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FEATURES

014  TOP 9 OLYMPIC UPSETS: #5 DOUG RUSSELL—THE FIRST TEXAN
by Chuck Warner
American Doug Russell upset Mark Spitz in the 100 meter butterfly at the 1968 Olympics in Mexico City. His gold-medal performance that day remained the sole occasion he had ever beaten Spitz in that event!

016  TEXAS EVEN TOUGHER
by David Rieder
After Texas dominated last year’s men’s NCAA Division I Swimming and Diving Championships, it’s possible that this year’s Longhorn team is better!

020  GEORGIA ON OUR MIND
by David Rieder
With the Georgia Bulldogs finishing first or second in the last five women’s NCAA Division I Swimming and Diving Championships, picking Georgia No. 1 this year just makes sense—not to mention they have the talent...again!

024  TIME FOR DEFENSE
by Jason Marsteller
All of the team champions from last year’s NCAA II (Queens women and men), NCAA III (Emory women, Kenyon men) and NCAA (Indian River women and men) Championships are getting ready to defend their titles. However, in 2016, the NAIA is guaranteed to crown a new women’s and men’s champion!

026  A TOWER OF STRENGTH
by Annie Grevers
At 6-9, Texas swimmer Clark Smith—literally—towers over his competition. At NCAAs later this month, he’ll return not only to defend his 500 free title, but also to help his Longhorn teammates repeat as national champions. If they do, the UT Tower on campus will be lit completely in orange and will display the #1 on all four sides of the 307-foot landmark.

034  HISTORIC SURPRISES AT U.S. OLYMPIC TRIALS: JEFF FARRELL INSPIRES A NATION
by Annie Grevers
Six days after an emergency appendectomy, Jeff Farrell swam at the U.S. Olympic Trials and qualified for the 1960 U.S. Olympic team that competed in Rome, where he won two gold medals as the anchor of the world record-setting 400 medley and 800 freestyle relays.

COACHING

010  LESSONS WITH THE LEGENDS: EDDIE REESE
by Michael J. Stott

012  SWIMMING TECHNIQUE MISCONCEPTIONS: SWIM THROUGH THE PAIN
by Rod Havriluk
A common misconception is that it is necessary to “swim through the pain” to maximize performance. Typically, the source of the pain is the shoulder, and the cause is either from the demands of conditioning or from injury. Swimming through pain from conditioning can have a negative effect on technique. Swimming through pain caused by injury is almost guaranteed to have a negative effect on technique, as well as make the injury even worse.

026  RELAY STRATEGIES: GETTING IT DONE
by Michael J. Stott
There’s so much more to winning a relay than just swimming fast. Decisions made before the race play an important role in giving a team the best opportunity to perform their best.

034  HISTORIC SURPRISES AT U.S. OLYMPIC TRIALS: JEFF FARRELL INSPIRES A NATION
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ON THE COVER
Texas is favored to capture its second straight men’s NCAA Division I Swimming and Diving championship—and 12th title for Coach Eddie Reese, who would stand alone as the winningest NCAA Division I men’s swimming coach in history. The Longhorns return a truckload of championship finalists, including junior Clark Smith, who won the 500 free last year and has already broken an American record (1000 free) and has come close to another (500 free) this season. (See feature, page 30, plus related story, page 16.)

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A VOICE for the SPORT

A few weeks back, most of the northeastern United States was covered with around two feet of snow. This meant canceled school and practices and lessons for many, leaving coaches grumbling and swimmers rejoicing at the brief reprieve. It also meant a golden opportunity to share our distinctive—and gleefully warped—swimmer humor with the masses on social media.

On countless Instagram feeds, there was our tribe on proud display, out there in the elements in nothing more than a racing suit and cap and goggles. Then, the shivering swimmer would take his or her marks, and off he’d plunge—sometimes off of cars and porches—into the snow, before surfacing and “swimming” through the powder to the hilarity of all.

Then, up it would go on Instagram or Facebook or wherever else, and swimmers around the world got a good collection of material to crack up no matter how many times you watch it on Instagram.

I’ve never been much for social media myself, but seeing those “blizzard swimmers”—from teams up and down the East Coast and across wide snowy stretches of the Midwest—made me jealous of the instant shared connections that club and college swimmers have these days. There are now over 400,000 registered swimmers with USA Swimming, and thanks to social media, the tribe has never been tighter or more connected.

A generation ago, the monthly arrival of this magazine was about all that tied us together...in any media-centric sense. It was where we found the results and the rankings in the back—that small type is where many of us first saw our names in print. (The issues are still saved in boxes in my parents’ basement. I know I’m not alone in this.) Now that stuff is updated online, in real time, and no one can deny that the sport is better for it.

But now the culture that is swimming—above and beyond the times and the meets and the practices—is being shared as never before. My own Instagram feed includes the hilarious “SwimWithIssues,” the inside jokes of “Swimmer Problems,” the killer photography of Mike Lewis (mike2swim) and, of course, a wide assortment of the boldfaced names that represent our sport. Check them out, if you haven’t already.

With Olympic Trials fast approaching, no one wants more nor’easters to blow through and cancel practices, but when the next blizzard arrives, I’ll be waiting on my Instagram for swimmers to do their thing—in the way that only swimmers can.

Casey Barrett
Senior Commentator
PUSH YOUR LIMITS BY MAKING THE MOST OUT OF EACH PRACTISE

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Define “getting better.”
At the end of a season, I look at our guys and try to figure out if what we did worked. If it did, I know it won’t work the same way next year. So I have to change it and make it harder. If it didn’t work, I have to discard it or figure out how to make it better.

What’s the measure of getting better?
Time is all that matters.

How is it you relate so well with your athletes?
No matter your age, your mind doesn’t get that old. If I didn’t have mirrors in the house, I wouldn’t know that I was old—until I try to go upstairs! So much of what I have learned has been from swimmers—what they did, didn’t do, what didn’t work, suggestions they made. I’ve always been open to them. You can tell people anything...as long as you do it nicely.

Eleven NCAA championships.
How has the competition changed?
Everybody has gotten taller. You go to NCAAs, and it is like a redwood forest with all the tall guys around. You’ve also got better athletes in the sport. I’m not sure the coaches have gotten better, but the athletes have.

How have you changed?
I look at old communications, and I’m not sure I’ve changed a lot. I know two or three things that will make anybody better.

What are those?
I’m not going to say, but one thing is you have to be consistent. Another is you have to get stronger. And third, butterfly kick in a workout is very important. You have to do it three or four times per week. Once you get an athlete to within three to five percent of their genetic gift, then your margin of error is a lot less—and you can’t make any mistakes. You also have to do the right things often enough.

What is your equation for success?
You have to have talent, work hard...and it takes time—and the time is different for everyone.

What keeps you invested in coaching?
I am cursed or blessed with a gene where I have got to find a way to get better—for myself and anyone else. At my age (74), I do a lot more exercise (stationary bike, rowing machine, lift weights, push-ups, sit-ups, etc.) than most people my age. I don’t believe there are any easy ways.

What do you enjoy most about practice?
Practice—the whole thing. The guys always go faster than I ask them. I give them times that I think are real, and help them on a set whether it is hard-aerobic, easy-aerobic or lactate. For a coach, there is nothing like being trusted.

Michael J. Stott is an ASCA Level 5 coach whose Collegiate School (Richmond, Va.) teams have won eight state high school championships.
The prevalence of shoulder problems in swimming is well documented. “Anecdotal evidence suggests that the culture of swimming dictates that shoulder pain is normal for competitive swimmers, and it should be tolerated if they want to succeed” (Hibberd & Myers, 2013). Numerous other studies have been conducted that show the proportion of swimmers suffering from shoulder injury.

In some of the studies, swimmers were asked about current injuries (such as Tate, et al., 2012). In other studies, they were asked about their history of injuries. Regardless of the study design, the results make two points clear:

• At least one and possibly two of every three swimmers have suffered from shoulder injury.
• The proportion of swimmers with shoulder injury remains significant over the past four decades.

