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Michael Andrew turned pro at the age of 14. He embraced the non-traditional Ultra-Short Race-Pace Training. Despite his naysayers, the 19-year-old fully believes he's doing what he needs to do to pull out his God-given potential. And he proved it this summer with his men's high-point performance at nationals and a 50 free gold medal at the Pan Pacific Championships.

**026 | FOR LOVE OF THE SPORT**  
by David Rieder  
Kathleen Baker has always loved swimming. It's been a motivating force that has helped her battle Crohn's disease and that has led her to help others believe they can overcome their own medical challenges. And it's a quality that she has shown throughout her career that's included a world record, Olympic gold and silver plus medals of every color at the 2017 World Championships and 2018 Pan Pacific Championships.

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## ON THE COVER

This is the look of someone who just set her first world record—pure happiness and joy! When Team Elite's Kathleen Baker touched the wall at the finish of the women's 100 meter backstroke at this summer's U.S. nationals, she looked at the scoreboard, thrust her left arm into the air and spun around 360 degrees. She was in shock at the time she saw: 58.00! "It's so crazy to be able to look at that time and say that I'm the fastest woman ever in the 100 backstroke," she said. "It's a been a goal of mine pretty much my whole life to have a world record." (See feature, page 26.) [PHOTO BY BY PETER H. BICK]

026







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# INTERNATIONAL SWIMMING HALL OF FAME POISED FOR GREATNESS

BY BRENT T. RUTEMILLER

For those who have not been following events surrounding the International Swimming Hall of Fame (ISHOF), please let me bring you up to date.

It was announced last year on Nov. 3 that *Swimming World* would merge operations with the International Swimming Hall of Fame. Over the past 11 months, much progress has been made to consolidate these two important institutions. A major event took place in August 2018 when Sports Publications International—Parent Corporation of *Swimming World*—transferred its stock to the International Swimming Hall of Fame. The transaction brings more financial stability to ISHOF and allows the transition of *Swimming World Magazine* subscribers to become ISHOF members, and *Swimming World* advertisers to become ISHOF sponsors.

The inclusion of *Swimming World* properties into ISHOF's portfolio creates new opportunities and new products that will elevate ISHOF. Significant upgrades to the museum are already underway, including the conversion of parts of the Henning Library into a television studio for new multi-media programming and products. Offices are being upgraded, and new *Swimming World* staff will relocate to Fort Lauderdale.

The stock transfer was predicated on two other major events that directly affected ISHOF. The most significant event was the announcement that the City of Fort Lauderdale will invest \$27 million to renovate and upgrade the aquatic center, which will begin reconstruction as early as March of 2019 and should be completed in July of 2020.

As a result of the upgrades, there has been much interest in major events returning to Fort Lauderdale on a national and international basis. The infusion of new dollars for the facility has created excitement for the city and ISHOF that will surely extend to upgrades in the museum and its displays.

The month following the city's \$27 million approval to renovate the aquatic center, ISHOF and the Fort Lauderdale City Commissioners came to terms on a 30-year lease, ensuring that ISHOF remains permanently attached to the aquatic center. Within that agreement, the city has agreed to work with ISHOF to revert the name of the aquatic center back to the International Swimming Hall of Fame Aquatic Center with the intent of finding dollars from a presenting sponsor.

So, now that three strategic actions have taken place surrounding the International Swimming Hall of Fame, ISHOF is poised to fulfill its true mission. However, renovation, a long-term lease and the merger with *Swimming World* only establishes a strong foundation. It is up to everyone in the swimming community to build on this momentum to make things even better!

ISHOF's leadership and board are now turning their attention to establishing a new vision on how it will display, archive and preserve the rich history of aquatic sports. And with any new idea, dollars will have to be obtained in order for any vision to reach its fruition. Look for ISHOF to set a new and exciting course, and in the meantime, please consider becoming a member of ISHOF and donating to help us preserve the history of aquatic sports. ♦



**Brent T. Rutemiller**

Publisher of *Swimming World Magazine*

CEO of International Swimming Hall of Fame

"If you want to win, first help someone else win!"



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# LESSONS WITH THE LEGENDS

SWIMMING WORLD  
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SERIES IN WHICH TOP  
COACHES  
SHARE SOME OF  
THE SECRETS OF  
THEIR SUCCESS.

BY MICHAEL J. STOTT

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## DON WATSON

**D**on Watson spent 24 years as the director of the University of Texas Swim Center and manager of Longhorn Aquatics Swim Club. There he helped host more than 45 major swimming competitions, including the 1988 Olympic Trials. However, his lasting legacy is as a high school and an open water coach of storied marathoners John Kinsella and Sandra Bucha.

His seminal influences were among swimming's best. A teammate of Doc Counsilman while at the St. Louis YMCA, Watson won the 1650 yard free at the 1946 YMCA national championships while Counsilman took the 100 and 200 breaststrokes. In 1946, 1947 and 1948, Watson captured the 22-mile Mississippi River swims.

Not surprisingly, he earned a swimming scholarship to the University of Iowa, coached by hall of fame coach David Armbruster and his assistant, Counsilman. Degree in hand, Watson married and matriculated to the University of Indiana, earned a master's degree in physical education and served as Hoosier assistant under Counsilman.

A coaching stop at Maywood Proviso East High School in Illinois preceded his move to Hinsdale Central High School (1965-80), where he attained legendary status. At Hinsdale, he racked up a dual meet record of 163-3 (including 128 victories in a row), 12 consecutive state championships (1967-78) and produced 167 high school All-Americans. It was there he developed multi-time state champions and Olympians John Kinsella, John Murphy, Bob Nieman (pentathlon) and open water standout Sandra Bucha. Another Watson swimmer, Robert Dudley, CEO of British Petroleum, was a 2014 International Swimming Hall of Fame Gold Medallion recipient and inductee.

While at Hinsdale, he improved upon neighboring New Trier's community-based swim concept. Watson elevated the learn-to-swim element into a program that encompassed a competitive national team approach that included advanced training, and especially pulse-rate monitoring, that was even foreign to college teams. In the process, he produced great athletes, instilling in them commitment, dedication, hard work and service as a path to a successful adulthood.

Overall, his swimmers won four Olympic medals (two gold, one silver and one bronze); five gold and one silver at the World Championships; and three gold and one silver at the Pan American

Games. His athletes also captured 13 national championships and set three individual and five relay world records.

While Watson was guiding his Red Devils to state titles, he devoted considerable energy to the open water careers of hall of famers Kinsella and Bucha while they were college students at Indiana and Stanford, respectively. The duo teamed together to win innumerable open water marathons, mainly in Canada, often by large margins. Kinsella, named the 1970 Sullivan Award winner, was the world's premier marathon swimmer during the 1970s and is an ISHOF and IMSHOF inductee. Bucha, while having a relatively short marathon career conducted entirely during her college years, was the global pre-eminent female marathoner in the early '70s.

This July, a memorial service was held for Watson who passed away in November 2017. Attendees paid homage to the man and his considerable accomplishments that included being honored as:

- ASCA Coach of the Year (1970)
- NISCA Coach of the Year (1970)
- USA Swimming Coach of the Year (1970)
- International Interscholastic Swimming Coaches Association Coach of the Year (1978)
- Glen S. Hummer Award recipient (1979), given annually by USA Swimming to the individual who makes the greatest contribution in the U.S. to open water swimming
- Six-time international USA Swimming team manager

To date, he has been inducted into three halls of fame: ISHOF (2015), International Marathon Swimming (2013) and the Hinsdale Central High School Foundation (2003).

### PERSONAL PERSPECTIVES

**Eddie Reese (six-time Olympic coach and 40 years as coach at the University of Texas, which has won a record 14 NCAA Division I men's team championships)**

"Don was one of the great high school coaches. His training atmosphere was such that his swimmers were working harder than almost all clubs and colleges in our country.

"He continued to follow swimming, recognizing fast



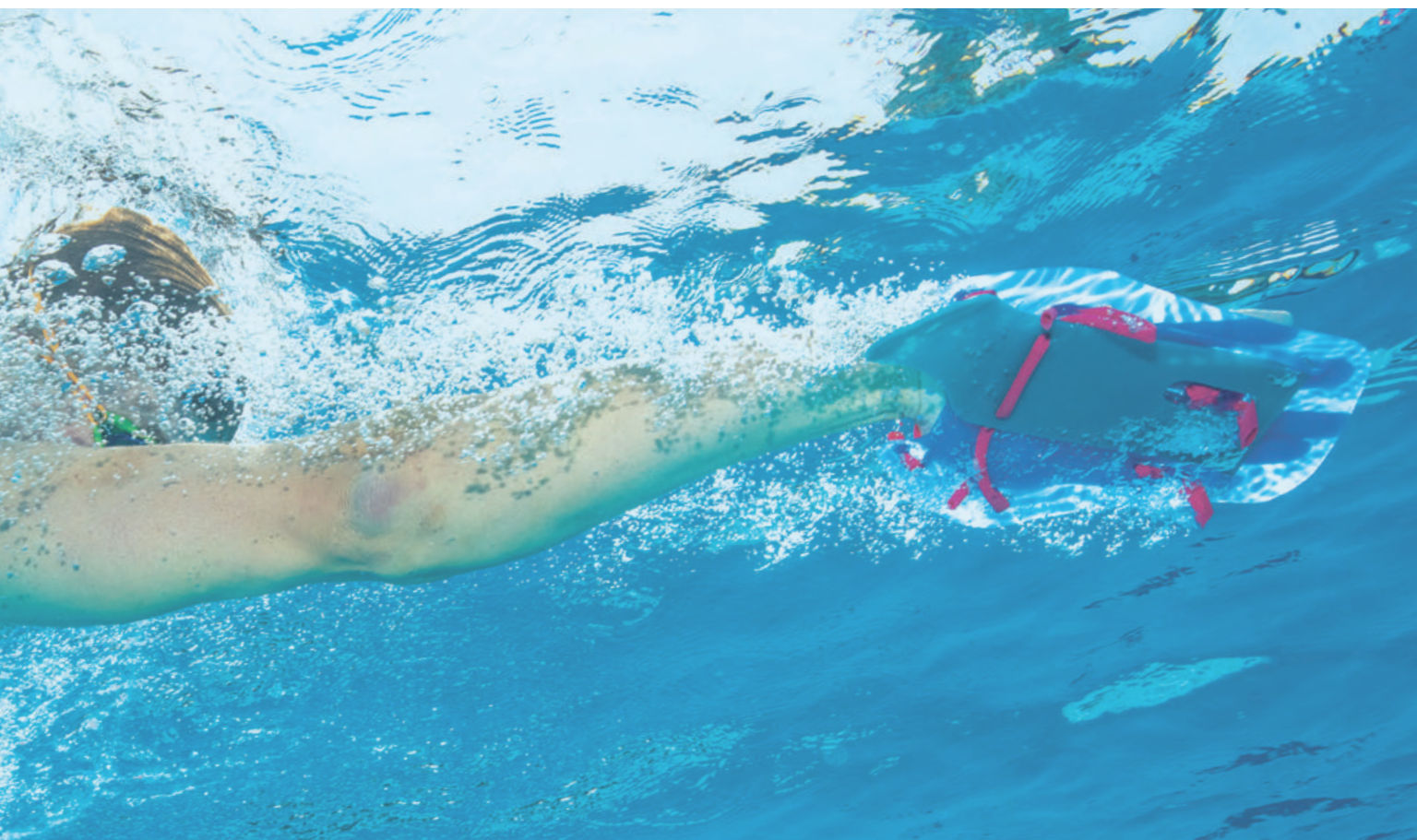
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swimming and hard workouts. He shared some of them with me. His workouts were tough, but meaningful.”

**John Kinsella** (two-time Olympic medalist, six-time NCAA champion, world record holder in 1500 freestyle, ISHOF and IMSHOF inductee)

“The beauty of Don was he made things simple, understandable and straightforward. His most famous phrase was “Nothing great was ever accomplished without enthusiasm.” He had an understated elegance about him, and he set a tone so that you wanted to live up to your part and not let the team down.

“He didn’t put pressure on us, and he had a way that brought

out the best in us. For me that was big. He listened to what you said so you felt you had a say in things—like your opinions and thoughts counted. He also had a great sense of humor, and for me, that helped take the pressure off. It was business, but it was fun.

