

SWIMMERS OF THE YEAR

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DECEMBER 2014 • VOLUME 55 • NO. 12

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10 MOST IMPACTFUL PEOPLE OF 2014

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HOLIDAY GIFT IDEAS

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POOL DECK

THE

HALLS



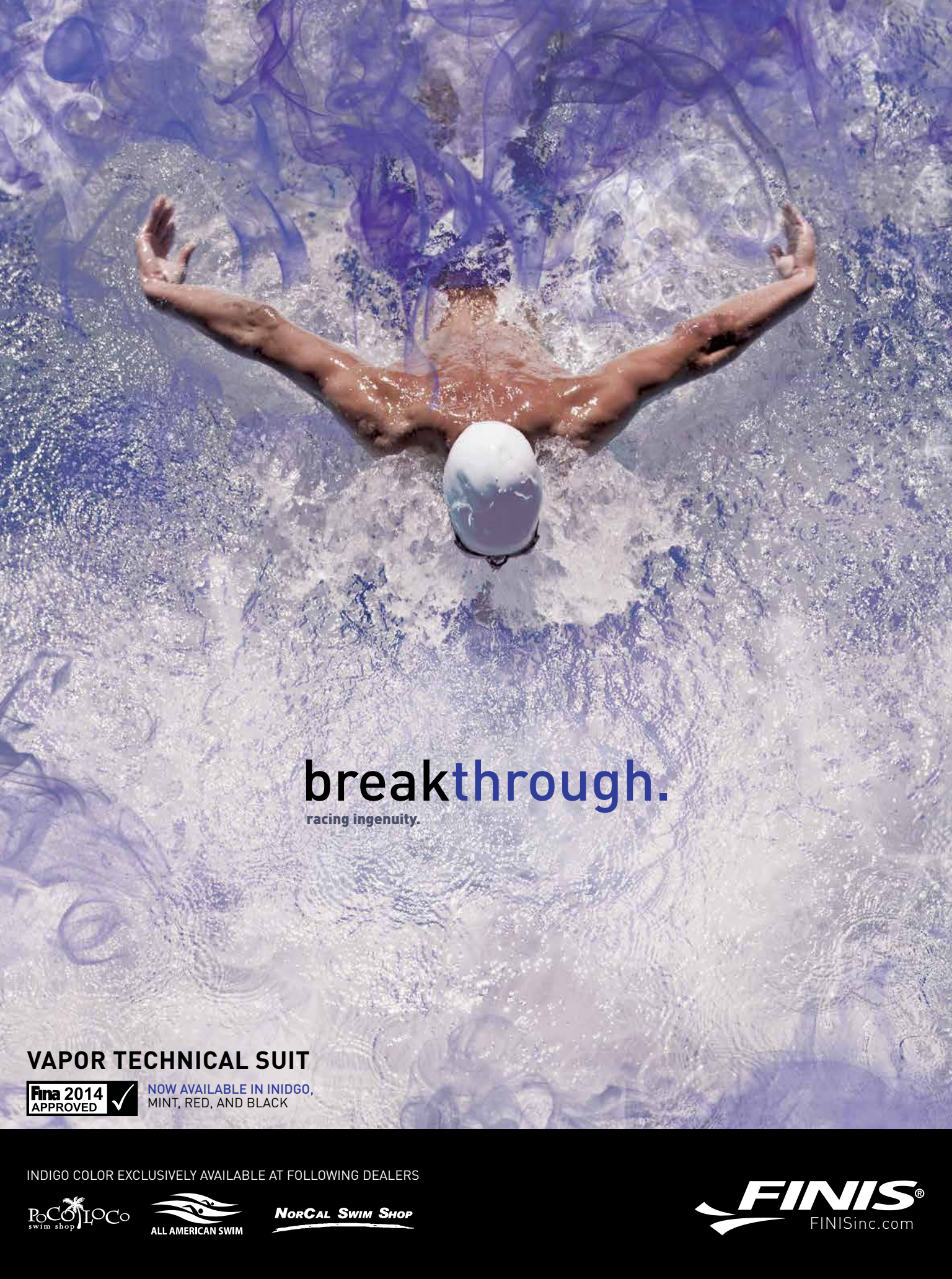
JESSICA HARDY
1-time Olympian
2-time Olympic medalist

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ON THE COVER

Fifty years after *Swimming World Magazine* named Don Scholander as its first World Swimmer of the Year in 1964, Japan's Kosuke Hagino became the first athlete from Japan—male or female—to win the annual award. Hagino, 20, captured 12 medals between the Pan Pacific Championships and Asian Games (six gold, four silver and two bronze). He finished the year ranked No. 1 in both IMs, No. 2 in the 200 free and 200 back as well as fourth in the 100 back and fifth in the 400 free. (See story, page 21.)

[PHOTO BY JOAO MARC BOSCH]

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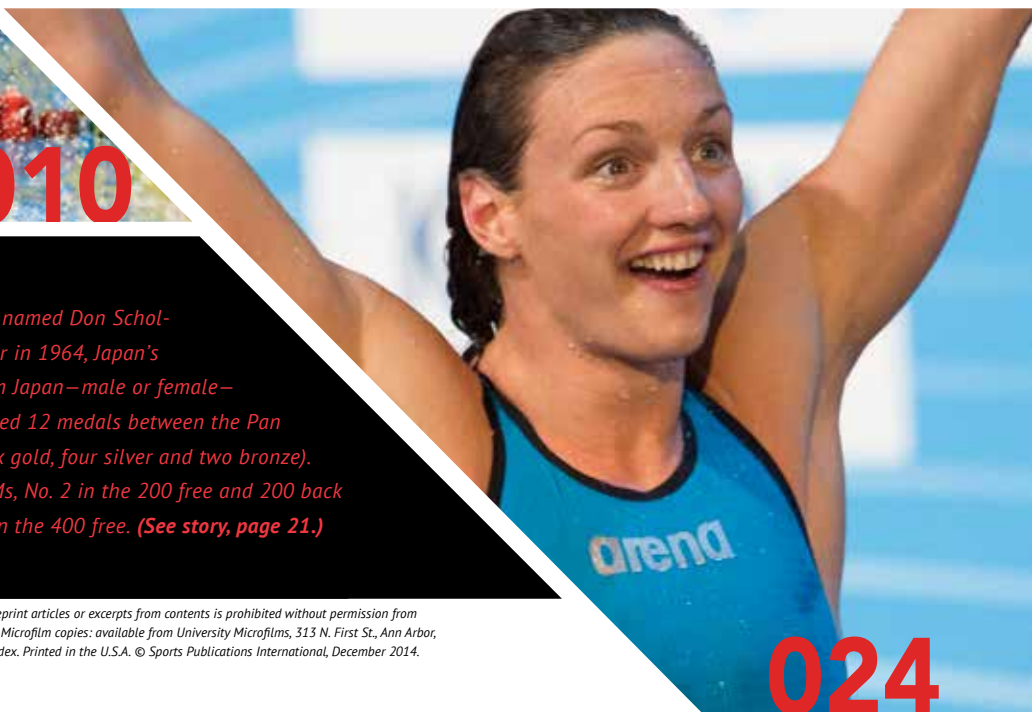
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A Voice for the Sport

THE 10 MOST IMPACTFUL PEOPLE OF 2014

BY BRENT T. RUTEMILLER

Our sport is blessed with great people. Some are public figures, others work behind the scenes. As appropriate for this time of year, I want to recognize 10 people who are making an impact in our sport. Thanks to the following people for their contributions and inspiration.

1. Matt Farrell. The chief marketing officer for USA Swimming successfully launched a national campaign to increase athlete membership with industry support. Farrell was able to bring industry rivals together to help finance swimming's first marketing campaign with the belief that everyone in the industry wins with membership growth and retention. Swim Today!

2. Tom Ugast. The chief executive officer for Nation's Capital Swimming in northern Virginia, Washington, D.C. and Maryland took over the devastated Curl-Burke Swim Club after its former owner was sentenced to prison. Ugast successfully rebranded the club, reshuffled the coaching deck and reignited passion that ultimately produced national champions, Olympians and world record holders such as Katie Ledecky.

3. Alexander Sienkiewicz. The chief marketing officer for SwimOutlet.com has redefined Internet retail marketing through technology, search engine optimization, branding and advertising. The traditional swim shop business has changed forever.

4. David Arluck. The chief executive officer for Arluck Promotions has firmly established himself as the leader in athlete-centered swim clinics through his founding of the Fitter and Faster Swim Tour. Through consistent marketing, sponsorship and advertising, Arluck and his staff have created a revenue stream for the athletes he represents while promoting the sport nationwide. Brilliant!

5. Susan Woessner. USA Swimming's Safe Sport director has worked tirelessly to not only educate the swimming community about sexual abuse, but also to track down, ban and initiate police proceedings to incarcerate those responsible for that abuse.

6. Robert Allard. As the leading lawyer representing sexual abuse victims, Allard continues to call for leadership change within USA Swimming without recognizing that the organization has initiated significant reforms. Allard's wide cast of blame paints the entire sport as perverted, forcing the swimming community to defend its moral fiber instead of those who are true victims. Back off, Bob!

7. Tom Fristoe. The chief executive officer for TeamUnify.com continues to be the No. 1 platform for a swim club to manage its business. Fristoe was the first to successfully combine all the tools a club needs to manage membership, raise money, run swim lessons, collect dues and distribute information. Good technology wins every time!

8. Craig Lord. As a journalist for *The London Times* and owner of SwimVortex.com, Lord has been the leading watchdog on international issues in aquatics. His recent resignation as a member of FINA's Press Commission, due in part to Vladimir Putin being awarded FINA's highest honor, showed both conviction and character—two traits that must be applauded.