Whether the cause of shoulder pain is a natural response to training or the result of an injury, there can be negative consequences if a swimmer continues normal training. It is only natural for a swimmer to make a technique adjustment to minimize pain—even at the expense of performance. Altering stroke technique to avoid pain is a major problem with trying to swim through the pain.

DIFFERENTIATING INJURY PAIN FROM CONDITIONING PAIN

The cause of shoulder pain is a very difficult issue for coaches. If the pain is from adapting to the workload, it may not be in the swimmer’s best interest to reduce the workload. If the pain is due to injury, reducing the workload is usually essential. To determine the best course of action, a coach must first differentiate between muscular soreness (from conditioning) and joint aggravation (i.e., injury).

Unfortunately, diagnostic procedures that help to differentiate injury and conditioning pain are not foolproof. Swimmers with shoulder pain should often be referred to a physician for a thorough evaluation. However, there are certain characteristics that can help differentiate the type pain.

Characteristics of pain caused by injury:

• Localized pain that can be pinpointed at the front of the shoulder
• Tenderness in a specific area when gently palpated with the thumb
• A dramatic increase in pain when the arm is lifted overhead and inwardly rotated

Characteristics of pain caused by conditioning:

• General soreness throughout an entire muscle
• Pain that does not severely increase as the arm is elevated and inwardly rotated
• Little or no restriction in the range of motion

In one respect, differentiating between muscular soreness and joint injury is
inconsequential. Once the discomfort reaches a certain level, it is likely to affect technique (Mullen, 2013). In fact, one definition of “injury” is pain that interferes with training (Swanik, 2002). Once a swimmer experiences “interfering” pain, corrective action is necessary to avoid practicing an ineffective technique because “a swimmer with shoulder pain cannot ‘swim it out’” (McLean, 1984).

On the other hand, shoulder pain (from either conditioning or injury) often reveals ineffective technique. For example, the swimmer in Fig. 1 (top) has his arms above his shoulders for nearly 2-tenths of a second at the beginning of the pull. During that time, he stresses his shoulders and generates very little force. Whether he feels muscular soreness or joint injury, a technique adjustment is necessary both to relieve pain and improve performance.

Swimmers also needlessly stress their shoulders in freestyle as the arm submerges below the shoulder (Fig. 2, above). Whether shoulder pain from this motion is classified as injury or conditioning is irrelevant as far as adjusting technique. The “exposure time” to shoulder stress is also “wasted time” with respect to performance.

ADJUSTMENTS TO RELIEVE PAIN

One of the common strategies to relieve shoulder pain is to decrease training distance and intensity. In some cases, a swimmer may need to stop training completely. However, a swimmer who continues to train with a reduced workload can work on technique adjustments that reduce shoulder stress. Naturally, any workload adjustment must be based on the severity of an individual’s condition.

There are other adjustments that can help a swimmer recover more quickly. Even if a swimmer feels pain when swimming with hand paddles, for example, discontinuing use of paddles may not be the best solution. In fact, while wearing paddles, a swimmer may be better able to pinpoint the stressful part of the stroke and make technique adjustments that relieve pain. Swimming a limited training distance with paddles and maintaining a constant focus on technique adjustments are both important components of relieving pain.

Adjustments in the arm entry and beginning of the pull in freestyle, butterfly and backstroke are the most critical stroke phases to address (Havriluk, 2016). Fortunately, the arm entry adjustments that minimize shoulder stress also improve performance. Virtually every swimmer can improve technique both to relieve pain and swim faster.

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—or contact Rod through info@swimmingtechnology.com.

SUMMARY

Shoulder injuries are a serious and well-documented problem in swimming. Swimmers and coaches need to differentiate between pain from conditioning and from injury as a first step of a recovery plan. The plan may also include adjustments in training workload and use of equipment. Controlling the arm entry is essential, not only for a swimmer’s rehabilitation, but also for his/her performance. Whether a swimmer suffers pain from conditioning or injury, continuing normal training can negatively impact technique (and performance).
TOP 9 OLYMPIC UPSETS

Who will shock the world of swimming in Rio? Is it someone we can anticipate if we take a deeper look into the backstory of past upsets? The understanding and appreciation of an Olympic upset can enhance our enjoyment of tracking athletes in the years, months and now days leading up to the 2016 Olympics.

Beginning with the November 2015 issue and running through July 2016—a month before the start of the Olympic swimming events in Rio on Aug. 6—Swimming World Magazine will bring you its top 9 upsets in the individual events in Olympic history—with an emphasis on the last 50 years.

This month:

#5

DOUG RUSSELL: THE FIRST TEXAN

BY CHUCK WARNER

Olympic gold medal milestones are marked by swimmers with names such as Schollander, Spitz and Phelps. After Don Schollander won four Olympic gold medals at Tokyo in 1964—at the time, the most gold medals ever won in a single Olympic Games—Mark Spitz chased that record.

In 1967, as just a high school junior, Spitz was the world’s best male swimmer. By the start of the 1968 Olympic Trials, the phenom had broken world records seven times in the 400 freestyle, 100 butterfly and 200 butterfly. With the high probability of the USA winning three Olympic relays, the sport’s most exciting question was: “Could Mark Spitz win five or even six gold medals at the 1968 Mexico City Olympic Games?”

SWIMMING IN TEXAS?

In the 1960s, swimmers from the East and West Coast pretty much dominated USA international team rosters. Texas was best known for the Alamo. But in the 1950s in Midland, Texas, there was a boy named Doug Russell who would begin to change that.

At 10 years old, Doug became one of the fastest sprinters in the nation for his age group. But by his junior year of high school, he had become primarily a basketball player.

When Doug thought about college, he realized that if he was going to find out just how good an athlete he could be, he needed to be in an individual sport. So he wrote a letter to Coach Don Easterling at the University of Texas at Arlington—an NCAA Division II school—and received a Letter of Intent in the mail from the coach, with a note: “Practice starts on June 4 at 7 a.m. Be on time.”

In those days, a DII swimmer competed at his unique championships to try and earn entrance onward to Division I. By Russell’s junior year, he was one of the best swimmers in the country, and his team competed at the 1968 DI Championships, where UTA finished seventh! Russell not only won the 100 yard fly, but was a member of the Mavericks’ winning 400 medley relay.

1968 OLYMPIC TRIALS

Luis Nicolao’s (Argentina) 100 butterfly world record of 57.0 (4-27-62) had stood for five years, but on July 9, 1967 at Santa Clara, Calif., Mark Spitz demolished it with a 56.3. Three weeks later at the Pan American Games in Winnipeg, Spitz lowered it to 56.29.

Spitz had beaten Russell head-to-head at the U.S. nationals that summer, but Russell tied Mark’s 56.3 WR at a meet in Tokyo in late August. Mark also went 56.3 at London in late September, and improved the global standard again on Oct. 7, 1967—this time in Berlin—with a 55.68 (55.7).

Spitz and Russell had left the rest of the world more than a second behind as they pioneered a new frontier of speed.

However, Doug was privately frustrated. Mark was constantly finding a way to run him down when they raced or chased the world record. Equally bothersome was that while a swimmer such as Don Schollander would provide Doug an occasional kind word or pat on the back, he didn’t feel that Mark Spitz ever showed him any respect.

In the preliminaries of the Olympic Trials in August of 1968, Russell qualified first (55.99) with Spitz close behind (56.43). In the
on the Sunday prior to leaving the four-week training camp, Doug Russell swam a dive set of 4 x 100 butterfly, leaving on 8 minutes. Each one was 56. He was in the best shape of his life.

**MEXICO CITY OLYMPICS**

The 100 butterfly finals were on the fifth day in Mexico City. Mark Spitz had already won two relay gold medals and a bronze (100 freestyle). If he could win the 100 butterfly, he would most assuredly win a gold medal on the USA 400 medley relay. (At that time, only those swimming in the finals of relays were awarded a medal.) That would tie Schollander’s standard of four gold medals as the most in an Olympics. If Mark could win the 200 butterfly—an event in which he held the world record—he would own a record of five gold medals.