“He took everyone’s goals and everyone seriously. We were in shape and didn’t lack for work. He was a distance swimmer himself, so maybe there was a natural kinship there. His practices were slanted toward distance and repeats. By 12, I had a pretty good idea that distance was my forte.”

**Sandra Bucha** (2014 Honor Open Water Swimmer, International Marathon Swimming Hall of Fame; ISHOF open water swimmer inductee)

“When I was 10, we moved to Hinsdale, Ill. We joined a summer league swim team coached by Don Watson, who had been coached by Steve Nielson, my St. Louis coach. Within three years, I was competing on the national circuit.

“In 1968, Illinois did not have high school girls’ swimming. I had been training with a talented AAU age group team, and Coach Watson told the girls that IF we made the AAU national cut times, we could train with the boys’ high school team during our high school years. I made those cuts, trained with the boys, and I will be forever grateful.

“Coach groomed me into a competitive swimmer, but even more importantly, allowed me to mature into a responsible young adult, capable of facing challenges in the water and later in life. I OWE my swimming career—and in many ways, my life’s personal and professional success—to Coach Watson. He taught me to endure, to survive, to succeed and, with any challenge in my life, to never give up.

“When I was a high school senior and ready to participate in the Olympic Swimming Trials, my father, with the encouragement of Coach Watson, retained the ACLU to represent me and another swimmer, Cynthia Cilyo, to sue the Illinois High School Association to allow girls to participate on boys’ teams in non-contact sports. Much of the language in the court opinion in this case was used in future litigation and contributed to the passage of Title IX. Through Coach Watson, I was able to make a small and humbling contribution to girls’ competitive swimming. I miss Coach Watson immensely.” ♦

.....  
Michael J. Stott is an ASCA Level 5 coach whose Collegiate School (Richmond, Va.) teams won nine state high school championships. He was named a 2017 recipient of NISCA’s Outstanding Service Award.

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# BEYOND THE YARDS

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## TIPS AND TECHNIQUES FROM THE WORLD'S FASTEST SWIMMERS AND BEST COACHES



Everyone knows superheroes are athletic. They need to be able to leap, sprint and fly quickly and effortlessly—people's lives depend on it. What some may not realize is during their downtime, superheroes train just like every other athlete. One of the best ways to cross train for lifesaving work is—you guessed it—swimming! The one and only Wonder Woman is a firm believer that time in the water is her secret weapon.

“Training in the water gives me an edge on the enemy,” says the heroine. “Whether it’s lifting a 25-ton boulder or sprinting at lightning speed to get from one place to another, swimming laps helps keep my muscles strong and my body loose for those activities.”

Just like every other club swimmer, Wonder Woman utilizes multiple training tools to help her maintain efficient technique. Her go-to swim gear for a superhero workout includes **arena's gold Powerfin Pro Fins** and **WB Superheroes Collection Kickboard**.

Leg strength is an important asset in Wonder Woman's line of work. In addition to her golden wrist cuffs and Lasso of Truth, her matching gold Powerfin Pro Fins provide the advanced technology to help build leg strength and endurance. One drill she often uses is vertical kicking. While at the deep end of the pool, she will lift her arms into a streamline position (or for an added challenge, she will hold a weight) and kick small fast dolphin kicks for one minute, trying to keep her chest and upper body out of the water. After resting for 30 seconds, she repeats the set, and after six rounds, she switches to vertical flutter kick.

“Let me tell you, vertical kicking is a leg burner,” she says. “But in the end, it pays off.”

The first lady of superheroes pairs her gold fins with arena's WB Superheroes Collection Kickboard. Her board in particular is emblazoned with the symbol of her friend and co-founding member of the Justice League, Batman. She

says it's important to show her support for her fellow superheroes, both in the field and in the pool. The hand holds in the board allow her to switch between several different hand positions. Keeping her head above the water while kicking also allows her to keep an eye on her surroundings—a habit that is never lost on superheroes.

Like many swimmers, Wonder Woman doesn't enjoy swimming alone. Occasionally, her Justice League partners Batman, Superman and Aquaman join her for her workouts. Of course, the obvious question is: “What's it like swimming with someone like Aquaman?”

“He likes to show off sometimes, but generally, he helps set the pace for the group,” says Wonder Woman. “Aquaman makes a great training partner. He pushes you to go a little bit harder with each length.”

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## SWIMMING TECHNIQUE CONCEPTS:

BY ROD HAVRILUK

# INTERNATIONAL SWIM COACHES ASSOCIATION HALL OF FAME SUMMIT

The annual conference of the International Swim Coaches Association (ISCA) was held Aug. 28-31 in Clearwater Beach, Fla. As is customary for the ISCA conference, there were presentations by coaches, scientists and a combination of coaches and scientists (see Fig. 1). The coaches seemed to enjoy the presentations, as many were vocal about how they would apply the information with their teams. This article reports some of the conference highlights and coach reactions.

### WHAT?

There were panels on sprint training, distance and open water training, preventing abuse, season planning for age group swimmers, marketing and managing fatigue. Individual presentations included science and technology for starts, the use of data to analyze technique, the importance of the rate of perceived exertion, applying research findings, nutrition and leadership.

ISCA also launched a new certification program course on nutrition. (The complete ISCA coach certification program is now available online in Spanish as well as English.)

### WHO?

ISCA has truly become international! Coaches and presenters came from Australia, Canada, China, Costa Rica, Grand Cayman, Mexico, Portugal, Sri Lanka, Switzerland, Turkey and the USA.

The all-star lineup of coaches included Gregg Troy, Mark Bernardino, Bill Rose, Todd DeSorbo, Matt Kredich and Braden Holloway. International presenters included Abby Knox (Canada), Dr. Erkan Gunay (Turkey) and Dr. Joao Paulo Vilas-Boas (Portugal).

### WHY?

In the first presentation, Dr. Scott Mclean of Southwestern University made a general comment about the value of science. He borrowed a concept from former USOC high-performance specialist Dr. Peter Vint and explained that in today's culture, it is essential for a coach to tell swimmers not just the how, but also why. Dr. Mclean's message made an impact with Nico Messer (Switzerland), who said that one of his key takeaways from the conference was that "the coach who knows WHY beats the coach who knows HOW."

The following presentations didn't disappoint, as the "why" was explicitly covered throughout the conference. For example, the "why" was explained using physics as the foundation for specific technique elements as well as for more global training concepts. Chris Hadden (United Swim Association) remarked afterward on "the importance of properly selling my season plan to my club swimmers and explaining 'why.'"

### SWIMMING STARTS

Dr. Mclean explained that the swimming start is a "complex multi-segment movement" and that positive and negative momentum impacts performance. With video, photos and graphs, he showed how the action of the head, trunk, arms and legs must all be managed (see Fig. 2).



FIG. 1

FIG. 1 > Panel on developing a complete season for age group swimmers with Canadian coach/registered dietitian Abby Knox, Turkish scientist Dr. Erkan Gunay, Coach Don Lemieux and Coach Kevin Weldon.

### VELOCITY FLUCTUATIONS

Dr. Vilas-Boas noted how the fluctuations in body velocity changed after just 10 seconds into a 50 meter freestyle (see Fig. 3). The velocity variation is about 1.4 meters per second before 10 seconds and about one half as much after 10 seconds. He attributed the decrease in velocity variation to a "sudden change in available and useful power" and that it indicated the "transition from ATP-CP to glycolytic metabolism." He also explained that the variability was "very individualized" and what that would mean for the swimmer.

Ricardo Duron (Mexico) commented that he could immediately use information from Dr. Vilas-Boas about determining the most appropriate intervals to sustain the aerobic power pace.

### DELIBERATE PRACTICE

Brandon Converse (East Grand Rapids Aquatic Waves) commented on the benefit of the deliberate practice concept of immediate feedback. This author presented an example from a one-week study (Jefferies, Jefferies & Donohue, 2012) that showed a tremendous increase in hand force from real-time feedback (see Fig. 4). The swimmer practiced backstroke in a flume with a monitor above his head and could see the hand force curve for each stroke.

### RATE OF PERCEIVED EXERTION

Dr. Gunay developed a numerical/pictorial scale to evaluate the rate of perceived exertion (RPE) for use with swimmers of ages 10 to 12 (see Fig. 5). The goal of his scale was to help children understand expectations and recognize their "thresholds and limits for training." He found that when using the scale, swimmers were better able to control training load and also maintain a constant stroke count while increasing stroke rate.

### OTHER COACH COMMENTS

One of Peter Robinson's (Southwestern Swimming) takeaways is to use Gregg Troy's 25-yard sprints without a push-off for "early-season evaluations of sprinters...to determine natural sprint abilities." Robinson explained Troy's rationale: "Sure, everyone's still out of shape from the short August break, but those who were born to sprint will shine."



FIG. 2

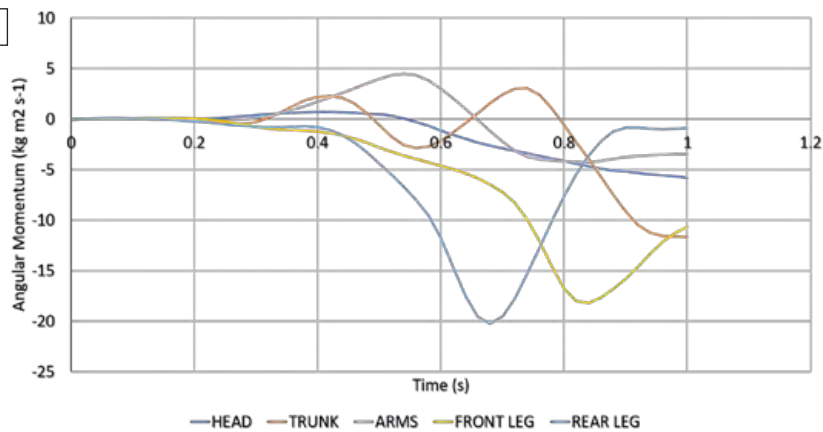


FIG. 2 > A rotational analysis of the swimming start shows angular momentum for the head, trunk, arms and legs.

FIG. 3

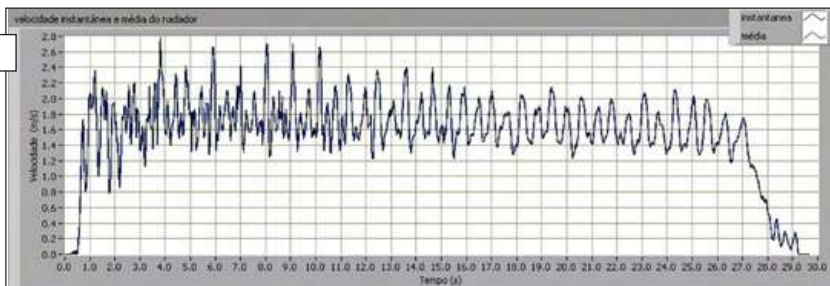


FIG. 3 > This graph shows the fluctuations in the body velocity for a 50 meter freestyle.

FIG. 4

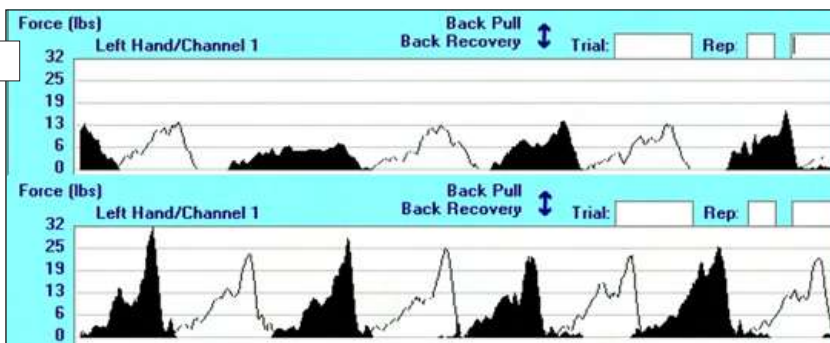


FIG. 4 > A one-week deliberate practice intervention produced a dramatic change in hand force from the pre-test (top) to the post-test (bottom).

