In This Issue…

ARTICLES
- Featured Topic: Neck and Back Progressions 2-3
- Innovative Swimsuit Makes a Big Splash 4
- Featured Topic: Parkinson’s Disease/Dystonia 5-6
- Featured Facility: Aquatic Center at CP in Green Bay, WI 7
- Business: Therapy Pools 8-9
- Featured Colleague: Dr. Bruce Becker 10
- Featured Equipment: AquaLogix 11-15

EDUCATIONAL DATES & LOCATIONS
- ATRI Certification Exam Offerings at Conferences 6
- Give Online Certification a Try 15
- Professional Development Days 16
- 2015 National Aquatic Therapy Conferences 17-19

MISCELLANEOUS
- Christmas in July 10
- Our ATRI Family 15
- Great Member and eList Specials Coming 16
- Social Media Volunteers Needed 16
**Clinical Pearls from Neck and Back Progressions course (offered this fall)**
Beth Scalone, PT, DPT, OCS

One of the most common movement impairments seen in individuals with neck pain is reduced motor control of scapular muscles. Petersen and Wyatt (2011) found, individuals with unilateral neck pain exhibit significantly less lower-trapezius strength on the side of pain compared to the contralateral side. Additional studies have discovered individuals with neck-shoulder pain exhibit increased activity of both upper trapezius and SCM muscles (Falla et al 2004, Madeleine et al 2003 and Madeleine et al 1999). Training the lower and mid trapezius in the water is ideal for these individuals because the buoyancy of the water supports the weight of the upper extremities and chest reducing the downward gravitational pull through the upper trapezius and scalenes, in turn reducing compressive forces at the cervical facet joints.

Due to the attachment along the spinous processes for upper trapezius and the transverse processes for the levator scapula, activation of these muscles creates a rotational force at the cervical spine. Therefore, early in neck rehabilitation it is recommended to perform upper extremity movements bilaterally balancing out the rotational forces. Once adequate strength of the deep neck stabilizing muscles is achieved the exercises can be progressed to unilateral and reciprocal activities.

**BASIC MID AND LOWER TRAP ACTIVATION EXERCISE**

Stand with ulnar side of hands resting on noodle (thumb up), keeping elbows straight, press gently down into the noodle to activate the lower trapezius. Perform 5-10 reps. Continue with protraction and retraction of the shoulder blades (light downward pressure maintained as client is able). Imagine the shoulder blades are going towards the opposite hip. (Vary the angle of flexion and abduction, start bilaterally and progress to unilateral)

Progress towards unilateral activity and integration by adding a coordinated lunge forward with protraction. Watching head and neck posture.

Performing isolated protraction and retraction is often difficult, supporting the arm on the kickboard can help prevent the patient from flexing and extending the elbows.

Lumbar stabilization progression begins with local muscle activation of the transverse abdominus and multifidus. Most early exercises involve transverse abdominus activation with drawing the belly button in towards the spine. Multifidus is activated along with the transverse abdominus during the belly pull in combined with hip extension. Bressel et al. (2012) demonstrated that hip abduction in the pool also activates the multifidus.

*Continued*...
Clinical Pearls from Neck and Back Progressions
Continued

As the client learns local muscle control, global muscles must be retrained. The gluteals are often inhibited or weak leading to reduced stability of the SI joint and lower back. In function, especially closed chain activities, the glutes work together with other muscles to stabilize, control and move the body in all three planes. The gluteus maximus eccentrically decelerates hip flexion in the sagittal plane and controls internal rotation of the femur along with the gluteal medius in the transverse plane. The gluteus medius plays a primary role in controlling lateral translation of the hip and pelvis in the frontal plane to the same side of the body. When these muscles fail and the pelvis drops on the opposite side during single leg stance it is often described as a positive trendelenberg. Lack of femoral rotational control translates down the lower extremity chain resulting in internal rotation of the femur, valgus stress at the knee and pronation at the foot and ankle and up the chain with increased anterior tilt of the pelvis and lumbar lordosis with increased shearing and compressive forces.

Similar to cervical spine rehabilitation, with lumbar spine progressions begin with bilateral leg work, such as squats. Once the client can control a squat without holding onto the pool wall, progress to single leg activities. Watch that the client maintains pelvic and femoral alignment in all three planes.

Begin with single leg stance, increase the challenge by adding arm movements while keeping balance and alignment. Next add opposite leg movements to challenge stability in each plane. The goal is to have disassociation of the moving hip from the pelvis. Progress by increasing speed and or adding either a buoyant cuff or drag force equipment on the moving leg.

Frontal Plane:
Hip Abduction

Sagittal Plane:
Hip Extension

Transverse Plane:
Hip External Rotation

Adding buoyant equipment can increase the challenge the exercise significantly. Use caution when adding. The wonderboard push down exercise shown below is great to activate gluts and work the “core” however it requires a large amount of strength and balance. Consider less buoyant equipment first such as e-z grip, leg cuff or noodle.