9. John Leonard. The executive director for the American Swim Coaches Association continues to work tirelessly behind the scenes, calling for better and cheaper methods for drug testing. Leonard has been the voice for swim coaches worldwide for more than 30 years and has more experience on matters concerning the coaching community than any other person in the sport.

10. Dr. Brent Rushall. As professor emeritus at San Diego State University, Rushall polarized the coaching community on his Ultra Short Race Pace Training (USRPT) theories. His short yardage training theories continue to challenge traditional training methods, creating an experimental generation of young athletes. ❖

Brent T. Rutemiller
Publisher of Swimming World Magazine



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Peter H. Bick, USA Today Sports Images, Reuters, Getty Images

OFFICIAL MAGAZINE OF:



ENDORSED BY:

PUBLISHER:



P.O. Box 20337
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JUDGING WALLS

GOING INTO TURNS

BY JEFF COMMINGS

[PHOTO BY CHRISTINNE MUSCHI, REUTERS]

In short course competition, turns are one of the biggest factors in determining the outcome of a race. For the most part, half of a race is spent either preparing for, executing or breaking out of a turn. If an athlete is not fully prepared for a turn well in advance of executing it, he or she is likely to lose momentum into the wall, and, therefore, not get the ideal pushoff needed to slingshot into the next length.

Coaches and swimmers will agree that, on non-backstroke races, a turn should not be planned once the head passes under the flags. By then, it's often too late to make stroke adjustments to allow the hands to touch the wall on a perfect stroke. Seven to 10 meters away from the wall has become the standard protocol for setting up a perfect turn, deemed to be the ideal distance to manipulate your stroke without messing up your rhythm.

Josh Fulton, head coach at Tide Swimming in Virginia Beach, Va., had this to say about the advice he gives swimmers on judging their turns:

"I coach my athletes to focus on several key elements of a successful turn: not spotting the wall, only looking through the top of your goggles, and not lifting your head into the turn. I also stress the importance of making stroke adjustments 10 meters out, especially on fly and breast, where you can get caught between strokes.

"We talk a lot about the transfer of energy through the turn—the speed of your approach will dictate the speed you come off of the wall. If you slow down on your approach or turn in a resisted position, you lose all the 'free' speed you gain from your

turn. So, stay compact through the turn and think about 'bouncing' off the walls and staying on the balls of the feet as you hit the wall."

Whether you are competing in a pool for the first time or the 100th time, it's always ideal to orient yourself with the markings on the bottom of the pool and on the wall to avoid, as Fulton said, breaking body position to note your distance from the wall. Most swimmers mistakenly believe that all pools have the same markings, and that the "T" at the bottom of the pool is always the same distance from the wall. Proper knowledge of pool markings will allow you to use that black line at the bottom of the pool as a guide to preparing for the turn.

Sara Goff, head coach at Minnetonka Swim Club in Minnesota, stresses that perfecting the approach to a turn happens "day-in and day-out at practice" as well, not just the day of the competition. "Great turns are difficult," she adds, "but they can be second-nature."

Goff, a backstroker in her swimming career, gave five pointers for executing great turns:

- Press, extend and reach with the body, creating an ideal line for the approach.
- Minimize interruptions from the flags in by not breathing.
- Execute the turn quickly and tightly, minimizing friction and exposure.
- Allow for optimal push off of the wall.
- Leave the wall—no matter the stroke—in a streamline with connected kicks and a great breakout. ❖



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SHORT CUT TO SUCCESS?

Whether out of necessity or by choice, there are those who train short course for long course competition. Despite the obvious differences, swimmers can still be successful at either pool length.

PICTURED > Connor Jaeger has been successful at both short course and long course meets. In 2014, he not only won the short course 1650 yard freestyle at NCAAs, but the long course 1500 meter free at Pan Pacs.

[PHOTO BY DELLY CARR]

Josh White, associate head coach at the University of Michigan, coached four of the top nine milers at the 2012 U.S. Olympic Trials, including runner-up Connor Jaeger—NCAA champ in the short course 1650 yard freestyle and gold medalist at Pan Pacs in the long course 1500 meter free this year.

White believes “it is definitely possible to be successful in long course while training in a short course pool.

“Every summer, a number of high school-age swimmers are successful on the national level without ever training long course. That said, I believe that it definitely requires specific types or adaptations of short course training in order to get there.”

Bluefish head coach Chuck Batchelor has coached a number of swimmers—including Elizabeth Beisel and Laura Sogar—who have had long course success without the benefits of 50-meter training. He believes that “training short course for long course success is a universal challenge for club coaches. Bluefish Swim Club is lucky if we get six LC practices at home a year,” he says.

“One of the key training points is mindset. What are the team and individual athlete goals for the year, the next four years? Is the club’s prime goal to win SC winter juniors or take 45 athletes to NCSAs in Orlando? Or is it to have 12 high school-age athletes at the next U.S. Olympic Trials or, perhaps, have five athletes make the junior national team in one year?”

“At Bluefish, our goals, culture and mindset are for long course competition. The greatest achievements in the sport—world rec-

ords, world rankings, the Olympics—are primarily swum in a 50-meter pool,” says Batchelor.

MENTAL DIFFERENCES

Brian Bickner is senior coach of the DeKalb County Swim Team in Sycamore, Ill. He has access to an outdoor pool in the summer, but the rest of the year, practice is all short course.

“There is an obvious mental difference between swimming short course and long course, especially for age group kids,” he says. “Last year, our age group swimmers were offered 28 short course and five long course meets, so we strongly stressed that for experience, our kids enter as many long course meets as possible.”

In Olympic years, Batchelor ensures that Bluefish swimmers race in long course trials/finals meets at least once a month.

“When we do have those few LC training opportunities, I curb my desire to grind out some grueling mileage and focus on race-specific and race-pace training.” (These words come from a man who has no compunction about giving swimmers sets of 16 x 400 SC IMs.)

So how does one overcome the lack of long-course access?

Michael Maczuga, founder and head coach of the Arizona Marlins in Scottsdale, says that lack of 50-meter training is a big hurdle for the first few meets when races seem longer than they really are, but are a non-issue later on.

“For me, training is training, and there doesn’t really seem to be a difference. You are either in shape or you’re not. Once the mental barrier is overcome, it comes down to what kind of shape you’re in,” he says.

AEROBIC APPROACH TO TRAINING

At Michigan, White believes that taking a more aerobic approach to training, especially for mid-distance and distance swimmers, is a logical way to gain long-course fitness.

“The most difficult part of transitioning between the courses is at the end of races and in the last 10 meters of each length. Increasing the overall practice volume and length of each repetition makes the most sense to me,” he says. “Increasing the length of the repetitions also applies to sprinting. After all, 100 meters long course takes seven to eight seconds longer than short course, so essentially, if you are training short course, you should train for a 110-yard or a 220-yard race.”

Bickner observes that short course swimmers when not trained properly tire at the end of the events. Like White, he opts for overdistance.

“We do 125-yard and 250-yard sets to prepare for 100-meter and 200-meter events. We also gear our kick sets for distances equivalent to the time of actual events. So, if a swimmer has a two-minute event, we like the kick intervals to be a distance which will take two minutes in a short course yards pool,” he says.



PICTURED > Bluefish head coach Chuck Batchelor has coached a number of swimmers—including Elizabeth Beisel and Laura Sogar (left)—who have had long course success without the benefits of 50-meter training.

[PHOTO BY STEVE MANHART, ARENA]

Batchelor employs three things to boost long course performance: “At times, I won’t let them push off the far wall. We will do a lot of repeats of 125s rather than 100s. Most significantly, I have swimmers go broken 225s as a way to set goal times for 200 meters.

“Part of the year, twice a week, we rent a 36-meter pool. I have measured out 33-1/3 meters, extended lane lines and strung up used car lot flags. We really enjoy going 33-1/3 meters, and I believe it has helped us both short course and long course,” he says.

PLUSES TO SHORT COURSE TRAINING?

White asserts there are definitely some pluses to the short course approach. “We build at least two short course workouts into every week during long course season. One reason is turns and underwaters. I have always wondered why someone who can kick 15 meters underwater off every wall in a short course 100—or 10 meters off every wall underwater in a 200—suddenly reduces the kick distance dramatically when going long course. You would think the breath control would be easier to do when it was half as frequent. We find that training long course all of the time de-emphasizes the walls and the underwaters,” he says.

“For me, training is training, and there doesn’t really seem to be a difference (between short course and long course). You are either in shape or you’re not. Once the mental barrier is overcome, it comes down to what kind of shape you’re in.”

—Michael Maczuga, head coach, Arizona Marlins

Bickner’s approach is to relegate all sprint sets start-and-turn work to short course while reserving other types of training for the longer pool. Says Maczuga, “Walls are still part of a long course race. Swimmers stay sharper when turns are an everyday routine. One of the dangers in training just long course is that swimmers can become sloppy and train with less intensity.”

Although Bickner has summer long course access, he, like White, concedes that short course training can be done with special accommodations.

This past winter, he found a way to leverage 25-yard training into two long course YMCA national records for Caitlynn Moon. Last summer, Moon, now a Texas A&M freshman, clocked a 16:40.05 in the 1500, putting up 22 mid-race 33s to destroy the previous mark of 16:59.47. Later, she threw down 8:49.29 to win the 800-meter crown. “She definitely did a lot of aerobic training SCY,” he says.

Following is the most difficult set he gave her this summer:

- 10 x 600 on 6:40 (looking for 10 seconds rest on each 600)
- 1-minute rest
- 9 x 300 on 3:30 (looking for 15 seconds rest on each 300)

COACHING IS THE X-FACTOR

“I don’t think pool length is as much of a factor as those programs with long course water would have us believe,” says Maczuga. “I am a believer that coaching is more an art and less science. Kids make it to nationals in many ways. Some do dry-land, some not; some do USRPT, others do conventional training; and then there are the kids who have hopped from program to program.

