

# SW

## SWIMMING WORLD

### BIWEEKLY

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## **BOWMAN & MARSH NAMED 2016 USA OLYMPIC HEAD SWIMMING COACHES** *by Jeff Commings*

**I**n a career that includes such accomplishments as guiding Michael Phelps to unparalleled heights in swimming, Bob Bowman will add one more accolade: Olympic head coach.

Bowman will be head coach of the 2016 U.S. Olympic men's swim team, his first time at the helm of the Olympic squad. He had served as assistant coach at the 2004, 2008 and 2012 Games, where his primary task at each meet was seeing Phelps through some extraordinary performances.

"I got a text from Frank Busch saying 'Please call me,'" Bowman said after the announcement. "When he told me I said, 'Are you kidding me?'"

The 51-year-old had previously served as head coach of an international squad at the 2007, 2009 and 2013 world championships. He was also an assistant at the 2014 Pan Pacific championships, which marked Phelps' first meet in his return to competition.

It'll be a busy 11 months for Bowman leading up to the Rio Olympics. In addition to the preliminary duties he'll handle as head Olympic coach, he's also going to be busy in his first season as head coach at Arizona State University. Bowman was hired as the head coach at ASU in April. He's also lead-

ing a strong elite squad in Tempe, Ariz., including Phelps, Allison Schmitt, David Nolan and more.

Bowman will be leading an Olympic team that will look to bounce back from what was perceived as a subpar week at the FINA world championships last month. The men's team only won two gold medals (the 400 medley relay and Ryan Lochte in the 200 IM) out of 10 total in Kazan. Many inside USA Swimming have been quick to point out that the squad did not include Phelps and a couple others who performed well at the U.S. nationals.

"I'm so grateful to so many people who allowed me to stand here today," Bowman said. "I'd like to mention the head Olympic I served under: Eddie Reese, Mark Schubert, Gregg Troy. Those are just icons in the sport and to be considered in their company is an honor and I'm truly humbled.

"I'm excited to get to work on ... things we can do as a team. The strength of a swimming nation is on its relays, ... and right now we could be better. I look forward to working toward the next year with our athletes to get them ready for when the time comes. The time you put in today will make the difference between going to Rio and not (going), between winning a medal and not (winning a medal).





[ Photo Courtesy: Kevin Liles-USA TODAY Sports ]

“As a staff, we are committed to making the USA the number one team there, and do it in a way that everyone enjoys it, and is a part of what is happening. Every person on that team will contribute, and every person has to contribute to make it happen.”

David Marsh has been putting swimmers on Olympic teams dating back to 1992, and that long-term dedication to shaping America’s best swimmers was recognized today when Marsh was picked by USA Swimming as the head women’s coach for next year’s Olympics.

“When I absorbed this and put this into emotions, all I could do was the gratitude thing,” Marsh said at the USA Swimming press conference. “I feel so incredibly grateful to so many people. I’d like to thank the swimmers I’ve coached in the past 34 years. They all had an impact on this.”

This will be Marsh’s first time as head Olympic coach. He had served as assistant coach in 1996, 2000 and 2012. The first two stints came during his heyday as head coach for the Auburn men’s and women’s programs, where his Tigers collected a staggering 12 NCAA team titles. In 2012, he was the men’s assistant coach, where his personal swimmer Cullen Jones earned Olympic medals.

Though this is his first gig as head Olympic coach, Marsh has plenty of experience leading international racing teams for USA Swimming. His first head coach job was in 1995 for the Pan Pacific championships, where he was the men’s head coach. In 2003, he was head coach at the world championships. In 2003, 2005 and 2011, he served as head coach for the prestigious Duel In the Pool meets.

His first experience on an international coaching squad was the 1991 Pan American Games in Cuba as men’s assistant coach. Most recently, he was the men’s assistant coach at last month’s world championships.

For the past eight years, Marsh has been the guiding force to the resurrection of SwimMAC Carolina, where he rejuvenated the age-group program and brought some of swimming’s best talents to Charlotte with the Team Elite program. Ryan Lochte, Cullen Jones, Micah Lawrence and Tyler Clary are among the American Olympians he currently trains there.

Before his time at Auburn and SwimMAC, Marsh was most known for building up the program at Las Vegas Gold, where he worked with such talents as Mel Stewart. He had also been assistant coach at Auburn in the early 1980s, where he helped Rowdy Gaines train toward fame at the 1984 Olympics.

“When I think of coaches, my mind goes instantly to Richard Quick. When I think of stepping into the role he had (as head Olympic coach in 1988, 1996 and 2000), it’s an incredible honor. The Olympic Games is the greatest event that I’ve been a part of. It brings the best of the best together, and it brings out some incredible stories and some incredible performances and some incredible pressure. Right now, I think with the make-up of the potential team is incredible. One of the things that is going to be critical is that fall matters. You have to get off the couch and get into the pool.

“I’d like to dedicate this to my mom. She doesn’t remember things as well as she used. She always believed in me, and I would like to honor her with this, and I hope make her proud.” ◀





[ Photo Courtesy: Griffin Scott ]



[ Photo Courtesy: Maria Dobysheva ]

## BOB BOWMAN, DAVID MARSH DISCUSS OLYMPIC HEAD COACHING JOBS, 2016 OLYMPICS CHALLENGES

by Jeff Commings

*Shortly after USA Swimming announced them as the head coaches for the 2016 Olympics, Bob Bowman and David Marsh spoke with the media about the expectations placed on them in the 11 months before the Rio Olympics and their duties as coaches of the most successful swimming nation. They were joined by USA Swimming national team director Frank Busch.*

**Marsh:** This morning started 3:50 in Charleston where I was at a staff retreat, and to some degree that's symbolic of where we are this time of the year. Everybody's in the trenches, they're working hard, everybody knows it's the Olympic year. They don't necessarily need the (Olympic) head coach piece to be motivated. But what I hope can happen by Bob and I being able to come together and help form a little bit more clear vision as to what we can do and offer our resources to all the athletes for the opportunities to increasing the medal count and pulling the team together in the best possible way will be increased. I got the call from Frank, and it harkens back to the first phone call I got when I was a 30-year-old punk coach in Las Vegas and I just got this big Auburn job that I dreamed of, and the very first person that called me was Frank Busch. He was just offering his support and advice as to what I could do, and the first thing he said was "Take care of your family first." That's kind of how we roll at USA Swimming. We're a family, and we just have a little clarity as to the roles in the family at this point.

**Bowman:** It's hard to express what an honor it is to lead a

USA team in any fashion. But to be the head Olympic coach certainly takes it to a new level. I'm incredibly grateful to USA Swimming for that opportunity, and to be able to work with David, who is one of my mentors growing up. We have a very long history, and I think we complement each other well. And I'm very much looking forward to not only the challenges that we'll deal with, but the fun we're going to have because I know it's going to be a great environment, a great team environment, and we'll be able to build something special for Rio.



[ Photo Courtesy: Joe Johnson ]

### BOWMAN'S TAKE ON ADDING OLYMPIC COACHING RESPONSIBILITIES TO ASU COACHING JOB

**Bowman:** I think the move to Tempe facilitates all of this in that the incredible facilities that we have now, the resources that we have, and the environment that (athletic director) Ray Anderson has created for excellence, I think all that all



feeds together. It's really kind of accelerated the process and maybe me being named head coach will kind of add to that excitement because we've had a great start with not only the college team but the pro team, and I'm really looking forward to moving ahead with that.

I don't think it makes it any more difficult (to get the college team running). I think we've got it up and running, and we know what we need to do. We have a great staff who's supporting me. I think it makes it in many ways more fun.

### **STRENGTHS ON U.S. WOMEN'S TEAM AND BRINGING WOMEN TOGETHER FOR OLYMPIC TEAM**

**Marsh:** I would say the strengths of this team is in the youth. There's a swell of youth that's coming through the United States right now that's holding the veterans accountable. At the same time, we have some really cornerstone veterans in the program that know how to do this. They know the routine, they know how to get ready for this. I don't they'll run into any great surprises. I think it's a perfect combination of what you could want a year out on the women's side. Can we get the group together to put together the relays that can win gold? That may be some of the bigger challenges. There are some events that we're not as strong in. There are some events that the world has improved in. At the same time, there were some swims from Kazan that were relatively "slow," and I think some opportunities for not just medals, but in some cases, multiple medals (exist).

The best thing we can do is be a support system to whatever's needed out there to try to bring together the best possible team. Colleges have their agenda set. We'd love to see a commitment by everybody that's going to be with us in Rio starting this fall. Most have already done that, and I don't think there's anything we're saying to motivate them to get them going. I do think the fall is a critical for development to carry over. Trials come in June. They don't come in August. They're going to be upon us quicker than we think and we'll have a chance to reset for Rio. In terms of training base and getting the work that will sustain them, that has already really begun.