Doug Russell was stubborn, perhaps to a fault. He liked to simply go out fast and hope to hang on. Coach Gambril suggested a new race strategy: “You can be just as fast as everyone else on the first 50, without working as hard as everyone else on the first 50.” In both the preliminaries and semifinals, with Mark waiting and watching behind Lane 4 for the following heat, Russell sprinted to the lead and held on.

In the finals, Russell swam in Lane 4 and Spitz in 5. Doug misjudged his breakout from his start, and his arms caught the surface. He noticed, however, how strong he felt and made an immediate strategic adjustment: “Just swim with these guys,” he thought. At the 50 turn, Spitz was timed in 26.1; Russell, 26.5.

With 25 meters remaining, American teammate Ross Wales, Spitz and Russell were crushing the field and swimming in synchronized strokes. Doug had so much energy in reserve, he knew he had the race won. “What should I do when I touch the wall?” he thought to himself. “Maybe I should jump out quickly as though I was waiting for Mark.” Or, “Maybe I should turn and continue like it was a 200?”

Doug Russell pulled away, and—for the first and only time in his life—he hit the wall still accelerating, winning in 55.9 to Spitz’s 56.4. He leaped upward in the water and fired a “No. 1” sign into the air in the direction of Coach Easterling. He climbed from the pool, knelt by the block, and folded his hands as if in prayer.

“They say that when you’re about to die, your entire life flashes before your eyes,” Russell said recently. “When you win an Olympic gold medal, the same thing happens. All the people who had helped me get there raced through my mind: my mom, my grandmother, Coach (Don) Easterling and Coach (Don) Gambril.”

And he also realized that in 55.9 seconds, he had put a target as an Olympic gold medalist on his back. He knew that people would be alert to how he treated them and would want to beat him in the next race.

Mark Spitz and Doug Russell raced again at the 1969 NCAA Championships. Doug led for 95 yards. Afterward, Russell’s gold medal in Mexico City remained the sole occasion he had ever beaten Mark Spitz in a 100 butterfly race. And that is one reason this “first Texan’s” feat is one of the greatest upsets in Olympic swimming history.

Chuck Warner is a part of Swimming World Magazine’s editorial board and author of “Four Champions: One Gold Medal” and “And Then They Won Gold.” Both books are available for purchase online at www.SwimmingWorld.com. Next month: “Top 9 Olympic Upsets: #4.”
After Texas dominated last year’s NCAA Division I Swimming and Diving Championships, it’s possible that this year’s Longhorn team is better!

**SWIMMING WORLD MAGAZINE’S TOP 10**

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* = includes incoming transfer, Fabien Schwingenschlogl (Western Kentucky), 18 points

**STORY BY DAVID RIEDER**

**PHOTOS BY PETER H. BICK**
Eddie Reese has brought extremely talented teams to the men’s NCAA Championships year after year, and prior to last season’s meet, he already had 10 national titles to his credit. In the quest for No. 11, his team uncorked one of the all-time great NCAA performances en route to a dominating 129-point victory over California. Along the way, Texas became the first team ever to place six swimmers in one championship final, doing so in the 100 yard fly.

What do the Longhorns have in store for this year’s meet, March 23-26, at the Georgia Tech Aquatic Center in Atlanta? Expect nothing less than a repeat performance.

1. TEXAS LONGHORNS

Last year: 1st [528 points]
Returning points: 456

As lopsided as Texas’ NCAA championship victory was a season ago, this year’s team could prove even more dominant!

The Longhorns graduated just two major contributors: sprint backstroker Kip Darmody and freestyler Clay Youngquist. Meanwhile, they return Joe Schooling, Jack Conger, Will Licon, Clark Smith, Matt Ellis, Jonathan Roberts, Sam Lewis and divers Cory Bowersox and Mark Anderson—all championship finalists in 2015.

Licon won the 200 yard breast and 400 IM last year and will be favored to add the 200 IM title this time around with the graduation of David Nolan. Schooling and Conger finished 1-2 in both butterfly events, and Conger could also add some significant points in backstroke. Smith won the 500 free last year and has already broken an American record (1000 free) and has come close to another (500 free) this season.

Finally, the Longhorns add a pair of impact freshmen in Townley Haas and Ryan Harty, who have top-eight potential. Add those pieces together, and the Burnt Orange looks golden once again.

2. CALIFORNIA GOLDEN BEARS

Last year: 2nd [399 points]
Returning points: 253.5

Cal was clearly the second-best team a year ago, and that’s where they’ll stay.

Breaststroker Chuck Katis—third in both the 100 and 200, and a key member on the team’s high-scoring medley relays—has graduated...but Cal returns Ryan Murphy, named the 2015 NCAA Swimmer of the Year for his record-setting performances in both backstroke events.

Jacob Pebley should also score in backstroke, while Josh Prenot—who won gold medals in the 200 breast and 200 IM plus a silver medal in the 400 IM at last year’s World University Games—should be one of Cal’s top scorers and could contend for the national title in the 200 breast.

Sprinter Tyler Messerschmidt should return to the championship finals of the 50 and 100 free and swim anchor on the sprint relays. Butterfly Justin Lynch looks to contribute points in his sophomore season, and Cal will definitely get a boost from its freshmen, including highly touted Andrew Seliskar in both IMs and the 200 fly, plus Nick Norman, distance free—events in which Cal did not score any points in 2015.

3. MICHIGAN WOLVERINES

Last year: 3rd [312 points]
Returning points: 191.5

The Wolverines have some star power that could return them to the top three for a second straight season—even with the graduation of Bruno Ortiz and Richard Funk.

The Maize and Blue will have two seniors who should contend for individual titles in Atlanta: Dylan Bosch and Anders Lie Nielsen. Bosch, from South Africa, led for most of the 200 fly final last season before fading to third. He also recorded top-six finishes in both IMs. Meanwhile, Lie Nielsen, from Denmark, finished fourth in the 500 free and second in the 200 free in 2015, and will be the top returning finisher in the 200.

The Wolverines return four freshman scorers from last year: Paul Powers, Tristan Sanders, Aaron Whitaker and PJ Ransford, who turned in a surprising performance in the 1650 last year from Lane 8. Leading for much of the race, Ransford eventually fell off the pace, but still finished second, and should be one of the favorites at this year’s meet.

Michigan also adds transfer backstroker Luke Papendick, who won the ACC title in the 200 back as a freshman for Virginia in 2014.

4. NORTH CAROLINA STATE WOLFPACK

Last year: 8th [199.5 points]
Returning points: 174

Could this be the year the Wolfpack will put everything together and make a run at the top five? In each of Coach Braden HOLLOWAY’s first three seasons, NC State has made a big jump in the standings, moving into the Top 10 for the first time last season.

That happened despite the disqualification of their apparently victorious 200 free relay squad. But NC State returns much of their deep core of sprinters, including Ryan Held, Andreas Schiellerup, Soeren Dahl and Simonas Bilis, who placed third in the 50 free and second in the 100 a year ago.

The Wolfpack also is strong in distance freestyle, backstroke and butterfly. Anton Ipsen finished fifth in the mile last year as a freshman, and should be a factor in his second go-around in both the 500 and 1650. Also placing among the top eight as a freshman in 2015 was Hennessy Stuart in the 200 free, while Christian McCurdy, now a senior, finished fourth in the 200 fly.

5. FLORIDA GATORS

Last year: 5th [248 points]
Returning points: 149

The Gators will not have two major contributors from last year’s fifth-place team—Dan Wallace and Eduardo Solache-Gomez—but they could still make the top five, provided they get a superstar performance from go-to sophomore, Caeleb Dressel. He won the 50 free as a freshman, but failed to make the A-final in any of his other events. After a successful long course season, he should be a strong contender in the 100 free as well...and he could be in the hunt in the 100 breast after swimming under 52 this season.

Florida also will feature freestylers Mitch D’Arrigo—who scored in the 200, 500 and 1650 a year ago—and Arthur Frayler. Mark Szaranek could make a pair of championship finals in the IM. Seniors Pawel Werner (freestyle) from Poland and Corey Main (backstroke) from New Zealand should also score points.

