common as the C-Leg, if not more common, since 70% of the amputee population is trans-tibial."

Snell Laboratory is the only prosthetic provider in Arkansas currently trained and authorized by Ossur to fit the Proprio Foot.

According to Ossur Marketing Director Tabi King, Snell Laboratory was selected to participate in the limited introduction of the Proprio Foot due to their reputation as a leader in bringing new technology to their patients.

"Since the Proprio Foot represents new technology that hasn't been out there before, we felt it was important to initially launch the product with those who are familiar with microprocessors. Snell Laboratory is known for the amount of work they have done with the C-Leg, and were a natural choice."

Can the C-Leg, with its microprocessor knee, and the Proprio Foot, with its microprocessor ankle, ever work together? Someday, says King, but not yet. "Currently the Proprio Foot is only for below-knee amputees. In the next phase, it will be available for above-knee amputees, and for use with our Rheo knee. But right now, it's exclusive to trans-tibial amputees."

To date, even in its limited launch, the Proprio Foot is being received "very, very well," says King. "In fact, it's in such high demand that there's a waiting list. It's being heavily fit in the Department of Defense and the VA. Patients love it, and it's really delivering the best possible outcome you can get for trans-tibial amputees."

"It's an exciting new product," King summarizes. "It's revolutionizing how amputees live their daily lives, and most importantly, it's really affecting positive health outcomes and ensuring that amputees are safer and more stable. It's just a very exciting time to be delivering a product like this to the market."

For more information about the Proprio Foot and its availability, contact Snell Laboratory at 501-664-2624.

Snell Laboratory Is Business of the Year Finalist

Snell Prosthetic & Orthotic Laboratory was honored as a finalist in Arkansas Business's Business of the Year awards at a February 22 banquet. A field of over 200 nominees were considered for the prestigious award; Snell Laboratory was one of only five finalists in their size category, of businesses with 25-100 employees.

An audience of 900 viewed an audio-visual tribute to Snell Laboratory's outstanding record of growth, success, and community service, followed by presentation of a plaque now on display in their Little Rock, Arkansas, headquarters.

This recognition provides a sequel to Snell Laboratory's 2006 Community Service Award, sponsored by KARK-TV and the Arkansas Governor's office and the Department of Volunteerism, presented in recognition of the commitment of the company—and also its individual employees—to serving their communities as well as their clients.

Welcome to CareCredit!

Snell Laboratory is pleased to welcome a new partner in client support:

CareCredit, a GE Money Company, was created to assist individuals in developing payment options for a healthcare procedure that may not be covered by their insurance plan.

CareCredit offers convenient alternative plans that make it possible for patients to move forward with prosthetic or orthotic treatment whenever they are ready, unrestricted by the limitations of their insurance program.

Ask us about CareCredit, or visit their website at www.carecredit.com.



Last Issue's Puzzle Solution

- 1) HERSNEF
= FRESHEN
- 2) DETPAU
= UPDATE
- 3) ISERVE
= REVISE
- 4) REDZINEOM
= MODERNIZE
- 5) DRAUGE
= UPGRADE
- 6) IPACTATIEN
= ANTICIPATE

Bonus

Our goal:
ENERGIZE our FUTURE

It's a Puzzle to Me!

Unscramble the letters to discover six special virtues Team Snell 14 participants learned to borrow from dogs that work and compete. (Enjoy a bonus for unscrambling the circled letters in each word to form a final, secret phrase.)

*It may be possible to form more than one word from the letters given, so be sure to choose the word that best describes the traits of an ideal working partner.

- 1) NICTSINT = _ () _ () _ _ _
- 2) ACRUDENNE = _ _ _ _ _ () _ () _
- 3) LISPIENDIC = _ _ () _ _ () _ _ _ _
- 4) SPHINESAP = () _ _ () _ _ _ _ _
- 5) MORGGOIN = _ _ _ () () () _ _ _
- 6) CHEATLIT = _ _ () _ _ _ () _

Bonus—Our Goal:

() () () () () () () () () () () () Service!!

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Snell Prosthetic & Orthotic Laboratory
625 North University Avenue
Little Rock, Arkansas 72205
(501) 664-2624 • 1-800-342-5541
www.snellpando.com

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Prosthetic & Orthotic
Laboratory