FIG. 5

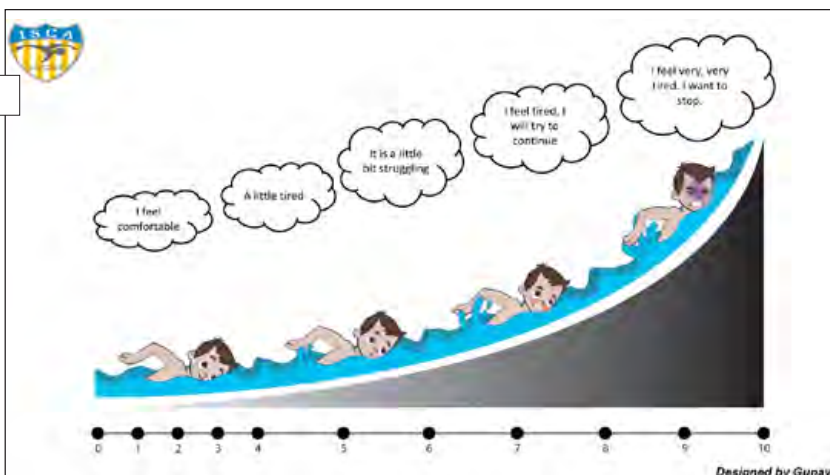


FIG. 5 > A numerical/pictorial scale to evaluate the rate of perceived exertion for use with swimmers of ages 10 to 12.

Felipe Jeminez (Costa Rica) enjoyed the panels on biomechanics and physiology and came away from the summit with an appreciation that “swimming is a difficult sport to study and analyze.” His overall comment was that the summit was an “eye-opening experience.”

Multiple coaches commented positively on the opportunity to dialogue with presenters and experienced coaches. Ben Delia (Franklin & Marshall College) remarked that the elite coaching panels featured extended time blocks to allow the panelists to elaborate on their experience coaching world-class athletes and answer a variety of questions. Mike Peterson (Ames Cyclone Aquatic Club) commented that “everyone was very approachable” and that he appreciated that he was able to speak with presenters during or after their presentations. ❖

## SUMMARY

The recent ISCA Hall of Fame Summit blended presentations by coaches and scientists. Audience questions and dialogue with coaches and presenters resulted in a number of thought-provoking moments. Julio Aragon (Costa Rica) summarized that “this summit is way more than the speeches and panels” and that “science and swimming must go hand to hand...to create better athletes and better coaches.” This author was both excited and encouraged that so many coaches are now applying science to support their swimmers to swim faster and with fewer injuries. This is great news for ISCA and its goal of supporting swimming with science.

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. Learn more at the STR website: [www.swimmingtechnology.com](http://www.swimmingtechnology.com). You can contact Rod through [info@swimmingtechnology.com](mailto:info@swimmingtechnology.com). All scientific documentation relating to this article, including scientific principles, studies and research papers, can be provided upon demand.

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# TOYS FOR BOYS... AND GIRLS

**THANKS TO NEW AND INNOVATIVE EQUIPMENT FOR TRAINING, TODAY'S SWIMMERS HAVE ENJOYED MORE PRODUCTIVE WORKOUTS, RESULTING IN FASTER SWIMMING.**

BY MICHAEL J. STOTT

**B**ack in the day, much of swim training was sheer drudgery, an exercise of endless laps swum over a long black line. Megayardage workouts, run by men with stentorian tones, ruled the day, resulting in fits of boredom, sore bodies...and, hopefully, fast times.

Today, the sore bodies remain, but thanks to entrepreneurial folks and innovative coaches who have introduced new training equipment over the years, the variety in workouts has become more pleasurable and productive.

The beneficiaries of the transformation are legion. Two USA Swimming gold medal clubs make extensive use of equipment and have the results to show for it. Fort Collins Area Swim Team in Colorado has two members (Zoe Bartel, Danny Kovac) on the national junior team.

Kovac was the year's fastest high school 100 yard butterfly (46.54), the CSCAA No. 1 recruit out of Colorado and is now a University of Missouri freshman. He recently swam at Junior Pan Pacs, competing in six events and fashioning a second leg (50.26) on the winning 4x100 free relay (3:19.44).

Bartel, a freshman at Stanford, broke the state high school record in the 100 yard breast (1:00.22) as a junior. She also won the 200 meter breast (2:25.68) at the 2017 Junior World Championships.

Magnolia Aquatic Club (Magnolia, Texas) has had similar success. The team finished a combined third at 2017 Winter Juniors (West). In late August, sisters Lucie and Lillie Nordmann competed at Junior Pan Pacs. Lucie, another Stanford freshman, swam legs on three winning relays and was second in the 100 meter free (54.74). Lillie, CSCAA's No. 2 Texas-ranked (12th nationally) female in the Class of 2020, finished fourth in the 200 fly (2:12.04).

All of these swimmers employ equipment extensively in their training. Following are some thoughts from their coaches on how they use these "toys" in daily practice.

## FORT COLLINS AREA SWIM TEAM

"FAST uses a variety of tools for different reasons," says head coach Mike Novell. "They help us influence parts of stroke technique, add resistance to build strength and provide

assistance to break down difficult skills."

The team uses equipment beginning with the most developmental groups continuing all the way to high school-age swimmers. "We require basic equipment based on practice groups, and the team maintains other more unique tools. The utilization of equipment adds variety, and is a fun way to introduce some tactile teaching to swimming," says Novell.

## Technique

"An example of tools and technique in concert is the use of paddles in drill swimming. We will have our athletes kick with their arms at their sides and a paddle resting on the crown of their heads. This teaches the importance of head position when thinking about body alignment. Our breaststrokes will swim with strapless paddles resting on their hands to encourage correct pull patterns while gripping the water. Backstrokes swim with cups on their heads to challenge head position. Butterflies drill with wiffle balls in their hands to really connect their kick and pull timing. Freestylers use a kick stick (6-inch PVC) in combination with the catch-up drill to encourage core connection and hand entry position," he says.

## Strength/Power

To build strength, FAST uses tools to add resistance to specific parts of the stroke. "We really like alternating between equipment and no equipment to keep feel for the water and make stroke technique



> Magnolia Aquatic Club's Lucie Nordmann swam legs on three winning relays at the Junior Pan Pacs in late August, and was second in the 100 free.

[PHOTO BY PETER H. BICK]





[ PHOTO BY PETER H. BICK ]

“We use a variety of tools that help us influence parts of stroke technique, add resistance to build strength and provide assistance to break down difficult skills. The utilization of equipment adds variety, and is a fun way to introduce some tactile teaching to swimming.” —Coach Mike Novell, Fort Collins Area Swim Team, with swimmer Danny Kovac

a priority while building water strength and power. We utilize a fins-drag sox-nothing progression for kick strength, foot speed and kick technique. We especially use this combo for underwaters. A similar progression for pulling is paddles-nothing-wiffle balls,” says Novell.

### Assistance

For more difficult drills and skill concepts, FAST athletes employ tools to simplify specific stroke parts. “Adding just a little bit of assistance helps swimmers focus on the task at hand,” notes Novell, “especially by using front snorkels and fins. We like to add in stroke and kick counting to quantify such assistance. One example is swimming 25s butterfly with fins and establishing a stroke count, then removing the fins and holding the stroke count. Another is placing wiffle balls in hands for an attritional challenge while holding the same stroke count,” he says.

### MAGNOLIA AQUATIC CLUB

“We use the parachutes, long swim cords, monofins and both short and long fins on a pretty consistent basis,” says head coach Terry Jones. “On Tuesday and Thursday mornings in conjunction with our dryland program, we do a variety of different things with swimming equipment.

“With the parachutes, we often do some 50s, either kicking or swimming at good effort. Then we will take the chute off and do something fast, sometimes with a dive. For example:

- 2x {6x50 with chute, every third 50 without, all fast at 1:15

“We do a variety of things with our long cords from Fast UNH2O Kicking (6 x 15 meters fast kick with monofin) to something we call Resist/Assist 50s, where swimmers use short fins and swim a 25 with resistance, pause 10 seconds and sprint back with assistance from the cord at 1:30.

“For partner cords, we take an old long cord, shorten it, attach it to a belt, and have a swimmer hold the other end for resistance. A

swimmer goes 12-1/2 yards with resistance, then the partner releases the cord while the swimmer sprints to the wall. We do repeats, and the partners switch out.

“We also do vertical kicking with weights. We have a ‘bottoms up’ drill, where a swimmer holds a weight (five to 10 pounds) and submerges with it to the bottom of the pool (13 feet). The athlete then dolphin kicks fast to the surface and proceeds to vertical kick for about 20 seconds, and repeats.

“In general workouts, Magnolia athletes swim a lot with short fins, often with paddles, to emphasize carrying a good kick. A typical set is:

- 3x {3x200 free or stroke with short fins

“We may have them cruise (threshold swim) the 200, descend the 200s, fast-easy the 200s x 50s and negative-split the 50s.

“Regardless, we do a lot of speed changing and descending in everything we do,” says Jones. ❖

An advertisement for Vasa swimwear. It features a photograph of a male swimmer in a pool, wearing a black swim cap and goggles, with his arms raised in a celebratory gesture. The text "Want Stronger, Better, Faster?" is overlaid on the left side of the image. At the bottom, it says "Powered by..." followed by the Vasa logo and the website "vasatrainer.com".



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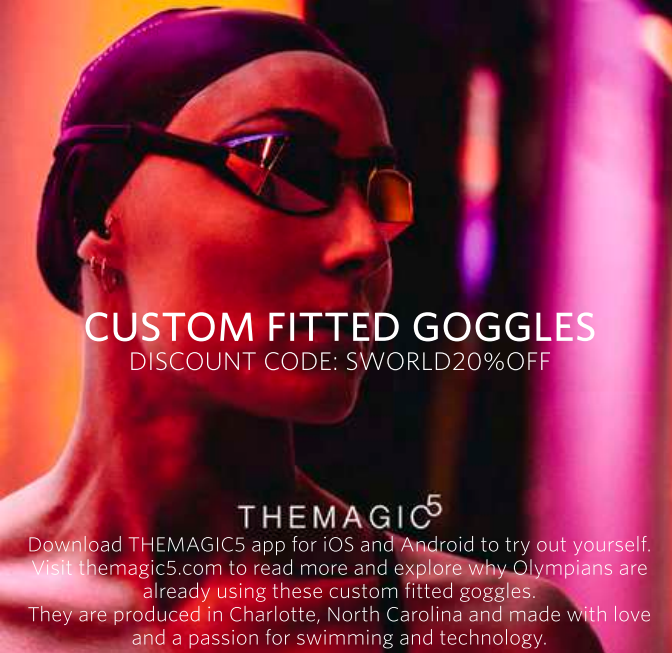
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A full-page photograph of Michael Andrew, a swimmer, in the middle of a race. He is wearing a black swim cap and goggles, and his mouth is open as if he is breathing or shouting. He is surrounded by splashing water. In the background, other swimmers and lane lines are visible.

> Michael Andrew won four events at this summer's U.S. nationals and was named the men's high-point champion. At Pan Pacs, he posted a 21.46 in the 50 free—improving on his winning time from nationals—to claim his first international gold medal.

[PHOTO BY PETER H. BICK]

# SWIMMING'S RESPECTFUL REBEL

*Michael Andrew turned pro at the age of 14. He embraced the non-traditional Ultra-Short Race-Pace Training. Despite his naysayers, the 19-year-old fully believes he's doing what he needs to do to pull out his God-given potential. And this summer, he definitely proved it.*

BY ANNIE GREVERS

It was a cold, rainy day in Brookings, S.D....when 7-year-old Michael Andrew swam in his first race. His mother, Tina, remembers him shivering. Michael remembers the misery. Then he dove in and won the 50 free. He qualified for state in his first race ever.

"That's when I started to fall in love with the sport and what it feels like to go fast," Michael said.

But Tina and Peter Andrew knew their son had a natural aptitude in the water well before that gloomy first meet.

"The first day Peter went to watch Michael's practice, he called me and said, 'You need to drop what you're doing and come watch this kid,'" Tina recalled. "Right from the get-go, we felt God had given Michael an incredible gift."

The Andrews saw it as their responsibility to help their son hone his gift. Tina and Peter asked the head coach of the club if Michael could train with her, and she said she couldn't change her program for every talented kid that came along.

Tina and Peter began weighing their options. After sifting through choices, Peter decided he would become Michael's coach. But he wanted to soak up as much swimming knowledge as humanly possible before committing.

