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July/Aug 2006

The ONLY mag-E-Zine

dedicated to

Upper Extremity Amputees



I' vegot the music in me! -
Part one

Black Iron Master –
Product Review

Phantom Pain and
Treatments - Revisited

The Long Haul –
A UEA' s Story

If You Can't Change Your
Reality, Change Your Mindset

Welcome to UpperEx.com

UpperEx.com is dedicated solely to both youth and adult upper extremity amputees. The mission of this publication is to provide information, resources, and real life stories relevant to all UE amps, both new and experienced, youth or adult, traumatic or congenital. It is our goal to also expand the UEA network globally and strengthen our voice as a community to effectively respond to relevant issues that we all deal with on a daily basis.

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One-Arm Dove Hunt

Thoughts from the Editor... Eric Westover



Welcome to summer!!!!!!

I hope everyone liked our new format for *UpperEx.com*! We got some great reader comments and NO bad ones! I, for one, love the new layout and how it looks, and I hope all of you like it too!

I wanted to let you know about some more changes coming soon to UpperEx.Com. We are in the process of getting a store up to sell hats, t-shirts, sweatshirts and the like, promoting UpperEx.Com. Hopefully (my fingers & toes are crossed), by the release date of this issue it will be up and running. Keep checking at www.UpperEx.net for updates.

All the proceeds from the sale of items will be used to promote and expand UpperEx.Com, to expand the UpperEx.Com Peer Support Network, and to help continue our mission of reaching out to upper extremity amputees and their families.

With that being said, UpperEx.Com will also be sponsoring events around the country to bring UE amputees together. Our first event will be in Wautoma, Wisconsin this coming August. See the Ad in this issue for more info....

And the BIGGEST change coming this summer is the unveiling of the UpperEx Amputee Outreach Coalition. This non-profit will continue the work and mission started by UpperEx.com. The Coalition will also be involved in events with other non-profits like the OPAF (Orthotics & Prosthetics Assistance Fund), the One Arm Dove Hunt Association, and other like minded groups that dedicate themselves to helping amputees. Keep checking back to www.UpperEx.org for more updates and information....

Have a GREAT summer!!!!

Peace

ALERT*ALERT*ALERT

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***THE EDITORS OF
UPPEREX.COM***

Why UpperEx.com...a message from the editors of UpperEx .com

This Ezine evolved out of some discussions between my Partner-in-Crime, Dave Hersher, and myself about eight months ago in the chat room on Arm-Amp.com.

I wanted to give back to the upper extremity amputee family that had given so much to me. I wanted to provide more information and inspiration to other UE amputees out there, and I also wanted to bring the UE community together in a collective, global voice. In my short stint as a RBE amputee I had found that there was little information and resources for upper extremity amputees compared to what's out there for lower extremity amputees.

I'd had a few ideas but was just chewing on them in thought and bouncing them off people to see what they thought. Then Dave suggested the ezine format. At first I was a little reluctant to commit to it because it was such a HUGE undertaking and I didn't want to do it alone. So, I talked with Dave and he agreed to come on board and share the editor duties with me and the ball was rolling. It's been an eye opening ride to get this far, but I'm so glad that we did this. I hope that this will provide another outlet and resource for both new and experienced upper extremity amputees of all ages.

I hope you enjoy it!!!

Eric A. Westover
RBE Amputee & Co-editor, UpperEx.com

When I think about where we are, with UpperEx.com, I'm amazed. What began as a conversation between Eric and myself has taken on life!

When I began this stage of my life I did what most people would do with any strange, new experience. I researched. What I found was very little information for me..an upper extremity amputee or my family.

My pastor put me in touch with a lower extremity amputee, and I learned a lot from him, but he couldn't answer specific questions I had. I tried to help other UEAs by making myself available to answer questions or just to talk. All the while I kept thinking there must be a better way.

Fast forward to my conversations with Eric, and here we are.
A better way!

My goal, for UpperEx.com, is to make information available that I couldn't find but definitely needed. I want UpperEx.com to be informative by providing answers to questions and inspirational by talking about people who have met this stage of their lives head on and continue to enjoy every day!

Dave Hersher
LBE Amputee & Co-editor, UpperEx.com

I wanted to give back to the upper extremity amputee family that had given so much to me.

I want UpperEx.com to be informative by providing answers...

Remember...

"There is only one way to happiness, and that is to cease worrying about things which are beyond the power of our will."

-Epictetus



If You Can't Change Your Reality, Change Your Mindset – Hilda Carroll

Coaching is all about change. Clients hire coaches because they wish to change something about their lives; because they believe that this change will make them happy.

And as a coach I am all for changing any part of our reality that we are less than satisfied with. But the truth of the matter is that some realities cannot be changed by the individual. Some realities we just have to live through.

Part of life involves coping with difficult circumstances beyond our control. But there is good news: even when our external situation isn't one we can alter physically, we do have complete control of how we experience the circumstance. Even if it doesn't always seem that way, we do have a choice about how we experience each and every event in our lives.

When those events are less than favourable, it's easy to focus on the problem, become disheartened, disillusioned, even depressed. However, this won't help us deal with the problem or work our way through it. Often we may have to work really hard to see the silver lining, but it's an effort worth making. If we make a conscious choice to seek a learning or an opportunity in every challenge that life throws up, we often discover (albeit, quite a bit down the line) that we gained something valuable from the experience.

“Why do you think they call the present a gift? It means that there is always a positive in every present moment, if you're willing and able to see it. Usually, we're either too upset, frustrated, or self righteous to even want to look.” -- Thomas Leonard

The best way to deal with difficult situations is to accept them as they are, rather than struggling with them, and wishing they were different. Once we accept what is, it becomes easier to see ways to learn and grow from the

But the truth of the matter is that some realities cannot be changed by the individual. Some realities we just have to live through...

Part of life involves coping with difficult circumstances beyond our control.

experience. It also makes it easier to see practical ways to deal with the situation, identify means of coping with it and (most importantly) begin to move through it.

Remind yourself that “this too will pass”, and wonder what unexpected blessing you'll discover originated with this experience when you later look back on it. In the midst of crisis, reassure yourself that although you can't see or imagine it now, there is something beneficial to be gained from what you're going through. Try and keep an eye out for what it might be. But even if it still escapes you, trust that it's there and you will recognize it later.

Contrary to what they say, life is a bed of roses. But when you prick yourself on a thorn, it temporarily shifts your focus from the blossom. Next time that happens attend to your wound, make a mental note to wear protective gloves next time, and then get back to appreciating the flower.