REFERENCES:


Innovative Swimsuit Makes a Big Splash

**UNIQUE DESIGN OFFERS SIMPLE SOLUTION FOR WOMEN WITH PHYSICAL LIMITATIONS**

**STEPIN2NOW Swimwear Eliminates Obstacles Associated with Putting On, Taking Off Swimsuits; Allows Women to Enjoy the Benefits of Water Exercise.**

STEPIN2NOW Swimwear (stepin2now.com/atri) has designed a swimsuit that is changing the swimwear industry as well as the lives of women suffering from arthritis and other physical conditions that make putting on a suit difficult. Company founder Anne Byrnes created the revolutionary design to enable women to simply step into a swimsuit, eliminating the bending, pulling and twisting movements that can create painful obstacles.

Byrnes credits her sister for inspiring the specialty suit. Exercising in a warm pool provides her significant relief from joint pain caused by arthritis. When getting into and taking off her swimsuit became a struggle, she grew concerned she’d have to give up aquatic exercise entirely. “The exercise is not the issue,” says Byrnes, a licensed Ph.D. clinical psychologist who retired after 35 years in university student health services. “The problem for many women stems from the actual process of getting into and then out of a wet suit.”

The benefits of the STEPIN2NOW suit derive from its design and shape. It consists of two independent half-suits that slide one on top of the other. Each half-suit has one shoulder strap and no fabric above the waist on the opposite side, allowing one’s arm to easily slide into the strap without rotating the shoulder. According to Byrnes, reducing stress on the hands, back and shoulders was the key criterion in designing the suit and remains its most important benefit. In addition, the shoulder straps don’t bind and stay in place; the fabric is sleek and light, and there are no buttons, zippers, snaps, or Velcro closures that require dexterity.

According to the U.S. Department of Health and Human Services there are 34 million women with arthritis in the U.S. in 2015 and their numbers will increase to 41 million by 2030.

According to a CDC study, arthritis continues to be the most common cause of disability among adults. 43% of women with arthritis, i.e., 14.6 million women this year experience limitations in daily activities such as bending and grasping.

“Because the buoyancy of the water supports you and alleviates the fear of falling, exercising in water is much easier than it is on land,” adds Byrnes. “The need for low-impact exercise that increases mobility and provides pain relief is becoming acute as the population ages.”

The STEPIN2NOW swimsuit met rigorous consumer product testing standards at the accessibility evaluation facility of a leading research university. Tested by women with arthritis, and receiving high ratings, the suit is ideal for water aerobics, aquatic therapy and lap swimming. The four-way stretch soft, silky Italian swim fabric, which is 80 percent polyamide micro and 20 percent XtraLife Lycra (demonstrated to resist chlorine damage 10 times longer than spandex) has a UPF rating of 50+.

The Stepin2now suit is made in America and manufactured in New York City. It is currently available in sizes 2 to 14, with plus sizes coming in summer 2015. Color choices include blue, fuchsia, purple and black, and a two-tone purple and blue (in sizes 2-10) with additional colors as well as prints planned. The swimsuit retails for $108 and can be purchased by ATRI members at the company’s online store at stepin2now.com/atri. With the 20% discount ATRI members AND THEIR CLIENTS pay $86.40

---

**LBP Dysfunction**

“I loved this class! Especially the useful exercises and class participation.”

- Dave Kramp
Parkinson’s Disease/Dystonia
Mary LaBarre, PT,DPT,ATRIC

Parkinson’s Disease (PD) and Dystonia are caused by abnormalities in the basal ganglia region, causing issues with the neuromuscular control of functional movement. The aquatic environment is an excellent place to work with these individuals to improve mobility and strength. The buoyancy of the water helps provide trunk support to decrease fear of falling. Buoyancy also decreases stress on tissues and joints, hopefully decreasing pain. If exercise is done in a warm water pool, tight muscles and stiff joints can relax, leading to decrease guarded posturing and improve functional range of motion with exercises and ambulation. Because of the increased ease of movement, individuals can use the water to improve their health and wellness.

I teach a weekly water fitness class for those with PD and other neurological conditions. Taking my skills as a physical therapist, I try to incorporate several principles into every class including gait training, balance training, and strengthening.

GAIT TRAINING:
I spend at least 10 minutes of warm up walking variations at the beginning of every class. I emphasize “big steps” to improve step length. I include arm motions to improve arm swing and help generate momentum. We work on change of direction using Unpredictable Command Technique. Research has also shown that backwards walking helps to improve lumbar extensor muscle strength (1). Individuals with PD often demonstrate forward trunk flexion with mobility, leading to increased fall risk. Backwards walking helps improve posture and also make them rotate to avoid a collision with classmates.