6. GEORGIA BULLDOGS

Last year: 7th [208.5 points]
Returning points: 129.5

Not having top breaststroker Nic Fink (who graduated) and 400 IM American record holder Chase Kalisz (who’s taking a redshirt year to train for the Olympics) on the 2015-16 roster is a big loss for the Bulldogs. Yet...they could actually move up in the standings after finishing just a half-point behind Stanford at last year’s NCAAs.

Matias Koski, who won the 1650 in 2015, will be counted on to lead Georgia. He also won consols in the 200 and 500 in Iowa City—the latter event in a time that would have placed third in the A-final.

Also returning is the versatile Gunnar Bentz—who took third in the 400 IM last year and could contend for the top spot in Atlanta—along with butterflies Tynan Stewart and Pace Clark, who both finaled in the 200 fly. All three Litherland triplets qualified for NCAAs as freshmen, with Kevin and Jay both scoring individually for the Bulldogs. Sprinter Michael Trice should also contribute points.

--- continued on 18
7. ALABAMA CRIMSON TIDE

Last year: 10th (176 points)
Returning points: 176

Zero—that’s the key number for the Crimson Tide. It’s the number of points they lost from last year’s team that cracked the top ten for the first time under fourth-year head coach Dennis Pursley. With teams in front of them sustaining heavy losses, Alabama will be poised to finish even higher than last year’s 10th-place finish.

Senior sprinter Kristian Gkolomeev—last year’s national champion in the 100 free and runner-up in the 50—leads the Crimson Tide, which also returns backstroker Connor Oslin—a top-eight contender in both backstrokes—and Anton McKee—the sixth-place finisher in the 200 breast who also is a likely scorer this year in both the 100 breast and 500 free.

The Tide also placed three relays in the top four last season, and they have some solid sprint depth that includes returnees Alex Gray, Luke Kaliszak and Brett Walsh, along with newcomers Robert Howard and Knox Auerbach.

8. USC TROJANS

Last year: 4th (278 points)
Returning points: 138

The University of Southern California figures to fall significantly from last year’s fourth-place finish after the loss of 200 (2015) and 500 (2014) free champion Cristian Quintero to graduation. The Trojans also will miss talented sprinter Santo Condorelli, who is taking a redshirt year to train for the Olympics.

Still, Coach Dave Salo’s crew can expect top performances from returning freestylers Reed Malone and Dylan Carter. Malone placed third in the 500 at last year’s NCAAAs, then captured two gold medals (200 meter free and 800 free relay) and a bronze (400 free) at the 2015 World University Games. He also won a silver medal in the 800 relay at the Kazan World Championships. Carter should pick up points in the 50, 100 and 200.

The Trojans also return Ralf Tribuntsov, who made the 100 back final as a freshman, and he should also add points this year in the 100 fly. In breaststroke, USC will have returning scorer Steven Stumph and freshman Carsten Vissering in the mix. It will also depend on points from diver Collin Pollard and former All-American flyer Macklin Davis, who missed last season with injuries. Versatile freshman Patrick Mulcare (IM/back/free) could also make an impact.

9. MISSOURI TIGERS

Last year: 11th (132.5 points)
Returning points: 84.5

What the Tigers lack in depth, they should make up for with top-end talent. Michael Chadwick, who finished fifth in the 100 free and ninth in the 50 a year ago, has the potential to contend for individual titles. So does transfer breaststroker Fabien Schwingenschlogl, who scored 18 points for Western Kentucky last year in the 100 (sixth) and 200 breast (12th). After losing breaststroker Sam Tierney to graduation, Schwingenschlogl’s arrival is, indeed, welcome.

Senior Daniel Graviss scored in the 400 IM last year, as did junior Carter Griffin in the 200 back. Dillon Love (back/sprint free) and Andrew Sansoucie (fly/free) both provide considerable relay depth that will give Mizzou a chance to score big points especially in the 200 and 400 medley.

10. AUBURN TIGERS

Last year: 9th (182 points)
Returning points: 155

Auburn only had four individual scorers at last year’s championships, but the Tigers made their way into the Top 10 once again on the strength of their sprint relays.

All of their main contributors return aside from graduated diver Fraser McKean. Junior Kyle Darmody made the consols of both the 50 and 100 free, while Arthur Mendes could join him in the top 16 in those events after placing 15th in the 100 fly last season.

Backstroker Joe Patching and breaststroker Michael Duderstadt should score in two individual events each this year and continue to provide strong legs on All-American medley relays. Jacob Molacek and Hugo Morris could assist by scoring in individual events this season after contributing important relay legs last year.

David Rieder has been a contributor to Swimming World since 2009. A native of Charleston, S.C., he is currently a senior at Duke University, where he announces for the varsity swim team.

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With the Georgia Bulldogs finishing first or second in the last five women’s NCAA Division I Swimming and Diving Championships, picking Georgia No. 1 this year just makes sense—not to mention they have the talent...again!

STORY BY DAVID RIEDER
PHOTOS BY PETER H. BICK
Georgia entered last season’s NCAA Championships as the two-time defending champions, yet few gave the Bulldogs much of a chance of challenging California with superstar Missy Franklin for the team title. But Georgia—despite not winning any events—gave the Golden Bears a run for their money, finishing only 61 points off the pace in second place. That marked the fifth straight year that Georgia had finished in either first or second.

At this year’s women’s NCAA Division I Swimming and Diving Championships, March 16-19, at the Georgia Tech Aquatic Center in Atlanta, Swimming World expects Coach Jack Bauerle’s women to return as national champions.

1. GEORGIA BULLDOGS
Last year: 2nd [452 points]
Returning points: 235.5

Georgia’s women’s team will make the hour-plus drive west from Athens to Atlanta with a deep, well-rounded squad. Leading the way is U.S. national team member Hali Flickinger, who should figure into the title hunt in whatever three individual events she contests. Her best chance at individual honors will come in the 400 yard IM—where she finished second last season behind the graduated Sarah Henry—and 200 fly—the event in which she won the U.S. national title last summer.

Brittany MacLean won both the 500 and 1650 freestyles two seasons ago, and she has returned to form in 2016, while Olivia Smoliga should be in contention for the 100 back title and provide some sprint firepower as well.

The Bulldogs’ title push will also feature junior sprinter Sarah Gibson, Annie Zhu, Emily Cameron, Megan Kingsley, Kylie Stewart and Meghan Raab—all returning individual scorers from last year’s runner-up squad.

2. STANFORD CARDINAL
Last year: 3rd [363 points]
Returning points: 201

A year ago, Stanford freshman Simone Manuel had a performance that was worthy of swimmer-of-the-meet honors...on most occasions. Of course, last year’s meet included a swimmer by the name of Missy Franklin!

All Manuel did in 2015 was set an American record on her way to victory in the 100 free while also capturing the 50 free crown. In addition, she placed second in the 200 and provided key legs on the victorious 400 medley and freestyle relays.

But Stanford will be without its star this season because she’s taking a redshirt year to train full time for the Olympics—as will Kassidy Cook, who earned a pair of top-three finishes last year on the 1- and 3-meter diving events.

So, how is it that the Cardinal is picked to move up a spot in 2016 to second place?

Lia Neal is the top returning finisher in both the 100 (second) and 200 (third) free, and she will take over as the anchor on Stanford’s favored medley relay squads that should feature Ali Howe, Janet Hu and reigning 100 breast champion Sarah Haase.

Moreover, this Cardinal team boasts three freshmen who could make a massive dent on the scoreboard: Kim Williams (breast/IM), Leah Stevens (distance) and Ella Eastin, who should be a contender in the IM.

3. CALIFORNIA GOLDEN BEARS
Last year: 1st [513 points]
Returning points: 279

Finding the correct spot for the Golden Bears in this year’s Top 10 may have been the most difficult pick. After all, they lost one of the top swimmers in the world—Missy Franklin—to the professional ranks, while a key contributor in the distance events—Cierra Runge—is taking an Olympic redshirt year and will transfer to Wisconsin next fall.