Hilda Carroll is a life coach who specialises in helping people to be happy right now, and see achievement of their goals as a bonus rather than the source of their happiness.

Visit her website at:

<http://www.thehappinessbusiness.com>.

Article Source: <http://EzineArticles.com>

Black Iron Master terminal device for weightlifting by TRS - Sean McHugh

I find that for about 90% of my daily tasks my body powered Hosmer #555 hook allows me to do nearly everything. Unfortunately, it was not an effective tool for working out in the gym. Exercises that involved pushing weight machine bars were easy to do as long as I wrapped a towel around the padded handles to keep from tearing them, but it was impossible to get a reliable grip on free weight bars or do any kind of pulling exercises without the hook opening by itself. My figure eight harness also limited my range of motion. My workouts were uncomfortable and unsafe.



I called Bob Radocy at TRS to inquire about getting a locking pin conversion for my Grip 2s and he told me about a custom device he had made for a power lifter in Florida that might be worth trying. My insurance doesn't cover recreational terminal devices but TRS has a direct purchase option. I sent the check right away.

The new Black Iron Master, as it is called, arrived in two days. I unwrapped the package on the way to the gym. I screwed it into the wrist of an old socket and used a silicone suspension sleeve to hold it on without a harness. The device is a heavy-duty hinged clamp which can be manually locked by twisting a large wing nut. I locked onto a curl bar and put it to the test. The wide surface area of the device allowed for a non-slip and wobble free grip on the bar. I moved through the gym trying everything; pushing, pulling, cable machines, dumbbells and barbells. The device proved to be exactly what I needed to get through a complete routine.

After a few weeks of training I was ready to attempt some pull-ups. For a few days I would clamp on the bar and just hang, and then I tried a little lift to test the security of my suspension. When I felt confident enough to go for it, I knocked out four clean pull-ups as the whole gym applauded and cheered.

After using the TD for a few months I had a new socket made specifically for the device. It is a total contact socket suspended well below the elbow with a silicone suspension sleeve. I wear an extra neoprene sleeve for added security (I found that the silicone sleeve alone developed pin hole leaks over time). I also had the socket made about two inches shorter than all my others and canted the wrist 20 degrees toward my body. These modifications put the TD in the perfect position for every exercise. Using the device feels very natural and comfortable.

I'm not fumbling around the gym anymore. I'm really starting to move some weight, more than some of the two handed guys! I'm sure you can imagine how outrageously good that feels!

In my experience it is all about simplicity and solutions. The Black Iron Master from TRS has proven to be a fantastic solution in the gym. It retails for \$900 and is available from TRS call 1.800.279.1865

PS: I just ordered the Hammerhead kayaking TD from TRS. It should be waiting on my porch when I get home today. The kayak is already strapped to the roof of my car.

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My fight began only three months after my wedding. I was working at a landscape company and kept coming home with burses on my legs and arms. I didn't think much of it, thought I must've hit something at work, but they just keep getting larger. My wife and I found out I was bleeding under my skin. After a trip to the doctor and a simple blood test I found out I had Leukemia. After a bone marrow biopsy they confirmed it was Chronic Myelogenous Leukemia and that I needed a Bone Marrow Transplant.

One of the big questions we were faced with was who would be a match because I'm an only child. We had a couple of unrelated matches in the register. After a couple of routine blood test on my parents they found out my dad was a perfect match. In July of 1991 I checked into Bone Marrow Transplant Unit in Milwaukee. I was in the unit for 2 months and off of work for the rest of the year.

Everything was going good until late in 1992 when I my body started eating my white blood cells. The doctor did tests and found out my spleen was the problem, so they removed it. My counts went up after that and everything was back to normal.

1995 was not a good year for me either. After a 6 month check up I found out my Leukemia was back. They put me on a shot to control it, which it did, but the shots had side effects like flu symptoms. They made me feel terrible. I'm glad after 2 years on the shots there was a new drug that I have been taking to this date and has put me back into remission.

1996 became the worst year of my life. In May, of that year, I felt like I had the flu. I made a doctors appointment for that afternoon but felt like I couldn't drive so I called my father to take me. Thank God I did because when he walked into the house he said I was blue. He rushed me to the emergency room and they didn't think I was going to make it.

They got me stabilized and rushed me to Freodert Hospital. I was in a comma for a week and they diagnosed me with DIC (disseminated intravascular coagulation.) which kills the small blood vessel in your extremities. It also attacked my kidneys and I had to be on dialysis for three days. The third day my kidney started working again.

...couple of days the doctors had stopped the infection but the damage had been done

In those first couple of days the doctors had stopped the infection but the damage had been done. My left arm started to get an infection so they had to amputate below the elbow. A few days later my right arm was amputated below the elbow. Two days after my surgery my prosthetic doctor had come to see me and made me my first set of arms right in my bed. Things were very frustrating for the first week with my new hooks. The first set was a voluntary opening hook and I kept on breaking the potato chips when I tried to pick them up. My physical therapist started out having me do small tasks with them and I have never looked back! Her goal was to find something I couldn't do; she lost that bet!

The doctors tried to save my legs by putting me in a hyperbaric chamber to force oxygen into me legs but it didn't work; so they amputated both my legs ten inches below the knees. During the first months of rehab I did not know what my life was going to be like. I was in the hospital for 66 days. I spend most of that time in the spinal cord rehab center at Fordert Hospital in Milwaukee. They put me there because they really didn't know where else to put me. Two weeks after my legs were gone the prosthetist came back and made me a set of legs, and said he'd get me walking again. I did not believe him!

After spending time with the spinal cord patients I came to realize that I didn't have it that bad. Most of the patients that I was having therapy with and eating dinner with would never walk again.

There was a few of them who could only move their heads because of severe damage to their spinal cord. I didn't jump up and start walking like I thought I would, that took me about 8 months before I could walk by my self, but today I walk about 95% of the time, just using a power chair for long distance.

After a year or so I was back to work and things were getting back to normal. I didn't like what the company had me doing. The head of manufacturing had read my resume and asked if I would like to work with the computer aided design system in tool and die, which I did for 3 months. After the 3 months working with the Tool and Die shop they hired me full time. I've been with the company for 12 years and I'm the senior Tool and Die designer.