BALANCE:
Balance is something we work on almost every class. We do a lot of core strengthening using kickboards, noodles and buoyant bells, to help class members stay “grounded” during class. Standing on one leg doesn’t seem like an important activity. However, single leg stance (SLS) is important in normalizing gait patterns and for functional activities like climbing stairs. We work on SLS exercises including basic leg range of motion on a regular basis. I also give individuals a choice of leg position for a lot of different exercises based on confidence and abilities. Even doing basic arm exercises can be challenging if you start with your feet together (narrow base of support), tandem stance (“stand on a tightrope”), or standing on one leg. Tai Chi has been found to improve balance (including SLS) and transitional movements on land (2, 3). Increasingly, Ai Chi has been shown to improve balance and mobility when incorporated in PD aquatic exercise programs (4, 5, 6). Ai Chi is terrific for “big motions” that are encouraged when working with individuals with PD. It also is a good technique to work on rotation to improve arm swing, weight shifting and crossing midline to decrease stiff posturing.

STRENGTHENING:
The aquatic environment has been shown to improve strength in various patient populations. Aquatic resistance training has also been shown to improve functional mobility in individuals with PD (7). We can do squats and squat jumps in the water to work on improving sit to stand movements. We also do speed intervals (jog in place, jumping jacks, arm bicycle or arm punches) for aerobic conditioning.

Above all, no matter what, remember to have fun. Our class plays water volleyball with a beach ball (great for trunk extension, leg strength and reactionary balance). For college basketball March Madness this year, we did agility drills for change of direction and passing drills for coordination. The sky is the limit for your creativity when working with individuals with PD and other neurological conditions in the aquatic environment.

References:

Continued…
Parkinson’s Disease/Dystonia

Continued


The ATRI Certification Exam is offered at the following conference locations:

April 30-May 3 in Chicago, IL

June 23-26 in Sanibel, FL

September 13, 2015 - San Diego, CA

November 12-15 in Chicago, IL

For more information go to our website www.atri.org and click on Certification Information. http://www.atri.org/ATRICertification.htm

HOW DO I KNOW WHEN MY CERTIFICATION IS DUE FOR RENEWAL?

Your certification renewal information is on the bottom right-hand corner of your certificate. Also, about six months prior to your renewal date you will receive the first reminder email with instructions to renew your certification. If you have not received an email, check your spam folder. Also, if you change your email address, please notify the ATRI office.

HOW DO I KNOW WHAT FEE TO PAY FOR RENEWAL?

The fee for recertification is as follows: $29 if continuing education credits are earned through ATRI; $49 if continuing education credits are not earned through ATRI, but with an ATRI Authorized Continuing Education Provider (see the list on the website or the link below); $69 if continuing education credits are not earned through ATRI or are not on the ATRI Authorized Continuing Education Provider list. http://www.atri.org/Certification/Continuing%20Education%20Providers.pdf

WHAT DOES THE CERTIFICATION EXAM COVER?

The exam tests the Aquatic Therapy and Rehabilitation Industry Standards and includes knowledge regarding the following topics with the percentage of questions on the exam listed:

• Movement Mechanics and Science - 21%
• Aquatic Principles - 22%
• Aquatic Therapy Principles / Methods - 31%
• Professional Responsibility - 8%
• Safety and Risk Awareness - 14%
• Legal Considerations - 4%

You can also download the complete Standards of the Industry from the website, or use the link below. http://www.atri.org/Certification/Standards.pdf
Featured Facility:
The Aquatic Center at CP in Green Bay, Wisconsin

The Aquatic Center at CP originally opened in 1987 with Northeast Wisconsin’s first warm water pool, average pool temperature was and remains today at 92 degrees. Operating at that time under the name of “Center for Aquatic Rehabilitation and Exercise” (C.A.R.E), additional community needs were identified, and in 2000 an additional warm water pool averaging 90-92 degrees was added. The facility re-invented itself in 2009 and became The Aquatic Center at CP. It now includes two warm water pools, a whirlpool, two sets of traditional locker rooms for men and women, as well as 3 co-ed changing areas for those who may need an attendant for changing, or require added privacy. Both pools are equipped with zero-depth entry, ramps and grab bars, allowing all patrons, regardless of abilities, the opportunity to walk in with ease or use a wheel chair for entry. In addition, a lift is available to assist patrons with access to the whirlpool.

The Aquatic Center at CP’s equipment ranges from traditional noodles and foam barbells to durable stainless steel wheelchairs made to endure the chlorinated water, Wet Vests and Adaptive Equipment. The well-trained and long-tenured staff has over one hundred years of service and experience, with backgrounds in Physical Therapy, Personal Training, Recreational Therapy, Pool Operations, Massage Therapy, Nursing and Education. A lifeguard is always on duty to ensure the safety of our patrons.

The Aquatic Center at CP’s programming is designed to meet the needs of all ages and abilities. Offering patrons a variety of choices to meet their goals, program area’s include:

- Focus on Arthritis Classes: following the Arthritis Foundation’s Exercise Guidelines.
- Specialized Aquatic Exercise: Hip and Knee, Post Stroke, Parkinson’s/Neuro.
- Instructional Classes: Parent Child Aquatics, Private Swim Lessons, Special Needs Swim Classes, One-on-One Adaptive Aquatic.
- Independent Exercise/Water Walking and Open Swim

All of these classes and programs can be followed up by a relaxing and rejuvenating soak in our 102 degree whirlpool.