### **ON HAVING TRIALS BACK IN OMAHA**

**Bowman:** I think we've already proven now with two Trials that the environment in Omaha is absolutely electric and a tremendous place for people to make an Olympic team. As a coach, for me, the Trials are much more stressful than the Games themselves because you have to get the job done on a certain day. It's always great to be in an environment where the crowd is so involved, and there's a large crowd which kind of mimics what's going to happen at the Olympics. And I think having it there the third time actually helps the ath-

letes who have been a time or two because they're going to know where everything is, and it kind of helps them out a bit in their performances. It's also such a charged environment that someone who goes there for the first time is going to be inspired to a new level. So, I think it's only a positive to have it in Omaha.

**Marsh:** I think Omaha has put on the two best swimming events that I have ever been to. I do think expectations are high. What you can count on this time is the names are here. Michael (Phelps) is back, and Katie (Ledecky) has been fortified. And there's some star power that I think is going to make it, to the common person, they're going to want to see it. You don't have to be a swim fan to want to come see these top Olympians. Omaha, and the trek to Omaha for young kids all over the country, has been almost like a mecca move in swimming where people need to be there. They need to get their eyes on that unique event. And that's a real testament to the job that you guys have done in Omaha. I'll tell you one of my favorite things about being in Omaha is being out in a restaurant talking with the people in Omaha. It's a pleasant place with pleasant people and you feel welcome in a genuine way. When we can get those baseball players moved out of town, we'll put on a good swim meet.

### **ON TRAINING POTENTIAL 2016 OLYMPIANS**

**Marsh:** For Bob and I, our paying job is really to do what we do. The good thing is we're the kind of guys that, in the last 10 or 20 years, we wouldn't make any decisions to be anywhere where (the team) wouldn't be supporting this (being Olympic head coach) as a number one priority as soon as we're called for it, so there's never any doubt of that. I think maybe some of the swimmers that I have right now might be concerned about not getting as much of my attention if I'm out helping somebody else. But my hope is that they can feel part of being doing what we can to help, whether that's bringing people into Charlotte to swim with us, or we take groups out to train together and maybe offer some parks. I think the thing about the pro swimmers right now, they need some additional stimulation. Just doing the same thing for the next nine months is going to make for a boring training atmosphere. So I think, one way or another, with the clarity that we have now in terms of what our roles are, we'll just try to help facilitate what the athletes need to be at their best, and I think the coaches are the best sources of that information.

**Bowman:** I mirror what David said. It's exactly right. I assume that having athletes who train for us, or a number of them hopefully who would make it on the Olympic team, it might facilitate some communication about how we operate, the kind of things we expect. Hopefully, it all builds around success at the Olympic level. So, *continued* >>>





if they can help some people kind of understand how they can communicate with us better, I think it will be a benefit.

### **ON SELECTING ATHLETES TO ENSURE A PLACE IN THE OLYMPIC FINAL OF THE MEN'S 400 FREE RELAY**

**Bowman:** I think we're going to swim enough (fast) people (in the prelims) to be safe. I don't know what that number is. I doubt it would be (all) four (of the fastest 100 freestylers on the team). There are some things we would have to look at, and David and I will discuss those with Frank and try to come up with the best strategy and for trying to save some people as much as we can. The reality of our situation now is we have to make sure we're in the final before we can win a medal. So we'll do whatever is necessary to make that happen.

### **ON FINA MAKING THE "RYAN LOCHTE TURN" ILLEGAL IN IM RACES**

**Marsh:** It's disappointing. Waiting to see how things are going to be called is really what we need to know. And, honestly, what we need to know that for is for the thousands of other kids that will be doing this turn. Now, if you leave the wall at all on your back, does that mean you're disqualified? By the interpretation they've sent, that will be the case. Ryan is a good enough athlete to figure out how to go fast. If you tell him to have to jump out of the water and do a front flip, he'll go fast doing that if that's the rule. I'm actually a little

more concerned about a knee-jerk reaction to one swimmer figuring out a way that he uniquely – because he has the ability to kick very fast on his back – could benefit from that kind of move.

**Busch:** I don't think the chance of that (rule) being overturned is very good.

### **ON KEEPING THE HIRING AS OLYMPIC COACH A SECRET UNTIL THE OFFICIAL ANNOUNCEMENT**

**Bowman:** It was very difficult, and it's the kind of thing that you immediately want to text somebody or call. Frank said "Do you promise (not to tell anyone)?" And I gave him my word.

**Marsh:** That was the hardest thing about it. I felt like it was the NCAAs, and you have that event ... where you know the meet's over. You just won the meet, but you can't celebrate. You have to stay really cool. My first one when that happened, when I knew that we had it locked up, when we had won, I couldn't show any excitement. I pulled Rowdy (Gaines) into the bathroom at Minnesota and we started celebrating together. I have to confess, though, that I did tell my wife last night.

**Busch:** I did this (promise them to secrecy) to test their character. ◀





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[ Photo Courtesy: Griffin Scott ]

# THREEPEAT: BRUCE GEMMELL WINS ASCA'S COACH OF THE YEAR

by Jeff Commings

For the third year in a row, Bruce Gemmell is the American Swimming Coaches Association's pick for coach of the year. His work in guiding Katie Ledecky to five gold medals and three world records at last month's world championships was undoubtedly the catalyst for the selection among a great list of nominees for the top American coach.

Only Eddie Reese (2004-2006) has won three times in a row.

Bob Bowman and David Marsh were also nominated. It's likely these two did not feel the pain of not winning the award, as they were still on a high after being named head Olympic coaches the day before.

"I want to thank Katie, not for her performance in the water but what she does out of the water," Gemmell said. "She is a great role model and friend."

Ledecky's world records in the pool came in the 800 free with an astounding 8:07.39 in the finals, as well as two world marks in the 1500 free. She swam a 15:27.71 in prelims, then followed it up with an incredible 15:25.48 a day later. She also won gold in the 200 and 400 freestyles and the 800 free relay to continue an unbeaten streak in a major meet that goes back to the 2012 Olympics.

Gemmell, as head coach of Nation's Capital Swim Club, oversees a large group of coaches, and he was quick to acknowledge them as well for their work in making the club one of the best in the country. In his personal group of athletes, he counts son Andrew Gemmell and rising distance swimmer Matthew Hirschberger as major talents.

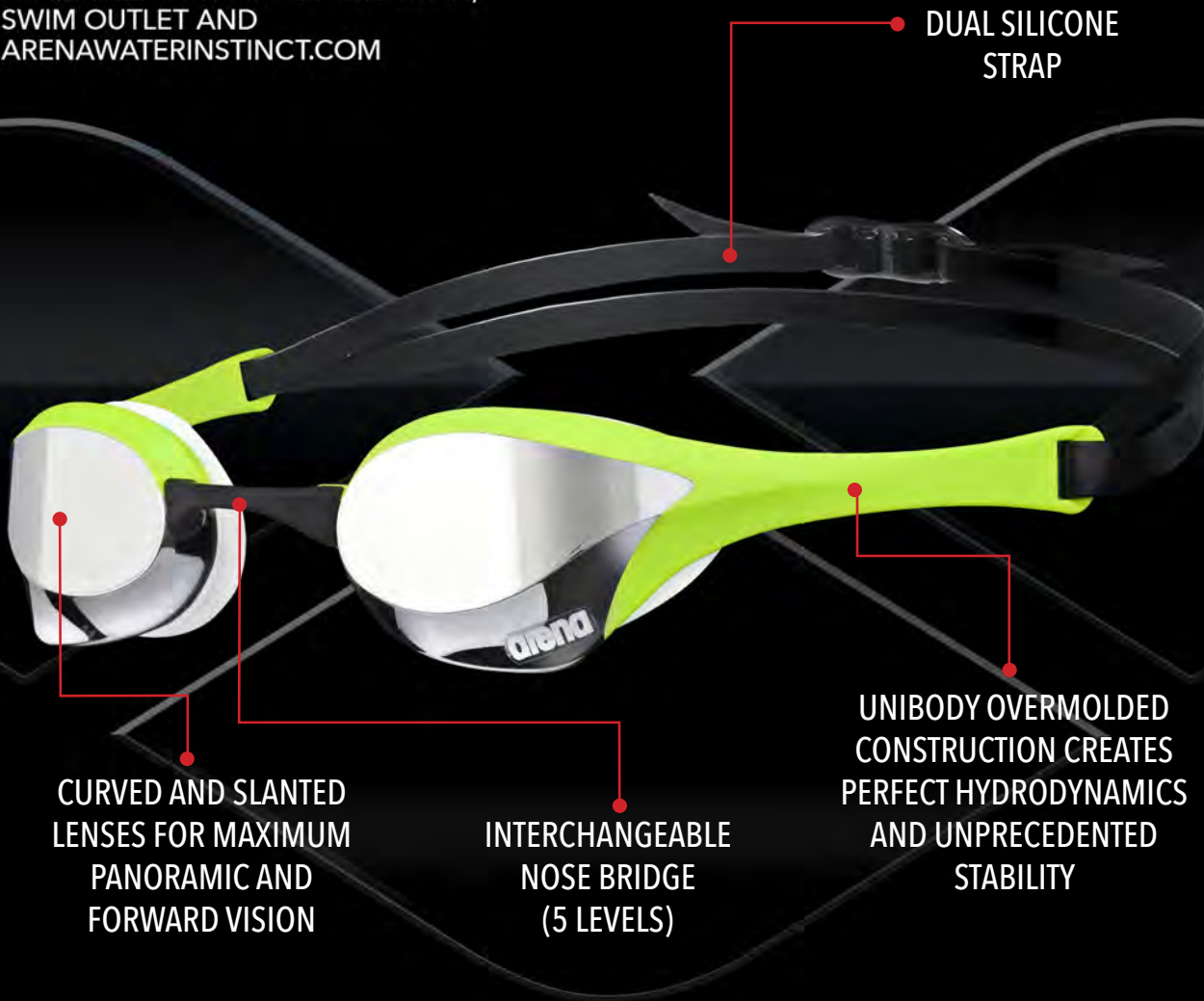
Gemmell was a part of the coaching staff at the world championships, where he worked with the distance swimmers. Connor Jaeger, who set an American record in the 1500 freestyle in Russia, and Michael McBroom swam as a part of Gemmell's distance squad during the team's time in Europe. ◀