Things were going ok, but I needed to get back into the things I love the most: My hobbies and doing things with my kids. My dad and I started to figure out how I was going to shoot my gun for deer and turkey hunting and how was I going to go fishing. We did a lot of trial and error but with many other peoples help and advice we accomplished our goals. I have shot more deer and turkey since losing my limbs than when I was able bodied, "Don't have to worry about my feet and hands getting cold." I also modified a knife so I can cut food because I love to cook.

When I was in high school I raced Remote Control Cars. I took the plunge and bought a monster truck and modified the controller, and now my son and I drive them all the time. We now have 5 cars to drive around. It help's working in a tool and die shop. I draw up the things I need and the guy's help me build them. We also bought a new camper and camp all the time. We have a group of friends that camp with us. We always have a great time. I'm currently coaching my daughter's soccer team and we have 14 wins and 6 losses this year.

It's been a long road. The community I live in was very helpful to me. The local Lions Club did many fund raisers for me. I also joined the Club and became President for a year. It was great giving back to the community!

One of the best things I did..was traveling to the One Arm Dove Hunt... If you have the chance to go don't let it slip by!!

My family has always been helpful too. In the last three years my mom has nursed me back from two total hip replacements. My wife and kids don't cut me too much slack because I pull out the handicap card and they just give me the look. They know I can do anything I put my mind to. You can do anything you put your mind to and I'm not afraid to try anything new.

Dealing with my prosthesis has been the most difficult thing I have had to deal with. After my amputations I didn't know anything about prosthetics. You are worried about what other people with think. I'm now on my fourth set of arms and legs. I have finally got legs I love and my arms are working great. I've come to the conclusion that I don't care what other people think. I use the prosthesis that works the best for me because I'm the person that has to put them on every day. Other people may have to look at them but I have to live with them. I was getting so tired of having to get new covers for my legs so the last set I didn't have them put on. My arms had skin coloring on them and looked so dirty. My new ones were made and I left the black carbon fiber color on them. I'm wearing a myo-electric on my left arm with and Otto bock griefier and hand. I have a conventional arm on the right with a TRS hook. I'm using freedom feet on both legs with Ossur alpha liners witch are the best set of legs I have used. I haven't had a sore on my legs since I've got them, that was always a problem with the first sets I had.

One of the best things I did, after my amputations, was traveling to the One Arm Dove Hunt. The last three years I have gone have been the best therapy you could ask for. To be surrounded by a group of amputees that vary in age from young to old was very overwhelming. You learn so much from everyone that you talk to and make so many new friends. The town is very friendly, the food is great and it is well worth the trip because you find out there are many other amputees just like you. It's not just about the dove hunting or the trap shoot. It's about the friendship and the people you meet. I met Eric and Dave there last year and commend them for starting UpperEx.Com. This year should be the best trip because my wife will be coming with me and we plan on heading to San Antonio for a week. If you have the chance to go don't let it slipby!!

Manufacturer' s Forum

The goal of this forum is to open a line of communication from companies that manufacture and distribute products for upper extremity amputees directly to the end user, the amputee.

Companies can use this forum to communicate new ideas for products, gain valuable feedback on existing products, recruit beta testers for experimental products, or use it to find out what we want to see for new products, gadgets, and devices specifically for arm amputees.

UpperEx.com is proud to host this section. However, we do not endorse or promote these companies for a paid fee. All companies who want to post in this section may do so for no charge.

UpperEx.com does reserve the right of editorial control and will review all posts for content and forum specifics.

Hello,

I am writing on behalf of a marketing research company based in Denver, CO. We are seeking upper extremity amputees to participate in a research study that pays \$100 for under an hour of their time. While you may not be able to release the names and information of potential candidates to me, would it be possible for you to provide them with my contact information? I can be reached at 800-800-0905. Any help you can provide would be very much appreciated.

Thank you for your consideration.

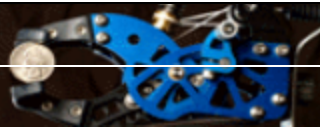
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I' ve got the music in me! - Part One Piano

This is the first of a series of articles about musical instruments and the UEA. Each article will be about a different type of instrument that would allow a UEA to continue to play or learn to play music.

Some of the instruments will need to be modified and the modifications will be discussed as well.

The first part, of this article, concerns playing one-handed piano and adapted music. The second part is about learning to play as a UEA with a unique teaching method.

I am a pianist and piano teacher, and I play with two fairly competent hands (most of the time!). In my profession, it is fairly common for pianists, and often times other musicians, to suffer a case of over-use syndrome, tendonitis, or carpal tunnel. These injuries can be the result of a combination of too much practice, and/or incorrect practice with respect to how the musician is using their fingers, hands, arms, and even the entire body in the practice process. The damage to a hand or arm due to over-use, tendonitis, or carpal tunnel may be temporary and easily resolved, or it can terminate the career of a pianist almost immediately.

I am a once-injured but recovered pianist. My story is similar to many others: while completing my doctoral degree, and working towards a final recital, I logged in many extra hours of practice (ie. sometimes eight hours a day!). My thought was that the more I practiced, the better I would become, and therefore I practiced fanatically, over-extending and over-using my right hand to the point where I could not play without significant pain. Because of too much practice, and incorrect for that matter, I ended up with tendonitis. This it prevented me from playing with my right hand for over six months. For several months it was painful and difficult to use my right hand to do very simple things, such as brushing my

teeth, drying my hair, mixing ingredients for a meal, to name a few. This injury forced me to re-examine how I played and used my hands, arms, and entire body while I practiced.

During this six-month period, I went right on with practice, with my left hand, that is. My teacher set a challenge before me to learn and play works written for the left hand. I willingly, and really quite happily, embarked on learning to play with one hand alone. I jumped right in by playing the big, well-known works: the Bach/Brahms Chaconne in D Minor for the left hand alone, and Scriabin's Prelude and Nocturne. I can't say that I mastered these successfully in that short period of time, but through the six-month journey, my left hand became stronger, and the end result of my study was a lecture-recital featuring left-handed piano music.

Aside from my story, it is worth noting that the most common injuries for younger pianists (ages 5-15 years of age) are not practice-related. These young pianists will usually acquire a sports-related injury. On the other hand (no pun intended!), older students, such as college-age and above, are at a higher risk of over-use and extended practice-related injuries. Regardless of age, it is important that piano teachers, such as myself, are prepared with and have

knowledge of piano literature for one hand, resources on this literature, and how to teach it should a student sustain an injury.

A practice-related injury, accident-related injury, or even a birth-imposed situation that offers up only one hand and/or arm, does not prohibit any person from playing the piano with their other good hand.