Still, this team has the makings of being a top-five team for an 11th straight season... and could even be in contention to repeat as champions!

Cal will need solid swims from its two high-profile seniors, Rachel Bootsma and Elizabeth Pelton. Bootsma will be looking for her third 100 back crown in four seasons, while Pelton holds the American record in the 200 back and could also contend for titles in the 200 free and 200 IM (top returning finisher, second).

Freshman Kathleen Baker should also take on a big scoring load, as she could be an instant national title contender in the backstroke events. Another freshman, World Championships silver medalist Katie McLaughlin, sustained a neck injury in January, but should be ready for NCAAs.

Junior Farida Osman (free/fly) and freshman Amy Bilquist (free/back) should figure into the championship finals in the sprint events, as should Celina Li in the IMs. Jasmine Mau and Noemie Thomas provide further depth in sprints and relays, and Marina Garcia will provide breaststroke points.

4. VIRGINIA CAVALIERS
Last year: 5th [229 points]
Returning points: 209.5

The Cavaliers return their core contributors from last year’s squad that finished just two points behind fourth-place Texas A&M.

Leah Smith and Courtney Bartholomew will once again shoulder the load for the ladies from Charlottesville. Smith swept the 500 and 1650 free a year ago, and the gold medalist in the 800 free relay at last summer’s World Championships figures to move up from her seventh-place finish in the 200 free as well.

Bartholomew, meanwhile, placed second in both backstrokes last year, and with the departure of Missy Franklin in the 200, she will be favored to do one better this time around.

Laura Simon could be in the hunt for individual titles in the 100 (fourth last year/second top returning finisher) and 200 breast (second last year), and she will provide a key leg on the Cavaliers’ title-contending medley relays.

5. TEXAS A&M AGGIES
Last year: 4th [231 points]
Returning points: 121

Two years ago, fourth-place A&M graduated NCAA champions Breeja Larson and Cammile Adams...and proceeded to place fourth again the following year. Now, even following the loss of Sarah Henry and her 51 individual points, the Aggies should not experience much drop-off.

Sophomores Bethany Galat, Lisa Bratton and Beryl Gastadello all scored in consolation finals a season ago, but all three look ready to make the jump to the championship level this season. Galat should score in the 200 IM as well as both breaststroke races, while Bratton has potential in the IMs and 200 back. Gastadello should be a top point scorer for the Aggies in the sprints and relays.

Breaststrokers Jorie Caneta and Esther Gonzalez could earn points as well, along with junior sprinter Sarah Gibson.

6. USC TROJANS
Last year: 8th [163 points]
Returning points: 133.5

USC, predicted to finish sixth, could push their way into the top five in Atlanta. That’ll depend on the performances from two top veterans, Kendyl Stewart and Chelsea Chenault.

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Stewart finished third in the 100 fly in 2015, but did not score in any other events. The Trojans will need more from the World Championships semifinalist this time around. Chenault, meanwhile, finished sixth in the 200 free and 10th in the 500, and is expected to improve upon those placings.

Backstroker Hannah Weiss should also be counted on for a pair of top-eight finishes, but the loss of diver Haley Ishimatsu—second on the platform last year—will sting.

7. LOUISVILLE CARDINALS
Last year: 6th [197 points]
Returning points: 132.5

Coming off the best finish in program history, Louisville returns to the national stage with a good opportunity to continue its success.

Senior Kelsi Worrell should be one of the favorites to earn national swimmer of the year honors, especially if she wins all three of her individual events. She captured the 100 and 200 fly a year ago, and she returns as the top finisher (third) in the 50 free as well.

The Cardinals will also count on junior breaststroker Andrea Cottrell, who should improve considerably from her finishes last year—11th in the 100 breast and 19th in the 200—into championship contention.

The team will miss Tanja Kylliainen’s 41 individual points and her key relay contributions, but with freshman sprinter Mallory Comerford joining returnee Andrea Kneppers, Louisville remains as likely contenders in both medley relays.

8. TEXAS LONGHORNS
Last year: 7th [164 points]
Returning points: 100.5

The Longhorns lose Gretchen Jaques and Sarah Denninghoff to graduation, but they still have junior Madisyn Cox, who placed third in the 200 IM, fifth in the 400 IM and 12th in the 200 breast last year. She also swam on the 13th-place 800 free relay and later turned in a pair of top-three finishes in the 100 and 200 breast at U.S. nationals.

Texas also returns backstroker Tasiya Karosas, who hopes to move up from her two consol appearances a year ago.

Also returning is breaststroker Bethany Leap, while talented freshmen Remedy Rule and Quinn Carrozza hope to provide an instant impact.

9. FLORIDA GATORS
Last year: 9th [129 points]
Returning points: 129

The Gators’ hopes for a Top 10 finish will rest with their two senior leaders, sprinter Natalie Hinds and British distance swimmer Jess Thielmann.

Hinds will contend for the national title in the 100 free after finishing third a year ago. She also should score in both the 50 free and 100 fly while contributing to Florida’s relays. Meanwhile, Thielmann made three championship finals last year, finishing as high as third in the mile.

Another senior, backstroker Ashlee Linn, should be on the verge of A-finals, while Taylor Katz, Taylor McKnight and Amelia Maughan could all contribute individual points.

10. TENNESSEE LADY VOLUNTEERS
Last year: 11th [125 points]
Returning points: 89.5

Despite the loss of breaststroker Molly Hannis to graduation, the Lady Vols still have the pieces that could lead to a Top 10 finish.

Senior Faith Johnson is the team’s top potential point scorer, having made finals of the 50 free in two of her previous three years. She also placed in the top eight in both the 50 and 100 free at U.S. nationals last summer. She will be joined at the Big Dance by Kira Toussaint, a transfer from Florida Gulf Coast who placed eighth in the 100 back last season.

Other potential scorers for Tennessee could come from senior Amanda Carner, an all-American in the 400 IM, and veteran sprinter Harper Bruens.

David Rieder has been a contributor to Swimming World since 2009. A native of Charleston, S.C., he is currently a senior at Duke University, where he announces for the varsity swim team.
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It’s that time of year for defense...as in all of the team champions from last year getting ready to defend their titles at the NCAA II (Queens women and men), NCAA III (Emory women, Kenyon men) and NJCAA (Indian River women and men) Championships. However, one thing is certain this time around: the NAIA will crown a new women’s and men’s champion!

BY JASON MARSTELLER

Savannah College of Art and Design (SCAD) returns one of the top men’s NAIA swimmers in Joel Ax, who won national titles a year ago in the 200, 500 and 1650 yard freestyles.
NCAA DIVISION II
March 9-12, Indianapolis, Ind.

Last year, Queens University of Charlotte (N.C.) put an abrupt end to a decade-long reign by the Drury Panthers with an unreal men’s and women’s team performance at the NCAA Division II Championships in Indianapolis.

The Drury men had come into the meet with 10 straight titles, while the women had won five of the previous six NCAA DII Championships. Queens, just a few years old as a program—but with the backing of a USA Swimming Gold Medal Club in SwimMAC Carolina and its head coach, David Marsh—turned up the heat to win the first national titles for the school.

Head coach Jeff Dugdale looks to have his charges ready for another strong run for the championship trophy. Although Queens is missing two-time men’s Swimmer of the Year, Matt Josa—because he’s focusing on his club swimming during the Olympic year—the team still has plenty of firepower returning.

Five-time NCAA champ Nick Arakelian (500-1000-1650 free, 400 IM, 800 FR) is back and has a great shot at duplicating his 2015 success as a freshman. Dutch Olympian Sean Dreesens also competes for Queens.

Patricia Castro Ortega, the women’s Swimmer of the Year in 2015, returns for Queens after winning the 100, 200 and 500 yard free as well as the 200 IM during her freshman season. She’ll definitely be a factor this year, along with teammate and six-time All-American Caroline Arakelian.

Drury might have a difficult time trying to get revenge on the team that stopped its dominating NCAA II performances, as both of its men’s and women’s teams are very young. Entering the season, the men’s roster had just two seniors, while the women’s roster sported five.