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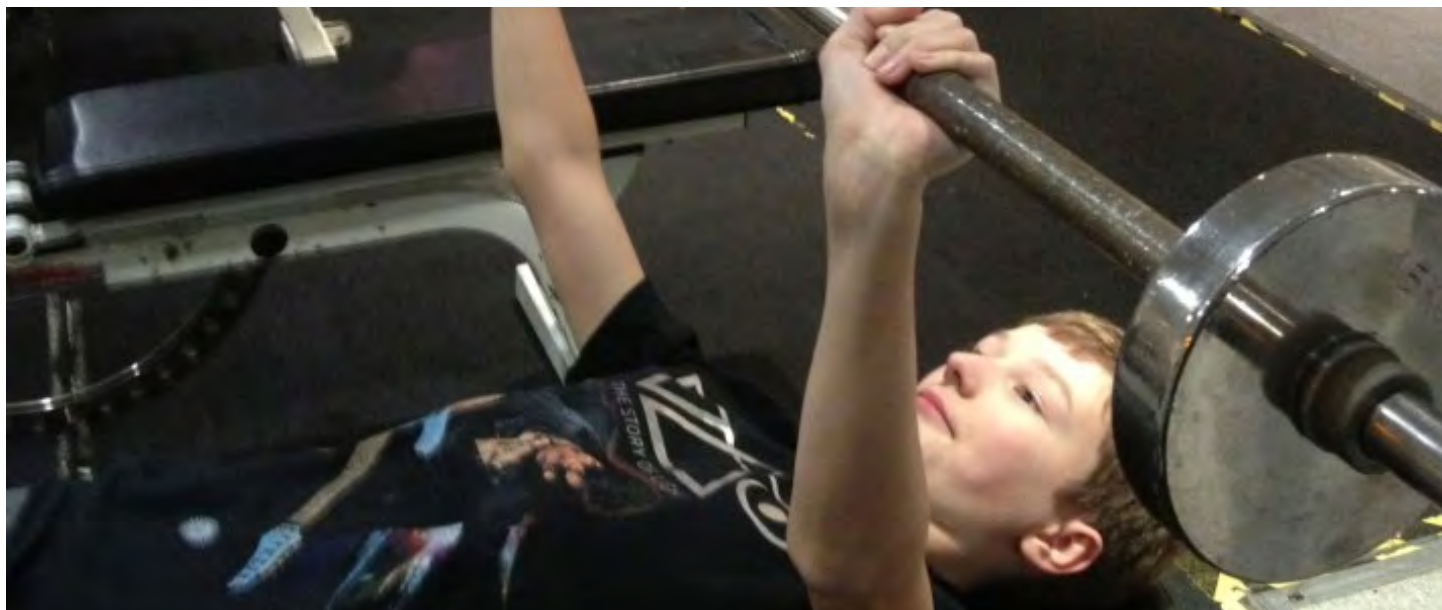
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## 6 QUESTIONS REGARDING WEIGHT TRAINING FOR TEENAGE SWIMMERS

by Dr. G. John Mullen

USA Swimming correspondent Mike Gustafson opened his mailbag and gave his personal experience and opinion on weight training for teenagers. In this piece, Gustafson questions the use of weight training, using his personal experience as a former competitive swimmer. As a dryland consultant for clubs across the nation, one could think I'd be upset with him for "bashing" weight training, but as I read his piece I was nodding my head, as I had similar experiences in my own swimming career.

As an age-group swimmer, I ranked second in the United States for 13-14 boys in the 50 free. I mention this not to suggest my expertise, but to note I was an early maturer. When I turned 17 I wasn't improving as I had expected and decided to find a strength coach instead of using my swim club's weight training program. I figured I need an expert, someone who can lift 500 pounds off the ground and works with football, basketball and other sports. On the first day of training, a 300-pound Olympic weightlifter asked me my name, then showed me a workout on a white board. He said I had to complete this circuit faster than the times on the board to be able to train with him. Exhausted from a grueling practice and two hours of country club coaching, I laced my shoes tight and sprinted through this 20-minute circuit. Despite being a "sprinter" in the pool, I had years of high volume training under my belt, and I sprinted through the routine of line touches, body weight squats, and walking lunges.

At the end, I sprinted back into the facility asking for my

time. The strength coach looked up at me from his chair, questioning if I've done the entire routine, as he was shocked at my time. My time blew away the two top times, later which I found out were done by a high school wrestler trying to make varsity and a baseball pitcher. (No offense to those athletes, but who would bet against an aerobically-trained swimmer performing 15,000 yards a week in a 20-minute circuit routine?)

After each session with this strength coach, I felt quite similar to the feelings that Mike Gustafson had. The strength coach knew I was a sprinter, and thought this 5'10" 130-pound boy needs some muscle. I was given six to eight exercises of 6-12 repetitions for three to five sets to failure. Also, he thought that as an athlete, I should know how to clean, jerk, and perform all the Olympic lifts. So, I followed the program to the letter and worked my butt off, but I could barely finish the swim workouts.

Taper came and the strength coach wanted me to lift like this up to three days before Sectionals, which was my summer taper meet, as there were no Junior Nationals at the time. I remember getting to that meet and being so sore and tired ... not a good feeling at a taper meet. To say the least, I did not perform well. This left me extremely frustrated, as I was working hard and not seeing any benefits. Clearly, I was an impatient high school student starting to peak in maturity, making improvements harder, but it still didn't seem fair. I worked with this strength coach for one more season



with similar results. In retrospect, the program designed was not the worst program I've seen for a swimmer, but this hypertrophy (muscle mass building) program combined with high-volume training was not effective, as similar to research done in collegiate swimmers.

Entering college, I once again was pumped to begin working with a dedicated strength coach for college athletes! As you can tell, I was the swimmer who loved dryland, mostly because I excelled at it. At college, I got into the weight room and once again I was doing high volume Olympic lifts, 4x12 of cleans and jerks, with little to no instruction by the trainer. Luckily, I had some weight lifting experience in high school, or I certainly would have hurt myself on these Olympic lifts without form corrections. Sure enough, our team had our fair amount of dryland injuries, probably close to the statistics I've reported about previously.

This is a long introduction to my thoughts on weight training for teenage swimmers, but I feel my experience is all too common. You have a motivated young swimmer and you want to give them every opportunity for improvement. Unfortunately, no matter how hard you work, if the pieces aren't in the correct place or you don't have the right people working with you, you're unlikely to succeed.

Like Gustafson, I personally had similar results with weight training. Mike and I are an older generation, one I wish strength coaches can move away from. Unfortunately, I see and hear about the same pitfalls everyday:

- Injured from dryland
- Too sore to move
- Tired and overtrained
- Dislike of dryland training

Remember, weight training for swimmers is different than weight training for fitness or other sports. Swimming contains so many differences!

My physical therapy colleagues constantly ask me: "Why do you do strength coaching for swim teams?" or "Why don't you just become a swim coach since that's all you post on social media?" These dryland inadequacies are the reason why I write so much about dryland and work with so many teams. I am trying to improve this generation of swimmers so they don't have to go through things that Gustafson, myself, and millions of others have in the past. Luckily, there are small segments of coaches making improvements, but this isn't the majority.

Back to resistance training for teenage swimmers. Here are

the most common questions I receive regarding resistance training for teenage swimmers:

**Is it safe?** In all honesty, it often isn't. This doesn't mean it can't be safe with proper guidance, progressions and supervision, but if a swim coach with no education in resistance training is teaching weightlifting to your growing child, I'd argue it isn't safe. Just because you lift weights or did as a swimmer doesn't make it safe. A proper program is safe, but must start with many basics and progress to weight training. Once again, when done properly with proper guidance, weight training scientifically is safe for all ages; however you must be able to perform proper body weight form correctly, master all body weight exercises first, then progress to weight training. Also, performing some type of lower-body loading (i.e. body weight training, weight training, jumping) during years of maturation is likely beneficial for preventing low bone mineral density (BMD) in the hips. This increases the risk of osteoporosis and fractures later in life. These formative years are a huge opportunity for bone growth and health! Too often, people are allowed to lift weights on a club team once they reach a certain age. It's like magic, you turn 16, time to lift weights! This is similar to giving a kid a car without driving lessons at 16. Just because they are a certain age doesn't make them competent and safe. I've worked with some young groups of kids who I've given resistance training (often bands, but sometimes weights), but only after they've mastered all body weight movements, demonstrated safe biomechanics, and needed further overload for improvement.