“Finding a coach who can extract potential and get athletes to the next level seems to be the X-factor more so than the measure of the course,” he says. ❖

Michael J. Stott is an ASCA Level 5 coach whose Collegiate School (Richmond, Va.) teams have won seven state high school championships.

FREESTYLE STRAIGHT-ARM RECOVERY

BY ROD HAVRILUK

SWIMMING TECHNIQUE MISCONCEPTION:

A common swimming technique misconception is that maintaining a straight arm throughout the recovery improves performance in freestyle. While some swimmers are able to improve performance with a straight-arm recovery, science clearly shows that the improvement is not, in fact, related to the recovery itself. Equally important, there are significant limitations to recovering with a straight arm.

Many people believe that the technique of the fastest swimmers is worth copying, resulting in numerous misconceptions. In reality, even the fastest swimmers have technique limitations, but they offset them with strength and conditioning. The purpose of this series of articles is to address scientifically the technique misconceptions that have become “conventional wisdom,” and to present more effective options.

STRAIGHTENING THE ARM IMPROVES THE PUSH PHASE

This misconception is fueled by the fact that some swimmers do swim faster when they change to a straight-arm recovery. However, the increase in speed is due to an improved push phase and is not related to the arm orientation above the surface. Instead, in the attempt to make the arm straight for the recovery, swimmers benefit by extending the elbow at the end of the push phase.

The advantage of an effective push phase is shown by comparing the Aquanex analysis of the swimmers (see Fig. 1).

A swimmer with an ineffective push phase (left image) is about halfway through his push, and his elbow (yellow arrow) has already broken the surface. Because his hand moves upward with the elbow, he fails to increase his hand force on the push. Consequently, his peak force is only about 30 pounds. In anticipation of a bent-arm

recovery, swimmers often fail to extend the elbow to complete the push.

In comparison, the swimmer in the right image is extending his elbow at the finish of his push

phase. His elbow is still submerged with the arm in a strong position, resulting in a peak force of over 50 pounds.

Since swimmers typically fail to extend the elbow on the push, there is tremendous potential for improvement in this critical technique element. It is not surprising that straightening the arm to achieve a straight-arm recovery would improve performance for many swimmers. However, this is not justification for a straight-arm recovery, as there are serious limitations.

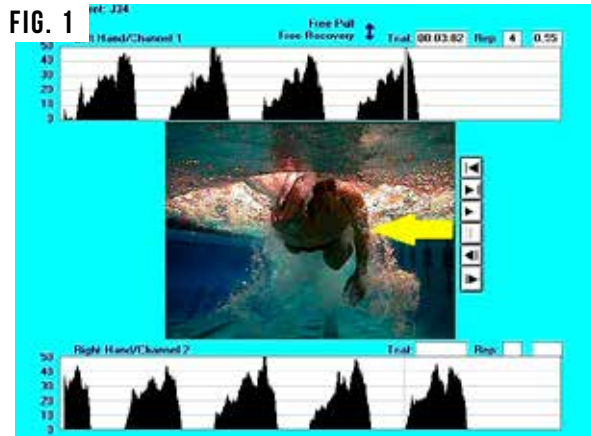
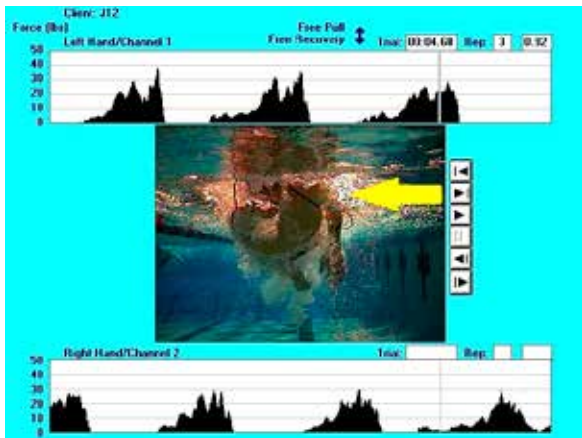


FIG. 1

FIG. 1 > (ABOVE) The left image shows a typical push phase where the elbow (yellow arrow) moves upward more than backward. The right image shows a more effective push phase where the elbow extends to push the hand backward. The vertical gray lines are synchronized with the video image and show that the swimmer on the right is generating about twice as much force as the swimmer on the left.

LIMITATIONS OF A STRAIGHT-ARM RECOVERY

The primary limitations of a straight-arm recovery are wasted time and effort on both the arm entry and exit. When the arm is straight for either the entry or exit, the leverage is very poor, limiting the amount of force that it is possible to generate. Moving a straight arm through water takes excessive time, and needlessly expends energy.

Wasted Time and Effort as the Arm Enters. When the arm is straight during the recovery, it will almost certainly be straight as it enters the water. A straight-arm entry wastes time and generates little force until the swimmer's hand submerges below the shoulder. For example, the swimmer in **Fig. 2** completed her arm entry with her hand above her shoulder. The red shaded area shows that she wasted 2-tenths of a second generating minimal force while she submerged her straight arm below shoulder level.

Wasted time and effort on the arm entry is an almost universal technique limitation, regardless of a swimmer's arm orientation on the recovery. A recent study (Becker & Havriluk, 2014) documented the prevalence of an ineffective arm entry as well as the dramatic difference between males and females.

Wasted Time and Effort as the Arm Exits. A straight-arm recovery can also waste time and effort on the arm exit. If a swimmer straightens the arm below the surface in preparation for a straight-arm recovery, there will be resistance on the arm as it moves upward to the surface. The resistance is particularly noticeable if the palm is facing upward.

A hand paddle provides valuable feedback to the swimmer about the arm position on the exit—whether or not the swimmer has a straight-arm recovery. The resistance on the paddle will be very obvious if the palm faces up. Outwardly rotating the arm—so that the pinky edge of the paddle exits the water first—reduces resistance and also minimizes shoulder stress.

Lateral Body Motion and Shoulder Stress as the Arm Recovers. Depending on how the recovery is performed, there can be additional limitations. For example, Prins (2009) explained that if the straight arm is not recovered in the same vertical plane as the side of the body, the recovery would add lateral motion to the torso. On the other hand, if the arm is recovered in the same vertical plane as the side of the body, and there is not a conscious effort to rotate the arm externally, there would be considerable stress on the shoulder.

OPTIMAL PUSH AND EXIT PHASES

It is possible for a swimmer to have both optimal push and exit phases. An optimal push/exit transition is complicated. As shown in **Fig. 3**, a swimmer must extend the elbow to complete the push and then immediately flex the elbow to begin the exit. Split-second timing is required, especially at racing speed. The advantages are that a swimmer will benefit both from more propulsion and a faster, less-stressful recovery.

Dr. Rod Havriluk is a sports scientist and consultant who specializes in swimming technique instruction and analysis. His unique strategies provide rapid improvement while avoiding injury. He can be reached at the website for Swimming Technology Research (Tallahassee, Fla.): www.SwimmingTechnology.com.

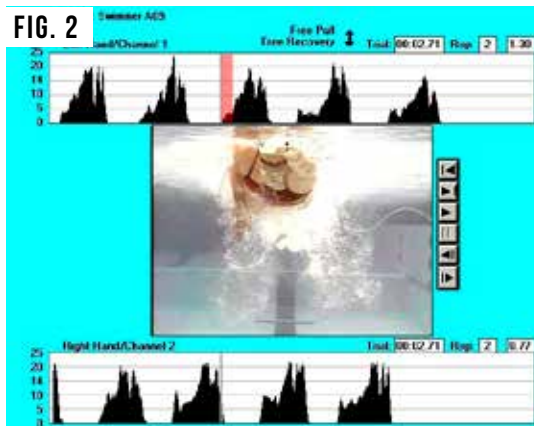
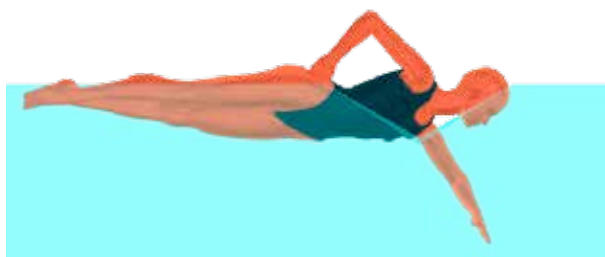


FIG. 2 > (ABOVE) This swimmer's straight left arm entry wastes time and effort. The red shaded area shows that she generates only minimal force for about 2-tenths of a second until her hand is below shoulder level.

FIG. 3 > (BELOW) For an effective technique, the elbow extends to complete the push phase (top image) and then immediately flexes to begin the exit phase (bottom image).



SUMMARY

Straightening the arm at the completion of the push phase for a straight-arm recovery will sometimes improve performance. However, the improvement is due to straightening the arm below the surface and not having it straight on the recovery. There are limitations of a straight-arm recovery, including wasted time and effort on both the arm entry and exit.