So, in order to prepare the single-handed pianist for action at the piano, we should consider the aspects of playing works written for one hand. First of all, the pianist will need to adopt a slightly different seating position at the keyboard. Traditionally, two-handed pianists usually seat themselves directly in front of Middle C on the piano the body seems to be divided evenly between the registers (high and low) of the piano. Pieces written for the left hand alone are better negotiated if the pianist sits slightly to the right of Middle C. This position will allow for the most freedom of movement and mobility across the entire range of the piano. Pieces written for the right hand, however, may not require a change in seating. Please note that every piece will be a bit different as far as the register changes and shifts in position, thus it is helpful to have a competent teacher, and one who has played this kind of literature, to assist in determining how to sit at the piano.

As far as using the feet in pedal-situations: the right foot still retains the its job to cover the right pedal, the damper pedal, and the left foot will still manage the *una corda* pedal. Even sitting a bit farther right of Middle C will not greatly affect the pedal situation. Rarely, if ever, will the *sostenuto* pedal be used (middle pedal). Playing music for one hand will also offer slightly different challenges for all levels of pianists! Single-handed piano literature requires many of the same demands as two-handed music, such as voicing a melody and balancing it against the accompaniment, voicing chords, and/or voicing a melody hidden inside a chord pattern, negotiating large chords and even large rolled chords, maneuvering register

shifts (ie., changes from the low to high range on the piano, sometimes moving quickly across the keyboard), negotiating scalar and arpeggiated work cleanly, and the timing and execution of the pedal.

Practicing and playing music for one hand will strengthen the hand with respect to playing large chords, negotiating and playing scalar and arpeggiated patterns cleanly, and voicing a melody over an accompaniment. It should be mentioned that in traditional two-handed piano music, the right hand usually assumes all of the voicing of the melody, and that the voicing is typically done by the outer fingers, four and five (the weaker ones). This will still hold true when playing music for the right hand alone. The pianist should be aware that while voicing the melody with the outer fingers, it will also assume the accompaniment as well which can be a strain to the hand if the pianist is not careful in HOW they are using the hand. In left-handed piano music, the thumb and second fingers will do the voicing, and then the remainder of the hand will provide the accompaniment. The technical demands on each hand, left and right will be different with respect to each piece, and it will take time to build the strength of that hand. But, regular and diligent practice, with guidance, can produce wonderful results and progress towards being a competent one-handed pianist!

It is difficult to generalize and prescribe exactly what to do and how to start playing music for one hand since every pianist and person is different. Age and level has a factor as well. For example, in order to assign the correct studies, exercises, and repertoire for a student would require in-depth thinking and knowledge of that pianist's skills and abilities, current technique, repertoire, and theory regime in progress. In other words: a blanket prescription of what should be assigned for one-handed music cannot happen without knowledge of these things. It is safe to say, however, that for any pianist, it is necessary

to accumulate time on practicing exercises and/or etudes for the hand in order to prepare that hand for future study on the actual repertoire itself.

There are two very helpful resources that piano teachers and pianists should have knowledge of: Piano Music for One Hand, by Theodore Edel (publ. by Indiana University Press), and One-Handed: A Guide to Piano Music for One Hand, by Donald L. Patterson (publ. by Greenwood Press). Professor Edel's book provides an historical commentary on the background of the literature for one hand, and several well-known pianists in past history that have championed the repertoire. From there, the book divides into solo works for the left and right hands alone, and works for one hand and orchestra, and chamber works.

Professor Edel provides a helpful brief commentary about the pieces, noting historical reference, level of difficulty, and publisher(s). Professor Patterson cites works for the right and left hand alone, music arranged and transcribed for one hand, and concerted works for one hand: piano and orchestra; piano and other instruments; anthologies; and composer ensemble music. Like Edel's books, he too includes a short commentary about each piece, level of difficulty, and publisher. He also includes a separate list of pedagogical literature (teaching literature) for one hand, and a discography as well. I recommend both books highly!

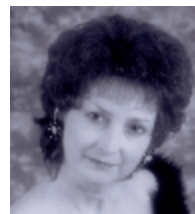
And now, back to being the piano teacher . . . As a piano teacher, I need to have access

to pieces for the elementary through the intermediate to late-intermediate, and advanced pianist. The following list of works that appears at the end of this article will provide a working-list of elementary through late intermediate and early advanced piano literature for one hand. The list will offer up a legend that will explain the level of difficulty, and the list will also cite some collections that will appeal and challenge the early-advanced to advanced pianist. (Please consult the books by Edel and Patterson for a more comprehensive listing of one-handed literature.)

In closing, I am a pianist with two working hands. My experience of being injured, however, has not prevented me from playing the piano at any given point. Once I recovered from the pain, I began, with the assistance of several teachers, to play the piano again with two hands. I had to unlearn some bad habits, and the result of that took several years to become comfortable playing nearly tension-free. It was a journey that I am so very glad to have experienced, even as painful physically and emotionally as it was. Even now, I plan and practice several pieces for the left hand alone and program them on my recitals, and every other year I program a recital devoted to one-handed piano music. I truly love to play the piano and relish the challenge of learning and communicating the musical meaning of repertoire written for one hand.

I hope that any and all future one-handed pianists will embrace this music as much as I do! My best wishes to all!

Adrienne Wiley is currently Associate Professor of Piano and Pedagogy at Central Michigan University. She received her bachelor and masters degrees from the University of Kansas, and her doctorate from the University of Oklahoma. Dr. Wiley is a performer and teacher, and specializes in studying and playing piano music for one hand. She has written several articles for national magazines, and reviewed Donald Patterson's Book One-Handed. She has also recently released a CD of single-handed piano works through the White Pine Music. (www.whitepinemusic.com). The CD features educational (teaching) literature and advanced concert works.