Peter swam through his primary school years in South Africa. "I thought it was stupid the way we swam up and down the pool without purpose," Peter recalled. He wanted his boy to be swimming laps that would translate directly into faster swimming. There needed to be meaning in each stroke.

The whole family—Michael, his younger sister Michaela, Tina and Peter—attended their first American Swimming Coaches Association (ASCA) conference in 2008. "We bought everything they had to offer," Tina said. The family was willing and ready to learn what the very best did. But it didn't take long for the Andrew family to notice a pattern of traditionalists among swim coaches in the U.S.—reading from a training bible that hadn't changed much since the 1980s.

Peter connected with Jonty Skinner, a fellow South African and former world record holder in the 100 meter free (1976-81). Skinner had worked in the sports science department and as the resident coach at the U.S. Olympic Training Center in Colorado Springs.

Peter and Tina told Skinner about their son's phenomenal gift. "The first thing he asked Peter was how big my feet and hands were," Tina said. "He wanted to know if the genetics were there."

Skinner invited them down to Colorado Springs and watched



Michael swim. He agreed. The kid was good.

### COACH DAD

By 2009, Peter Andrew was a registered coach and had made the commitment to coach his son. He had never coached before, so he was ingesting as much information as possible.

Peter's interest was piqued after reading Dr. Brent Rushall's bio. Rushall was invited to the 2009 ASCA Conference because fellow Australian coach, Forbes Carlile, was being honored.

The Andrews found their seats in the lecture room for Rushall's talk. "The first thing Dr. Rushall said was, 'I've never been invited to speak here, and this will be the last time they ever invite me because I'm about to proceed to dismiss everything they've presented at this conference with science,'" Tina recalled.

"I went up to him afterward, shook his hand and said, 'We're going to be friends,'" Peter said. Father and son began implementing the training right after the ASCA conference. Dr. Rushall mentored Peter, helping him digest the science behind the race-pace method, and helped formulate Michael's training.

"Less than a year into this relationship, Michael started smashing (national age group) records," Tina said. "That's when people started wondering, 'What is this training Michael talks about?'" Dr. Rushall coined the USRPT (ultra-short race-pace training) acronym in 2010.

### CONTROVERSIAL METHODS

"I think the perception of USRPT has changed a lot in the last two years," Michael said. "There are more closet USRPT trainers out there," Tina added.

Why are they closeted, though? The Andrew family found themselves battling a thick army of traditionalists—coaches who didn't like their long-proven methodology challenged.

The shallow understanding of the USRPT method is this: a lot of 25s, not a lot of hard work. But anyone who has tried to complete a USRPT practice would know this is not a method for the weak-willed.

At the training camp in Dana Point, Calif., before the recent Pan Pacific Championships, Michael worked with coaches Gregg Troy, Teri McKeever, Ray Looze and Wyatt Collins. He said they all noticed his sets weren't as easy as they had pictured.

One of Michael's most challenging sets leading into this year's U.S. nationals was a 200 butterfly pace set. Why 200 fly? Michael doesn't even swim the 200 fly.

"It's all training for the back end of my 100 fly," Michael



>It was hard not to note the 100 breaststroke win at U.S. nationals as a significant one on which to hang his cap. Michael surged in the final 15 meters to take the title, disproving the USRPT naysayers who thought his training wasn't adequate to make it through an entire 100. He secured a spot on the Pan Pacs roster with the 100 breast "W" as well as a good event haul for the 2019 World Championships.

[PHOTO BY PETER H. BICK]

explained. "It gives me a visible marker for how to properly pace my race."

The set was 30 50s butterfly (short course meters), max effort with 20 seconds rest between. If you take the "max effort" part seriously, this is a no-joke set. And Andrew translated that very literally, holding 12.5 seconds per 25 on an "on-fire day."

"But there are many days where I don't make 30," Michael says. "Often my body fails at 20." In a traditional setting, the body failing would mean very little to a coach. But the fails (above-pace 50s) in the USRPT sets are the most pivotal points. "If I fail at 17, I want to make another eight or 10 50s."

If Michael fails to meet pace, he will rest a cycle, then get back to the set. If he fails on the 50 following a rest, then they will cut off the set there.

USRPT has "race pace" in the acronym for a reason. Michael doesn't want to train his body to swim 25 meters of butterfly at a pace slower than 12.5 seconds per 25.

To correctly implement this training, there needs to be a great amount of integrity in the swimmer and coach. You cannot cheat your way to the ideal race pace. Numbers don't lie. And the rest component is as significant as the pace being held.

"The big idea is only 15 seconds rest—enough to allow the blood to recirculate and oxygenate," Peter said. But not too much rest, because "once the heart rate starts to drop, the lactate levels begin to increase." If you've never felt the onset of lactic acid, it's when

CONTINUED ON 24 ►

muscles begin to seize up and become more like added weight than useful power.

With minimal rest, Michael builds lactate throughout the set, but it doesn't all fall on him like an anvil until the end, when he allows his heart rate to drop.

Michael will have 15 minutes of rest and easy swimming after each race-pace set.

"The body is stressed and then rested," Peter explained. "You can repair yourself quicker over time (with this stress-rest pattern). When we first started USRPT, I used to feel sorry for him (Michael) and give him extra rest."

But Peter learned that was actually a disservice to Michael. He felt the lactic acid settle sooner with more rest.

## PRO AT 14

Michael Andrew had 38 national age group records by 2013... at age 14. He wasn't exactly a household name, but his peers and many coaches couldn't help but notice the amphibious teen. Then, he grabbed the attention of the entire swimming community—and many beyond the pool—by turning professional at the age of 14.

Andrew had just made history by becoming the youngest male swimmer in U.S. history to turn professional. They knew it would cause a stir, but the decision was a straightforward one for the Andrew family.

"It's pretty simple," Michael said. "My parents are South African. They come from a place where the collegiate system wasn't the only way to go about having an athletic career. Americans are very indoctrinated into thinking that's the only way.

"We weighed the pros and cons and prayed about it. I was going to give up training and competing for a high school and college, and we felt very at peace with that," Michael said.

Another huge factor was Michael's Olympic dream. The Andrew family didn't feel like they would be doing the best to pursue the goal of swimming quickly in long course meters by spending so much time training and racing in short course yards.

In 2015, two years after turning pro, Michael was named Swimmer of the Meet at the World Junior Championships in Singapore after winning a gold, three silvers and a bronze. At the 2016 Olympic Trials, Andrew placed fourth in the 100 meter breast with a world junior record of 59.82. At his final World Junior Championships in 2017, Michael set the pool ablaze—breaking world junior records in the 50 free (21.75), 50 back (24.63) and 50 fly (23.22)—and taking gold in the three events. Momentum built with each summer.

## SUMMER OF '18

After years of age group dominance, 19-year-old Michael was ready to break out onto the big stage.

And conditions were prime for the sprinting sensation to display his fast-twitch prowess. The 2018 Phillips 66 U.S. Nationals would feature 50s of each stroke. One of Michael's goals is to be the best in the world in all four 50s. The 50s were built into the nationals meet schedule because the 2019 World Championships will include 50s of strokes.

At nationals, Michael won the 50 meter fly, edging out fly master Caeleb Dressel. He proceeded to collect the national title in the 50 breast, then the 100 breast. He finished the meet with another

## MICHAEL ANDREW THROUGH THE YEARS



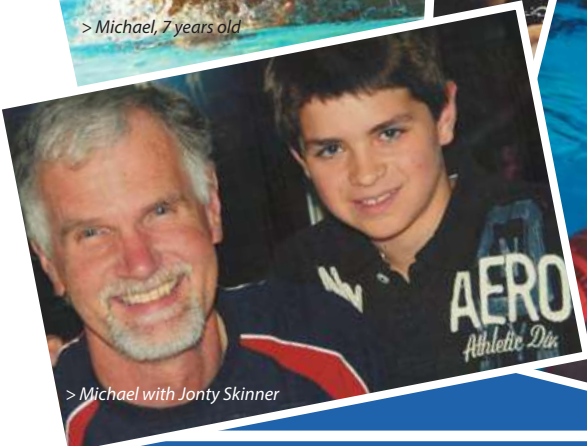
> Michael, 7 years old



> Aberdeen Aquaholics



> Michael (right) offers congratulations



> Michael with Jonty Skinner



> Age grouper



> First autograph





[PHOTO BY PETER H. BICK]

"It's pretty simple. My parents are South African. They come from a place where the collegiate system wasn't the only way to go about having an athletic career. Americans are very indoctrinated into thinking that's the only way. We weighed the pros and cons and prayed about it. I was going to give up training and competing for a high school and college, and we felt very at peace with that." — Michael Andrew, explaining why he turned professional at the age of 14

title in the 50 free, again outspringing Dressel for the win. And Michael wasn't just racking up wins—he was swimming lifetime bests. The curtains had been drawn on Michael Andrew's adult professional career.

In post-race interviews, Michael did say he felt he might have gained credibility in the swimming community, but he wasn't just out to prove USRPT actually works. He was out to swim as fast as Michael could swim.

But it was hard not to note the 100 breaststroke win as a significant one on which to hang his cap. Michael surged in the final 15 meters to take the title, disproving the USRPT naysayers who thought his training wasn't adequate to make it through an entire 100.

Michael accumulated four titles, securing a spot on the Pan Pacific Championships roster with the 100 breast "W" and securing a good event haul for the 2019 World Championships.

He was emotional after the 50 fly win because he knew he had officially "made it." He was going to represent Team USA on the senior level for the first time internationally.

"My mental frame of mind changed a lot this year," Michael said. "I really took ownership of my swimming. I was more intentional about what I was doing. A little fear also played into it, given the significance of this summer (qualifying for Pan Pacs and Worlds)."

#### ALWAYS QUESTIONING, ALWAYS HUNGRY

Tina gave a glimpse into a tumultuous few years for the family. "We kind of lost our way a bit. A lot was out of whack. I was rolling my eyes, thinking, 'We're going to another meet....' Our actions weren't lining up with our beliefs. We made swimming our god for a while."

This year, Tina and Peter watched their son migrate out of age group dependence into true adult professionalism. He started


making the calls, so to speak. Peter has always thought Michael should swim the 200 IM—he always thought he was engineered for that event. Tina always thought the 200 fly and 400 IM were where Michael could prove the most. Outsiders have doubted Michael's competence in longer races, saying his training couldn't provide him with the stamina to get through them.

But Michael is a purebred sprinter, and he feels his talents make him predisposed to swimming fast—*really fast*. And there's no shame in short races!

"I basically said, 'It's Michael's choice,'" Peter shared. "Yeah, I'd like him to swim the 200 IM. But I'm going to train him for what he wants to swim."

Michael felt tremendous freedom when he was unshackled from the judgment that might come from choosing not to swim longer races. And that self-assured strength certainly showed this summer when he raced to more best times at the Pan Pacific Championships in Tokyo. Michael posted a 21.46 in the 50 free—improving on his winning time from nationals—to claim his first international gold medal.

Peter used to question himself all the time, wondering if he had any business coaching his son, if he knew what he was doing. But with every doubt, he was reassured. The best coaches in the world are always questioning, never complacent, Peter thought. And a Michael Andrew who follows in his coach's footsteps—always questioning and always hungry—could be an indomitable force come 2020. ❖



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# FOR LOVE

**Kathleen Baker has always loved swimming. It's been a motivating force that has helped her battle Crohn's disease and that has led her to help others believe they can overcome their own medical challenges. And it's a quality that she has shown throughout her career that's included a world record, Olympic gold and silver plus medals of every color at the 2017 World Championships and 2018 Pan Pacific Championships.**

BY DAVID RIEDER | PHOTOS BY PETER H. BICK



# OF THE SPORT

**K**imberley Baker remembers when her daughter, Kathleen, was 8 years old and her appetite for swimming could not be satiated. Kathleen's parents made sure she had a busy schedule of activities, including Girl Scouts, dance, gymnastics, soccer and even horseback riding...but Kathleen kept asking if she could swim every single day.

"Probably one of the smartest things we ever did was say 'no,'" Kimberley said. "We told her, 'If you really, really like this and you're really good at it, it will be much more important that you still like it when you're 13.'"

Over the next few years, Baker wrote out pages of notes containing goals—the times she wanted to swim in every race, the times she wanted to hit in practice and technical changes she wanted to make—and brought them to her coaches at STAR Aquatics in North Carolina. Baker's passion for swimming was such that her parents would threaten to *not* let her go to practice if she didn't finish her homework or chores.