In contrast, a swimmer with an optimal technique straightens the arm at the completion of the push phase, and then immediately flexes the elbow to begin the exit phase. While an optimal push/exit transition is complicated and requires split-second timing, it maximizes swimming speed and minimizes both energy expenditure and shoulder stress. ❖



PERSONAL PEAK PERFORMANCE PUZZLE

[PHOTO BY MIKE ARON]

1. In kick sets, I:
 - a) Take it easy, talk to my friends in the next lane and use the time just to relax.
 - b) Try to kick as fast as I can and make my kicking speed as close as possible to my swimming speed.
 - c) Try to find ways of getting the laps done without actually kicking (e.g., pulling on the lane ropes under the water, taking four or five strokes in and out of each turn, etc.)
2. When the alarm goes off at 6 a.m., I:
 - a) Jump out of bed, grab my swim bag that I packed the previous night and rush out the door to workout with a smile on my face.
 - b) Hit the snooze button.
 - c) Tell Mom and Dad that I've caught a rare disease that prohibits me from getting out of bed before 8 a.m.
3. When I get to the pool, I:
 - a) Hide in the locker room, lie on the floor and pretend to be a big pile of used towels.
 - b) Immediately start preparing for a great workout.
 - c) Tell Coach that I can't train too hard today because I've just joined a new religious group that doesn't believe in hard work, exercise or training.
4. I always take a drink bottle to the pool for my workout that is filled with:
 - a) Cool, clean water that I drink regularly throughout my workout.
 - b) Beer
 - c) A mixture of reindeer milk and raw meat.
5. During warm-up, I:
 - a) Find excuses to avoid as much of it as possible.
 - b) Steadily and progressively prepare my body and my mind to train the best I possibly can.
 - c) Make brrrm-brrrm noises under water and imagine I'm a motorboat.
6. When I approach a turn, I:
 - a) Increase my speed, tuck my legs and arms in tightly and turn as fast as I can.
 - b) Slow down, wave to my friends in the other lanes and adjust my goggles and cap.
 - c) Stop and ask Coach, "Did you happen to see that great football game on TV last night?"

FIND OUT JUST HOW GOOD YOU REALLY ARE!

Think you've got what it takes to **be the best**?

Want to **achieve more** than just swimming a few laps for "fun and fitness"?

Are you dreaming of winning gold, gold, **GOLD**?

Then, take the following **20-question quiz**, and let's find out what you're really made of!

7. When I get to the flags at the end of a repeat, I:

- a) Grab onto the flags and swing on them like a gibbon (*aka* a monkey).
- b) Slow down and float into the wall.
- c) Control my breathing, kick with power and accelerate into the wall at maximum speed.

8. During butterfly sets, I:

- a) Try to swim easily with flow and control, breathing every two or three strokes with a strong, powerful, rhythmic kick.
- b) Jump up and down and make loud dolphin sounds.
- c) Run around the pool deck, looking for flowers to pollinate.

9. When we swim breaststroke, I:

- a) Ask if I can get out and go to the bathroom...and sit there for 45 minutes.
- b) Concentrate on my breathing, my rhythm and my body position while kicking backward powerfully with my legs.
- c) Have underwater burping contests with the kid in lane 6.

10. When we swim backstroke, I:

- a) Keep my head still, my arms long and straight, and kick with speed and power.
- b) Look up at the sky and count the birds I see in the air.
- c) Fall asleep.

11. When Coach asks me for my best effort, I:

- a) Give 50 percent of my best effort.
- b) Give 75 percent of my best effort.
- c) Give everything I've got to everything I do.

12. Complete this sentence: "The secret to swimming success is..."

- a) ...good luck.
- b) ...working as hard as I can—every day—in and out of the water, and learning as much as I can as quickly as I can.
- c) ...new goggles.

13. Which of the following statements is false?

- a) Success is a choice: I choose to be successful by how hard I work and how dedicated and commit-

ted I am to my training and my recovery.

- b) Success is all about luck. It doesn't matter how hard you work or how talented you are, you need to be lucky...or you just can't win.
- c) If it is to be, it's up to me: I can achieve anything I want to achieve if I believe in myself, give everything I've got to my training, and never, ever give up.

14. Responsibility for my swimming gear (my goggles, kickboard, pull buoy and other equipment)—i.e., taking care of it, cleaning it, making sure it's always in great condition— is:

- a) My Mom's.
- b) Mine.
- c) My coach's.

15. What I eat—i.e., my diet—is the responsibility of:

- a) Me.
- b) Whoever serves the burgers at McDonalds.
- c) Whoever makes the burritos at Taco Bell.

– continued on 18



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GOLDMINDS – continued from 17

16. When things don't go my way or when I don't swim a PR at a meet, I:
- Blame my coach, my parents, my training partners, the pool and anything else I can think of.
 - Get inspired to work even harder.
 - Sit in a quiet corner and eat 35 pounds of chocolate.
17. If I miss a workout, I:
- Go for a run, do some stretching, spend 10 minutes on my core exercises and work on some flexibility exercises.
 - Stick my head out the window and yell, "YAHOOOOO"!!!
 - Read a book about what to do if you miss a workout.
18. I thank my coach:
- Every day.
 - Every week.
 - Nev-er!!!
19. I think I can:
- Do anything.
 - Do nothing.
 - "What was the question again?"
20. Which of the following is true?
- Ice cream tastes better than broccoli.
 - I am really amazing.
 - I will never stop trying to be all that I can be.
- None of the above.
 - All of the above.
 - Only the first statement.

And what does your score say about you as a swimmer?

0-20: Perhaps Google "knitting classes" in your local area...or look into another sport/game that's right for you—like marbles or dominoes—because you're certainly not a swimmer!

21-30: That's a good start. At least you have a few of the basics right...from here, the only way to go is up.

31-40: You're showing some signs that swimming might be the sport for you. You make many good decisions about your training and your preparation, and you're putting in place some of the habits you'll need to realize your full potential.

41-50: Breakthrough time! A score in this range means you do most things right most of the time, and a major breakthrough and some powerful performances are only a session or two away.

51 and over: Look out, Ledecky! Watch out, Phelps! You're well on the way to becoming an outstanding swimmer and a champion human being! ❖

Wayne Goldsmith is one of the world's leading experts in elite-level swimming and high-performance sport. Be sure to check out his websites at www.wgaquatics.com and www.wgcoaching.com.

Swimming World Magazine has been counting down the top 10 triumphs and tragedies in the history of swimming.

It all started back in April when Chuck Warner presented to our readers, "Mark Spitz: An Unlikely Conqueror." The article told of how Spitz had conquered his critics, his fears and team changes, how he successfully negotiated the challenges of his father and how he went on to win a record seven gold medals at the 1972 Olympics in Munich.

Spitz's fame became an enormous inspiration for young swimmers around the world, and his triumph ranked No. 10 on the magazine's list of triumphs and tragedies.

Since then, Warner has written about historic highs and lows of our sport:

- #9.** Rick DeMont: Robbed of Two Olympic Gold Medals
- #8.** The Carliles: A Love Affair of Swimming
- #7.** The Greatest Olympic Team in History: 1976 U.S. Men
- #6.** Saving Atlanta: The Battle Against Illegal Drugs
- #5.** USA Turns Out Olympic Lights: Boycott of the 1980 Moscow Olympics
- #4.** Michael Phelps Changes the Sport of Swimming
- #3.** World War II of Sacrifice and Honor Slows the Advance of Swimming

Kicking off 2015 in our January and February issues will be *Swimming World's* top two in the final countdown of what we believe to be the top 10 triumphs and tragedies in the history of swimming. You'll want to read these stories. ❖

Check the scoring key below to find out how many points you scored:

| QUESTION | SCORES | | | QUESTION | SCORES | | |
|----------|--------|---|---|----------|--------|---|---|
| # | A | B | C | # | A | B | C |
| 1 | 1 | 3 | 2 | 11 | 1 | 2 | 3 |
| 2 | 3 | 2 | 1 | 12 | 1 | 3 | 2 |
| 3 | 1 | 3 | 2 | 13 | 1 | 3 | 2 |
| 4 | 3 | 2 | 1 | 14 | 2 | 3 | 1 |
| 5 | 2 | 3 | 1 | 15 | 3 | 2 | 1 |
| 6 | 3 | 2 | 1 | 16 | 2 | 3 | 1 |
| 7 | 1 | 2 | 3 | 17 | 3 | 1 | 2 |
| 8 | 3 | 2 | 1 | 18 | 3 | 2 | 1 |
| 9 | 2 | 3 | 1 | 19 | 3 | 2 | 1 |
| 10 | 3 | 2 | 1 | 20 | 2 | 3 | 1 |



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[PHOTO BY DELLY CARR]

KATIE LEDECKY

Female World and American Swimmer of the Year

2014 SWIMMERS OF THE YEAR

BY JASON MARSTELLER

A year ago, Katie Ledecky was knocking on the door of legendary status among women's distance freestyle greats.

After setting world records in both the 800 and 1500 freestyles (8:13.86, 15:36.53), she won *Swimming World's* Female World Swimmer of the Year honor for the first time.

In 2014, she simply kicked down the door.

It started in June at The Woodlands

(First-place votes in parentheses)

Senior Invitational. Swimming in an in-season meet in Shenandoah, Texas, Ledecky, 17, lowered her world records to 8:11.00 and 15:34.23.

Two months later at the U.S. senior nationals, Ledecky added a global standard in the 400 free (3:58.85), joining an elite group of women's swimmers who have held the 400-800-1500 freestyle world records simultaneously: Ilsa Konrads (1960), Debbie Meyer (1967), Shane Gould (1971), Tracey Wickham (1978)

and Janet Evans (1987).

But Ledecky wasn't finished.

As most swimmers battled a cold and rainy outdoor event at the Pan Pacific Championships in Australia, Ledecky seemed unfazed. First, she lowered her 400 free mark to 3:58.37, then lapped Olympic-level talent in the 1500 with a stunning standard of 15:28.36.

How fast are those times? Fast enough to qualify for the 2016 U.S. Olympic Trials...in the *men's events!* ❖

THE
TOP
5

FEMALE WORLD SWIMMER OF THE YEAR

1. KATIE LEDECKY, USA (14)
2. KATINKA HOSSZU, HUNGARY
3. SARAH SJOSTROM, SWEDEN
4. CATE CAMPBELL, AUSTRALIA
5. MIREIA BELMONTE GARCIA, SPAIN

THE
TOP
5

MALE WORLD SWIMMER OF THE YEAR

1. KOSUKE HAGINO, JAPAN (12)
2. ADAM PEATY, GREAT BRITAIN (1)
3. RYOSUKE IRIE, JAPAN
4. GREGORIO PALTRINIERI, ITALY
5. FLORENT MANAUDOU, FRANCE



[PHOTO BY DELLY CARR]

KOSUKE HAGINO

Male World and Pacific Rim Swimmer of the Year

Swimming World Magazine has been naming world swimmers of the year since 1964 when Don Schollander first earned the honor. Martha Randall became the first female to win the award in 1965.