Solo Piano Literature for One Hand: Teaching Literature for the Elementary to Early Advanced Pianist A Working-list Compiled by Dr. Adrienne E. Wiley <u>Early to Late Intermediate Literature: Left and/or Right Hand</u>		
Aaronson, Sharon	"Between Two Lands." (RH)	Alfred.
Adoff, Stephen	"Left Alone and Blue." (LH)	Willis Music
Alden, John Carver	"Gavotte for the Left Hand."	B.F. Wood
Alexander, Dennis	"Elegy." (LH)	Alfred.
Alexander, Dennis	"Peaceful Hearts." (RH)	Alfred
Shawcross, Frank, arr.	<u>Nine Carols for Christmas (Piano.)</u> Disabled Music for One Hand)	Disabled Living Foundation Foundation
Yeager, Jeanine.	<u>Especially for You</u> Or <u>Just for Fun!</u> the pieces are for hands that may have only a few working fingers, thus pieces often feature small patterns that the hand can manage.	Kjos West
Lewenthal, Raymond	<u>Piano Music for One Hand</u>	G. Schirmer

Distance Learning Piano Lessons

Features of Distance Learning Piano Lessons:

- ? Ideal For Busy Adults.
- ? Play By Ear.
- ? Play Popular Songs After 1 Lesson
- ? Effective and Intuitive non-traditional approach.
- ? Free Trial Piano Lesson.
- ? Over the Phone (We pay the phone charges).
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- ? Listening alone focuses musical attention.
- ? Save drive time.
- ? Study with a master jazz pianist/arranger

Welcome to the 21 st Century. Now you can study piano with a master jazz pianist/teacher, in the comfort of your home, over the phone. Since April 2002, I've taught students from as far away as New Zealand, Hong Kong and England and as close as my hometown Chicago Illinois. I use the internet to send *chord drills*, *custom lead sheets*, *verbatim arrangements*, and *audio files* to students around the world. I also have the privilege of teaching a blind student from Arkansas and 2 students who have lost the use of one of their hands after suffering a stroke.

I have over 25 years experience teaching and performing piano and have studied with arguably the 2 best jazz pianist/teachers in the country, namely *Alan Swain* from Depaul University and *Tony Caramia* currently at Eastman School of Music.

Each of my students brings a unique set of skills to their lessons. I build on those skills and formulate my lesson plans accordingly. Three areas that I think are key to being able to play piano lifelong are: Chords, Concepts and Creativity. Very briefly, if you can form/play any chord and you understand essential concepts i.e. circle of 5ths, chord substitution etc., you can use this knowledge to be creative at the piano. You will no longer be restricted by that others write or arrange but will have the skill set necessary to make a song your own.

Equipment needed:

- ? Cordless Phone
- ? Headset
- ? Piano/Keyboard
- ? Computer/ Email Address
- ? Adobe Acrobat Reader (Free off the internet)

We will get back to you and discuss just exactly what your goals are regarding playing the piano. (See home page under *Music Menu* for a list of some of the playing styles I teach). Then we work out a lesson time that is convenient for you. We pay all phone charges. We call you at the pre-designated lesson time and all you do is pick up your cordless phone, insert your headset and head on over to your piano/keyboard to begin learning.

Goal for My One-Handed Students:

To bring the joy of playing piano into or back into their lives.

Beginning in September 2003, I started teaching a student who lost the use of her left hand. In writing arrangements of popular songs for **right-hand only**, I was able to bring music back into my students life. In 25 years of teaching this may be the most rewarding experience I've had.

To my knowledge 95% of the **one-handed piano** repertoire is written for left hand only and is mostly classical pieces. These classical pieces are quite difficult for the average piano player.

Having written over 30 one-handed arrangements over the last 2 years, for my student, Kay Breslin, I've had the pleasure of seeing her evolve into a wonderful musician. She recently performed at a **Rehabilitation center** which gave as much joy to the audience as to the performer. If you'd like to hear Kay perform just go to the home page and click on the video. You can read more about Kay in the Stroke Connection Magazine July/August 2005 issue.

Since the Stroke Connection article appeared, I've started to teach 2 other students who have survived strokes. Each of my 30 plus arrangements is primarily written to be played with the right hand alone. But they could be played with the left hand with some slight editing. I will look forward to writing my first **left-hand only** arrangements.

If you or someone you know has always wanted to play piano, or has played before their particular **disability** and want to get music back in their life, please call me at 800-32-PIANO.

Lessons are \$75 an hour for weekly lessons, either 45 minutes or an hour, or \$100 an hour for bi-weekly hour lessons. Tuition is paid monthly and due the first week of each month. Tuition includes 24/7 emailing of questions with a response within 24 hours.



Mark Miller studied with the masters, **Alan Swain** of DePaul University and **Tony Caramia** of the Eastman School of Music.

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Treatment Options for Amputees Experiencing Phantom Limb Pain -

Sarah L. Chollar

An estimated 50-80% of people with amputations experience phantom pain and phantom sensations. Phantom pain can be severe and can have a huge impact on quality of life, mobility, prosthetic use, and the social lives of people who experience this phenomenon. Traditionally, medical interventions have not been effective in reducing phantom pain. Research continues to develop theories to explain the underlying mechanism which maintain phantom pain in hopes of discovering effective treatments. The study of cortical reorganization in relation to phantom pain offers many new exciting possibilities for the treatment of phantom pain. For the amputee who experiences phantom pain, there are many treatment options including hypnotherapy, biofeedback, mirror box therapy, pharmaceutical therapies, and surgical procedures.

Amputation resulting from accident, disease, or congenital defect is an extremely traumatic event that results in a permanent physical disability. Much research has gone into the development of surgical procedures as well as rehabilitation programs and prosthesis development, while the psychological rehabilitation of people with amputations has received less attention. Some of the most interesting phenomena related to amputation are phantom pain and phantom sensation. Phantom pain can be defined as painful sensations such as burning, stabbing pain, or cramping that emanates from the location of the former limb in people who have been amputated.

Phantom sensations may refer to itching, tingling, or other nonpainful sensations emanating from the missing limb. Some phantom sensations may be similar to the burning, cold, or pins and needles of phantom pain, but these sensations are not reported as painful and are classified as sensation and not pain (Kooijman, Dijkstra, Geertzen, Elzinga, & van der Scans, 2000).

Phantom pain research is important because many people who experience phantom pain report that it causes them moderate to severe suffering (Kooijman et al., 2000). In many people with amputation, living with phantom pain may interfere with the use of prosthetics as well as reduce people's ability to maintain employment and desired levels of social activity (Hanley et al., 2004). Research that may lead to the development of effective treatments for phantom pain may significantly increase the quality of life for individuals who experience phantom pain.

Despite the growing body of research in the area of phantom pain, the study of this phenomenon has been marked by inconsistent findings and contradictions from one report to another. One area that has been widely debated is the actual prevalence of phantom pain in the population of people with amputation. These prevalence figures may be as low as 49 % to as high as 83 % (Dijkstra, Geertzen, Stewart, & van der Schands, 2002). Many different factors may contribute to these estimates including difficulty recruiting large sample sizes, low response rates for survey studies, and differing operational definitions for phantom pain (some studies did not differentiate between phantom pain and phantom sensations).