Come to experience this awesome facility. On October 24th and 25th ATRI will offer these courses: Intro to Aquatic Therapy, Treatment Techniques for Chronic Conditions, AquaStretch for Pediatrics and Neuro, Optimal Techniques for Aging Issues, Progressions for Balance and Joint Dysfunction, and Hands-On Techniques for LE and UE.
Therapy Pools
By Mick Nelson, USA Swimming

When considering an initial design for a new or renovated aquatic facility, it would be a good idea to give some serious thought to space for aquatic therapy and warmer water for special needs classes. This space is not only a valid income stream but one of the most marketable community services that the facility can offer. Of course the 2 pitfalls for this type of consideration are over designing and under designing the space requirements. The “professionals” who are going to actually use the space on a rental contract (probably) will always recommend the deluxe version. Not a bad way to go if you have a liberal budget but in the end this space usually has to be value engineered down so it might be better to start with the more practical and affordable.

The people who “pull the purse strings” will tend to leave out necessary amenities (space) that will reduce the functionality of aquatic therapy offerings. Make sure everything needed is included – just make it a reasonable size. Below is one sampling of a functional reasonably sized space in less than 4,000 square feet ……

At least one (better if two) pools need to be designed strictly for Aquatic Therapy. These pools must be designated strictly for Therapy during the identified hours, in other words, shared programming is not allowed if it is reimbursable therapy. The pool can be used for other programs before or after the hours for therapy but not during or simultaneously. These pools do not have to be large – in fact they can be as small as 10’ wide x 15’ long x 4’ deep as long as they have stair or ramped entry and a lift. Water temperature should be able to be controlled between 88 and 92 degrees.

When addressing the needs of the pool, there are other considerations that need to be planned:

- Unisex assisted care-giver dressing rooms and showers
- Examining and treatment rooms for the therapist to evaluate patients

Continued…
Therapy Pools

Continued

- Land based exercise equipment for cross training and evaluation purposes
- Waiting areas and other amenities

For design and planning information please contact Mick Nelson mnelson@usaswimming.org

For programming information please contact Sue Nelson snelson@usaswimming.org

For Aquatic Therapy information please visit www.atri.org
Featured Colleague:
Dr. Bruce Becker

Dr. Bruce Becker is a physiatrist (a medical specialist in Physical Medicine & Rehabilitation) with a lifelong interest in aquatic therapy.

He graduated from Tulane University School of Medicine and completed his residency training in Physical Medicine and Rehabilitation at the University of Washington. He became an Associate Professor at Wayne State University School of Medicine and served as Vice President of Medical Affairs for the Rehabilitation Institute of Michigan from 1992 until 1998. Becker then moved to Spokane and served as Medical Director of St. Luke’s Rehabilitation Institute until 2006. He currently holds clinical appointments as Clinical Professor in the Department of Rehabilitation Medicine at the University of Washington, School of Medicine. Dr. Becker is also the director of the National Aquatics & Sports Medicine Institute, pursuing physiologic research during aquatic activity.

In January 2012, he was appointed as Director of Health Benefit Research Programs for the National Swimming Pool Foundation.

In 1997, Dr. Andrew Cole, MD and Dr. Becker co-authored the textbook Comprehensive Aquatic Therapy published by Butterworth-Heinemann. Elsevier published the second edition of the textbook in 2002, and a third edition of Comprehensive Aquatic Therapy was published in February 2011 by Washington State University Press. Comprehensive Aquatic Therapy remains the acknowledged reference text for aquatic therapists the world over. It includes extensive case studies, with multiple choice questions and answers as didactic content. New chapters have been added, covering the entire scope of aquatic therapy practice, including innovative new techniques with material for program development, including staff training and marketing. The text contains 21 chapters and 558 pages.

He has published numerous chapters on aquatic therapy in most of the leading textbooks in rehabilitation, authored aquatic research articles in numerous journals and lectured globally in the area of aquatics.

He has also been honored by a number of organizations for pioneering support of the value of aquatic activity and exercise. In 1999, the Aquatic Therapy & Rehab Institute named him as Aquatic Professional of the Year at their annual meeting in San Diego. Aquatics International Magazine named him to the Power 25 in Aquatics in 2006 and 2011. He has also been the recipient of the John K. Williams Award from the International Swimming Hall of Fame for his work in adapted aquatics. Dr. Becker has been recipient of major aquatic research grants from the National Swimming Pool Foundation, as well as other grants from the National Disability and Rehabilitation Research division of the Department of Education.

When talking with Dr. Becker about his journey, he ended with this “I have been fascinated by the use of aquatics for both recovery and training throughout my career. I worked with Olympic athletes using aquatic therapy and was impressed with their results and then began treating regular rehab patients, including SCI, TBI, stroke, etc. Probably my most important career accomplishment has been to reawaken American medicine as to the use of aquatic therapy, and the science supporting that reality.”