NCAA DIVISION III
March 16-19, Greensboro, N.C.

This year looks more of the same for the NCAA Division III Championships, as the trio of Kenyon, Denison and Emory are all among the top programs in the division again.

Last year, the Kenyon Lords won its 34th team title, tying them with the Oklahoma State men’s wrestling team for the most NCAA team titles in a single sport in any division.

Meanwhile, the Emory women clinched their sixth straight victory and eighth overall title in the last 11 years with a dominant triumph over Denison.

Both defending champions look to be in position to add to their streaks. But don’t rule out Denison for an upset in either the men’s or women’s team races.

Individually, the door is open for new stars to emerge, as both the men’s and women’s Swimmers of the Year have moved on. Olympic hopeful Andrew Wilson of Emory moved to Austin to train with the Texas Longhorns as one of the top potential U.S. Olympians in men’s breaststroke. And Sarah Thompson of Williams graduated. In 2015, she became just the fourth swimmer ever to win the 1650 yard free for three straight years at the DIII meet. She also captured the 500 to give her six career titles.

NAIA
March 2-5, Columbus, Ga.

Oklahoma Baptist controlled the NAIA landscape the past four years—the only four years of the program’s existence—with seven national team titles and one runner-up finish.

That reign is now over, as OBU has transitioned to NCAA Division II, opening the door for plenty of other teams to battle for the team title.

The Savannah College of Art and Design—more commonly known as SCAD—is well-positioned to take advantage of the void atop the NAIA in both the men’s and women’s competition, with new head coach Bill Pilczuk having taken over the squad this past season. He replaces Chris Conlon, who moved on to an athletics administration position in Maryland.

Pilczuk, a world champion swimmer who spent time as a consultant with SwimMAC Carolina, definitely has the ability to help SCAD improve upon its performances from last year—third place among the men and runner-up among the women.

The school returns one of the top men’s swimmers in Joel Ax, who won national titles a year ago in the 200, 500 and 1650 yard freestyles.

Olivet Nazarene is another potential title contender. Under the direction of head coach Scott Teeters, ONU has placed among the top five teams since 2013.

NJCAA
March 2-5, Fort Pierce, Fla.

It looks like more of the same from the past four decades for Indian River State College in Florida. IRSC has dominated the NJCAA ranks, with the men claiming their 41st straight victory last year, and the women taking home their 34th consecutive win and 37th overall.

The men’s winning streak is the longest by any program in any sport in college athletics. They won last year’s title with an astounding 1,819 points to Iowa Lakes Community College’s 947. The women had a slightly closer contest with 1,534 points against Monroe Community College’s 1,106.

IRSC’s continued ability to reload is extremely impressive, considering the NJCAA only allows competition by a student-athlete for two years before they move on to another school at the NCAA or NAIA level.

IRSC’s major recruit two years ago, Stefan Stoimenov, is already gone after an epic career that included three national records in 2015. He helped the school’s 800 yard free relay to an NJCAA record of 6:31.90, while also setting marks in the 200 back (1:45.19) and 100 fly (46.99).

Hoping to make up for the points lost by Stoimenov this season are Emslie and Jason Van Der Touw of South Africa. Both have had strong performances so far this year.

IRSC’s women will have to replace two-time women’s Swimmer of the Year Barbara Caraballo, who finished her time at the junior college level with an NJCAA record in the 200 IM (2:01.50).

However, that record could be in jeopardy this year, as sophomore Christina Loh of IRSC has become one of her team’s leaders. Loh is from Kuala Lumpur, Malaysia, and has been a force in the breaststroke and IM events.  
There’s so much more to winning a relay than just swimming fast. Decisions made before the race play an important role in giving a team the best opportunity to perform their best.
If relays mirror the culture of a team as Cal’s Teri McKeever once noted, they are also a source of pride.

“To be on a relay is an honor. It is a chance to be a part of something bigger than yourself,” says Kenyon men’s and women’s coach Jessen Book.

“It is pride—a rewarding experience—to represent your school,” says Brian Reynolds, Drury’s nine-time NCAA D-II coach of the year. “Swimmers realize that everybody would love to be in that spot and have the potential to be an All-American or national champion.”

How important are they?

“Unbelievably—because they set the tone for a meet,” says Georgia coach Jack Bauerle, whose 2005 Bulldog women became the first D-I team to win all five relays at an NCAA championship. “Unlike football and basketball, it is very difficult to get momentum in a swim meet. Relays are a big vehicle to do it. Winners of relays can ride the emotion right through a meet extending to individual events as well. They set the tone at NCAA, conference and high school state championships,” he says.

“The very first talk I gave each season at (the University of) Arizona was ‘what it means to be on a relay,’” says Frank Busch, now the national team director of USA Swimming. “It doesn’t matter if you are on a ‘D’ or an ‘A’ relay—it shows how determined you are and what you stand for. There is something about ownership, whether it is high school or college. When you take ownership of something all of a sudden, it means a little more,” he says.

SWIMMER PLACEMENT

Who comprises the quartet and when that decision is made varies.

“This is one of the greatest challenges for any coach,” says Book. “You have to find the balance between the numbers—that is, who has swum the fastest—with what your instinct and experience tell you. While we usually go with the fastest swimmer(s), we are also acutely aware of who is swimming well. Ultimately, we will often give the swimmer with a hot hand a shot.”

Criteria for selection is fairly obvious for the medley relay. Reynolds goes with his fastest stroke athletes, tinkering only when a flyer might also be a great freestyle anchor swimmer. For freestyle relays, swimmer placement depends upon several factors, including athlete ability, personality, event distance and opponent.

“In sprint relays, the personality of an anchor athlete has to be a kid who absolutely hates to lose—someone who will run through a wall and do whatever it takes to get there first,” says Reynolds. Great anchor swimmers endear themselves to their teams, coaches...and, sometimes, nations.

“You have to have tough kids on the end,” says Bauerle, who treasures the Maritza Correia and Megan Romano swims that led to Georgia national championships.

Then there was the men’s 4 x 100 free relay Olympic final in Beijing.

“There was no question that Michael Phelps would be the leadoff,” says 2008 Olympic head coach Eddie Reese. “He is such a great competitor. And Jason Lezak for years had been one of the best anchor men this country has had.” His 46.06 against the French still stands as the fastest 100-meter free leg of all time.

Free relay selection for slots 2 and 3 are not as critical as the first and last, and they often depend upon team need. “On a 200 free relay, we may opt to go faster to slower (2 and 3), depending in part on whom we want to have water,” says Reynolds.

“You have to go by time, obviously,” says Bauerle, “but some swimmers just get in the water better—particularly at NCAAs, where many teams are really fast and there are a lot of waves. So, if it is pretty even, you need someone who can get in the water and hold his/her stroke better in the wash. The dual meet season is a good time to find that out,” he says.

“Depending on the distance, whether it is a 200, 400 or 800, swimmer placement is crucial,” says Busch. “In a men’s race, the water is much rougher than with women. Separating yourself from the field can make a big difference psychologically. Trying to swim from behind in a short relay with a lot of turbulence is a very difficult place to be,” he says.

In shorter races with bigger bodies, there is a greater need to get out front. It becomes mano a mano, with coaches looking to put the top performers in the pressure positions and the more nervous in the comfortable spots (2 and 3, with 3 being the most comfortable). Sometimes, it’s about the first two spots just getting out ahead. There are other times—e.g., 800 free relay—when the best swimmer may go third to gain a strategic or tactical advantage in hopes the anchor can hang on and bring it home.

Busch adds a cautionary note: “In the 400 and 800, you don’t want to get too far behind because sometimes athletes then overswim the first half of their legs trying to make up the difference.”

OTHER CONSIDERATIONS

While coaches decide placement, they often listen to swimmer opinion.

“If a swimmer says, ‘I’m ready,’ I listen to them,” says Bauerle, recounting his 2003 FINA World Championships experience. There he considered Lindsay (Benko) Mintenko—a seven-time 200 meter free national champion—for anchor. Mintenko, who had had a poor individual 200 free prelim swim, approached Bauerle and said, “I can go faster.” Intuitively, he let her lead off. The decision produced American individual and relay records and a near-miss world mark. “That was a learning experience for me, and I have taken that to heart ever since,” he says.