The research of Jensen, Krebs, and Rasmussen, (as cited in Kooijman et al., 2000) has supported the idea that many more amputees experience nonpainful phantom sensations, with reports of as many as 90 % reporting phantom sensations 6 months after surgery. Despite an established prevalence rate, the one thing that is certain is that many people with amputation experience phantom pain and sensations, and for some this pain can be debilitating.

Phantom pain may be an interesting topic for scientists to study, but it may not be as personally important to scientists as to the person with an amputation who experiences the phenomenon first hand. Several years ago I experienced amputation of some of my fingers in a car accident. This singular event opened my eyes to a new world which I had never even recognized. I had, and still have, many questions about amputation and the rehabilitation process. This desire to improve rehabilitation efforts for people with amputation was the driving force that has carried me through 3 years of college. In that time I have learned a great deal, but still very little about amputation. I myself experience phantom sensations on a regular basis, but fortunately have very little phantom pain. I have experienced the cramping, burning and stabbing phantom pains, as well as the feeling that my fingers were twisted and frozen in unnatural positions.

I cannot really describe the feeling of pain that seems to be located in the thin air my fingers used to occupy, but it is a strange and baffling feeling indeed. I have wondered what could cause these sensations, but mostly wondered what can I do to make this stop?

With what I have learned about phantom pain, I am still not sure that there is anything I can do to relieve the pain and sensation, but I do feel better knowing that cortical reorganization provides a possible explanation.

It is nice to know that the feeling is not a sign of madness, as I would have been told by doctors hundreds of years ago.

Amputation may have existed for as long as people have existed (Friedman, 1978). There are many historical accounts of amputations found in mummified bodies, relics of early prosthetic devices, and accounts of people with amputation found in various art forms over the ages. There have been historical accounts of phantom pain dating back to 1551 when Ambroise Pare, military surgeon, reported that his patients complained strongly of pain that resided in the limb that was no longer there (Herman, 1998). Historically phantom pain was considered to be a purely psychological phenomenon, but now most researchers believe physiological processes are the basis of phantom pain and sensation, although debate continues as to whether the pain is maintained centrally or peripherally (Hanley et al., 2004).

Some researchers suggest that psychosocial factors do indeed contribute to phantom limb pain (PLP). Factors including depression, anxiety, and stress may intensify PLP (Hanley et al., 2004; Topfner, Wiech, Kiefer, Unertl, & Birbaumer, 2001). Hanley et al. (2004) wanted to investigate the potential benefits to approaching phantom limb pain and adjustment to amputation from a psychosocial perspective. What the researchers found was very interesting, and their results did indeed support a biopsychosocial model of adjustment to amputation and PLP. The researchers explored several possible factors which might contribute to the adjustment to amputation and phantom limb pain, but found that only social support, the presence of solicitous responding, and catastrophizing were significantly associated with recovery outcomes.

Catastrophizing was defined as “the use of excessive and unrealistic negative self-statements when in pain..” (p. 883). In this study, catastrophizing early in recovery was associated with a significant decrease in phantom pain in the future. This is extremely counterintuitive, as well as contrary to past research which demonstrated that catastrophizing was associated with poorer outcomes. It has been hypothesized that catastrophizing may be a part of the grieving process. The role of perceived social support was also strongly correlated with better outcomes for people with amputation.

The role of social support has been widely studied in many different health related areas, and can have an extraordinary impact on recovery. The researchers distinguished between adaptive social support leading to better outcomes, while solicitous responding lead to poorer outcomes. Solicitous responding was defined as significant others offering to help or to take over tasks when the person with an amputation was struggling or in pain. This type of help is thought to contribute to helplessness and increased disability.

It was interesting to note that many of the other factors analyzed by Hanley et al., such as perceived control of pain, did not yield significant correlations with treatment outcomes or adjustment. The researchers conclude that it may be possible to predict long-term adjustment from measures taken in the first month post amputation. This finding supports the previous research of Topfner et al. (2001) who found that examining and treating psychological factors that influence the perception of pain in the first few weeks after amputation can help prevent chronic pain from developing. The two most prominent contributors to a positive outcome were perceived social support and catastrophizing.

Kooijman et al. (2000) conducted an epidemiological study to identify factors associated with the development of phantom pain and sensations, as well as to determine the prevalence of these conditions in the Netherlands. The researchers pointed out that there seems to be a difference in the prevalence rates of phantom pain between upper and lower extremity amputees, with a higher rate observed in upper extremity amputees. In this study the major significant finding was that phantom pain was twice as likely in people with amputations who also suffered from stump pain. Many of their findings were not statistically significant, but instead suggested trends.

Among these trends was the increased likelihood of phantom pain associated with the length of the residual limb; the higher the level of amputation the more likely he person was to experience phantom pain. Kooijman et al. also reported a trend with the role of prosthesis use. The use of myoelectric prosthetics was not associated with experiencing phantom pain, and similar results demonstrating the positive role of prosthesis use were also reported by other researchers (Dijkstra et al. 2002; Karl, Muhllicker, Kurth, & Flor, 2004; Topfner et al., 2001). Although the psychological and physiological aspects of phantom pain cannot truly be separated, both aspects have been studied using very different approaches.

One of the most exciting theories about the causes of phantom pain relate to neural plasticity and the reorganization of the cerebral cortex. Many studies have examined cortical reorganization through the use of functional magnetic resonance imaging (fMRI). One such study was conducted by Lotze, Flor, Grodd, Larbig, and Birbaumer (2001). These researchers used fMRI scans to compare the hand and lip movements of people with amputations versus intact controls.

Aside from real movements, researchers also had participants move their phantom hands and recorded the cortical activation during these imaginary movements. Previous research by Cohn et al., and Kew et al. (as cited in Lotze et al.) has found that cortical reorganization takes place in both the primary somatosensory cortex (S1) and the primary motor cortex (M1). Their findings were extremely interesting in that only those who experienced phantom limb pain also displayed significant cortical reorganization, the people with amputations who did not experience phantom pain did not display such reorganization.

The cortical area representing the lip had begun to stimulate the deafferented area, or the area of the cortex that was no longer receiving somatosensory input from the hand, and this movement is considered cortical reorganization. Another interesting finding of the Lotze et al. study was the observed co-activation of the hand and mouth areas of the cortex. When the people with amputation were asked to move their phantom hand, cortical activity was also seen in the area representing the mouth. The concept of co-activation is also observed when stimulation of the mouth also results in activation of the phantom limb (Lotze et al.). The researchers' results suggested that cortical reorganization of the S1 and M1 areas may be the neural correlate to phantom limb pain, noting that the activation was present not only in lip movements, but also during imagined movements.