Now, 50 years later, Kosuke Hagino is the first swimmer from Japan—male or female—to be named *Swimming World's* World Swimmer of the Year.

Hagino has made it clear that he wants to become Japan's version of Michael Phelps—by swimming and winning multiple events at major championships.

The 20-year-old certainly accomplished his goal in 2014.

At the Pan Pacific Championships, Hagino captured five medals by winning the 200 and 400 IM and placing second in the 200 and 400 free as well as the 800 free relay.

A month later, he upped the ante by taking home seven medals at the Asian Games: gold in the 200 free, 200-400 IM and 800 free relay plus silver in the 400 free and bronze in the 100 and 200 back. And he became only the second Japanese swimmer to be named the Most Valuable

Player of the entire multi-sport event. The first swimmer from Japan to earn the honor was Kosuke Kitajima in 2002.

Hagino finished the year with top times in both IMs (1:55.33 Asian record and 4:07.75). In fact, he clocked the top five times of the year in the 200 and top three in the 400.

He also ranked second globally in the 200 free (1:45.23) and 200 back (1:54.23) as well as fourth in the 100 back (52.78r) and fifth in the 400 free (3:43.90). His 200 and 400 freestyle times were national records. ❖

(First-place votes in parentheses)

THE
TOP
5

FEMALE AMERICAN SWIMMER OF THE YEAR

1. KATIE LEDECKY, USA (14)
2. MISSY FRANKLIN, USA
3. ELIZABETH BEISEL, USA
- 4T. MAYA DIRADO, USA
- 4T. JESSICA HARDY, USA

THE
TOP
5

MALE PACIFIC RIM SWIMMER OF THE YEAR

1. KOSUKE HAGINO, JAPAN (14)
2. RYOSUKE IRIE, JAPAN
3. THOMAS FRASER-HOLMES, AUS
4. DAIYA SETO, JAPAN
5. SUN YANG, CHINA



PICTURED > Cate Campbell (right) with sister, Bronte Campbell

[PHOTO BY DELLY CARR]

CATE CAMPBELL

Female Pacific Rim Swimmer of the Year

Australia's Cate Campbell continued her dominance in sprint freestyle to win *Swimming World's* Female Pacific Rim Swimmer of the Year award for the second straight year.

The 22-year-old began her championship campaign in July at the Commonwealth Games by leading a 1-2 finish in the 100 free with her younger sister, Bronte, 20. Cate finished the meet with three gold medals (two relays) and a silver medal in the 50 free.

A month later at the Pan Pacific

Championships, she added four gold medals, sweeping the 50 and 100 free-styles—with Bronte again finishing right behind her—and swimming on two winning relays.

Campbell finished the season with the world's top times in both the 50 and 100. Her Commonwealth record of 23.96 in the 50 actually tied England's Fran Halsall for the top spot. That time also tied for the third fastest 50 free all-time and was the fastest ever in a textile suit.

In addition to turning in three of the

top five 50 times in 2014, Campbell also swam the year's top five 100 times. Her fastest was a 52.62 during prelims at Pan Pacs.

Australia had won the women's Pacific Rim award 14 straight years before China interrupted the streak with Ye Shiwen's victories in 2011 and 2012. Besides Ye and Campbell, only three other swimmers have won back-to-back titles: Australians Susie O'Neill (1995, 1998-2000), Petria Thomas (2001-02) and Leisel Jones (2003-05-06). ❖

(First-place votes in parentheses)

THE TOP 5

FEMALE PACIFIC RIM SWIMMER OF THE YEAR

1. CATE CAMPBELL, AUSTRALIA (14)
2. EMILY SEEBOHM, AUSTRALIA
3. YE SHIWEN, CHINA
4. BELINDA HOCKING, AUSTRALIA
5. LAUREN BOYLE, NEW ZEALAND

When *Swimming World* first presented the American Swimmer of the Year award in 1980, it was for the best swimmer in the United States. By 1999, the award became a regional honor, with the magazine making its selection from swimmers throughout the Americas: North, Central and South.

Still, the USA continued to win...until now.

Swimming World's 14-person international panel of voters selected Canada's Ryan Cochrane as the first non-U.S. swimmer to be named its Male American Swimmer of the Year. But there's a catch: Cochrane tied the USA's Tyler Clary for the honor, making them Co-Swimmers of the Year!

Cochrane, who turned 26 in October, won gold medals in the 400 and 1500 free at the Commonwealth Games, then claimed gold in the 800 and silver in the 1500 at the Pan Pacific Championships. He finished the year ranked No. 1 in the 1500 (14:44.03), third in the 400 (3:43.46



PICTURED > Ryan Cochrane

[PHOTO BY DELLY CARR]

RYAN COCHRANE and TYLER CLARY

Male American Co-Swimmers of the Year

national record) and fifth in the 800 (7:50.62 split).

Clary, 25, moved training bases this year from Club Wolverine (Mich.) to SwimMAC (N.C.) to focus not only on his swimming, but on his burgeoning auto racing career as well. At Pan Pacs, he won the 200 back and finished second in the 400 IM and third in the 200 fly. He had four times ranked among the world's top 10—400 IM (second, 4:09.03), 200 back (third, 1:54.73), 200 fly (eighth, 1:55.42) and 200 IM (tie for 10th, 1:57.94). ❖



PICTURED > Tyler Clary

[PHOTO BY DELLY CARR]

(First-place votes in parentheses)

THE TOP 5

MALE AMERICAN SWIMMER OF THE YEAR

- 1T. RYAN COCHRANE, CANADA (5)
- 1T. TYLER CLARY, USA (2)
3. MICHAEL PHELPS, USA (5)
4. RYAN LOCHTE, USA (1)
5. BRUNO FRATUS, BRAZIL (1)



[PHOTO BY JOAO MARC BOSCH]

KATINKA HOSSZU

Female European Swimmer of the Year

If not for Katie Ledecky's earth-shattering swims in distance freestyle, Katinika Hosszu definitely would have had the credentials to win World Swimmer of the Year honors. Instead, she finished second, but repeated as *Swimming World's* Female European Swimmer of the Year.

She's now on track to join Kristina Egerszegi (1990-92), Inge de Bruijn (1999-2001) and Federica Pellegrini (2009-11) as three-peat winners.

This summer, she won six medals at the European Championships, including

gold in the 100 back and both IMs. She added silver in the 200 free and bronze in the 200 fly and 800 free relay.

Hosszu, 25, ranked among the top 10 in the world in six events: 200 IM (first, 2:08.11), 400 IM (second, 4:31.03), 100 back (third, 59.36 national record), 100 free (ninth, 53.64 national record), 200 fly (tie for ninth, 2:07.28) and 200 free (10th, 1:56.30 national record).

As successful as she was in long course, she was even better in short course.

Known as the Iron Lady for her overloaded event schedules that often see her swimming every event at various stops on the FINA World Cup circuit, Hosszu broke five short course world records this year: 100 IM (57.25, 56.86), 200 IM (2:02.61, 2:02.13) and 400 IM (4:20.83).

She also captured her third straight victory in the FINA World Cup tour, adding to her record total of prize money. In the last three years, Hosszu has earned well over \$1 million (USD). ❖

(First-place votes in parentheses)

THE
TOP
5

FEMALE EUROPEAN SWIMMER OF THE YEAR

1. KATINKA HOSSZU, HUNGARY (9)
2. SARAH SJOSTROM, SWEDEN (5)
3. MIREIA BELMONTE GARCIA, SPAIN
4. JAZMIN CARLIN, GREAT BRITAIN
- 5T. RIKKE MOELLER PEDERSEN, DENMARK
- 5T. RUTA MEILUTYTE, LITHUANIA



ADAM PEATY

Male European Swimmer of the Year

[PHOTO BY ALEX WHITEHEAD, SWPIX.COM]

There were several men who won multiple gold medals at this summer's European Championships, but only one who set a world record. That was Great Britain's Adam Peaty, who clocked 26.62 in the 50 breast in the second semifinal heat.

That seemed enough to sway *Swimming World's* international panel of voters to name Peaty as this year's Male European Swimmer of the Year.

Peaty, who will turn 20 later this month, went on to win the event at

Europeans in 27.00. He also added the year's top time in the world—and fifth all-time—in the 100 breast (58.68) on his way to collecting four gold medals (he also was a part of the winning men's and mixed 400 medley relays.)

A month earlier, swimming for England at the Commonwealth Games, Peaty won the 100 breast and placed second in the 50 breast to South Africa's Cameron van der Burgh. Peaty took a second gold medal in the 400 medley relay.

Peaty is just the third swimmer from

Great Britain to be named *Swimming World's* European Swimmer of the Year.

Rebecca Adlington topped the voting in 2008 on the women's side after winning a gold medal in the 800 free at the 2008 Beijing Olympics.

Meanwhile, Adrian Moorhouse took top male European honors 24 years ago back in 1990.

That year, the British breaststroker dominated the stroke and tied his world record of 1:01.49 in the 100 meter breast twice! ❖

(First-place votes in parentheses)

THE TOP 5

MALE EUROPEAN SWIMMER OF THE YEAR

1. ADAM PEATY, GREAT BRITAIN (12)
2. FLORENT MANAUDOU, FRANCE (1)
3. GREGORIO PALTRINIERI, ITALY (1)
4. ROSS MURDOCH, GREAT BRITAIN
5. DANIEL GYURTA, HUNGARY



[PHOTO BY JOAO MARC BOSCH]

KARIN PRINSLOO

Female African Swimmer of the Year

South Africa's Karin Prinsloo captured *Swimming World's* Female African Swimmer of the Year award for the second year in a row.