**Does it help swimming?** In all honesty, it hasn't been scientifically proven. However, few things are scientifically proven in swimming or sport, as results are very individual. If you are looking for a detailed breakdown of all the resistance training in swimmers, [read this piece](#). Just remember, many of these resistance training programs are dated and similar to the programs Gustafson, myself, and many others performed. Nonetheless, I believe dryland is beneficial for many things — swimming performance being one of them — but if you don't, then don't do it! A poorly-designed dryland program is likely more harmful and wasteful than not doing one (at least have them perform another sport or run around so they can develop BMD, see above).

If Not weight training, then what? A well-designed dryland program must be a unified and consistent program within an entire club. Many clubs have their coaches run their programs separate from one another, resulting in confused swimmers as they progress through programs. Ideally, a club should provide a progressive program from the time children enter the program to the time they leave. This well-planned program must start with the [continued >>>](#)



basics: dynamic warm-up, coordination, games, and biomechanics. Next, improving strength, power, and improving muscular imbalances are the next key areas. It should build on these principles, preventing muscular imbalances, while continually developing strength without creating habitual soreness. Once movement mastery with challenging body weight exercises in varying planes of motion occurs, then consider weight training.

***Should we run for dryland?*** If you are looking to burn calories and cause fatigue, which is the goal of some groups/individuals on swim teams, then run. However, dryland is a practice, just like swimming. You should have a purpose and goal for everything in your dryland program, especially the elite athletes. This simple shift in mindset can help tremendously, as most swimmers don't need more of a workout, they need a practice. Like renowned strength coach Pavel Tstatsouline says, "if you want a workout, run up a hill."

***Will I get too bulky?*** Weight lifting can certainly put on muscle. Some feel more mass can benefit certain swimmers by increasing their potential for force production and/or increase surface areas for grabbing water. Others feel it adds unwanted resistance in the water, resulting in drag. Luckily, there are methods for increasing strength with putting on muscle mass and without putting on muscle mass. If you are looking for the latter, performing low volume, high-intensity lifts, but not to failure. This routine can build power and strength without adding excess muscle mass. This type of training is also the most supported in the literature for improving maximal swimming velocity.

***Will I get too stiff?*** One misconception about resistance training is the idea that resistance training reduces mobility. Resistance training can certainly cause soreness by causing muscular damage believed to result from the cross-bridging of actin and myosin, especially during the eccentric phase of a lift. This soreness will acutely limit motion and the sensation of "stiffness." However, resistance training over a longer period appears not to reduce range of motion and more likely facilitates greater range of motion when combined with static stretching. Therefore, if you are worried about becoming stiff, start with light weights, have a low lifting volume, and start when stiffness is less vital (during the off-season, although a brief window for most). Then progress slowly, hopefully through a progressive approach set-up at your club from the age-group to the senior level.

This article only answered some of the questions regarding weight training for teenage swimmers and even less regarding dryland for swimmers, as it is a highly complex and misunderstood topic. Nonetheless, safe, effective and beneficial

dryland programs are possible when you take into account the research, common sense and a knowledge in swimming. Dryland needs to make a shift and benefit swimmers, not disservice them like it did for Mike Gustafson and myself. If you are a coach, evaluate your group and team's dryland. If you are a parent, don't settle for inexperienced coaches leading your children through poorly-designed and dangerous programs. Encourage them to work with a dryland coach or become certified themselves (this won't solve all the problems, but is a good place to start). If you are unsure about the safety and effectiveness of the dryland program, consider the following:

1. Are the coaches even watching the kids during dryland?
2. Are the coaches making corrections to the kids' form during dryland?
3. Is there a progression of exercises and continuity among groups?
4. Are they simply giving the kids a "workout" instead of a practice?

If you answered no to the first three and yes to the last question, your kids are likely going to have results like Gustafson and myself.

If you are a coach and want to make this shift at your club, it is possible. First, look into becoming a certified trainer. These certifications are not all created equal, but are self-study courses which are not overly pricey. I highly suggest the NSCA-CSCS certification as it is the most-coveted certification. While these programs can teach you biomechanics, common types, safe progressions, and training volumes, they won't teach you the subtleties of dryland for swimmers. If you are looking for implementation of dryland with swimmers, finding a mentor is key, but highly challenging.

At COR, we've started an internship program for those looking to improve their dryland and weight training knowledge for swimmers. Other avenues are through online sources, blogs, research articles, presentations, etc. It is a small community, but there are great minds in the sport. Gain information from these people, email them, consult with them, and pick their brains. I know this all sounds like a lot of work, but remember you are doing this for the kids and are setting safe, practical, and educational programs which they'll use and remember for their entire lives.

Don't have dryland leave a poor taste in their mouths! ◀



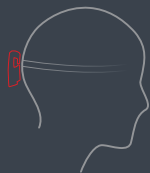
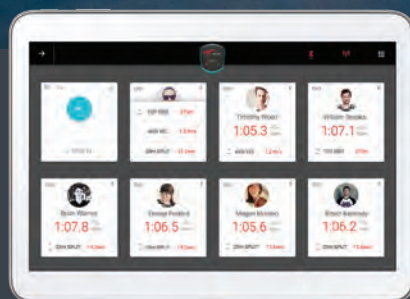
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# THE ULTIMATE GUIDE TO FIXING SWIMMER'S POSTURE

by Dr. G. John Mullen

Reducing drag in the pool is paramount for swimming improvement, as drag is the biggest deterrent of swimming speed. However, long periods of poor posture out of the water will force any swimmer into poor posturing in the pool, especially during fatigue. If you take a look at a group of swimmers, you'll certainly see many hunched over with rounded shoulders in the stereotyped "swimmers posture." This posture has the cervical spine slightly extended, the upper thoracic spine in flexion, the lower thoracic straight, the lumbar straight (flexed) and the pelvis tilted backwards. Not only does this poor posturing increase the risk of swimmer's shoulder, but impairs body alignment and increases drag. Whether I'm with a personal trainer, physical therapist or entire swim team, I'm frequently correcting poor resting posture.

The normal lumbar spine (lower back) has a slightly extended inward curve, called lordosis. In individuals with the flat back posture, the pelvis is tilted toward the rear and the lumbar has lost this lordosis, causing it to be flat, which is actually a flexed position for this portion of the spine. People with flat back will tend to stand with their hip and knees hyper-extended and their head forward.

This deviation from ideal spinal alignment is marked by and sometimes called posterior pelvic tilt. This describes the backwards rotation of the superior iliac spine (ASIS) in relation to the pubic bones of the pelvis. A good visualization of this is thinking of the "top" of the pelvis tilting toward the rear.

Individuals who display this posture, besides having the appearance of a very flat back, will also show the appearance of a flat buttocks that is tucked under. (fig.1)

Some of you may think poor posture isn't a big deal and wonder why swimmers should fix this. There are a couple of reasons. Rounded shoulders and a flat back limit overall spinal motion, a necessary motion during swimming. This poor positioning also puts you into a bigger risk for injury, including shoulder impingement and herniated discs.

How do you go about fixing this? Understanding the tight and weak muscles are key. This ultimate guide for swimmers' posture breaks down strengthening and soft tissue exercises for fixing your poor posture.

The most commonly tight muscles are the hip flexors, rectus abdominis, glutes, hamstrings, pectoralis, and suboccipitals. One very important side note about the hamstrings – they lie between the glutes (pelvis) and the calves. It's a tug of war between the glutes and the calves, and the hamstring is the rope. It's not the rope's fault that it's stretched out, it's the pullers. Most people feel like they have tight hamstrings and stretch them. While it is an OK thing to do, most of the time it's not going to work because tight hamstrings are a symptom, and not a cause. It's like getting headaches and popping Advil every day, instead of finding the root cause of the headache.



[ Photo Courtesy: Azaria Basile ]

<b>Head:</b>	Forward
<b>Cervical Spine:</b>	Slightly Extended
<b>Thoracic Spine:</b>	Increased Flexion
<b>Lumbar Spine:</b>	Flexed (straight)
<b>Pelvis:</b>	Posterior Tilt (tilted backwards)
<b>Knees:</b>	Hyperextended



Overall, we're going to put some curves back into the spine. I should mention at this point that the pelvis needs to be in a bit of an anterior tilt for optimal performance. That's how the spine gets its 'S' shape. The problem arises when that 'S' is too curved or is more like an 'I' or 'C.'

Here is a breakdown to improve your rounded and flat back posture! Time to break down the body parts from the head to the low back.