Another study that examined cortical reorganization and its relation to phantom pain was a study conducted by Karl et al. (2004). In this study, researchers examined cortical reorganization using steady-state movement-related cortical potentials (MCRPs) and neuroelectric source imaging. The advantage to this type of study is its ability to study the cortical activity elicited by rapid repetitive movements.

Participants were monitored while making repeated rapid movements of their hand, feet, and tongue. Karl et al. hypothesized that cortical activity of the tongue would be shifted into the deafferented hand area. They also predicted that reorganization would be positively correlated with phantom pain and negatively correlated to prosthesis use. The results of the study supported each of these predictions.

One of the main findings of this study was that amputees who experienced phantom pain displayed higher levels of excitability of the motor cortex, as well as a significant shift of the tongue area into the deafferented hand area. This finding was only seen in people who experienced phantom pain and not in those amputees without phantom pain. The area of reorganization seems to be limited to areas near the deafferented area, as no changes were seen in cortical activity of the foot movements. Both phantom limb pain and cortical reorganization were associated with residual limb length. The greater the extent of the amputation, the greater the likelihood of phantom pain and a larger deafferented area to be potentially reorganized. This may also be related to the use of prostheses and their role in reducing phantom limb pain. The longer the residual limb, the more likely it is that a prosthetic device can comfortably be worn and used. This study also found a negative correlation to phantom pain and the use of prosthetic devices. More daily use was correlated with less motor cortex reorganization.

Another approach to investigating cortical organization and phantom pain was a study conducted by Birbaumer et al. (1997). Amputees with phantom pain were given anesthesia on their stump via brachial plexus blockade and then tested with stimulation on digits and lips. Neuroelectric source imaging was used to study cortical reorganization. Birbaumer et al. hypothesized that the anesthesia would reduce cortical reorganization when it was able to reduce phantom pain, but would have little to no effect on reorganization when it was not able to reduce pain.

The results of the study included a finding that lip representation in the cortex had moved into the area once representing the now missing hand. This cortical reorganization was significantly correlated with people who experienced phantom pain and was not significant in those not experiencing pain. For the amputees who found relief from phantom pain due to the anesthesia, cortical changes were seen where the lip representation in the cortex moved away from the area that was representing the now missing hand. I found it astounding that these changes in plasticity occurred so quickly.

I assumed the process of cortical reorganization took time to develop, but these changes were seen within 20 min of administering the anesthesia.

Hunter, Katz, and Davis (2005) were interested in determining whether subjective reports of phantom pain could be correlated with objective physiological measures. Hunter et al. measured stump tactile spatial acuity and sensory thresholds to determine if these measures reflected the subjective reports of individuals with phantom pain. Participants were selected who had similar traumatic injuries, within the same time frame, to control for differences. Detailed descriptions of phantom pain were recorded through interviews with the participants. Many different physiological measures were taken including skin temperature readings, tactile detection thresholds, two-point discrimination thresholds, and thermal thresholds. Results of the study found no significant associations between subjective reports of phantom pain and the physiological measures taken. Hunter et al. concluded that attempting to classify phantom pain and sensations based on peripheral sensory function may be a misleading approach to studying phantom pain.

There are many different treatment options for people who experience phantom pain. There are a few basic categories, such as preventative treatments, pharmaceutical treatments, surgical, and non-surgical treatments. Many treatments have failed to yield lasting relief from phantom pain. It has been estimated that very few people with phantom limb pain seek medical treatment due to the prevailing attitude that medical interventions are unsuccessful (Kooijman et al., 2000). There is some evidence that preventative treatment may be effective for stopping phantom pain before it becomes an enduring problem. This preventative treatment has been studied using an analgesic, ketamine, and a hormone, calcitonin (Mayo Clinic, 2006).

Nikolajsen et al. (1996) were interested in how ketamine would be able to reduce phantom pain while residual limbs were stimulated with thermal and mechanical stimuli. Ketamine was chosen because it is capable of blocking NMDA receptors. Some researchers had theorized that LTP and NMDA receptor sites may be responsible for creating a pain memory which might lead to the development of a chronic pain condition. In this controlled study, ketamine, but not the saline placebo, resulted in a reduction of phantom pain. Nikolajsen et al. found that ketamine did not reduce the pain and phantom sensation resulting from thermal stimuli, while it did increase pain thresholds. This study concluded that ketamine was effective for reducing phantom pain and stump pain, but these effects did not last long.

Another study that investigated NMDA receptor involvement in phantom pain was a study by Kiefer et al. (2002). They found that NMDA receptor blockers may be useful in preventing phantom pain before it develops into chronic pain. The researchers hypothesized that NMDA receptors may play a role in the development of a pain memory which makes treatment difficult in later stages.

One of the most interesting treatments for phantom pain is the mirror box treatment developed by Ramachandran. In this study by MacLachlan, McDonald, and Waloch, (2004) phantom pain was significantly reduced by the use of a mirror box, which is an apparatus designed to give the illusion that an amputee has both working limbs. It is thought to help by giving the person a sense of control over the phantom limb. It is interesting to note that this treatment has repeatedly resulted in the telescoping or shortening of the phantom limb. MacLachlan et al. found that the perception of increased control over the phantom limb allows people with amputations to relax the phantom and reduce sensations of contortion associated with some types of phantom pain. This sense of control is thought to be what reduces the associated phantom pain.

Another interesting type of therapy involves the use of hypnotic imagery. In a study by Oakley, Whitman, and Halligan (2002), imagery based hypnosis was able to reduce some types of phantom pain. The amount of reduction seen was related to the imagery suggested during the hypnosis. The researchers suggest that imagery produced by the person who experiences the pain may be more effective, as opposed to suggestions from the therapist. In two cases, long-term reduction of certain types of phantom pain were seen. Oakley et al. suggest that these case studies offer further lines of research into the potential for pain reduction through the use of hypnotic imagery.

One final treatment option is the use of biofeedback to reduce phantom pain. Harden et al. (2005) used thermal biofeedback in a pilot study that resulted in a 39 % reduction of phantom pain. The researchers hypothesize that phantom limb pain is related to sympathetic nervous system activity.