Is it too soon to remind you that Christmas in July is coming? Everyday for a week we’ll give you exceptional opportunities for education, equipment, clothing and other aquatic therapy items. You’ll get it by email in our member mailing. Be ready!
AquaLogix – Exercises and Equipment
Mary Wykle, PhD

All of us have “go to” equipment and exercises in our toolkit that we adapt to the specific needs of our patients/clients. One of our challenges is to keep the aquatic therapy session interesting and challenging to the point that our patient feels success at the end of each session.

Exercises need to be functional and fluid. Finding the right mix is the challenge. No equipment except maybe the wall or in pool bars may provide the starting point, but progression requires patient patience through multiple ranges and planes of motion. This entails movements that address the core strength and varied balance shifts to progress to balance. We want to accomplish aquatic therapy injury recovery with fluid resistance technology. Several exercises I currently use begin in a wide stance that I reference as a plié adding squats or a sumo stance adding small alternate leg lifts. From this stance, a lower body movement is a soccer kick across in front. For the upper extremity, reaching across the body with a stretch. These are lead-ins to PNF movements.

My personal preference after no equipment is to graduate to buoyant supportive equipment and finally to my favorite – resistive drag equipment.

I believe the most adaptable and versatile piece of drag equipment on the market is the AquaLogix Fitness System. It is a fluid omni-directional drag resistance fitness system that offers a diverse array of equipment that can be utilized to treat a wide variety of patient conditions. This simply means, being able to work a muscle group equally and smoothly in any direction and employs the same muscle activation as strengthening performed on land. AquaLogix equipment can be used in the treatment of shoulders, elbows, hips, knees, and low back conditions.

AquaLogix is a low impact fitness system that consists of 5 core products.

Blades are available in High Speed or Max Resistance. They attach as a cuff on the ankle to provide lower body resistance in all planes of motion. They can be worn on the wrist to provide hands free upper body resistance. This benefits users with hand or wrist injuries and limitations or in conjunction with the bells for added resistance. Blades are most effective worn on the ankles.

Continued…
**AquaLOGix**  
*Continued*

Bells are available in high speed, all purpose, and max resistance. The black bells create a dynamic moderate training tempo and are most effective for upper body and core specific training. The electric green bells create a dynamic high speed training tempo and effective for upper body and core specific training, especially for anyone needing less resistance. The black and the electric green bells are most often used in aquatic therapy. The electric blue bells create a dynamic slow tempo. These are most popular with athletes and patients that require additional resistance to achieve training.

The proper hand position for the bells is with one fin at the top. The inside grip is a pistol grip when held in this position. Always caution to relax the grip.

Exercises using AquaLogix equipment are performed from a wide stance or a lunge.

Upper extremity exercises are adjustable to meet the needs of your patient. In the beginning, the least resistance is without rotation of the bells. Progression in therapy should be graduated in intensity. Rotation of the bells with execution is the goal as the most benefit is with the omni-directional movement of the bells. This is accomplished through speed, number of repetitions, and time. As strength is gained, move through this sequence with the black bells. The electric blue bells are the most challenging and athletes and patients that overestimate their strength will want to go directly to the blue bells. The therapist must determine the resistance that is most appropriate for the patient to perform the exercise through the entire range of motion while maintaining a strong core.

The Crossover is a basic exercise opening the chest and back and increasing upper torso range of motion.

- Start from a stable position, shoulders submerged, and arms opened wide

  ![](Fig.1)
  ![](Fig.2)

- Bells are held in a vertical position with palms facing forward – fig.1
- The arms horizontally adduct in front of the body as the bells rotate to a horizontal position with palms down and continue across the body
- As the arms open, the bells rotate the bells to a vertical position – fig.2
- Alternate the crossover in front of the body with each repetition. Begin with slow repetitions, and gradually increase speed or number of repetitions

*Continued…*
FRONT and LATERAL PULL DOWNS
- The front pull down begins with the arms extended in front of the shoulders
- The palms are facing the bottom of the pool so that the bells are horizontal on the surface of the water
- The bells pull toward the thighs keeping arms as straight as possible
- Return to the starting position maintaining the same position of palms toward the bottom of the pool
- Lateral pull downs are with the arms extended to the sides and the bells are horizontal. Pull the bells down to the hips and return to the surface
- Modifications include shortening the lever length (the arm) or rotating the bells to a vertical position to decrease the surface area
- Combination option: Arms extended horizontally to sides with palms forward. Close arms to meet in front of chest, rotate palms toward bottom of pool and pull downward to the thighs. Return palms to front of chest, rotate palms to face each other and open to starting position.

UPPERCUTS
- Begin in a wide stance position
- The preference is to alternate arms, but sets with each arm are okay.
- Arms are extended to the side but not completely straight
- Bells are horizontal with palms toward bottom of pool
- Begin pulling deep and diagonally across the body, up to the front of the shoulder with the palm turning upward
- At the surface, rotate the palm toward the bottom of the pool and return to the starting position with the palm rotating upward at the end
- It is important to “dig” deep as you pull across the body

Continued...
AquaLOGix

Continued

PADDLE WHEELS
- Holding equipment in front of body, circle the bells forward, then switch directions and circle towards you.
- Repeat in both directions as quickly as possible to create white water.