## NECK

One of the most effective postural exercises for combating neck pain is the chin tuck exercise. This exercise not only helps strengthen the muscles that pull the head back into alignment over the shoulders (upper thoracic extensors) but it also stretches the scalene and suboccipital muscles.

The chin tuck exercise can be done numerous times throughout the day, such as while sitting in the car or at the desk at work. The repetition of this exercise throughout the day also helps develop good postural habits. It is especially important to perform this exercise when the neck and shoulder blades first begin to hurt.

### CHIN TUCKS

*Lie on your back with your knees bent. Next, create as many double chins as possible at your neck, without lifting your head off the ground. Next, lift your head slightly off the ground, while maintaining the double chins. (fig. 2)*

## SMR SCALENES

The scalenes and suboccipitals are often overactive during poor posture. Perform these self myofascial releases (SMR) and reduce tension in the neck.

*While sitting, gently use your index, middle, and ring finger as you apply pressure to the side of the neck. Make sure you study the position of these muscles first! (See video 1 - pg. 22)*

### SMR SUBOCCIPIAL MUSCLES

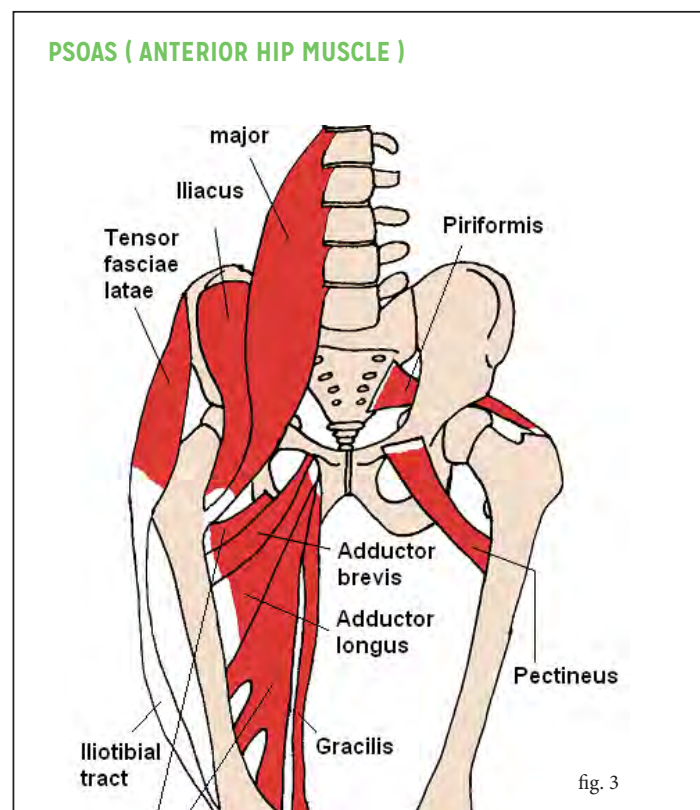
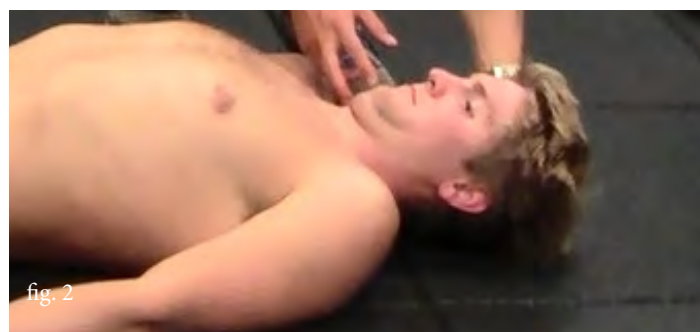
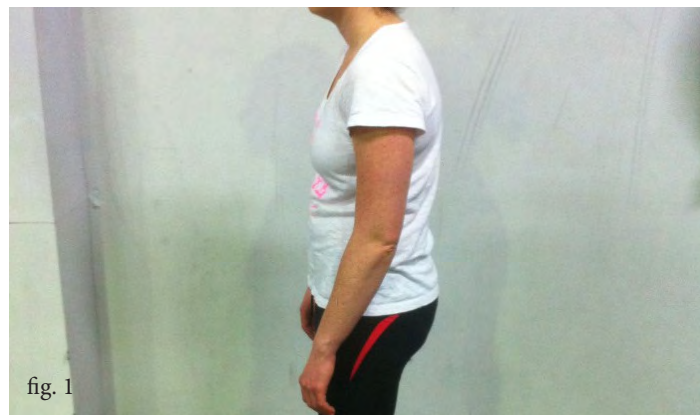
*Lie on your back with your knees bent, then place a tennis ball right next to the bump on the back of your skull. Next, press your head into the ball gradually. (See video 2 - pg. 22)*

## SHOULDERS AND THORACIC SPINE

For the neck and shoulders, reprogramming the neural system is key and often underdiscussed. If you are looking for some soft-tissue and strengthening techniques, I've written about them in detail in the return to swimming protocol; for USA Swimming; and Understanding the difference between shoulder pain and injury. Instead of repeating my work, here is another technique to be used in combination of the other exercises. This is a set of arm movements for mobilizing the brachial plexus,

the nerves which run through the arms. This set of mobilization helps restore motion in the nerves, reducing neurosensitivity and arm carrying position (shoulders rounded, etc.). In combination of this, it helps strengthen the back muscles and neck muscles, which are the result of swimmers' posture. (See video 3 - pg. 22)

*continued >>>*



## FOAM ROLL THORACIC SPINE

Lie on your back with your knees bent and place a foam roll parallel to your spine. Make sure your head and tailbone are on the foam roll and your head is relaxed. Place your arms on the ground for support and roll back and forth at your desired speed and amplitude. (see video 4)

## LOW BACK

Having a flat lower back can be a result of many things, including a compensatory result of the above issues. Nonetheless, we are building a complete program here, so here are some recommendations for those with a flat low back. (fig. 3)

Lie on your back with your legs on a bench or leg rest (elevated approximately 45 degrees). Next, with one end of a mobility stick perpendicular to your body, press into the muscle. You can flex your hip to see if the stick moves, but once in the correct position, hold.

## QUADRATUS LUMBORUM

Lie on your back, approximately 30 degrees from vertical with the tennis ball on your side between your rib cage and pelvis.

## PIRIFORMIS

Sit with one leg straight and the other bent. Put the tennis ball on the outside of your glute of the straight leg and roll the tennis ball on the outside of your hip.

## TENSOR FASCIA LATAE

Lie on your side and put the tennis ball directly behind your hip. To find the proper position, find your hip bone and place the ball two finger breadths behind it, then lie directly on your side with the tennis ball directly behind this bone. (see video 5)

## ILIOTIBIAL BAND

Lie on your side with a tennis ball under your lower thigh, on the bottom leg just above your knee. Bend the top leg's knee and place it flat in front of the bottom leg. Push through your top leg and forearms to move the tennis ball down the length of the lower leg. (see video 6)

## GLUTE ACTIVATION

Warming up before a workout is crucial. It's also a good time to make sure that you're lengthening and activating your dormant muscles. I've written more extensively about it here. (see video 7)

Before training, consider adding your these exercises before your in-water dynamic warm-up. Also, a proper strength and conditioning program can help improve your poor swimmers posture, so ensure your dryland for swimmers is a well-balanced program, addressing your needs! ◀

Video 1 >>



Video 2 >>



Video 3 >>



Video 4 >>



Video 5 >>



Video 6 >>



Video 7 >>







## THE TRUTH ABOUT ICING... WHAT WE STILL DON'T KNOW!

by Dr. G. John Mullen

Icing has been under scrutiny over the past few years and I'm a tad late on the whole icing debate. Excellent and inquisitive posts have already accrued, so why am I finally coming to the discussion?

Although previous articles were well-researched and in-depth, I feel they missed a few key points [ [Mobility WOD; 10 Reasons - Icing Injuries is Wrong](#) ]. This isn't a knock at my online peers, but implies the complexity of this seemingly simple topic. It also suggests the unknown, something clients and patients hate to hear and something health care professionals, trainers, and voodoo doctors hate even more to admit. Nonetheless, icing is a tough topic which is poorly understood and something I'm adding to the [COR Swimmer's Shoulder System](#).

### THE VARIOUS REASONS FOR ICING

Icing for athletes is poorly researched and misinterpreted because because the reasons why people use ice varies greatly. Do you have acute pain for training? Do you have acute pain from an injury? Do you have chronic pain from an injury? Do you have acute pain from training and a competition? Do you have an acute injury, but want to continue to train? These are only some of the factors I deal with in my physical therapy and personal training practice.

I have patients of all shapes, skills, and goals. If I suggest icing, it depends on these factors. Unfortunately, the research doesn't account for all these factors, as it is hard to control for different factors. Also, the research doesn't accurately understand the inflammatory process of a human after an acute injury. Think about it: Who would sign up for a study where you sprain your ankle and track the inflammatory response? I know none of my elite dryland swimmers are

interested, and even my sedentary physical therapy patients wouldn't be interested. Therefore, we group acute inflammation from an injury and acute inflammation from training into one box. Unfortunately, these boxes should be different, as inflammation from training (which causes soreness from breaking down the z-disks during cross-bridging) is likely more acute than inflammation from an acute injury.