"You're lucky as a person and a parent if your kid finds something they love, and you don't have to actively encourage them to do it," said Kathleen's father, Norris Baker. "We never had to encourage or make Kathleen do anything related to swimming."

By the time she was 14, Baker was much faster than any of her swimming peers in Winston-Salem, N.C., and that's when the

beginnings of the Olympic dream stirred within her. So she went to her parents with a proposition: she would leave home to train with an elite swim club. Both clubs Baker presented as options were far away from home, so her parents broached the idea of training with SwimMAC Carolina, just more than an hour south in Charlotte.

Baker agreed, and she and her parents met with several SwimMAC coaches. SwimMAC was reluctant to accept a talented swimmer from another club in the same region, but Baker took out her notebook and presented a compelling argument for why she should be an exception.

"She is pretty convincing when it comes to swimming. She had her whole list of reasons," Kimberley said. Norris added, "A lot of it was wanting to be part of a program that had a progression to it. She wouldn't be at practice and swimming by herself."

Baker also sought more frequent access to long course training and teammates that would accompany her to national-level competitions. The 14-year-old convinced coach after coach that her plan was a good one. The last of those coaches was David Marsh, who helmed a group of professionals that would eventually include a single teenager: Baker.

At first, Baker's parents drove her back and forth to Charlotte from Winston-Salem (about an 80-mile drive each way), where Kathleen and her older sister, Rachel, were both in school at Forsyth



Country Day School and Norris was the head of the elementary school. But that arrangement wasn't sustainable, and the family eventually rented an apartment in Charlotte and began home-schooling Kathleen.

"We pulled it off because Kathleen wanted it and was willing to sacrifice so much," Norris said. "We worked it out as a family, and she went and really had a great experience at SwimMAC. It kind of kept growing from there."

## PURE JOY

When Baker was 17, she qualified for her first senior U.S. international team, traveling to Australia for the 2016 Pan Pacific Championships. A year later, she qualified for the World Championships final in the 100 back. That Olympic dream, so fragile for so many, had crystalized into a legitimate possibility.

Baker entered the Olympic summer after an unspectacular freshman year at Cal-Berkeley. After exams in April, she had returned to Charlotte to train with Marsh for two months before Olympic Trials. Baker was no stranger to success in either the 200 back and 200 IM, but she and Marsh decided that for 2016, they would put all their eggs in the 100 back basket.

What ensued were two days that Baker called "the most stressful thing in my entire life." Of the Olympic Trials experience, Kimberley said, "It was awful." She added, "Her sister, Rachel, practically had to leave the building when Kathleen swam because she was so shaken by it."

But after 59 seconds, the trio was in tears—the happy kind. Kathleen had finished second and booked herself a spot on her first Olympic team. What Norris remembers from that night was not watching his daughter race, but what happened afterward. Kathleen flew over the lane line from Lane 5 into Lane 4 to celebrate with race winner and fellow first-time Olympian, Olivia Smoliga.

Baker's dad observed, "She literally had the most joy—pure happiness and joy—that pure joy that comes from someone making the Olympic team and who loves her sport so much!"

## TIME TO SHARE HER STORY

Immediately after Trials, Baker decided to tell the world about the greatest challenge she had ever faced: Crohn's disease. Before that, her battle with Crohn's had been a deeply personal subject, shared only with coaches and certain teammates. But as an Olympian, Baker figured she had reason to share her story.

"I always said that if I made the Olympic team, I would love to come out with my story because of how much I struggled as a kid," Baker said. "I really wanted to be a positive voice for it and especially for pediatric Crohn's patients or anyone with a chronic illness."

For years, Baker had struggled with frequent illness, fatigue and weight loss. When she learned that she had been diagnosed with the dreaded gastrointestinal disease, she Googled "Crohn's" before her parents had the opportunity to sit down and talk with her, and she didn't find many stories about Crohn's patients going on to great athletic achievements.

But Baker found the will to believe that she would get through it. Her parents believed, too, and they enlisted doctors who took a similarly positive approach to the situation.

"Your story is not going to be how you got sick and had to stop swimming," Norris remembered telling his daughter. "It was going to be just the opposite. We believed and hoped that she would believe, and she did."

As an Olympian, Baker wanted to be the reason others believed they could overcome their own medical challenges.

"Crohn's affects so many different aspects of your life, and I really wanted to be someone who people could look up to and see that I've been able to achieve something so amazing while having Crohn's disease. I have struggled along the way with it—of course, any patient does—but I've been able to overcome a lot to get there," she said. "I just want to be able to be that voice so that other kids can have that same experience."

## BAKER'S LAUNCHING POINT

When Baker arrived at the Olympics in Rio de Janeiro, she had no expectations other than to try and make the 100 back final—

CONTINUED ON 28 ►



> Upon her return to Cal-Berkeley after her breakout meet at the Olympics in Rio, she was the country's best collegiate backstroker for the next two seasons, winning four individual NCAA titles and setting an American record in the 200 yard back.





> After she touched the wall in the women's 100 back at U.S. nationals last July, Kathleen Baker thrust her left arm into the air and spun around 360 degrees. As she looked at the scoreboard, she was in shock at the time she saw: 58.00—her first world record!

that is, until her prelims race, when she finished as the top seed and became just the third American in history to swim the race in under 59 seconds.

Marsh, the head coach of the U.S. women's team at those Olympics, worried that Baker's prelims time was a fluke. It wasn't. She came back for the semifinals and again qualified fastest for the final. The next day, before the biggest race of her life, Kimberley texted back and forth with her daughter.

"She said, 'I'm good. I think no matter what, I'm good,'" Kimberley recalled. "She felt really proud of the time she'd already posted, and she felt like she had done a lot to bring a positive awareness to Crohn's disease. She felt like, 'Check and check. How can I not be proud of what I do at this point, no matter what?'"

So ironically, the pressure was off in Baker's first Olympic final—and she walked away from it with a silver medal. Later in the week, she also won Olympic gold as the backstroke on Team USA's women's 4x100 medley relay.

That meet turned out to be Baker's launching point. Upon her return to Cal-Berkeley, she was the country's best collegiate backstroke for the next two seasons, winning four individual NCAA titles and setting an American record in the 200 yard back. In the summer of 2017 at Worlds, she repeated her gold and silver medals from the Olympics and added a bronze in the 200 back.

### 368 DAYS TO A WORLD RECORD

In late July 2018, Baker swam at the U.S. nationals in Irvine, Calif., the site where she had qualified for her first international team four years earlier. Already co-champion in the 200 back, Baker was slated for the 100 back final on the fourth night of the meet

when Marsh approached her with an idea.

"I never do this to Kathleen—I never do outcome stuff with her," he said. "She's so big on goals that I try to back off outcome. I said, 'Do you know what this crowd needs tonight? It needs a world record.' She goes, 'It does.'"

Baker was surprised Marsh had brought up the topic, but she had been thinking about the 100 back world record for more than a year—368 days, to be exact! When she won a silver medal at the World Championships in Budapest, Canada's Kylie Masse won gold and set the world record at 58.10. Every single day since then, a notification had popped up on Baker's phone at 8 p.m.: "58.1."

So that night in Irvine, Baker went out faster than any woman ever had. She flipped at the 50-meter mark in 27.90, 6-tenths faster than Masse's world-record pace. Watching poolside, Norris and Kimberley were praying she could hold on, but they were used to watching Baker swim races like that—she had been doing it her

whole life.

"That has been my race strategy since the very beginning," Baker said. "It used to be just 'go as fast as you can for as long as you can.' I used to do 2,000s for time in practice as a 13-year-old and just sprint until I couldn't sprint anymore."

Nowadays, Baker insists, she does hold back something. Clearly, on this night, she held back just enough.

Baker battled her way into the wall and touched. She thrust her left arm into the air and spun around 360 degrees. As she looked at the scoreboard, she was in shock at the time she saw: 58.00.

"It's so crazy to be able to look at it and say that I'm the fastest woman ever in the 100 backstroke. It's been a goal of mine pretty much my whole life to have a world record. That record has been

"I think it's so important to enjoy what you love because then it doesn't ever seem like a job. I think as long as I'm loving it, I'll swim for a while."  
—Kathleen Baker



on my mind since Kylie broke it last year,” she said. “I was hoping to be able to do it by 2020, but to already be able to get it—especially at nationals this summer—was just amazing.”

## TURNING PRO

Just days after her world record, Baker announced that she would be forgoing her final year of NCAA swimming at Cal to turn professional. She signed an apparel deal with Speedo. She felt she had accomplished pretty much all she could as a collegian, but the bigger catalyst for her decision was the timing of the next Olympics and the still-fragile nature of her health.

Now 21, Baker has her Crohn’s under control—she gives herself shots containing her medication, and she has learned not to overextend herself in training—but she still has to be careful to keep her body in a comfortable rhythm. Now, she has the chance to get comfortable as a pro with two full years before she aims for her second Olympic team.

“I think that there’s a lot of adjustments when you turn pro, and turning pro a year before the Olympics could add some more adversity. I just really wanted a lot of smooth sailing,” Baker said. “My main focus is on international swimming, but I’m so thankful for what Cal has given me and the teammates I’ve had.”

Her first meet as a professional came at the Pan Pacific Championships in Tokyo in early August, and Baker again collected one medal of each color. Just weeks after setting a world record in the 100 back, she ended up falling to the bronze-medal position in that event, but she scored a win on the meet’s final day in the 200 back, her mark of 2:06.14 propelling her to 10th all time in that event.

Also in 2018, Baker made inroads toward establishing herself as a threat internationally in the 200 IM. She won the event at nationals in 2:08.32, making her the second-fastest swimmer in the world this year. She will swim all three of those events at next year’s World Championships, which could include the 100 back semifinals and 200 IM final back-to-back on the second night of competition.


## ENJOYING WHAT SHE LOVES

Her endgame is 2020, when she hopes to return to Tokyo for the Olympics. While anything on top of making the team would have been a bonus in 2016, that won’t be the case come 2020, when Baker will be expected to contend for multiple individual medals. She has grown up—from teenage talent to joyous Olympian to international force.

But some things never change. Asked about her future beyond 2020, Baker replied: “I think it’s so important to enjoy what you love because then it doesn’t ever seem like a job. I think as long as I’m loving it, I’ll swim for a while.”

Baker now splits her training time between Berkeley and San Diego, where Marsh has relocated his pro group—a long way from home in North Carolina. She’s a full decade removed from that determined young girl bringing pages of detailed goals to her youth coaches and demanding her parents let her go to swim practice more often.

And even though health threw her a few curveballs along the way, that swim-crazy girl grew into the woman who is now the fastest 100 backstroker in history. ❖



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WITH KATHLEEN BAKER

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*Music before you race:*  
**Anything rap, hip hop and country**

*Swim meet snack:*  
**Pretzels**

*Motivation to get through a rough practice:*  
**Try to find something positive and enjoy it**

*Highlight of your swimming career to date:*  
**Breaking a world record**

*Least favorite part of swimming:*  
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# A TRANSITION YEAR

College swimming may have lost the top two swimmers in the world—with Katie Ledecky turning pro and Caeleb Dressel graduating—but there will still be plenty of storylines to follow this college season.



> Ella Eastin, last season's Swimmer of the Meet at women's D-I NCAAAs with five wins (three individual—including two American records and a meet record—and two relay), will lead Stanford in its quest to capture its third straight team title.

BY DAN D'ADDONA | PHOTOS BY PETER H. BICK

**T**he Katie Ledecky-Simone Manuel Stanford dynasty is over. Of course, just because they don't have the best team in history this year doesn't mean the Cardinal won't claim another women's NCAA championship this season.

Meanwhile, after four men's NCAA titles, the Texas run could be at an end. Plus Florida's Caeleb Dressel will no longer be torching the collegiate pools with his jaw-dropping speed.

This will be one of the biggest transition years in NCAA swimming in recent years. With Ledecky, Manuel, Dressel and recent world record setter Kathleen Baker all leaving the college pool (Manuel and Dressel graduated, while Ledecky and Baker opted to turn pro early), four of the biggest names in amateur swimming are now moving on to the professional ranks.

Still, you'll be able to find plenty of talent during the upcoming 2018-19 college swimming season, led by Indiana's Lilly King, Texas' Townley Haas and Stanford's Ella Eastin.