“In sprint relays, the personality of an anchor athlete has to be a kid who absolutely hates to lose—someone who will run through a wall and do whatever it takes to get there first.”

—Brian Reynolds,
Head Coach,
Drury University

(Pictured: Drury’s Sean Feher in pool being congratulated by Samuel Olson after winning 2015 NCAA DII 400 FR)
Types of competition can dictate strategy as well. Dual meets offer chances to experiment and learn swimmer personalities. At such times, coaches learn who relishes the eyeball-to-eyeball competition, who prefers clear water and who loves to anchor.

Splitting relays in dual meets can serve a variety of purposes. Depending on points, coaches will do it to produce extra effort, experiment with order, discover personality traits, groom future athletes and/or determine consistently high performers.

Says Book, “Splitting relays, for me, is about fun and racing. Typically, I want to use our relays to practice things we might do at the end of the season—that could be either practicing different combinations or cementing a specific order. Every so often, we will choose to swim split relays for excitement and change.”

When a meet result is not in doubt, Reynolds will often pit freshmen versus seniors or mix-and-match to produce a close finish. “It is fun to experiment. I like to give as many swimmers as I can a shot at relays,” he says.

Resting athletes for relays is a dicey proposition and a tactic generally reserved for the deepest rosters.

“When I do it is basically to save swims for certain athletes,” says Reynolds. “If you are an athlete at a national championship and are going to swim four individual events and three relays, that is 14 prelim and final championship swims. As a coach, if you have the ability to rest, you do it. But it’s a gamble because the relay has to be fast enough to qualify for the ‘A’ final.

“I’ve done it to keep some swimmers fresher for individual events (2005) when I’ve had the talent,” says Bauerle. “But the NCAAAs have changed. Now it is really hard to take good people off in the morning. Years ago it was easier. There are more good teams. You are there to go to war, and the kids have to be ready to lay it out,” he says.

**STARTS AND EXCHANGES**

While season-ending meets are about execution, earlier training is about practice. At the highest level, coaches stress “good” versus “perfect” or “superhuman” starts. “One early takeoff can wipe out an entire year of preparation,” says Busch, whose men’s 200 medley relay was disqualified at one NCAAAs, costing the team second place.

The Bulldogs begin practicing relay starts and exchanges in October and do them “as many times as possible so we know each other well,” says Bauerle. The Dawgs also use relay judging platforms and practice in meet-day suits. He prefers .15 as a reaction time. “We don’t like anything over .20 because that adds up and can influence if someone gets clear water or not.”

Relay takeoff platforms are one of Book’s favorite training tools: “Not only are they fun, but they sharpen the focus of the athletes. We do have goal times and do not preach or practice starts faster than approximately .05. A false start in a major meet will never be worth those 5-hundredths,” he says.

The 2016 NCAA meet will introduce a new wrinkle.

“The dynamics are going to change because we will start the meet with the 800 free relay,” says Bauerle. “That means it will be swum fresh for the first time ever rather than at the end of a long second day. I think we are going to see some new records for sure.”

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M. Stott is an ASCA Level 5 coach whose Collegiate School (Richmond, Va.) teams have won eight state high school championships.
In last month’s article on cross training (SW Feb, page 21), I commented how the next several articles would illustrate exercises using cross-training equipment. This month, the first installment will be training with TRX suspension straps.

One of the benefits using TRX suspension straps is the instability the straps provide during the movement. That instability creates more of the “feel” that you would have in the water. The straps force you to learn body control through your core, and they help you practice body position and balance.

This article shows several exercises that correlate to different body positions in the water during stroke starts and push-offs.

I recommend doing this program twice a week, performing each exercise for three sets of 10 to 15 repetitions. Discontinue these exercises two weeks before a major competition.

There are several models of TRX suspension straps as well as others manufactured by different companies.

Enjoy these exercises and reap the benefits they provide when you’re in the water.

MEET THE TRAINER
J.R. Rosania, B.S., exercise science, is one of the nation’s top performance enhancement coaches. He is the owner and CEO of Healthplex, LLC, in Phoenix. Check out Rosania’s website at www.jrhealthplex.net.

MEET THE ATHLETES
Carl Mickelson swam for the University of Arizona. As a senior, he finished fourth in the 100 and 200 yard breaststroke at the 2012 NCAA Division I Championships.

Susie Paul has been a Masters swimmer for the past 10 years.

NOTICE
All swimming and dryland training instruction should be performed under the supervision of a qualified coach or instructor, and in circumstances that ensure the safety of the participants.

TRX WORKOUT
BY J.R. ROSANIA
PHOTOS BY EMMI BRYTOWSKI
DEMONSTRATED BY CARL MICKELSON AND SUSIE PAUL

1. ALTERNATING ARM TRX STROKE
While standing upright, position yourself in the TRX straps and lean forward with one arm straight in front of you (with the palm of the hand facing downward) and the other arm at your side. Maintain your body position, and alternate arms.

2. TRX PIKE-UPS
Place your feet in the TRX straps, and get into a push-up position. Pike your hips in an upward direction, and repeat reps.

3. SQUAT JUMPS
Holding the TRX straps, lower into a squat position, then explode into an upward jump. Repeat.

4. TRX PULL-OUTS
Holding both handles of the TRX straps, slowly lower yourself toward the ground, maintaining a straight core. Allow your arms to rise overhead into a perfect streamline. Pull yourself back up as if doing a butterfly pull. Repeat.

5. SUPINE STATIC HOLD
While lying supine with your feet elevated, hold both handles of the TRX straps and pull your body off the ground with your arms at a 90-degree angle. Hold for 10 to 30 seconds. Repeat four to six times.
At 6-9, Texas swimmer Clark Smith—literally—towers over his competition. At NCAAs later this month, he’ll return not only to defend his 500 free title, but also to help his Longhorn teammates repeat as national champions. If they do, the UT Tower on campus will be lit completely in orange and will display the #1 on all four sides of the 307-foot landmark.
Many of the tall, lanky types in swimming look to be randomly throwing limbs forward, praying they’ll catch water.

Then there’s Clark Smith. The 6-foot-9 University of Texas junior is an anomaly—he pieces together what UT Coach Eddie Reese calls one of “the best freestyle strokes I’ve seen in a long time.” That’s high praise from Reese, who has seen legendary freestylers in his previous 37 years at UT and as a member of the past seven Olympic coaching staffs.

FAST GENES

Clark’s dad, John Smith, swam under Reese’s watch from 1981 to 1984. As a senior in ’84, John was a part of Texas’ 400 medley relay that won a national title. That same year, at the women’s NCAA Championships, a swift UT freshman backstroker named Tori Trees won the 200 back title. Tori went on to qualify for the 1984 Olympic team and place fifth in the 200 meter backstroke final. She also went on to marry a fellow NCAA champion Longhorn...named John Smith.

Tori and John’s only son, Clark, inherited quite a gene pool. Since young Clark’s older sister and younger sister swam, he became an involuntary member of the family carpool.

“Everyone was getting in the car to go to workout. The whole family swam—that’s just who we are,” father, John Smith, said.

“He took lessons wearing fins and water wings,” Tori said. Clark eventually cut the cord with the beloved water wings. He began swimming year-round at age 9.

Being the son of an Olympic swimmer could either cause a child to shy away from the water or lead him or her to it. According to Clark, having a mom who was an Olympian was not intimidating. And it “makes it seem less impossible (to make the Olympic team), but I certainly don’t feel entitled to make the team because of her,” he added.

How can an Olympian and NCAA champ keep from being overbearing swim parents? Side note: Tori has been a swim coach for nearly 25 years!

“If you think his beautiful stroke is an accident, we got news for you,” John joked. “But, no, we consciously tried to keep our mouths shut—he had the best club coach in the country (Denver Swimming Academy head coach Nick Frasersmith) and has the best college coach in the country, so it’s easy to let the coach coach.”