The African Championships, scheduled for Sept. 22-28 in Dakar, Senegal, were postponed indefinitely due to the Ebola virus outbreak in Africa, but Prinsloo's performances earlier in the year dominated the region. Her times ranked No. 1 among African women in six events: 50-100-200-400 free and 100-200 back.

At the end of January, she competed in Perth, Australia at the BHP Billiton Aquatic Super Series and clocked her fastest times of the year in the 100 and 400 free (54.48, 4:07.92).

At the South African nationals in April, her top performance came in the 200 back (2:10.32).

Then in June, competing in the Mare Nostrum series, she turned in the region's best times in the 50 and 200 free at Monaco (25.60, 1:57.17) and in the 100 back at Barcelona (1:00.78).

All of her region-leading swims except the 50 ranked among the top 35 in the world.

Her best showing was in the 200 free (No. 19).

Prinsloo, who turned 25 on Dec. 2, also competed in this summer's Commonwealth Games in Scotland.

Although she didn't swim any personal best times, she placed eighth in the 200 free and competed on South Africa's 400 medley and 800 freestyle relays that finished fifth and sixth. ❖

(First-place votes in parentheses)

THE
TOP
5

FEMALE AFRICAN SWIMMER OF THE YEAR

1. KARIN PRINSLOO, SOUTH AFRICA (13)
2. TARA-LYNN NICHOLAS, SOUTH AFRICA
3. MICHELLE WEBER, SOUTH AFRICA
4. JESSICA PENGELLY, SOUTH AFRICA
5. RENE WARNES, SOUTH AFRICA



[PHOTO BY ALEXANDRA PANAGIOTIDOU, FINA/QATAR SWIMMING]

CHAD LE CLOS

Male African Swimmer of the Year

Chad le Clos joined South African compatriots Roland Schoeman (2004-07) and Cameron van der Burgh (2009-11) as three-time winners of *Swimming World's* Male African Swimmer of the Year award.

If le Clos wins again in 2015, he'll join Schoeman as the only four-time victor.

The 22-year-old dominated the African region in 2014, ranking No. 1 in five events, including the 100 free, 200 back, 100 and 200 fly as well as the 200 individual medley.

Le Clos also had an amazing run at the Commonwealth Games in Scotland, winning seven medals.

Individually, he won the 100 and 200 fly (51.29, 1:55.07) and placed third in the 50 fly (23.36) and 200 IM (1:58.85).

He also was a part of three medal-winning relays: 400 free (silver) plus the 400 medley and 800 free (bronze). With the five medals he won four years ago in Delhi, le Clos now has 12 Commonwealth Games medals: four gold, two silver and six bronze.

Le Clos finished the year with three top 10 world rankings: a tie for second in the 100 fly (51.29), second in the 200 fly (1:54.56) and a tie for 10th in the 200 IM (1:57.94).

His 200 fly and 200 IM times were swum in April at the South African nationals.

This past year was also very profitable for le Clos, as he won the grand prize of \$100,000 (USD) for the third time in the last four years as the men's overall champion of the FINA World Cup tour. ❖

(First-place votes in parentheses)

THE TOP 5

MALE AFRICAN SWIMMER OF THE YEAR

1. CHAD LE CLOS, SOUTH AFRICA (14)
2. CAMERON VAN DER BURGH, SOUTH AFRICA
3. SEBASTIAN ROUSSEAU, SOUTH AFRICA
4. ROLAND SCHOEMAN, SOUTH AFRICA
5. DEVON BROWN, SOUTH AFRICA

10 BEST PERFORMANCES

BY JEFF COMMINGS

KATIE LEDECKY CHOPS SIX SECONDS OFF 1500 FREESTYLE WORLD RECORD

[PHOTO BY DELLY CARR]

After 700 meters, it looked like Katie Ledecky was running out of steam. The likelihood of her breaking her own world record in the 1500 free (15:34.23, 6-19-14, at Shenandoah) on the final day of the Pan Pacific Championships looked slim. But something happened 100 meters later—as if Ledecky found a new energy source within herself. Soon, she was a few tenths under record pace and getting faster as the race progressed. Her time of 15:28.36 is light years ahead of what seemed possible at the beginning of 2014, and it took so much out of Ledecky that she had almost no energy for her typical end-of-race celebration.



SARAH SJOSTROM HOLDS BREATH, BREAKS 50 FLY WORLD RECORD

[PHOTO BY JOAO MARC BOSCH]

The fastest time swum in the women's long course 50 butterfly this year would have ranked ninth in the 50 freestyle event. That's an insane thought to everyone but Sweden's Sarah Sjostrom, who posted the world record of 24.43 in the 50 fly—64-hundredths faster than the previous mark from 2009—at the Swedish nationals in July. Sjostrom didn't take a breath for the entire race—a rarity for female sprinters, but it appeared to be the key to her record-shattering performance.



KATIE LEDECKY BREAKS 4:00 BARRI- ER IN 400 FREE TWICE

[PHOTO BY DELLY CARR]

After Katie Ledecky swam a 3:59.82 in the 400 free at last year's World Championships, everyone figured Federica Pellegrini's world record (3:59.15, 2009) would not survive much longer. Putting in a blistering opening 200 meters at the U.S. nationals, Ledecky took her own record down with a 3:58.86. Using a different strategy at the Pan Pacific Championships, Ledecky held back just a bit in the first 300 before putting together a 59.63 final 100 to post a 3:58.37 just two weeks after her first record-breaking swim. Might we see a 3:57 in 2015?



OF 2014

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NING ZETAO BOOSTS CHINA'S SPRINT PROGRAM WITH SECOND- RANKED 100 FREE AT ASIAN GAMES

[PHOTO BY BESTSWIMMING]

Before this year, the thought of China ranking in the top three in the world in the men's 100 free was a nice pipe dream. Ning Zetao's 47.65 at the Chinese nationals put him in a tie for second in the world this year, making him a serious medal threat for next year's World Championships. A Chinese man has really never made such a global impact in sprint freestyle as Ning, but this 21-year-old appears on the cusp of making a major breakthrough.



4

ADAM PEATY BREAKS 50 BREAST WORLD RECORD

[PHOTO BY ANDREA MARISI]

Adam Peaty had the meet of his life at the Commonwealth Games, winning the 100 breast and taking silver in the 50 breast. One month later, he broke Cameron van der Burgh's world record in the 50 breast (26.67, 2009) with a 26.62 at the European Championships. What's mind-boggling about the swim is that Peaty didn't have the best finish, gliding into the wall for what seemed like an eternity. Peaty has improved with each meet in 2014, breaking 1:00 with ease in-season, then letting loose at the Commonwealth Games and European Championships. Great Britain has a great history of breaststroke success, and Peaty's on track to keep the tradition going.



5

KEVIN CORDES CONTINUES TO LOWER 200 YARD BREAST AMERICAN RECORD

[PHOTO BY PETER H. BICK]

Kevin Cordes is starting to make 1:48 in the 200 yard breaststroke look easy. A year after his mind-blowing 1:48.68 at the 2013 NCAA Championships, Cordes pushed the envelope a bit further with a 1:48.66. No one has ever been within two seconds of him—a stunning development that will cement Cordes in the annals of history's greatest U.S. college swimmers. And he has one more NCAA's this March, giving him a final chance to drop the record even further.



6

— continued on 30

7



KATINKA HOSSZU CONTINUES TO REIGN IN SHORT COURSE INDIVIDUAL MEDLEYS

The Iron Lady from Hungary had her sights set on this year's FINA World Cup, taking down her own short course meters world records in all three individual medleys a total of five times in two weeks. Her records now stand at 57.25 for the 100, 2:02.61 for the 200 and 4:20.83 in the 400. The dominance she has shown in the World Cup should give her confidence for next summer's World Championships, where she'll look to defend her medley titles.

[PHOTO BY QATAR SWIMMING]

TOM SHIELDS TAKES 200 FLY TITLE AT USA SWIMMING NATIONALS

[PHOTO BY GRIFFIN SCOTT]

Tom Shields' long course swimming hadn't caught up to his brilliance in the short course pool until he dove in for the 200 fly final at the U.S. nationals. Swimming in lane two and viewed as an outside shot to make the Pan Pacs team in the event, Shields used his underwater kicking prowess to keep rivals at bay. Previously, he had never been able to seal the deal in the final 100, but he put in a strong third 50 meters to hold off Tyler Clary for his first national title. It was also the event that got him selected for his first long course World Championships squad.



8

[PHOTO BY GIAN MATTIA DALBERTO/LAPRESSE]



DANIEL GYURTA TAKES DOWN HIS OWN RUBBER SUIT 200 BREAST SHORT COURSE WORLD RECORD

Daniel Gyurta skipped the 200 breast at the long course European Championships, with his coach saying the Olympic champion needed a break from the event. Apparently just one meet was enough for Gyurta, as he raced the short course meters version of his pet event at the World Cup series. In Dubai, he broke his own world record of 2:00.67 with a 2:00.48. Gyurta was 3-tenths off pace through 150 meters, but turned on his patented late charge to take his record closer to the 2:00 barrier.