*And there are plenty of strong teams...*

## STANFORD WOMEN STILL STRONG

Last year, if you took away all of the points that Ledecky, Manuel and Eastin scored, the Cardinal still would have won the national championship. However, Stanford also lost elite graduated seniors Janet Hu, Ally Howe and Olympic diver Kassidy Cook.

"We are really trying to keep it relative to the group we have now," Stanford coach Greg Meehan said. "We knew when we won in 2017 that the 2018 team was even better on paper. We wanted to have a meaningful and successful season, and we did that—it was a special experience, with memories we will keep for a long time."

"But we have to turn the page and look in front of us: 2018 is always going to be there. But winning in 2018 is not going to help the 2019 team win. We are just trying to be the best versions of ourselves, and we are going to do that with this group."

And that best version could be stunning. There is plenty of talent on that roster. In addition to Eastin, returning swimmers Katie

Drabot and Brooke Forde are coming off of their first taste of being on the U.S. national team.

"Drabot's success continued this summer by making her first USA team and qualifying for Worlds next summer," Meehan said. "She worked really hard for that. She had some pretty audacious goals in the fall and just pursued them. She really attacked the work that was required. Sometimes kids just need to do it once to prove to themselves that they can do it at this level. Sometimes it is just a matter of believing it. Now she is starting to move into a leadership role."

"Ella exceeded her own expectations. It was not like she was in a place where she was trying to learn to win for the first time. She was in the place where she just put together some great swims and had the confidence of having her best year of work behind her. When you add that confidence to an already talented swimmer, it is kind of the perfect storm. That was probably one of the greatest meets ever for any woman at any NCAA meet."

There are many other talented swimmers returning from the juggernaut Cardinal team plus a superstar recruit in Canadian Taylor Ruck. She'll provide Stanford with another dynamic presence after earning gold last summer at Pan Pacs, beating Ledecky in the 200 free—not to mention winning an additional silver and three bronze medals in Tokyo...plus six gold medals at the 2017 World Junior Championships and two bronze medals at the 2016 Olympics!

"It is no secret that we are losing a ton, but I think we have a good group of freshmen who will be able to make an impact down the road," Meehan said. "Taylor is coming in with a little bit more experience than the others, but I am thrilled about our class. It is probably the best incoming class we have ever signed, and Taylor certainly leads the way with her international experience and her versatility."

NCAA runner-up Cal has Amy Bilquist, Katie McLaughlin, Maddie Murphy and Abbey Weitzeil returning, but definitely will miss the presence and point scoring at NCAAAs of Baker, who won



multiple national championships individually and on relays.

Texas A&M will look different, too. Last year's third-place team loses a dominant senior group that included Lisa Bratton, Jorie Caneta, Bethany Galat and Beryl Gastaldello.

Those departures from the Golden Bears and Aggies could open the door for another title contender—or in this case (with Stanford's loaded lineup), another runner-up contender. Perhaps it'll be Michigan, which finished fourth last year behind distance depth and a breakout performance by Siobhan Haughey, who returns for her senior year.

## A TIGHT BATTLE (AGAIN) FOR MEN'S CROWN

On the men's side, we can expect another exciting race for the team championship.

Yes, the Longhorns have won four in a row, but last year's meet was extremely close, with Texas, Cal and Indiana all within reach of the title on the final day—and North Carolina State not too far behind.

But each of those top-three teams lost huge points to graduation.

Texas will still have Haas, John Shebat and some strong divers, led by Grayson Campbell, but it lost key components Joseph Schooling and Brett Ringgold.

Cal lost Connor Hoppe, Matthew Josa and Justin Lynch, but returns Andrew Seliskar, Pawel Sendyk, Ryan Hoffer, Michael Jensen and Zheng Wen Quah, giving the Golden Bears some quality depth.

Indiana returns national champion Ian Finnerty and All-American Vini Lanza, but lost the face of the program in Blake Pieroni. ❖



> Townley Haas returns for his senior year at Texas with hopes of becoming the first swimmer to win the 200 yard freestyle four straight years at men's NCAA's. Only Haas (2016-18), Arizona's Simon Burnett (2003-05) and Cal's Matt Biondi (1985-87) have won three in a row in the event at the D-I Championships.



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**See display ad on page 32.**

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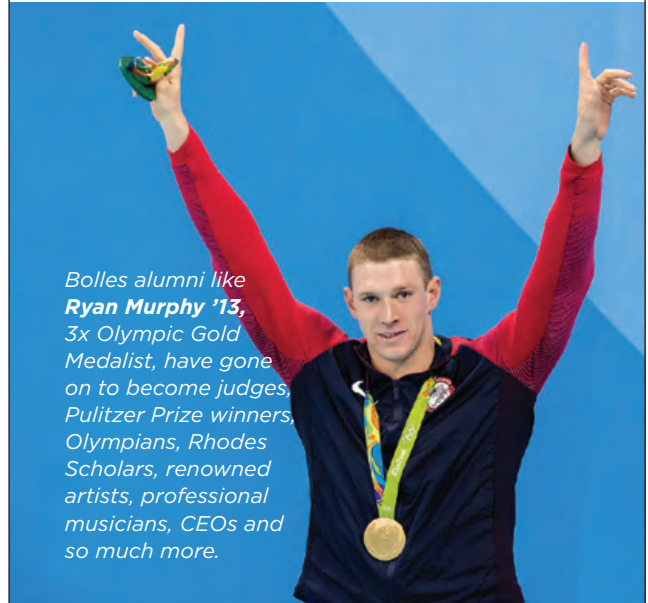


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billingsleyt@fuma.org • www.forkunion.com

Head Swim Coach: Jon B. Larson 434-842-4210

larsonj@fuma.org

Fork Union Military Academy is one of the premier college preparatory schools in the country. Founded in 1898, the school has a tradition of educating young men in "Body, Mind and Spirit."


The Academy is located in Central Virginia near the town of Charlottesville and the University of Virginia. FUMA has been nationally recognized as a sports powerhouse, producing multiple Olympians, two Heisman trophy winners and over 150 professional

football, basketball and baseball players. Their Swimming & Diving program has produced athletes who have gone on to swim at some of the nation's best college programs, including a swimmer who competed in the 2016 Summer Olympics in Brazil.

Starting in 2016-17, the Academy expanded its swimming program to include postgraduates who are looking to improve academically or just get stronger and faster in the water before attending college. Like its high school program, postgraduate students participate in the One Subject Plan, where students take one subject at a time over seven-week terms throughout the year.

In addition to this, they have access to SAT/ACT prep courses, college credit courses through advanced placement (AP) courses, and dual enrollment courses taught with PVCC (a local community college). This academic approach, along with the discipline and structure it provides, allows students not only to excel academically, but also athletically, helping instill self-discipline, character and time management.

Their program and school have a long history of developing young men of character both in and out of the pool. Swimmers will have access to between nine and 11 training sessions a week in the Academy's state-of-the-art, 8-lane by 25-meter indoor pool that was built in 2006, and will compete at USA Swimming-sanctioned meets throughout the year, including Winter Nationals, Winter Junior Nationals and Speedo Sectionals. In addition to the pool, they also have access to the best in athletic training staff



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and dryland equipment, whether it is on their pool deck or in one of their weight/cardio rooms.

This is the setting that the Academy has used to help produce four high school state championships in the past seven years, 39 High School All-Americans and countless others who have gone on to swim at national and international meets, including the World Championships and the Olympics.

*See display ad on page 34.*

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Director of Enrollment Management:

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Aquatic Director: Scott Ward 443-544-7161

sward@mcdonogh.org

On 800 rolling acres in a suburb north of Baltimore, McDonogh School is a vibrant, diverse, family-like academic community. Students are inspired regularly by talented, caring teachers and achievement-oriented classmates. Opportunities abound in academics, arts, athletics and service. A five-day boarding program is an appealing option for swimmers with early morning practices.

The Henry A. Rosenberg Jr. Aquatic Center, built in 2006, includes an indoor 8-lane, 50-meter pool, which is home to boys' and girls' swim teams and coed water polo teams. Since 2003, the girls' squad has won 12 league championships, and the boys won league championships in 2012 and 2018. Additionally, water polo earned a league championship in 2018.

McDonogh swimmers have risen to the top of the sport. Since 2000, the boys' and girls' teams have had 43 individual High School All-Americans, totaling 144 All-American performances. Recent graduates have contributed to top collegiate programs, including Harvard, Stanford, Arizona, Georgia, Purdue, Columbia, Johns Hopkins and the U.S. Naval Academy. In 2009, one alum set a national high school prep record and later went on to win a gold medal at the 2015 Pan American Games in record time. Most recently, three swimmers participated in the 2016 Olympic Trials, with two placing in the semifinals and championship finals.

Upper School tuition for day students is \$30,720; \$41,080 for five-day boarding. In 2018, McDonogh awarded more than \$5.9 million in need-based financial aid.

## Mercersburg Academy



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Head Swim Coach and Director of Aquatics:

Glenn Neufeld 717-328-6173

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Swimming at Mercersburg has a long tradition of excellence. The program has fielded 31 swimming Olympians, including five gold medalists. Head coach and former YMCA National Coach of the Year, Glenn Neufeld, leads a Mercersburg swimming program that has produced numerous prep school All-Americans, and has sent countless swimmers to compete at a wide variety of top colleges and universities. Mercersburg Academy also operates a summer swim camp for swimmers ages 8-18.

Founded in 1893, Mercersburg Academy gives students the opportunity to live and learn in a richly diverse and authentic learning environment that is home to students from over 30 states and 40 countries. The curriculum offers over 170 courses, including more than 40 AP, post-AP and honors-level courses all taught by an experienced faculty—80 percent of whom hold advanced degrees.

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*See display ad on page 37.*

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201 South Main St. • Hightstown, NJ 08520

Director of Admission: Molly Dunne

609-944-7501 • Fax 609-944-7911

admission@peddie.org • www.peddie.org

Director of Competitive Swimming/Head Coach: Greg Wriede  
gwriede@peddie.org

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Recent graduating swimmers went on to Harvard, Princeton, Yale, Stanford, Northwestern, University of Pennsylvania, ASU and

CONTINUED ON 36 ►



Auburn. Peddie's substantial endowment provides need-based financial aid for roughly 40 percent of its students.

**See display ad on page 37.**

## Phillips Academy

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**Founded in 1778**

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Photo courtesy of Fox-Mar

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CONTINUED ON 38 ►



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Aquatics Director/Sports Information Director: Kati Eggert

860-408-4292 • [keggert@ethelwalker.org](mailto:keggert@ethelwalker.org)

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 413-529-3000 • [cdietrich@williston.com](mailto:cdietrich@williston.com)  
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 Swimming and Diving Coach: David Koritkoski  
 413-529-3245 • [dkoritkoski@williston.com](mailto:dkoritkoski@williston.com)

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Walker's Centennial Aquatic Center was built in 2016 and houses an 8-lane, 25-yard deep pool, one of the fastest pools in the New England Prep School League and the only all-girls school in New England with such an advantage. The facility has the newest technology that removes gases from the surface of the water so swimmers breathe fresh air.

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# KNOW THYSELF... AND YOUR OPPONENT

A GOOD RACE PLAN AND AN AWARENESS OF YOUR OPPONENTS' TENDENCIES CAN HELP YOU PERFORM AT YOUR BEST.

BY MICHAEL J. STOTT

**T**he Middle Atlantic high school coach remembers his first high school state meet as if it were yesterday. He had an outstanding distance freestyler going against the reigning state champion. The coach had researched his swimmer's chief opponent and memorized his times and preferred race strategy. The champ liked to take the first 200 out strong and then descend the last three 100s.

Pre-race, he detailed the information, and his athlete took the message to heart. The coach counseled, "You must be ahead at the 200. And bless him, he was," says the coach. "It was a great race. The adversary descended, my guy went hammer and tong with him and lost by 26-hundredths, with both swimmers registering All-American times. In agony after the race, my swimmer's comment was, 'Coach, I just couldn't hold him off.'"

In all fairness, it wasn't for lack of trying.

"Was there disappointment? Absolutely. The strategy was valid, the training, stroke technique, aerobic capacity and speed were all in place for a worthy challenge. We just came up short," he says.

Joshua White is associate head coach at the University of Michigan and has mentored open water and distance swimmers for years.