KARATE PUNCHES
- Begin in a wide squat position with the bells in a vertical position and held close to the chest with palms facing
- Punch forward and rotate the bell quickly with one arm as you extend the arm with palm facing the bottom of the pool
- Quickly return to the starting position
- Repeat punches can be a set done with one arm, followed by a set with the other arm
- Second option is with alternating arm punches
- 3rd option is like the other options, only punch out across the body and return to starting
- 4th option – start with palm facing shoulder, push across as though “kissing” bicep

Lower extremity exercises include:

HEEL KICKS
- Face the pool wall and use the gutter or deck for stability
- The movement is knee flexion with the heel lifting towards the buttocks
- The legs alternate
- It is important to have the knee towards the bottom of the pool when flexed
- Perform slowly at first to ensure correct execution
- Quicken the pace and add a bounce

LATERAL LEG LIFTS and LEG CIRCLES
- Face the pool wall and use the gutter or deck for stability
- Begin with the right leg abducting and adducting laterally to the side (repeat, other leg)
- Sets of lateral leg lifts can be done by number of repetitions or time.
- Include slow lifts for wider range of motion, medium speed lifts for strength, and quick lifts for endurance that will be much smaller in range of movement
- Leg circles are performed as with lateral leg lifts. Include circles in both directions.

KARATE KICKS
- Stand with feet shoulder width apart.
- Lift right knee. Straighten right knee. Bend right knee. Place right foot down beside left foot.
- Repeat with left leg: Lift left knee. Straighten left knee. Bend left knee. Place left foot down beside right foot. Continue to alternate, OR repeat one leg 10-20 times, then change legs.
- Repeat series kicking to the side leaning opposite, and then kick to the back.
- Double legs to side – at side of pool; initially hold edge of pool for support, lift knees and kick both to side

Continued...
AquaLOGix
Continued

Adding AquaLogix equipment to your toolbox will expand your options for your patients and will attract the athlete recovering from injury, and others looking for some new therapy options.

Questions about AquaLogix? Contact Dr. Mary Wykle, PhD at mwykle@aol.com or go to www.aqualogixfitness.com.

I live in California. Last week I was in NJ for my niece’s wedding. At the rehearsal dinner I came to find out that the groom’s aunt, Barbara Smith Linnehan from Maine, was one of the first ATRIC members. When she and I realized that we are both ATRI members we squealed like we just found out we were in the same sorority. We clicked immediately. Attached is a picture of us at the wedding reception. ATRI folks show up everywhere.

Jacqueline Moon  ATRIC, AEA

Give the Online Certification Exam a Try
Click here for a Sample Exam - http://www.quia.com/quiz/1104395.html

The Exam. The exam will consist of approximately 110 to 130 written questions taken during three one-hour periods online (or three successive hours onsite at an ATRI Event). The questions will be made up of multiple choice and matching. Here is a sample question:

A client with MS working in an 82° F (28 C) pool will benefit most from:

a. A thirty minute workout at 85% of heart rate reserve.

b. A Watsu® session.

c. A water walking program.

Intermediate AS for Lower Extremity

“It helped to have instructors recognize my learning style and offer an example related to my style.
Thanks!” – Christine Cornell

“Appreciated the one-on-one attention of both instructors within the class and during the hands-on lab.” – Angie Fenlon
Great Member and eList Specials Coming!

These specials are good for the entire week. We try to get notices out at the beginning of the week. If you’re on the eList, you’ll be notified on Monday and Thursday.

**April 27** – 10% off the SECOND EDITION of Functional and Creative Ideas for Balance and Gait plus FREE shipping in the US.

**May 4** – $49.95 Fit N Fun book for a $29 donation to the scholarship foundation

**May 5** – FIRST DAY LIVE! Half-price on ATRI Fall Conferences in Chicago and San Diego.
   One day only.

**May 6** – FIRST DAY LIVE! Half-price on ATRI Fall Professional Development Days.
   One day only.

**May 11** – Special from ATRI faculty member Donna Adler

**May 18** – Special from ATRI faculty member Terri Mitchell

**May 25** – ATRI is scheduled to offer a discount to the Sanibel FL June 23 – 26 conference

**JUNE** – Specials from Connie Jasinskas, H2OWear, Laurie Denomme, Mary Wykle and Ruth Sova

---

Social Media Volunteers Needed

Have you always wanted to help out, but not sure what you could do?
Are you positive, outgoing and enjoy interacting on social media sites?
We want to hear from you! Contact us to find out how you can help manage some of our social media sites. Email Monica at mgunn@atri.org.