Once again, grouping everything together and saying icing is wrong is likely an overstatement. Based on the current unknowns from research and highly variable goal and phase of the inflammation, we clearly don't have all the answers. On top of this, I haven't even mentioned individual genetic inflammatory response. This is a tad out there, but genetically there are different inflammatory responses in the cardiovascular system, so why not in the muscular system? This is an area I wish I knew more about, but is it too much to imagine that some people have different inflammatory responses to injury and training than others? Also, people could have a different response to ice than other. Although the research suggests ice does not improve inflammation for the majority, are we confident it doesn't help some people? On top of this, ice does have a nociceptive effect (pain-reducing) which can help function, and isn't this really the goal? If you have pain during movement or pain all the time, removing that is the goal. Once that is resolved, you can get precise and look at reducing your inflammation with diet and lifestyle. Too often we medical professionals express the importance of a cellular function, though improving general movement and quality of life is much more important.

*Who cares about inflammation if you can't walk!*

With all this ranting, you'd probably think I give all my patients ice packs as they walk in the door, but I don't even have ice at my physical therapy clinic. Why waste someone's time with something they can do on their own? If I don't hand out ice, you think I must recommend it to a lot of swimming physical therapists or swimming personal training clients. Once again, a big stinking nope.

### I recommend ice in a few scenarios:

- *Have high pain and need some relief? Try some ice. It won't cure the pain, but it can help for about 60 minutes. This window could help you move better, preventing other musculoskeletal injuries and compensations.*
- *Have an important practice or competition and need relief? Try some ice. It may limit inflammation and muscular strength and gains, but oh well, you're not looking for a training response, but performance.*

Once again, this is a dense topic and will involve much more study. ◀



## DR. DETECTIVE: THE MENTAL SIDE OF OVERCOMING A SWIMMING INJURY

by Dr. G. John Mullen

I often discuss the steps to experiencing physical recovery from a swimming injury. Put a tennis ball here or a baseball there and — poof! — you can improve your shoulder pain. However, injury rehabilitation is never this easy, especially if you've been dealing with shoulder pain for a while.

However, pain and structural abnormalities are not always clear-cut. One study took diagnostic images of asymptomatic triathletes' shoulders and noted that 71 percent had abnormalities. They also looked at symptomatic triathletes' shoulders and found that 62 percent had abnormalities (Reuter, 2008). These abnormalities ranged from inflammation to rotator cuff tears, suggesting that there is little correlation between structural abnormalities and the triathlete's symptoms.

One can have a structural abnormality but not feel symptoms. Another study found that 79 percent of asymptomatic professional baseball pitchers had abnormal labrums (Miniaci, 2002). None of this directly pertained to swimmers, but it is hard to believe that running or biking caused the structural abnormalities in the triathletes' shoulders; and as stated, pitchers perform only a fraction of the overhead movements as swimmers perform, so imagine the volume of shoulder abnormalities in swimmers.

This may surprise some of you, but sometimes stuff breaks/tears/inflames and you don't feel it. Conversely, sometimes you hurt, but nothing is wrong structurally. A proper system of prevention and rehabilitation respects the complex interaction of pain, dysfunction, and pathology.

Our medical system defaults to surgery far too often, simply because most people don't know what else to do when something keeps hurting. Surgery is sometimes needed, but should only be an option after other means have been exhausted in an effort to rebuild an otherwise robust ship. Sometimes surgery is indicated and will correct the cause of a swimming injury, but symptoms, signs, imaging, and other factors need to be assessed first.

The current typical evaluation and rehabilitation process after an injury is often lengthy and inefficient. When shoulder pain occurs, most swimmers try to swim through it for two or three weeks, do an extra kick set, or skip the pulling set. Sometimes these alterations are from your coach's advice; other times you dig deep, reiterating the "no pain, no gain" mantra. Hopefully, the symptoms will go away with these alterations. But, if they continue, an orthopedic surgeon or primary care physician is the next stop (typically taking one week to schedule an appointment). At this time, diagnostic imaging (x-rays, MRI, etc.), a cortisone shot, or a referral to a rehabilitative specialist (physical therapist, osteopath, chiropractor, massage therapist, trainer, or supplement provider) are the typical courses of action.

Let's look at three options in detail:

1. **MRI (Magnetic Resonance Imaging):** Dr. James Andrews (a world-renowned orthopedic surgeon for Major League Baseball pitchers) recently said,



“After scanning 31 healthy pitchers’ shoulders: The pitchers were not injured and had no pain. But the MRIs found abnormal shoulder cartilage in 90 percent of them and abnormal rotator cuff tendons in 87 percent. If you want an excuse to operate on a pitcher’s throwing shoulder, just get an MRI (Kolata, 2011).” This is a scary reality, and I’m not suggesting that MRIs are worthless. I don’t think Dr. Andrews is suggesting that no one needs shoulder surgery; they just aren’t the be-all, end-all for shoulder injuries. Often, repeated overhead motions cause microdamage, which accumulates over time without correlated symptoms. This accumulated damage isn’t the typical cause of shoulder pain in swimmers, as they’ve become accustomed to these abnormalities.

2. **Cortisone Injections:** Cortisone injections are extremely beneficial in treating inflammation. By the time many clients get to a physician’s office (in two to three weeks) the inflammation has dissipated! If the inflammation has resolved, why get a cortisone injection? Cortisone should only be utilized if severe inflammation is present. Cortisone also has long-term deteriorative effects on muscle. Cortisone is a typical stop on the route to surgery when a physician or therapist is not sure what the cause of the symptoms is.
3. **Rehabilitative Specialist:** These specialists commonly take a few weeks to schedule an appointment, and when they see you they will work on your symptoms. If handled “properly,” you will see this professional for two to three weeks and have full symptom alleviation. Unfortunately, many rehab clinics, no matter their specialty, rely heavily on modalities (electrical stimulation, ice, and ultrasound) and exercises instructed by an assistant. These modalities are mildly beneficial if used during the right phase of the injury, but are over prescribed with high insurance payment returns.

Choosing one of these three options often results in long periods from the pool. Worst of all, during this long drought, symptoms and joint function don’t always improve. Here are the common routes after a shoulder injury, all of which are considered “successful” approaches by a health care specialist:

1. **Brief Improvement:** Upon return, many swimmers are asymptomatic and begin to push themselves to make up for lost time. The body is activating different muscles (a good thing, since the normal muscle pattern leads to injury). Sadly, after feeling good for the first hour, fatigue occurs and old movement patterns return along with the accompanying symptoms, which will likely cause a re-injury.
2. **Full Improvement:** Another commonality is having full symptom alleviation after seeing a rehabilitation specialist for four to six weeks, then returning to the pool feeling like a wet noodle, having lost all neural feel that was developed throughout the season. This puts the swimmer back to pre-season form, often making best times unlikely.
3. **No Improvement:** The last option is the worst of all. Upon return, after four weeks of simultaneous electrical stimulation, ice, ultrasound, and tape, the athlete finds their symptoms unchanged when swimming. Total symptom alleviation is great on land, which is a large step towards success. However, in this scenario the health care professionals do not take into consideration the demands of swimming, failing to consider continual preparation necessary to meet the demands of the sport.

Unlike other sports, swimming is a novel activity which doesn’t have an extended off-season. For example, in football there is a lengthy off-season that is utilized to build strength and speed. The season consists both of games and practice sessions, which allow time for maintaining off-season gains and preventing injuries. Once discharged from two to three weeks of rehabilitation sessions, football players are able to hop on the field and play (if symptoms are fully alleviated) without any decrease in performance. This is due to the natural movements of football and their gains achieved during the off-season.

## CONCURRENT SYSTEM

Unlike other sports, swim training is performed concurrently with the competitive season. If a swimmer had a shoulder injury, then returned to the pool after not swimming for three weeks, they’d belly flop off the block and be swimming like they had *continued* >>>

machetes for arms! Swimmers need the neural feel and repetitive swim training in order to perform optimally.

Once again, staying in the water is mandatory. Nonetheless, many health care professionals don't understand this necessity. On the other hand, many coaches are too aggressive in trying to completely minimize time out of the pool, perpetuating an injury, or aggravating the injury upon return.

## HEALTH CARE PROFESSIONALS

The two primary goals of health care professionals are to resolve the symptoms associated with an injury and to regain the ability to perform all daily activities. Unfortunately, for an athlete these goals may be in conflict with each other. When a health care professional recommends to stop swimming to heal the injury, it impedes swimming during essential times of motor development. Motor learning is more active during specific developmental stages. If a young swimmer has shoulder pain, removing them from the pool may impair motor learning, which takes countless hours in the pool to potentially regain. Health care professionals approach the process of injury improvement by relying on their scientific understanding of the body's anatomy and physiology.