"In general, I believe in working with swimmers to have them swim their own best race strategy," he says. "To do that, though, you certainly have to be aware of the tendencies of others in the race. If you don't know that someone else in the heat always goes out fast and dies, it can be so tempting to go out too hard just to stay in the race.

"Similarly, you don't want to go out too slowly with someone who has a back half that you can't match. So, for the most part, we encourage our athletes to race in the way that will help them go the fastest AND know their competition so that they can have confidence in that race plan. Though, depending on the circumstance, there are always exceptions," he says.

## PERFECT STRATEGY REWARDED WITH OLYMPIC GOLD

In his storied career, Bill Rose coached countless open water and distance stalwarts, especially at the DeAnza Swim Club and Mission Viejo, both in California. "In clinics, we talk about fly-and-die, negative split, descending by strategies—there are all kinds of ways to do it," Rose says. "I think the perfect way is to train at the highest possible level without going into oxygen debt." He cites Katie Ledecky as a prime example.

An early payoff for Rose was with Mike Bruner in the 200 meter



> At the 2004 U.S. Olympic Trials, Larsen Jensen (pictured) came from behind in the men's 1500 to defeat the favorite, Erik Vendt. "It wasn't (necessarily) the perfect strategy," said Jensen's coach, Bill Rose, "but it was the perfect strategy against Erik—the point being you have to vary your strategy based upon your competition."

[PHOTO BY BILL COLLINS]

butterfly at the 1976 Olympics. Bruner was pitted against favorite and world record holder Roger Pyttel of East Germany.

Rose had done his homework. "We went over Pyttel's 50 splits, all that good stuff." Come race day, Pyttel went out well. "No way was Mike going to try and be with him at the 100. Pyttel tended not to hold his third and fourth 50s very well," says Rose. "Sure enough, his third split was six-to-eight-tenths slower than the second, and the last was the slowest of all."

Rose had told Bruner to just ride the first 100 and know he was going to be a half body length or more behind.

"The next 50, your job is to catch whomever is the leader. Be even at the end of the third 50," Rose told him, "because the way you train your fourth lap is always your best. If you are, no one will beat you the last length. Mike believed in himself and his training. It was a perfect race for him, and it showed."

The result: first, Mike Bruner, 1:59.23 (WR); second, Steven Gregg (USA, 1:59.54); third, Billy Forrester (USA, 1:59.96); fourth, Roger Pyttel (GDR, 2:00.02).

## ANOTHER SUCCESS STORY

Another Rose success story unfolded at the 2004 U.S. Olympic Trials. While coaching at Mission Viejo, Rose had prepped Larsen Jensen—the 800 meter free silver medalist at the 2003 World Championships—for the 1500 at the 2004 U.S. Olympic Trials.

"I figured Erik Vendt would be the guy because he had been swimming very fast. So I studied what he did and developed what I felt was the perfect strategy to beat him," recalls Rose.

"I told Larsen what I expected from Vendt and what he needed to do to counteract him. I said, 'You are just going to dog him. He'll get a body length lead on you. When he takes off, you get on his feet until the 800. Then your job is to swim a 400 as fast as you possibly can and discourage him because I had seen at various times if you discouraged him late, he had a hard time coming back.

"Larsen ended winning the race in an American record. It wasn't the fastest Larsen could go or the perfect strategy...but it was the perfect strategy against Erik—the point being you have to vary your strategy based upon your competition."



> Before the men's 200 fly at the 1976 Olympics in Montreal, Coach Bill Rose (left photo at right) told Mike Bruner to just ride the first 100 and know he was going to be a half body length or more behind. "The next 50, your job is to catch whomever is the leader (middle, from left: Roger Pyttel and Bruner). Be even at the end of the third 50," Rose told him, "because the way you train your fourth lap is always your best. It was a perfect race for him, and it showed (right)."

## NOT ALL ROSES

However, for Bill Rose, the strategist, it has not been all roses. One haunting experience took place at the 2008 Olympic Trials, when he coached American record holder Chad La Tourette, who qualified second after the 1500 free prelims.

At the 2008 Olympic Trials, Rose figured Jensen would be the top qualifier and La Tourette would need to beat Vendt. With 300 to go, Vendt faded.

"Everything was going just fine," says Rose. "Chad in Lane 5 did everything he was supposed to do, but he never looked over toward Lane 3, where Peter Vanderkaay was charging home. Chad ended up third.

"I knocked myself silly. I thought I was a genius, and it showed just how stupid I really was—at Chad's expense...and it just killed me."

## A LANE 3 PERSPECTIVE

Peter Vanderkaay's (ultimately, a three-time Olympic medalist) race plan consisted of several parts. "In the first 500, I wanted to make sure I didn't overswim the first few hundred meters," he says. "It's easy to let emotion take me out too fast, which can significantly affect the back half of the race. I wanted to stay in control and get into my pace and try not to let anyone get too far ahead, but not burn a lot of energy up front.

"In the middle 500 meters, I wanted to concentrate on keeping the rhythm and pace in control while focusing on body position and technique...then build into the race and not experience any further separation between me and the leaders.

"The goal was to be within striking distance the final 500—that's where the pain really builds. I didn't want to think about it, but rather descend and take the lead (he did both from the 1250). The plan was to add a more pronounced kick to keep the pace up...then use whatever energy was left to hammer the final 300 and go all out the final 100 meters.

"I knew it was going to be a tough field with Jensen, Vendt and La Tourette vying for the top two spots," Vanderkaay added. "I wasn't too concerned with their strategies, as they were probably similar to mine. I ended up executing my race almost as well as I could have. Jensen (who finished second) was out quick, and I was able to reel him in over the final few hundred meters."

## SOMETIMES IT IS NOT THE STRATEGY

Fast forward to the 2012 U.S. Olympic Trials where Rose and La Tourette again had a plan for another elusive 1500 freestyle roster spot.

"In 2012, Chad was THE MAN. He had set an American record in the 1650 at NCAAs. I still get emotional about this," says Rose.

"I just trained the crap out of him, and when we tried to taper, things just didn't go right. He ended up way in front the first 800 meters. Both Andrew Gemmell and Connor Jaeger went into action and passed him (by the 1300), and he ended up getting third again.

"That wasn't a strategy problem. Chad wasn't able to do what we planned. It wasn't his fault—it was mine. I just buried him. He was just too tired and didn't get enough rest before the meet. I screwed him up twice. Here's a guy who, for sure, should have been in the Olympic Games. It was a horrible, horrible situation."

## ANOTHER VOICE

Second-place Jaeger (14:52.51), who finished a mere 32-hundredths behind Gemmell, had a race plan of his own.

"Looking back, the most exciting thing for me was that it was only the fifth time I had swum the long course version of the event," he says. "I was still getting used to the race itself, learning how to pace it and control my nerves in the front half, especially getting used to keeping track of laps. I learned the difference from college the hard way in prelims when I miscounted and overswam by 75 meters!

"My goal for the race was pretty simple. I wanted to keep the first 300 meters cool, build to the 500 mark, and then get faster with each subsequent 500 meters until I was going all-out at the end. My strategy was to take it easy as possible the first 300, but always stay in the race for first.

"Chad La Tourette had just broken a legendary 1650-yard record at NCAAs while I was in the race. I remember early on when he just went, and I couldn't hang. I ended up getting third, a humbling 10 seconds behind. In Trials finals, I knew I would be swimming right next to Andrew Gemmell, who had impressive long course experience, including getting top 8 in the 400 IM earlier.

"Almost immediately, I had to bail on my strategy. Memories of Chad's 1650 at NCAAs sprang to mind when he took off at the 200-meter mark. In my head, I was no longer fighting for first, but that Andrew and I were fighting for second.

"We were so far behind him at the 500-meter mark (La Tourette, 4:55.72; Gemmell, 4:59.97; Jaeger, 5:00.16) that I figured he was on American record pace. I had another mindset shift between the 800-to-1000-meter mark when Andrew and I caught and passed Chad (actually not until 1250-1300).

"At that point, it became a fight for first against Andrew. Regardless, I wanted to make sure I had enough in the tank (Jaeger outsplit La Tourette each 50 from the 800 on) to push hard again should Chad have a second wind and a strong finish.

"It was a really exciting race to be a part of, and something that I'll remember for the rest of my life," says Jaeger.

As will Rose and La Tourette. ♦



## Q &amp; A



Coach Kami Gardner

**Head Coach, Men's and Women's Swimming  
Washington & Lee University  
Lexington, Virginia**

.....

- Kenyon College, B.A., psychology (cum laude), '91; Western Illinois University, master's, sports management, '94
- 17-time NCAA champion, 27-time All-American at Kenyon
- Five-time NCAA Division III national record holder; D-III Female Swimmer of the Year, 1991
- Head coach, SUNY-Oswego, 1994-2007
- 11-time SUNYAC Conference Coach of the Year
- Head women's coach, Washington & Lee, 2007-present, with 11 ODAC conference titles and six D-III Coach of the Year awards
- Head men's coach, Washington & Lee, 2011-present, with four ODAC titles and one Coach of the Year award
- Member, Kenyon College and Troy High School (Ohio) Halls of Fame

While at W&L, Coach Gardner's women's teams have compiled a 90-32 dual meet record (73.8%). Her men's teams have gone 46-12 (79.3%).

.....

# KAMI GARDNER

BY MICHAEL J. STOTT

PHOTOS BY WASHINGTON & LEE UNIVERSITY ATHLETICS

Triumphant in high school and at Kenyon College, Coach Kami Gardner now promotes a winning culture at Washington & Lee University.

*Q. SWIMMING WORLD: Tell us how you decided to go to college at Kenyon.*

A. COACH KAMI GARDNER: I visited Kenyon as a high school sophomore, and I knew immediately that is where I wanted to go to college. My parents wanted me to visit other schools my senior year because Kenyon was cost-prohibitive for our family at the time.

When it was clear I was settling for my second choice, they promised me one year at Kenyon. It was understood that if they could not manage it, I would have to transfer. Fortunately, they were willing to make sacrifices so I could attend all four years. I am eternally grateful to them for that experience.

*SW: As a high school All-American and state champion in the 100 back, how did that success and subsequent association with other successful swimmers at Kenyon shape your competitive fire?*

KG: I have always been a competitive person, sometimes to a fault. However, being surrounded by a team of individuals who have the same passion and dedication to the process certainly draws that out of you. There was a level of trust among the Kenyon team and coaches. Everyone was there to improve and to support one another's effort. It was a lot of fun, but a lot of hard work.

"Coachman" (Coach Jim Steen's nickname) always started the season letting us know that we were not national champions. The team the previous year was the champion, but we were not that team... yet. It was humbling and challenging all at once.

*SW: How did the experience with Steen and the Lords/Ladies affect how you coach now?*

KG: The first thing I learned as a coach is that every place is not Kenyon. You have to build a culture within your own program before you can expect results. The one thing I took with me was the importance of

establishing traditions and a team identity. We had some great traditions at Kenyon, but those wouldn't necessarily work elsewhere. You have to give your swimmers a reason to want to be a part of this experience other than just swimming fast.

*SW: One coach has said that you are "good top to bottom—including team building, training, the mental side, things before taper in the locker room and goal setting." What are some examples?*

KG: I think "good top to bottom" is based on my philosophy. If you have something positive to contribute to our program, we want you to be a part of it. Some people will break records in the pool, some will win Fulbright scholarships, some will be your leaders on deck, and some will be the support system. Conversely, if you are taking more than you are giving, then it may not be the place for you.

**Team Building:** We do a lot of things throughout the season—some small and some big. I like to take each class out for a meal to discuss their concerns and goals for the season. It is a great way to help them find and develop their role on the team.

It is especially useful for the sophomore class to help avoid the pitfall of the sophomore slump. That class needs to realize it has an important role, and they are not just "the middle child."

I also like to have a separate men's and women's team-building activity. Although they are one team, they have different ideas of fun. Last year, the guys did paintball, and the women did a karate self-defense class.

**Training:** It is tough to give specific examples, but our secondary practices are specifically focused to develop power and speed for our sprinters/mid-distance swimmers and extra pace work for our distance crew. So, even if we are at the beginning of the season and looking to do a bit more aerobic training, our sprinters get their mental and physical needs met.