---

2015 Professional Development Days

**September 26-27** • Tucson, AZ

**October 3-4** • Boston (Canton), MA

**October 10-11** • Birmingham, AL

**October 17-18** • Allentown, PA

**October 24-25** • Green Bay, WI

---

**Adult Balance and Post-CVA SCP**

“Great information!! Thank you so much. This will be very helpful at our hospital!!”
- Patricia Meiner

“Loved the energy of the instructors. Loved the hands-on opportunities in the pool.”
– Jessica Hohenberger
2015 National Aquatic Therapy Conferences
See www.atri.org for detailed information.

ATRI Certification Exam offered at all National Conferences.
Offered Online Anytime!

Featured Specialty Certificate Programs, plus PLENTY of General Education!

June 23-26 • Sanibel, FL
September 10-13 • San Diego, CA
November 12-15 • Chicago, IL

A Closer Look at the Sanibel National Conference…

June 23-26 • Sanibel, FL
Intro. to Aquatic Therapy and Rehab
Functional Core Balance
Ai Chi International
Orthopedic Functional Progressions
Pediatrics: 3 months to 6 years
The Fatherland: Ai Chi from Japan
LBP and the Pilates Concept
Low Back Pain Strategies
Ai Chi Basic and Development
ROM, Stabilization, Balance for Endurance and Strength
Neuropine Warrior Rehab
Manual Options for the Hand and Wrist
Clinical Applications of Ai Chi
Gait, Balance, Proprioception and Coordination
Trunk-Centered Movement
COREssentials for Abs & Back
Fitness Applications of Ai Chi
Integrated Balance
Improving Outcomes for Chronic Pain Patients
Shoulder Strategies and Progressions
Treating Complex Conditions and Secondary Issues
COREssentials for Knees & Hips
Body/Mind Ai Chi
ATRI Certification QuickPrep
Water Roundtable
COREssentials for Balance
AquaStretchTM in the Home Exercise and Group Setting

Continued…

Intro to Aquatic Therapy and Rehab
“Good course structure. Covered a wide range of philosophies and techniques. Great access to resources.”
- John Serafano
1218 – Pediatrics: 3 months to 6 years
Beginner / Pool Workshop
Sanibel, FL / Tuesday, June 23, 2015
1:00-4:30 pm – 3.5 credit hours equal to 3.5 CECs/.35 CEUs
(Pool: 1:00-2:45 pm / Classroom: 2:45-4:30 pm)

Faculty: Katrien Lemahieu, MSEN

COURSE DESCRIPTION:
This course is for all those who are teaching young children, teaching water survival in water with or without swimming techniques, or using aquatic therapy for special education purposes. Included are Halliwick techniques, Motoric Remedial Teaching, and educational basic elements of progress in water. In the workshop you will learn about the basic elements necessary for behavior in water. You will learn how to progress considering age and possibilities, mental consciousness, water awareness and disabilities. “Inkie” the octopus will lead everyone through the learning cycle, with the highest quality in goals. From infants to older children (age of 6), with a course outline especially designed for joy, safety skills, and therapeutic techniques.

COURSE OBJECTIVES:
1) Experience the basic elements of water movement (researched in The Netherlands and Belgium).
2) Describe child behavior in water.
3) Determine motoric development in water.
4) Evaluate most common disabilities with case studies.
5) Play with swimming and motor skills with “Inkie”.

FACULTY: Katrien Lemahieu, MSEN, has been an aquatic instructor for 20 years and a presenter worldwide since 2005. She studied physical education with a specialty in Special Movement Education. In 2011, she became a certified hydro-therapist. She is the owner of the Kataqua Institute, providing education, certification and consultation for pools and is the Program Director for Club Aqua. She specializes in training that targets both the muscles and the mind and offers two e-learning programs (AquaMagicMoves) through Fitness Learning Systems (FLS).

1305 – Manual Options for the Hand and Wrist
Beginner / Pool Workshop
Sanibel, FL / Wednesday, June 24, 2015
1:30-5:00 pm – 3.5 credit hours equal to 3.5 CECs/.35 CEUs
(Classroom: 1:30-3:15 pm / Pool: 3:15-5:00 pm)

Chicago, IL / Saturday, Nov. 14, 2015
7:30-11:00 am – 3.5 credit hours equal to 3.5 CECs/.35 CEUs
(Pool: 7:30-8:45 am / Classroom: 8:45-11:00 am)

Faculty: Donna Adler, BA, ATRIC

COURSE DESCRIPTION:
Learn where pain may refer from for common hand and wrist pain diagnoses. Review general myofascial release techniques, including skin rolling, oscillation and AquaStretch™ techniques to form an integrated approach. Dorsal and radial pain, thumb and wrist pain and epicondylar pain techniques will be explored. Treating carpal-tunnel symptoms will also be explored.

COURSE OBJECTIVES:
1) Review AquaStretch™ and integrated manual techniques.
2) Examine trigger points and myofascial techniques for pain in the forearm, elbow hand, and fingers.
3) Determine what causes trigger points to occur and reoccur.
4) Identify considerations when evaluating a patient prior to treatment.