This biofeedback technique is designed to train the individual to monitor the temperature of the residual limb and thereby modify sympathetic activity. Relaxation training was used in conjunction with the thermal biofeedback training. Participants were also asked to keep a pain journal, with entries for the morning and afternoon. Harden et al. suggest that the reduction in pain seen may have resulted from several possibilities including decreased sympathetic output, or cognitive changes brought on by a greater sense of control over physiological processes. This pilot study suggests that thermal biofeedback may be a helpful addition to pain management strategies, although subsequent studies are needed to promote generalizability.

There are many more treatments available for the reduction of phantom pain, but the results have been inconclusive. Many studies report significant findings and moderate reductions in the amount of phantom pain felt. Despite these successes it still seems that there are very few treatment options that offer dramatic relief from phantom pain. Perhaps I will be able to further research this topic and uncover more substantial treatment options in the future.

There is still much to be discovered about the mechanisms underlying phantom limb pain and sensation. Researchers of the past did not have the astounding technical advances we are working with today to unlock the mysteries of phantom limb pain. The theories surrounding neural plasticity and cortical reorganization offer the possibility of uncovering the physiological correlates of phantom pain. These discoveries may lead to more effective treatments in the future. Researching phantom pain has been an exciting and rewarding venture, and I was amused to no end when I myself had to pause to deal with my own phantom pain and sensations. Now when I experience this phenomenon, I will think of the cortical reorganization and the deafferented area of cortex my fingers once stimulated.

UpperEx.com Cover Contest

UpperEx.Com wants you to be an Editor!!!!

We want you to be involved in making and choosing the cover for our November Issue!

Your job is to send us your pictures of an upper extremity amputee in action. It can be yourself, a friend, or from an amputee event. Please include your name, city and state, and an e-mail address with the photo.

UpperEx.Com will then post all the pictures and let you, the reader, vote on your favorite to be the Cover shot.

The winner will receive an UpperEx.Com Polo shirt and hat.

So, start sending in your pictures today....

Send your photos to covercontest@upperex.com

Deadline to submit your photo is August 24th. All photos become the property of UpperEx.Com and by submitting them you release UpperEx.Com to use that photo and release UpperEx.Com from any liability.

From Keith:

Peeling potatoes I' ve found that if you put a screw through a cutting board
&
stick your tatter on that it really works very well...

Support Groups

Support of family and friends is very important to a UEA. Their support is vital to a UEA's ability to recover, both physically and mentally, and to enjoy life. Sometimes the support of other amputees is needed as well. In order for UEA's to find that support **UpperEx.com** is providing links to various support groups both within and beyond the USA. These links are available, on our web site, in a downloadable PDF file. If your group isn't listed (and would like to be) or you find a group no longer exists contact the Webmaster with the information and we will update our links.

Helpful Links for UEAs

ARM- AMP: A Web site For Arm Amps by Arm Amps	http://www.arm-amp.com
OADH: One Armed Dove Hunt- fellowship and helping recent amputees is the primary focus	http://www.onearmdovehunt.com
Helpful Tips For Arm Amps	http://loricase.com/tips4arm-amps
MTB- Amputee - amputee mountain biking and cycling enthusiasts	http://www.mtb-amputee.com/index.htm
Amputee and Disability Resource Directory inc.	
Phantom Pain Support Group, Humor, Stories, News and more for the active or new amputee	http://www.amputee.ca
The Global Resource for Orthotics and Prosthetics Information	http://www.oandp.com

Links for Veterans

Department of Veterans Affairs	http://www.va.gov
Disabled American Veterans	http://www.dav.org
VA Rehabilitation Research & Development Service	http://www.vard.org/rehab.htm
Walter Reed Health Care System: Walter Reed Army Medical Center	http://www.wramc.amedd.army.mil

UEA Language

UEA	Upper Extremity Amputee
Residual Limb	Extremity Remaining After Amputation
Dis articulate	Amputate or separate at a joint
LAE/RAE	Left Above Elbow/Right Above Elbow
LBE/RBE	Left Below Elbow/Right Below Elbow
BBE/BAE	Bi-Lateral Below Elbow/Bi-Lateral Above Elbow
LWD/RWD	Left Wrist Dis articulate/Right Wrist Dis articulate
LED/RED	Left Elbow Dis articulate/Right Elbow Dis articulate
LSD/RSD	Left Shoulder Dis articulate/Right Shoulder Dis articulate
Socket	part of the prosthesis where the residual limb fits
Cable	connects terminal device and harness. A separate cable connects elbow joint lock to harness
Electrode	contact (on myoelectric prosthesis) located inside the socket which detects muscle activity to open and close the terminal device
Harness	straps which cross the back and shoulder, attaching to the cable and elbow lock. Used to open and close terminal device and lock/unlock elbow
Prosthesis	a device to replace the missing portion of arm
Prosthetist	person who designs prosthesis
Terminal device (TD)	a hand, hook, or specialty device attached to the wrist unit of the prosthesis
Wrist unit	attaches the terminal device to the socket
Going Naked	Not wearing a prosthetic device

UpperEx.com is looking for writers for our "From the Family" series. If your spouse, significant other, brother, sister or any family member (or even your friends) are interested in contributing to this series please use the editor's contact information below to let us know. Your article about coping with someone's loss may just change someone's life!

If you would like to become a guest columnist in UpperEx.com use the link below.

Enter Guest Column in the subject of the email. The message text should include your name as well as the topic you wish to write about.

The Editors of UpperEx.com will contact you as soon as possible concerning your request.

guestcolumn@UpperEx.com.com

Final Thoughts... Dave Hersher



As this issue closes I'm, once again, amazed at the events that are taking place around **UpperEx.com**.

We've received favorable reception from some of the biggest names in upper extremity products, as well as from many readers around the world. We are very encouraged by these comments and excited to see what comes next!

Last issue I told you we had a couple of "irons in the fire" and several of them are already happening! Our first event for UEAs (sponsored by **UpperEx.com**) will take place in August, our store will soon be open, and our non-profit organization is, rapidly, taking shape.

We've had our first contact for our support network and we are, firmly, committed to the new ezine format. Our readership is growing and expanding around the world!

Eric and I take great pride in each issue of **UpperEx.com** and we appreciate everyone who reads each issue.

The information gap, for UEAs, is shrinking and we are proud to be a part of that. We feel that each issue of **UpperEx.com** meets our mission of being both informational and inspirational to the UEA community.

We still have a couple more "hot irons" in the works (and many more ideas) so stay with us.

Thanks for reading **UpperEx.com**.

To contact an individual **UpperEx.com** editor or the Webmaster of the site use the address below.

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