CONTINUED ON 44 ►

## HOW THEY TRAIN

## EMILY HAGEBOECK

BY MICHAEL J. STOTT



## PROGRESSION OF TIMES

SCY	Best HS	2016-17 (FR)	2017-18 (SO)	Improvement
100 Breast	1:05.96	1:04.64	1:04.18	2.70%
200 Breast	2:20.94	2:17.89	2:16.81	2.93%
200 IM	2:08.86	2:08.12	2:06.93	1.50%

As a senior at George Washington High School (Charleston, W. Va.), Emily Hageboeck was the CSCAA's No. 1- ranked recruit from the Mountain State. At 5-4, Hageboeck finished her high school career as a 10-time state champion (100 yard breast/200 medley relay/400 free relay three times; 200 IM once) while helping The Hill to four state team championships.

Under head coach Kami Gardner, Hageboeck has once again begun dropping time after stagnating in her later high school career. At last year's NCAA Division III Championships, the Washington & Lee sophomore finished seventh in the 200 yard breaststroke (2:18.05), improving upon her eighth-place time (2:19.48) the year before.

To date, Hageboeck, an accounting/business administration and computer science double major, has earned six NCAA All-American recognitions. This spring, she was named the Old Dominion Athletic Conference Female Swimmer and Scholar-Athlete of the Year.

"Emily's first year was a surprise to her," says Gardner. "She came in without expectations, but still with a racer's determination. She had not gone a best time in a while, but she gained a lot of confidence throughout the year. Emily came back as a sophomore, knowing she was capable of competing among the best in Division III. She secured a B-cut in the first dual meet of the season, and never looked back.

"She is a very even-keeled person—never gets bent out of shape or goes over the top with enthusiasm. There is a smile on her face whether it was a tough day, workout, good or bad swim. She makes fun of herself, which makes her incredibly coachable for us...and approachable to her teammates. However, she is all business when she gets on the blocks, and she knows how to mentally prepare herself prior to that moment.

"Emily is a racer and gets better as the distance gets longer, no matter whether it is her best or off event. She wants to win and doesn't get rattled by competition. In fact, she thrives on it, knowing it makes her a better competitor. She also sets smaller goals throughout the season, such as aiming to be one of the first on the team to make an NCAA cut.

"Coaching Emily is a joy. I love the inner drive she has to get better. She recognizes that communication is a key to success, so she never hesitates to ask questions or ask for feedback. She is a team player. One of her main objectives is to get relays to the NCAA meet, where she plays a key role. The team responds to Emily's encouragement because they know she is sincere and wants them to do well.

"Her training habits and work ethic are impeccable. Emily is focused, pays attention to detail, and is determined to execute properly, always seeking ways to get better. She never misses practice, yet maintains a 3.8 GPA," says Gardner.

"One of her favorite sets is 40x50 with every other one fast. She holds 32 breaststroke on the fast. On pace sets, she will hold 34." ❖

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The Assistant Swimming & Diving Coach will organize and implement practice and meet plans in coordination with the Head Swimming & Diving Coach; recruit for swimming & diving; and perform designated facility duties. Guided by the Rhodes Vision, the Assistant Swimming & Diving Coach should build a sense of community and enthusiasm around the swimming & diving program by engaging the student body, alumni, parents and fans. Strong relational skills with internal and external constituents are critical. Other duties include participating in development and fundraising activities with various constituents

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**The Mental Side:** Communication is key! We do optional relaxation and visualization on deck and in the pool. Each person is different, and some find it makes them more anxious. Again, communication is key.

**SW: You organize creative recruiting trips.**

KG: I am not sure they are particularly creative, but they are thoroughly comprehensive. We want to make sure prospective student-athletes get a true sense of what it is to be a student-athlete at W&L. We schedule a full day of classes and meetings with professors or organization leaders. Prospects have free time with swimmers to get a sense of the community. The seniors organize activities after the academic/athletic training day is over. That isn't too difficult, as the team generally hangs out together anyway.

**SW: How do you build your season and then prioritize different points within your season plan?**

KG: I am a one-taper coach—two with our NCAA qualifiers. Many coaches like

a December taper, but we only taper for our conference meet. Most of our student-athletes travel abroad or are doing research/internships over the summer. Some are fortunate to be able to find a team to train with or at least a pool, but there are places where that is not possible. We have to be able to get an athlete prepared to swim fast in a short amount of time, so we like to focus on February.

**SW: What do you keep in mind when creating practices and training plans?**

KG: For starters, team and individual goals. However, there is much more than setting a plan and sticking to it. You need to be aware of what is going on with your swimmers. For example, midterms can be an incredibly stressful time. We take that into account when writing practices and make sure we are paying attention to the emotional fatigue they may be experiencing. There are times when it is more beneficial, and you will get more from your athletes by doing less. I like to leave practice early on days like this, and leave "practice" with my assistants. They then "decide" to give them a get-out

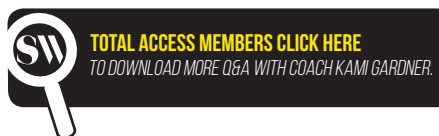
swim. The assistants look like heroes, and the team is happy.

**SW: Do you have any favorite practices?**

KG: I think every coach has a favorite practice or set. One comes from my Kenyon years: 40x50, every other one fast. We do it a few times a year. It is a great benchmark, and the swimmers tend to remember what times they held the last time we did the set. They really get into it, and it amps up the effort and energy at practice. I also enjoy really great IM and mid-distance stroke sets.

.....

*Michael J. Stott is an ASCA Level 5 coach whose Collegiate School (Richmond, Va.) teams won nine state high school championships. He was named a 2017 recipient of NISCA's Outstanding Service Award.*



# UP & COMERS

## AGE GROUP SWIMMER OF THE MONTH

BY TAYLOR BRIEN

# Michael Pickett

**M**any young athletes dream of the chance to represent their country in international competition, and New Zealand's Michael Pickett recently had that dream come true at the 2018 Junior Pan Pacific Championships, Aug. 23-26.

While there, Pickett finished third in the 50 meter freestyle (22.99) and 12th in the 100 (50.89), while also helping his teammates to three fifth-place finishes in the men's 400 medley and 400 freestyle relays and the mixed 400 medley relay.

Pickett has shown his speed ever since he was 12 years old when he first started breaking New Zealand national age group records. He now has 11 such records across the ages of 12 through 16. His most recent NAG mark came on his 16th birthday, Aug. 17, when he blasted a 22.31 for the 50 free (SCM) at the McDonald's Queensland Short Course Championships in Australia. His time lowered Orinoco Fa'amausili Banse's 2007 NAG standard of 22.98.

John Gatfield, assistant head coach at St. Peters Western Swimming Club (Brisbane, Australia), told *Swimming World*, "Michael is a worker and embraces the challenge of hard work. Since coming (from New Zealand) into our program at St. Peters Western in January this year, he has grown a lot—he knows and understands that everything we do now is a small stepping stone and investment into our goal of Tokyo 2020 and beyond."

In addition to being a talented swimmer, Pickett also excels in soccer and basketball.

Gatfield added, "He's an athletic lad and clearly loves to keep active and social in other sports or games outside of the pool. He's got a very relaxed attitude and keeps good balance with his work and play. But come training or race time...he's on!" ❖



### WHAT IS THE BEST THING YOU DO IN SWIMMING?

**SPEED**—both front and back end. I love going fast.

### WHAT ARE SOME OF THE TOUGHEST WORKOUTS/SETS YOU'VE DONE?

**8 x 50s max on 5 minutes**—no warm-down...Pain!

### WHAT IS YOUR FAVORITE THING ABOUT SWIMMING?

*The team environment—especially at St. Peters Western. Everyone is extremely motivated and strives to succeed in every way. Both coaches and athletes hold each other accountable...and no one athlete is bigger than the team, which is a huge push, both mentally and physically. The social side of swimming is great, too, especially traveling back home to compete and seeing all my NZ mates.*

### WHAT ARE YOU MOST LOOKING FORWARD TO THIS YEAR?

*Junior Pan Pacs and Youth Olympics—my first big youth teams.*

### WHO IS YOUR SWIMMING IDOL...

#### AND WHY?

*My all-time favorite swimming idol is Michael Phelps because of his work ethic and perfectionist-type attitude. More recently, Caeleb Dressel has been a huge motivator and idol who I look up to in the swimming world because of his amazing start, power and dominance throughout his events.*

### WHAT ARE YOUR FAVORITE HOBBIES?

*My favorite hobbies outside of swimming are competing in most sports, eating, sleeping, relaxing and hanging with mates.*

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## SHOULD USA SWIMMING HOLD TRIALS MEETS OUTDOORS IF THEY SERVE AS A QUALIFIER FOR AN INDOOR MEET? WHY OR WHY NOT?

BY ANNIE GREVERS



**CHUCK BATCHELOR**  
Head Coach, Bluefish Swim Club  
(Raynham, Mass.)  
(PHOTO BY DAVID RIEDER)

I think we should host our nationals and U.S. Trials meets in the best venues possible—period...

taking into consideration hotels and food availability, etc. Cost should be a secondary consideration. Indoor versus outdoor is only a factor as far as weather is concerned in the particular area.

I do think the venues should rotate [as they do]. It would be less exciting to only go to say, Indy, every year. As we do with Olympic Trials, we set up the best venue possible and run the meet

"normal" versus having prelims at night and finals in the morning [as it's been two of the last three Olympics].

After the team is picked, then every effort should be made at camp to acclimate the athletes to whatever environment and schedule will be expected at the Games. I believe this will ensure the best team at that moment will be chosen in the most fair way, and then the athletes will be prepared for the Games. What should never be a part of the equation—and I am afraid sometimes they are—are politics, money or media!

I also feel there always needs to be someone to ensure the venue is doing everything possible to make sure the venue is "right." This summer [at nationals in Irvine, Calif.], the water was too hot, and no one seemed to be on top of it. Apparently, chillers could have been rented right in L.A. for \$10,000 a week and could have dropped the pool temp by 10 degrees overnight. Ten grand is



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nothing, and it concerns me that no one in a position of authority had the foresight to do something so simple.



#### KATHLEEN PRINDLE

Head Coach, Performance Aquatics  
(Boca Raton, Fla.)

For perspective, I've coached at Olympic Trials in '08, '12 and '16—all indoors—and plenty of U.S. Nationals/Opens outside. My gut reaction prefers an indoor Trials meet for

several reasons:

1. Yes, Trials could replicate an indoor venue offered at the Olympic Games, which would certainly help prepare athletes. But does it work the other way? For example, if the Olympic venue were outdoors, then proper preparation for racing outdoors should be begun long before the Trials meet. I don't imagine you could effectively race backstroke at Trials for the first time outdoors by lining up your strokes with the clouds...not to mention the weather extremes and lack of predictability can/will affect athlete performance—if not in the water, then definitely in warm-up/ race prep. A controlled, replicable environment is probably more effective for long-term athlete preparation.

2. Consider that in the case of U.S. Olympic Trials, only up to 52 of the 1,800 athletes will actually experience the Olympic Games, so

replicating the competition venue is less important here. Creating an electric environment where athletes can swim fast becomes the goal. An indoor venue—as long as air quality is preserved—seems more conducive to such an experience. The energy from screaming fans and team cheers can get lost outdoors...all that noise and energy shoots up the bleachers and up into the sky versus being directed toward that 50 meters, where athletes can hear it and use that to push them to their performance potential.

3. There is great value in an outdoor venue! It can allow for increased fan participation and engagement—i.e., a festival environment is fun for everyone! But the goal of a Trials meet is athlete performance. We want the best for Team USA. To give our athletes a chance to perform and compete in a fair and optimized



#### LILLY KING

2016 Olympic Gold Medalist (100 breast, 400 medley relay); World Record Holder (50 and 100 meter breaststroke)

(PHOTO BY PETER . BICK)

I don't mind holding Trials meets outdoors. I think it gives a high-stress meet a more relaxing environment. While the weather can be somewhat unpredictable, I think having to overcome those adversities truly shows who the most well-prepared swimmers are. ❖



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# PARTING SHOT



> Jonathan Paredes of Mexico dives from the 27-meter platform on Stari Most during the first competition day of the sixth stop at the Red Bull Cliff Diving World Series in Mostar, Bosnia and Herzegovina on Sept. 7, 2018.

[ PHOTO BY DEAN TREML/RED BULL CONTENT POOL ]



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