In their eyes, any pain is viewed a sign of causing re-injury. This unrealistic approach is their reasoning behind long absences from the pool. Remember, any absence from the pool impedes "feel" and impairs performance. This is an area that many health care professionals do not comprehend, since their main goal is resolution of symptoms, not optimizing performance.

## SWIM COACH

At the other end of the spectrum are swim coaches. A swim coach's goal is to build the best swimmer possible. This process takes long hours in the pool, which can often cause re-injury if the return to swimming is not increased systematically.

From what I've seen, coaches generally have three approaches to shoulder injury:

1. **Swim through the pain to toughen up:** Swimming through the pain often makes an injury worse. This method is effective in some situations, like

when mental strength is being overcome, but many swimmers do not know the difference between pain and injury. However, making an injury worse can perpetuate the inflammatory process. If you swim through a shoulder injury, it likely causes areas of your shoulder to continually rub against each other, feeding into poor muscle force generation. This will make the injury worse and lead to even longer periods away from the pool.

2. **Stop swimming to heal the injury:** This is similar to the health care professional's view. These coaches have a swimmer immediately discontinue swimming. This approach commonly improves inflammation and symptoms out of the water, but certainly impairs one's swimming ability. Staying out of the water also does not guarantee that the injury won't return, completely heal, or occur again.
3. **Grab a board and kick:** Kicking is a great alternative to provide rest for the shoulder, but using a board puts the shoulder in an inappropriate position, potentially increasing shoulder symptoms and discomfort.

To reiterate, symptoms do not always correspond with structural abnormalities. Unfortunately, coaches and health care professionals often times look past or ignore the mental aspect of injuries, particularly the confidence of returning to the pool.

## THE PATIENT

I recently saw a 17-year-old male swimmer, Fabio, with shoulder pain for the past year. He had received physical therapy and multiple cortisone injections in both shoulders over the past year with minor improvement in his symptoms.

## THE PATIENT'S SIGNS AND SYMPTOMS

Fabio was a middle-distance swimmer with the hopes of swimming at a Division I university. Unfortunately, he was not able to compete at his championship meet last fall due to this injury. He stood at 6'1" and weighs approximately 180 pounds.

Fabio noted pain during the recovery phase of his swimming stroke and was currently swimming 2,000 yards for three days a week. With this protocol, he was



stopping at a pain level of 3/10, as he read this online. The pain was the same in the morning and at night.

Fabio was obviously frustrated with his shoulder, not sure how much yardage to increase and not sure if he will be able to swim in college, due to the injury.

## THE TESTS AND ASSESSMENTS

During the testing, it was clear Fabio was hesitant of any shoulder movement. As he raised his arms overhead, he was cautious, moving extremely slow through standard shoulder range of motion. Despite this hesitation, he did not report pain with any movement. To find some comparable sign (a test which reproduces his pain to re-test), I performed a maximal resisted external rotation test. This test provoked a 2/10 pain upon release.

## SWIMMING ASSESSMENT

On a video, the swimmer demonstrated a low shoulder stress stroke, entering shoulder width apart, with the hand diving down into the catch upon entry. Also, the recovery was relaxed, neither too narrow nor wide. Unfortunately, the video of him stroking was only at an easy speed, the only swimming video I obtained.

## TREATMENT

The treatments first began with myofascial releases (MFR) on the posterior rotator cuff, infraspinatus and teres minor. Five minutes of MFR on the posterior cuff resolved his resisted external rotation pain in the first session. I taught him how to release these areas by himself and he demonstrated competency.

However, upon the second visit he reported the same symptoms and growing frustration. During this session, I performed MFR on the posterior rotator cuff and once again resolved him symptoms. During this MFR, I discussed the mental side of injury recovery. When most people hear about the mental side of injuries, they often think of people “faking” injuries or exaggerating symptoms, but recent research by Scharbrun (2015) suggests the cortex in the brain “smudges” after chronic low back pain. What this means is after an extended injury, the region of the brain associated with injury becomes altered. This altered representation may not seem like a big deal, but if the brain begins over-interpreting information, it is likely

to interpret more information as pain or misinterpret a non-painful stimuli as painful. For example, if you have an injury, you constantly think about this injury. Always wondering, is this going to hurt? How does my shoulder feel? This constant mental chatter is potentially the reason for this smudging.

Luckily, mental skills and training are a cheap and easy method of potentially improving this smudging in the cortex. The mental skill I used with Fabio was an incantation. An incantation is a positive, repeated saying. This repeated saying can improve mental strength regarding an injury and prevent the mind from constantly analyzing the impaired area. In this example, I had Fabio repeat an incantation for five minutes upon waking and during the first five minutes of warm-up each day. One example incantation I used was: “My shoulder is strong, my shoulder is healthy, and I’m getting faster each day.”

This mental training was combined with continued MFR and posterior rotator cuff training for four sessions.

## THE OUTCOME

After implementing this soft-tissue and mental training, Fabio noted great improvement. Within a few weeks he was confidently performing the entire workout with his team, with minimal pain (reporting a 1/10 pain approximately once a workout).

## SUMMARY AND RECOMMENDATION

Mental training and skills won’t always be the holy grail of recovery, but plays a role in many, especially those with long-standing pain. Moreover, this form of mental training has little to no negative effects. If you are recovering from an injury, consider performing incantations and improving your mental strength and recovery. ◀

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Reference:

Scharbrun SM, Elgueta-Cancino EL, Hodges PW. Smudging of the Motor Cortex is related to the Severity of Low Back Pain. *Spine (Phila Pa 1976)*. 2015 Apr 17. [Epub ahead of print]



[ Photo Courtesy: Peter H. Bick ]

## KYLIE PALMER GIVEN “A WARNING” FOR 2013 POSITIVE DRUG TEST

by Jeff Commings

Australian freestyler Kylie Palmer has dodged any further suspension from competition by FINA, as the world organization announced that she will only be given “a warning and a reprimand” for testing positive for a banned substance during the 2013 world championships.

The positive drug test came on July 31, 2013, the day of the 200 freestyle final in Barcelona. Palmer finished sixth in that race, and was randomly selected for a drug test. The results of that urine sample “showed low levels of a prohibitive substance,” according to a press release from FINA earlier this year. Subsequent urine and blood samples a day later – when Palmer was part of Australia’s silver medal-winning 800 free relay – showed no trace of that substance.

Until today’s announcement, the name of the illegal substance that was found in Palmer’s sample had not been publicly identified. But now we know that it was furosemide, a diuretic that can act as a masking agent for other drugs.

The World Anti-Doping Agency got involved this past February, and during the appeal process, Palmer withdrew from Australia’s world championships team while the appeal was underway. Palmer appears to have proven that the illegal substance was taken unintentionally, and since it was her first drug violation, avoided a possible two-year or four-year suspension.

Though FINA has decided to not give Palmer an official suspension for the positive drug test in 2013, her result from the 200 free final will be nullified. Had she won any money as a result of that finish, her prize money would also have to be returned.

The silver medal Palmer won as part of the 800 free relay will not be revoked, according to the FINA announcement about the decision.

Palmer will now look ahead to April’s Olympic Trials in Australia.

Swimming Australia released the following statement regarding FINA’s decision:

*“Swimming Australia fully supported the process once the matter came before the FINA Doping Tribunal and accepts the findings.*

*Swimming Australia’s concern throughout the process was the two year delay in informing the athlete of the positive test that occurred in 2013 and the issues that this created for Kylie Palmer throughout the process.*

*Swimming Australia will continue to work with the Australian Government, the Australian Sports Commission and the Australian Olympic Committee to combat the menace of doping and remains a strong supporter of the fight against performance-enhancing drugs and other forms of doping, in both swimming and all sport.” ◀*





## DAVID NOLAN TO JOIN COMMIT SWIMMING

Commit Swimming announced this morning that David Nolan is joining the team to help grow their swimming platform. Nolan is working with the founders to ensure that Commit's workout management applications are engaging and insightful for both coaches and athletes. Nolan's primary duties will be to help develop the mobile app for athletes through testing, providing feedback, and additional ideas.

Commit released their web application for coaches and are looking to follow up with IOS and Android mobile versions. Nolan and the founders are also focused on an app for athletes which will give them more visibility into their training. Co-founder Dan Crescimanno commented that, "David's sharp and very passionate about swimming. There's not much more you can ask for in a teammate."

Sharp and passionate aren't the only qualities Nolan brings to the table. He's also the first swimmer to go under 1:40 in the 200 IM with a NCAA title time of 1:39.38. Currently, Nolan is training with Bob Bowman in Arizona as he looks to potentially compete for Team USA in Rio.

It's exciting to see young athletes and entrepreneurs dedicate time to improving the sport. After getting a demo of Commit's workout manager and learning about "the Parser" at ASCA's World Clinic, we're looking forward to what this new team releases in the coming months.