CHASE KALISZ DESTROYS AMERICAN RECORD IN 400 YARD IM

[PHOTO BY PETER H. BICK]

It was inevitable, but no less amazing. Chase Kalisz was not only the odds-on favorite to win the 400 IM at the 2014 NCAA Championships, but he also was viewed as having a shot at Tyler Clary's five-year-old American record (3:35.98). Kalisz's key to posting a 3:34.50 was his much-improved backstroke leg and an astounding 59.41 breaststroke split that put everyone else more than a body length behind. ❖



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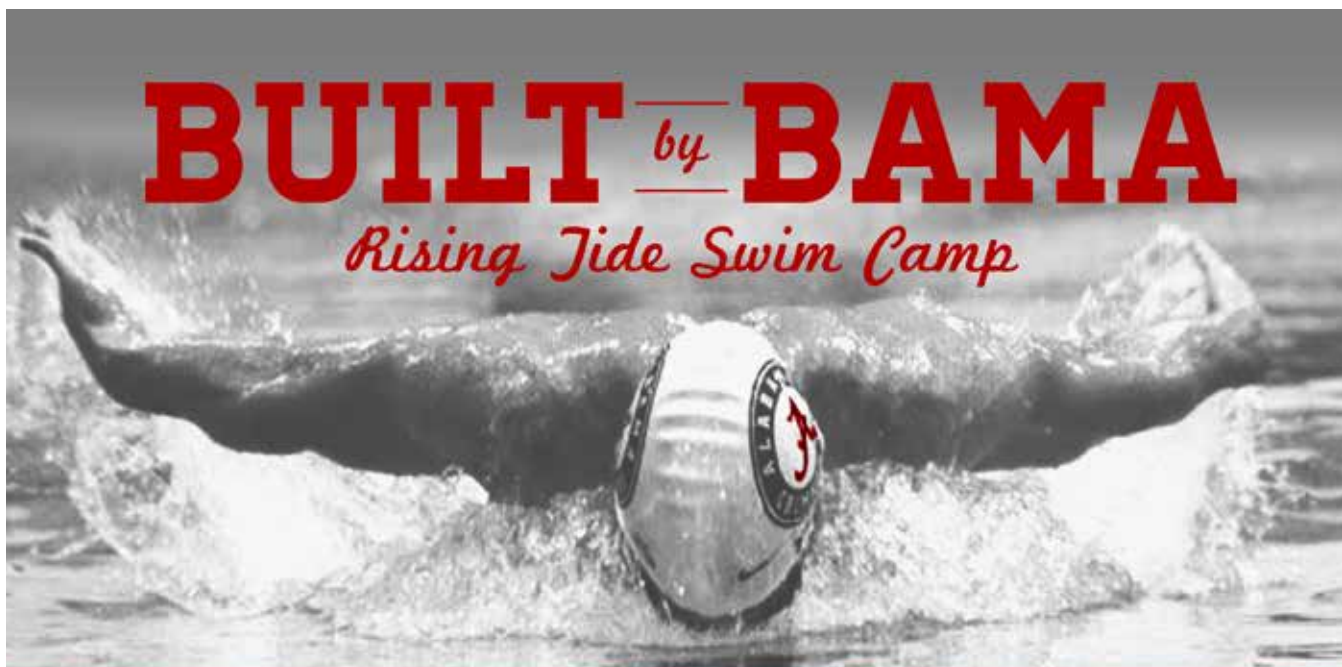
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• • •

In this month's nutrition column, *Swimming World* continues to provide flavorful, easy recipes for athletes. This month's recipe comes from the "Racing Weight Cookbook," a practical cookbook that makes it simple to dial in the right mix of carbs, fat and protein that will satisfy your appetite with high-quality, well-balanced meals.

Try out this sample recipe (at right). Substituting sweet potatoes for white potatoes boosts nutrition content, and this stew also has more veggies than many beef stew recipes. It has a great nutrient profile for a post-workout meal. ❖



Republished with permission of VeloPress from "Racing Weight Cookbook: Lean, Light Recipes for Athletes."



BEEF STEW WITH SWEET POTATOES

INGREDIENTS:

- 2 pounds lean beef, cubed
 - 1-1/2 cups beef broth
 - 14 ounces frozen pearl onions, peeled
 - 6 carrots, peeled and cut into 1-inch chunks
 - 8 ounces cremini mushrooms, quartered
 - 1 large (12 oz.) sweet potato, peeled and cubed
 - 3 cloves garlic, minced
 - 1 tablespoon Worcestershire sauce
 - 2 teaspoons paprika
 - 1/2 teaspoon seasoned salt
 - 1/2 teaspoon ground black pepper
 - 2/3 cup frozen peas
- (Double the sweet potato—to 1-1/2 pounds—and use 1 cup of peas for 69 g total carbohydrate.)

DIRECTIONS:

- Combine all ingredients except peas in a slow cooker and stir. Cover and cook on low heat for 6 hours. Stir in peas when stew is done (the hot stew will cook them).

PER SERVING:

319 calories, 6 g fat, 29 g total carbohydrate, 6 g dietary fiber, 37 g protein

20

MINUTES

+6

HOURS
COOK TIME

6

SERVINGS



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JOHN BITTER

BY MICHAEL J. STOTT

John Bitter has brought to Santa Clara a business mentality, more swimmers, increased programs, plans for a new facility and a potential new home for the International Swimming Hall of Fame.

Q. SWIMMING WORLD: *Why did you transfer after your sophomore year from Washington University in St. Louis to the University of Arizona?*

A. COACH JOHN BITTER: I started year-round swimming late, and getting to train with Coach Jim Tynan and his stable of fast swimmers at Sugar Creek Swim Club in St. Louis raised my competitive desire. I took a year off to train and then basically took a copy of *Swimming World*, looked at the top 10 schools in Division I and figured out who did not have a breastroker. I was only a breastroker, and Arizona was losing their best, so I applied, walked on, became team captain and literally learned to count the mile as my ticket to NCAAAs.

SW: *What did you learn from Dick Jochums?*

JB: I learned what to do, what not to do, where to ask and how to be a partner in the swimmer's journey. It is not your dream, it is theirs—but you have a responsibility to hold them accountable to what they say they want.

SW: *Any other significant influences?*

JB: Besides Dick—who has been like a second father to me—my own father, a surgeon, continues to be a large presence. He and my mother were pragmatists and instilled in me the importance of giving back. Through Dick, I was exposed to many great coaches (such as) Skip Kenney, Randy Reese, Eddie Reese, Gregg Troy, Teri McKeever, Don Gambriel, Mark Schubert and the late George Haines, to name a few. My first coaches, Jim Tynan, Kevin DeForrest, Steve Mateer and Martha Tillman, were influential as well.

SW: *You were instrumental in Tom Wilkins' development at SCSC.*

JB: Tom joined us in 1996, and I was his first coach. Dick trusted me and relied upon me to make program calls that would benefit us both. Tom won the Kiphuth Award that summer, and that



[PHOTO PROVIDED BY SANTA CLARA SWIM CLUB]

Coach John Bitter

CEO/Head Coach
Santa Clara Swim Club
Santa Clara, California

- University of Arizona, B.A., history
- 2006: head coach, Santa Clara Swim Club
- 2009: CEO, Santa Clara Swim Club
- Produced numerous national, junior and Olympic qualifiers
- Served on three National Select Camp, World Cup, Junior Pan Pacs and Zone Development Camp staffs
- Currently vice president of program development for USA Swimming

Prior to Santa Clara, Bitter swam and coached at the Sugar Creek Swim Club in St. Louis. However, it was his partnership at Arizona and then at Santa Clara with Dick Jochums that launched his career. While at SCSC, Bitter has more than doubled Santa Clara's competitive team membership, increased its program offerings and introduced a business structure that is producing a facilities expansion.

increased his trust level in our program. Dick became his primary coach, and I continued to interpret, listen, help, encourage and support Tom. During this time, Dick and I, through Tom, were able to build some great teams that went on to win combined and men's titles at summer nationals. In fact, we ended up taking 21 swimmers to 2000 Olympic Trials.

Tom is truly a special guy and one of the hardest working swimmers I have ever seen. He just loved to work. He taught me a lot about being a coach. I later became Tom's roommate and best man at his wedding.

SW: *You have been a four-time coach of the national junior team. Any teachable moments?*

JB: Many. For my swimmers, it has always been a ride of both ups and downs. This past year with Aidan Bums was no excep-

tion. He went to juniors last winter, and for two days, he performed like a first-time qualifier. The last day, he dropped five seconds in the 200 back and finished fourth. In April, we went to Clearwater, and almost every swim was remarkable. His 8:51 in the 1000 followed by his 1:45.3 200 IM within 30 minutes was very impressive. Three weeks prior to summer nationals, he went a 4:08 400 free.

The time from Clovis to nationals became not only a coaching moment, but a managing moment. I had no idea what I was going to get at nationals, so when he made the Junior Pan Pacs team and then went to Maui and earned a silver in the 400 free with a personal best of 3:52.5, I was very proud of him and his ability to ride those emotional swings.

– continued on 42

Q&A – continued from 41

SW: What accounts for the new energy and tremendous SCSC growth since 2006?

JB: After Dick retired, I spent a good amount of time building the SCSC business model in areas beyond just senior competitive swimming. We concentrated on constructing an age group

program that produced more home-grown talent. We redefined and re-branded our developmental program and made it more diverse. We also added a women's high school water polo program and expanded our learn-to-swim activities. While we have been very proactive in reshaping the club, I still have greater visions for the future.

SW: What is the impetus for SCSC's huge lesson business?

JB: Dick realized that SCSC needed to have a source of income that could be counted on to help rebuild the brand. He had been successful as a club coach running successful lesson programs in Washington and northern California, so we applied for and received a grant to

HOW THEY TRAIN:

BY MICHAEL J. STOTT

For University of Georgia-bound Aidan Burns, 17, a glance at his recent time progressions may be a harbinger of things to come. "Making the World Junior team in 2013 was important, but earning a silver (400 meter free, 3:53.10) this summer at Junior Pan Pacs gave him a taste of what it means to medal for Team USA," says his coach, John Bitter.

A distance freestyler by nature (2013-14 California Central Coast Section 200 and 500 yard freestyle champion for Bellarmine College Prep), Burns has shown remarkable versatility in backstroke and IMs as well.

"Aidan is very internally driven and a true student of the sport," says Bitter. "He is highly coachable and is always asking questions of himself, the coaches and his teammates. He has an excellent understanding of pace and his stroke—when it feels on, when it feels off, and how those feelings relate to his performance. He also is willing to work on his weaknesses in order to improve."