FACULTY: Donna Adler, BA, ATRIC, owns and operates Liquid Assets for Fitness in Phoenix, AZ. She works with geriatrics, pediatrics and clients with health challenges. Donna is an AquaStretch™ Facilitator and ATRI AquaStretch™ Trainer, and the recipient of the 2012 ATRI Tsunami Spirit Award. She is a co-author of the Aquatic Solutions for Chronic Conditions Manual, and is a consultant at the Virginia G. Piper Sports and Fitness Facility for Persons with Disabilities. Donna also continues her studies at the Center of Applied Energy Medicine in a Medical Intuitive Training program.
Fall 2015 Conferences & Professional Development Days

September 10-13 • San Diego, CA
Intro. to Aquatic Therapy and Rehab
Aquatic Warrior Basic Course
Orthopedic Specialty Certificate Program
Balance and Core Specialty Certificate Program
Aquatic Rehab for Non-Therapists
Interactive Posture
Core for Gait and Balance
Optimal Techniques for Aging Issues
Hip Impingement: The Hottest Topic in Orthopedics
Bad Ragaz for Muscle Re-education
Knees: Prehab and Rehab
AquaStretch™ for Pain Management
ATRI Certification QuickPrep
Chronic Conditions, Aquatic Solutions
Lumbar Stabilization Progressions

September 26-27 • Tucson, AZ
Intro. to Aquatic Therapy and Rehab
Neuro Options
Progressions for Balance and Joint Dysfunction
Athletic Rehab
Optimal Techniques for Aging Issues
ACL Rehabilitation

October 3-4 • Boston, MA
Intro. to Aquatic Therapy and Rehab
COREssentials for Knees and Hips
AquaStretch™ for Chronic Pain
COREssentials for Abs and Back
Post-Rehab for the Spine
COREssentials for Balance

November 12-15 • Chicago, IL
Intro. to Aquatic Therapy and Rehab
Rehab for Hip Implants, Arthroscopy and Labral Repair
Balance and Core Specialty Certificate Program
Aquatic Rehab for Non-Therapists
Neurological Issues: Focus on Parkinson’s
Optimal Techniques for Aging Issues
Gait Training Options
Knees: Prehab and Rehab
Therapeutic Applications for Individuals with Autism
Manual Options for the Hand and Wrist
Hip and Back Connections
AquaStretch™ Basics
Pediatric Balance and Gait
Aquatic Applications for Neck and Shoulder
ATRI Certification QuickPrep
Marketing
Interactive Posture
AquaStretch™ for Pediatrics

October 10-11 • Birmingham, AL
Intro. to Aquatic Therapy and Rehab
Manual Techniques for Upper and Lower Extremities
Progressions for Balance and Joint Dysfunction
Chronic Conditions, Aquatic Solutions
Optimal Techniques for Aging Issues
AquaStretch™ for Pediatrics

October 17-18 • Allentown, PA
Intro. to Aquatic Therapy and Rehab
Joint Replacement Rehab
Progressions for Balance and Joint Dysfunction
Bad Ragaz for Muscle Re-education
Optimal Techniques for Aging Issues
Aquatic Warrior Basic Course

October 24-25 • Green Bay, WI
Intro to Aquatic Therapy and Rehab
Aquatic Warrior Basic Course
Aquatic Options for Spinal Fusions, TBI, MS, Parkinson’s Disease
Progressions for Balance and Joint Dysfunction
Core for Gait and Balance
BackHab
Feedback from our Conferences:

WASHINGTON DC – FEB. 2014

Intermediate AquaStretch for Pediatrics/Neurological Issues – Donna Adler
So great for my learning style! Very applicable to my treatment setting.
- Melissa Schaeffer

Excellent. Loved the energy work in the classroom.
- Debbie Torrellas

Chronic Conditions – Donna Adler
Great presentation! Can’t wait to use it.
- Barbara Vees

I had several “aha” moments in this class. Love the 3-point foot stance!
- Pam Runyan

Intermediate AquaStretch for Upper Extremity – Donna Adler / Terri Mitchell
Thank you for sharing your knowledge with me. I especially liked the talk about meridians. I will continue my education into myofascial research/work. You opened my eyes to look at a patient differently.
- Lisa Cerutti

SEATTLE - MARCH 2014

Intro. to Aquatic Therapy and Rehab – Ruth Sova
Ruth is a fabulous instructor! Great sense of humor and very knowledgeable. It is obvious she loves what she does.
- Betsy Olsen

Ruth is a wonderful instructor. I can’t wait to start implementing these techniques. I would highly recommend this class to others – it was a fabulous experience.
- Corynn Kuehn

CHICAGO - MAY 2014

AquaStretch Basics
Great course and great instruction. I feel like I can go home and apply this to my patients on Monday.
- Monica Napier

Our next issue will deal with

Pool Chemistry, Functional Core, Lower Extremity, Brain Disfunction

Contributions are welcome...
Send your thoughts and comments to Ruth Sova
at ruthsova@ruthsova.com