Commit Analytics, Inc. is a Philadelphia based performance analytics company. Commit released its first product, Commit Swimming, in September 2015. The software is a web-based solution for coaches to record and analyze their team(s) training. Commit was founded in 2015 by Dan Crescimanno, Dan Dingman, and Nico Gimenez. The founding team consists of two ex-swimmers and all three have known each other for over 15 years. For more information on Commit Swimming visit their webpage: [www.commitswimming.com](http://www.commitswimming.com). ◀

*The above article is a press release submitted to Swimming World.*



[ Photo Courtesy: Peter H. Bick ]

## RYAN LOCHTE LOOKING FOR MICHAEL PHELPS TO PAY ON \$1,000 BET

by *Jeff Commings*

**R**yan Lochte told the media after the 2012 Olympics that he believed Michael Phelps would return to the pool for a chance to compete in the 2016 Games. He even went so far to wager \$1,000 that his friend and rival would be back, according to an interview with NBC 6 in Miami.

“When he first said he retired after 2012, I went to him the next day and said “I bet you \$1,000 that you’re going to be back. And he was like ‘no, no, I won’t, I’m done, I’m done.’ So he owes me \$1,000.”

Lochte told the network that Phelps hasn’t settled the bet yet. Phelps was adamant before, during and after the London Olympics that he wasn’t planning to return to competition, saying he didn’t want to race at the elite level in his 30s. Phelps has officially been back to his old self for about two years, even going so far as posting the world’s best time in three events this year.

Of course, Phelps’ return means Lochte will not have an easy road to making his fourth Olympic team. The two will likely go head to head in the 200 IM at next year’s Olympic Trials, as well as the 200 free. Depending on their schedules, both might swim the 100 free to get on the 400 free relay.

The NBC 6 interview also marked Lochte’s first public comments about FINA’s ruling that his new way of kicking underwater on the freestyle leg of the 200 IM is illegal. Lochte kicked on his back for 10 meters underwater before turning onto his stomach and swimming freestyle for the rest of the 200 IM at the world championships last month. It was a turn he and coach David Marsh devised when they realized Lochte was faster on his back.

Lochte called the decision “ridiculous,” adding that “They made a rule, like the Lochte rule, I guess because I was so much faster underwater than anyone else.” ◀





## ANTHONY ERVIN HEADING TO TROJAN SWIM CLUB

by Jeff Commings

**T**wo-time Olympian Anthony Ervin is heading to Los Angeles and Dave Salo's Trojan Swim Club in his quest to add another Olympic appearance to his resume.

Ervin, 34, had been training for the past four years at his alma mater, the University of California-Berkeley, with the postgrad team there. His comeback to the sport in 2011 culminated in a spot on the 2012 U.S. Olympic team and the finals of the 50 freestyle in London. He placed fifth in the event with a 21.78.

His London swims came 12 years after he tied for the gold medal in the 50 free with teammate Gary Hall Jr. at the 2000 Olympics. Ervin was also a part of the silver medal-winning 400 free relay in Sydney.

After the 2003 world championships, Ervin retired from the sport. In that time, he auctioned off his 50 free Olympic gold medal to raise money to help the victims of the 2004 tsunami in southeast Asia.

Ervin had one of the best training partners in Nathan Adrian while in Berkeley, and will be working with another top sprinter in Los Angeles: Vlad Morozov.

Ervin was born and raised in the Los Angeles area, and said in a press release that returning home was always a goal of his.

*"After 16 years, the time has come for me to return to the city of my birth, a journey home that I always knew I would make," Ervin said. "I will always have the blue and gold of a California Golden Bear in my mind and in my heart, for Berkeley as a city and university has, with a liberal education, matured a wily teen into this 30-something adult. I will always be grateful for the support of those personal relationships forged in Berkeley, and though I move forward, I will remain in touch with the friends, mentors, coaches, and teammates as we all continue to grow. The time and place for structured learning has passed; and as the dusky twilight of my competitive career closes in on me, it is time to move forward into the wilds of life with my friends and family." ◀*

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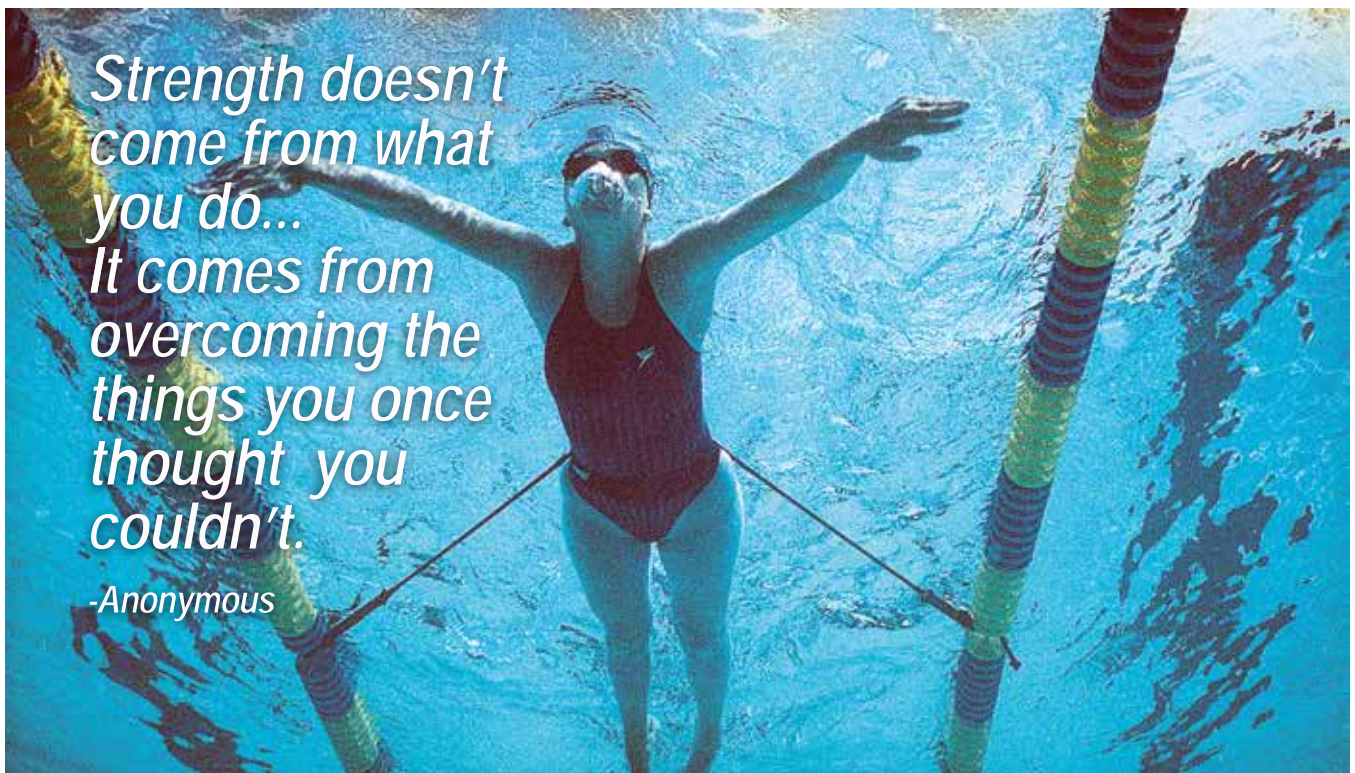
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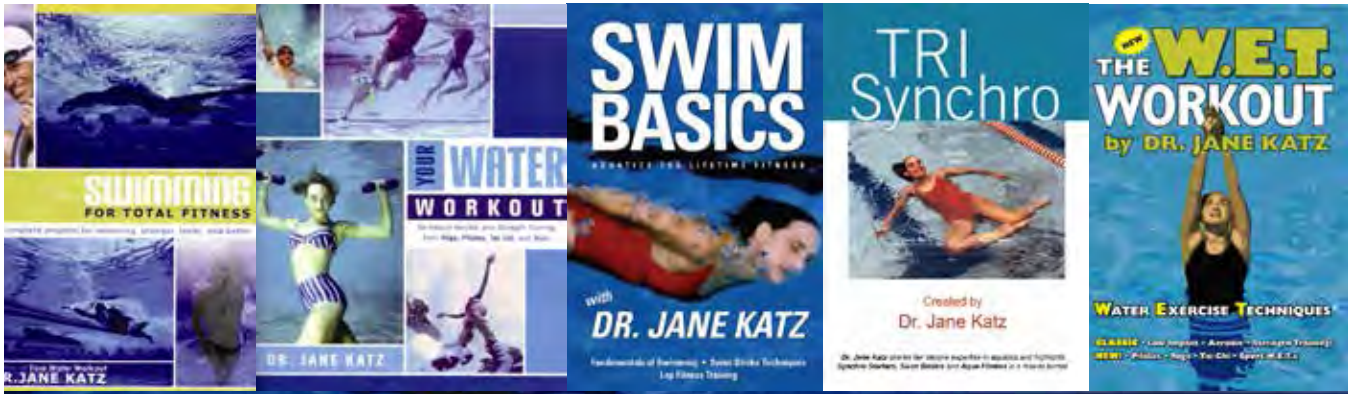


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