Bitter praises Burns for challenging his teammates as much as he challenges himself. "Aidan doesn't make excuses, and he expects that he and the coaches will bring their best to practice. He has set the bar high for himself and is not afraid to fail. He views every (meet and training session) as an opportunity to learn and to find ways to be better," says Bitter.

"We have spent a lot of time this past year making corrections on his foot speed in all strokes and making his kick better in non-freestyle strokes.

We are working on getting off the block and holding his velocity-to-breakout better via constantly stressing underwater kick and turnover rate improvement. By controlling his turnover rate and building pace, Aidan is learning not to overswim the front half of his races," says his coach.

AIDAN BURNS



[PHOTO PROVIDED BY SANTA CLARA SWIM CLUB]

PROGRESSION OF TIMES

| SCY | 2010 | 2011 | 2012 | 2013 | 2014 |
|-------------|---------|---------|---------|---------|---------|
| 500 Yd Free | 4:58.96 | 4:36.40 | 4:25.70 | 4:22.53 | 4:17.97 |
| 200 Yd IM | 2:05.96 | 2:01.57 | 1:55.97 | 1:53.57 | 1:45.36 |
| 200 M Free | 2:07.96 | 1:59.22 | 1:55.96 | 1:52.55 | 1:50.48 |
| 400 M Free | 4:28.94 | 4:11.55 | 4:02.65 | 3:53.51 | 3:52.51 |

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- **12 to 16 x 400** on 5:00 (one minute extra rest after each 4 - best average each round of 4)

Coach Bitter: "Here, Burns started the first round in the 4:30s. On the second round, he was between 4:23 and 4:28. The third round, he started at 4:23 and finished at 4:18. On the last round, he made it to 4:10 on the 16th 400."

FAVORITE PULL

- **Timed 2000** - long or short course

Coach Bitter: "Burns' best time is 21 minutes-low, using a buoy and 4-inch tubing around the ankles."

SAMPLE SET

- **Main Set:**

10x the following:

[1 x 200 on 2:30 (even split - goal to hold 3rd and 4th 100 of 500)

[1 x 100 on 2:00 (recovery)

Coach Bitter: "We did this set with techsuits. We started at 1:48 and went to 1:45s." ❖



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purchase a bubble for the training pool at the ISC. Dick found a LTS manager in 2001, and the program took off. In 2010, we rebranded the program and began looking for other expansion opportunities.

Today, we run summer lessons for the city as well as offer adaptive lessons, accelerated class programs and specific skill programs. My LTS director, Shannon Gomez, and her staff have done excellent work in this regard.

SW: How does the BELLfit program advance the SCSC mission?

JB: Bellfit is a way to give junior high school students a chance to get fit through swimming and maybe get interested in their high school swim teams.

SW: Why start a pool management company?

JB: To fulfill a marketplace need. This is a growth area for us and will be expanded in the coming years.

SW: SCSC caters to open water and triathletes.

JB: We do a good job of administering to these communities. We have tiered

our Masters program, which has allowed many new triathletes to enhance their swimming IQ. Two Masters tiers are more geared toward teaching strokes rather than just concentrating on volume.

“It is not your dream, it is theirs— but you have a responsibility to hold them accountable to what they say they want.”

*—John Bitter, head coach,
Santa Clara Swim Club*

SW: What is the value of the Santa Clara Invitational for your younger swimmers?

JB: George Haines created it to show the Bay Area and SCSC the best in swimming. It is a fantastic opportunity for our swim-

mers to see the best and what they do to swim fast. The swimmers who come take time to reach out to our younger swimmers who work the meet.

SW: Multi-time Masters world record holder Laura Val credits you for helping her swimming.

JB: That is very kind of Laura to say. She has been a great supporter since I first came here in 1995. Early on, I was fortunate to coach her, and I saw just how much she cared about the sport and the lessons learned from it.

SW: How are plans coming along for the new swim complex in 2016, and what's the status of the possible ISHOF move to Santa Clara?

JB: Things are moving in the right direction. The leadership of the City of Santa Clara is very proactive toward youth athletics and swimming, and it supports what we are trying to do. Something great will be happening here soon, but I want the right people to announce it. ❖

Michael J. Stott is an ASCA Level 5 coach whose Collegiate School (Richmond, Va.) teams have won seven state high school championships.

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UP & COMERS

AGE GROUP SWIMMER OF THE MONTH

BY JASON MARSTELLER

CARISSA ARMIJO



[PHOTO PROVIDED BY DARLENE ARMIJO]

WHAT WAS THE TOUGHEST PART ABOUT MOVING SO OFTEN?

"The biggest challenge I've had to face was adjusting to swimming in the U.S. We moved back in February, so I've just been adjusting from short course meters to yards, along with the different swimming terminology and format of swim meets here."

IT LOOKS LIKE YOU HAVE A BRIGHT FUTURE. WHAT ARE YOU LOOKING FORWARD TO THIS YEAR?

"I am looking forward to becoming mentally and physically stronger. I want to swim smarter and get a few summer junior national cuts...and enjoy my first year of high school swimming at Hardin Valley Academy. Go Hawks!"

WHAT DO YOU LIKE TO DO AWAY FROM TRAINING?

"I enjoy watching movies and spending time with my friends. I like taking pictures of my brother's soccer games. Also, I volunteer at the Emerald Youth Foundation, teaching kids to swim."

WHO DO YOU IDOLIZE IN THE SPORT...AND WHY?

"My swimming idols are my teammates and coaches because they push, challenge, support and encourage me to become a better swimmer. Shout out to Tennessee Aquatics and the City of Sunderland ASC in the U.K."

Carissa Armijo, 14, trains at Tennessee Aquatics with Coach Marshall Goldman. Armijo has a bit of a different point of view on the sport, having swum on three continents!

"Carissa is relatively new to the sport, so her natural feel for the water is pretty remarkable," Goldman told *Swimming World*. "She is constantly wanting to understand the process and feel of swimming. She has an incredible determination in the water, and she never wants to lose."

Armijo learned to swim in India, having grown up overseas. Her family then moved to England, where she first began swimming competitively at 11 with the City of Sunderland ASC. Her family then relocated to the U.S. last February, and she's been putting on a show with Tennessee Aquatics ever since.

This summer, she was the high-point winner for her age group at Southeasterns, and she's already a junior national qualifier in the 200 fly and 400 IM.

"Carissa also has a quirky, fiery personality," Goldman says. "She is always joking around and playful, which keeps her pretty loose at practice. Oftentimes this summer, she would stay in the water after practice, playing with her friends. She also volunteered to coach at the inner city recreational team, and was a great teacher to the young kids." ❖

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2016 U.S. OLYMPIC TRIALS CUTS

BY JASON MARSTELLER

MATT KREDICH

Head Coach, University of Tennessee

PHOTO PROVIDED BY
UNIVERSITY OF TENNESSEE



"I think they're not too fast, not too slow. In fact they are *juuust right!*—something makes me want to eat porridge and take a nap. I think that USA Swimming did a great job in putting these together in order to create a meet size that will be a great balance between a big-enough field that they fill the stadium, and an elite meet that allows our future Olympians to have adequate space and time with which to prepare. We'll see in a couple of years if they in fact hit their target. Coaches and swimmers in this country have always found a way to rise to the occasion, and this cycle will be no different."

In September, USA Swimming released the 2016 U.S. Olympic Trials cuts, which can also be found at <http://www.swimmingworldmagazine.com/news/2016-u-s-olympic-swimming-trials-cuts/>. In a *Swimming World* online poll sponsored by StretchCordz, 49 percent thought the cuts were just right, 35 percent felt they were too slow, and 16 percent said they were too fast. Here's what a few top coaches think about the cuts:

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TODD SMITH
Tampa Toros
2014 DISTRICT CHAMPIONS
200 yd Freestyle Relay - Southwest District



Lauren Bean
Tupelo High School
2014 STATE CHAMPIONS
200 yd Medley Relay - Mississippi



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RON TURNER

Head Coach, Blue Wave Swim Team



[PHOTO PROVIDED BY BLUE WAVE SWIM TEAM]

"I think the Olympic Trials should be the meet where the very best in the country compete for a coveted berth on the team, and that the environ-

ment should be one where participants can get in, compete and rest for finals. With a meet of 1,400 swimmers (the goal amount of participants), I think it takes away from that environment a bit. I do get the need of exposing up-and-coming swimmers to the competition, and bringing in the revenue dollars to make it a success. But, ultimately, I feel

that making the cuts a little faster would ensure an overall better competition for our USA athletes."

DAN FLACK

Head Coach, Baylor School



[PHOTO PROVIDED BY BAYLOR SCHOOL]

"I think the adjustments are spot-on—especially for the boys. Guys' swimming has gotten so much faster—the overall meet is an enormous celebra-

tion for our nation's swimming and a huge carrot out there for every single program to work smart and diligently, and give an athlete a shot at making the Olympic team."

TODD SCHMITZ

Head Coach, Colorado Stars



[PHOTO BY PETER H. BICK]

"I think the 2016 Olympic Trials cuts are truly a balance of the business side of continuing to grow our sport and the performance side of our sport wanting to ensure the highest quality meet possible so we pick the best 2016 Olympic team. I think people could argue almost all cuts being too fast or too slow, depending on how you think. I think the meet will end up being about 1,600 swimmers, and it will be the perfect size and still have plenty of people in the seats." ❖

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[PHOTO BY TAKUMI SAKAMOTO, PSC ASSISTANT MASTERS COACH]

PICTURED > Ain't morning workouts grand? Masters swimmers from the Phoenix Swim Club were greeted with this sunrise over Camelback Mountain recently when they showed up at the Phoenix Country Day Aquatic Center in Arizona.