Frasersmith coached a 15-year-old Clark to a 9:10 1000 yard free back in 2011 and a 4:18 500 yard free from Clark’s senior year in high school when he was 17. Both times still rank among USA Swimming’s all-time Top 100 (1000, 88th for 15-16 boys; 500, 36th in the 17-18 age group).

“I didn’t ever have a fear of failure or upsetting my parents,” Clark said. “They don’t care if I do well. They care that I’m enjoying it.”

HOOKED EARLY

Clark was reared in a home where burnt orange was worn with pride. “When he was born, somebody gave him a Texas T-shirt,” Coach Reese kidded in his trademark deadpan tone.

But there was always more than family tradition luring Clark to swim for the University of Texas.

Ten years ago, Clark’s older sister, Meaghan, was signed up to attend Longhorn Swim Camp, but she broke her wrist. Clark took her place at the camp and unknowingly took what would be his first unofficial visit to UT. Not that Reese and longtime assistant coach Kris Kubik had planned on cajoling the 10-year-old into a verbal commitment, but Clark just liked what he saw.

“I had my eyes set on UT since I can remember,” Clark said.

By the time Clark was a 13-year-old camper, he was thrown to the sharks—training with Longhorn Olympians Ricky Berens and Garrett Weber-Gale during his week in Austin. A 13-year-old capable of keeping that company must have had Reese and Kubik excited.

Reese would reject the term “visionary” when it comes to recruiting because, “Nobody can see that stuff (American record-caliber talent). I look for somebody with a good feel...someone whose mom might say, ‘My son looks pretty in the water.’”

In 2012, Reese made a home visit to recruit Clark. Tori remembers listening to the three “statisticians” spew numbers without pause.

In his first NCAA Championships as a sophomore last year, Clark Smith won the 500 yard freestyle—the first time ever that a University of Texas swimmer had won the event.

— continued on 32
“Eddie (as his swimmers and colleagues call him) rattles off my 200 splits from 1984, saying, ‘We could have been better there,’” former Reese pupil John recalled.

“Clark memorizes everything,” Tori said. “He knows the whole record board.” In a post-race interview at the 2015 NCAA Championships, Clark talked about how he needed to be more consistent with his splits in the 500 free: “Someone like Tom Dolan, who went a 4:08, held 50.4s for the last four 100s of that race.”

Clark and Eddie think in numbers. And thus far, they are hitting them.

OUT-OF-NOWHERE ILLUSION

“He’s like nobody you and I have ever seen before—6-9, 195 pounds,” Reese said. When asked if Clark was his tallest distance swimmer he’d ever coached, Reese responded, “He’s the tallest anything I’ve ever coached. People say once you get over 6-5 or 6-6, you can’t be a good swimmer. That’s just not true—with long limbs, you’ve got to be stronger.”

Clark was the sophomore who seemed to come out of nowhere to win the 500 free at the 2015 NCAA Championships. Much of the competition had never raced Clark because he did not qualify for the meet his freshman year!

But the Smith family is quick to point out his sudden emergence was an illusion of sorts. He had not rested his freshman year, thinking he’d make the meet with little rest at the conference championships, but the plan failed. No one saw Clark swim a rested 500 in the 2013-14 season.

In 2015, he became the University of Texas’ first-ever 500 free NCAA champ with a 4:09.72. At the 450 mark, Dan Wallace (University of Florida) turned even with Clark, but the Longhorn’s final split of 24.03 smoked past Wallace and left defending champion Cristian Quintero (University of Southern California) in his wake.

“When he turned even with 50 to go, his teammates relaxed because they knew he was going to win,” Reese said. “It’s hard to beat the good guys on the last 50—but he’s got that gear.”

Clark knows based on how he swims the race, “I just have to flip even to take control of the race.” But Clark had been a 23-high in his final 50 at a dual meet before. He knew he could be faster.

DISTANCE DISCOVERY

Eight months later, UT conducted its annual Eddie Reese Invitational—an intersquad meet in which the teammates compete in odd distances such as 150s, 300s and 2000s. Clark was thrown into the 2000.

“I thought 18:10; that’d be real good,” Reese said. The junior’s 1000 splits were 8:52 and 8:51, resulting in a 17:44.39. Clark averaged 53.2 seconds per 100. To put that in perspective, at the 2015 NCAAs, Georgia Bulldog Matias Koski averaged 52-highs to win the 1650.

“The mile is one of his real good events; everyone but Clark knew it. However, to go that fast (for 2000)—I was really surprised,” Reese added.

Teammate and 200 fly American record holder Jack Conger approached Clark after the race to say, “You just signed your death warrant.”

Reese asked the slightly winded Clark how much longer he could have kept that pace—“for another 500 or 600.” Yes, Clark has otherworldly stamina, evidence of his otherworldly work ethic.

“He does things in practice...” Reese trailed off before noting a recent set of 21 100s on 1:00. Clark averaged 51.3 seconds.

UT alum Michael McBroom’s 17:49 in the 2000 free at the 2014 Eddie Reese Invitational seemed untouchable...until Clark beat it by five seconds. Clark credits much of how he trains now to McBroom.
“He opened my eyes as to what I should be doing. I thought he was god-like in practice my freshman year. He would push an 800 free and go 7:52. I thought, ‘I’m going to stay out of that,’” Clark laughed.

But the distance gift is tugging at Clark’s long shirt sleeves (into which Reese says he’s still growing). Recruited as a 100 and 200 flyer, Clark would have to forfeit his baby, the 200 fly, if he decided to swim the mile at NCAAs.

“It’s taken us three years to trick him into the mile,” Reese said. “I’m not going to force anyone into an event. It never works out. You put them in what they’re real good at. He’s taken the bit in his mouth.”

According to Clark, this distance gig is new—something he has only “figured out in the last few months.”

**DEFINE CONFIDENCE**

On Dec. 5, 2015, Clark, who turns 21 in April, set an American record in the 1000 yard free (8:33.93) at the Texas Hall of Fame (THOF) Invitational.

“That was a little different because it’s not a real event,” Clark said. “I had expectations going in, but it’s not really an event that I need to focus on. It was more a vendetta for missing the 500 free (American record).”

Peter Vanderkaay’s 4:08.54 500 from February 2008 is the oldest men’s SCY American record in the books.

At the THOF Invite, Clark broke the pool and school record with his 4:08.82, narrowly missing PVK’s mark. “It eludes me,” Clark said.

“We all misuse the word, ‘confidence,’” Reese says. “We say, ‘For you to be good, you’ve got to believe it before you do it.’ I think you’ve got to do it before you believe it. And you must keep doing it. Clark had to become a good swimmer before he believed it.”

Reese claims the best way to collect confidence is through training and work ethic: “I’ve coached good swimmers—they’ve been more confident in their effort than the outcome of the race. You have to be confident in that you’re prepared to go. Clark is good at that.”

Clark was out in a 1:38 at the 200 in the 1000 at the THOF Invite. “That gave him confidence,” Reese says.

Clark agrees with this Eddie-ism: “I don’t know where it (confidence) stems from. I tend to focus more on the race than the time. I don’t swim off ego behind the blocks. I leave things up to chance— without putting a limit on my race.”

Clark believes that Reese is “not a really strict coach.” Reese typically comes up with practice sets off the top of his head, then allows swimmers to weigh in. “Eddie leaves the effort up to you,” Clark says. “He gives a set and with an expectation of how hard he wants you to go. You can choose not to work hard, not get better. Eddie may take the blame for it, but that falls on your shoulders. A lot of coaches would yell at their swimmers.”

**CONCLUDING THOUGHTS**

John says his son’s work ethic is his X-factor: “Every day he does things you wouldn’t believe—he’s invented USRPT (ultra-short race-pace training) for distance swimming.” Tori laughed in the background—“No, that doesn’t make sense.”

John’s friend and 1984 Olympian, Rich Saeger, recently said, “Clark is training his way into success. By default, he will be good. There’s no way he can’t own his events.”

Clark’s favorite Eddie-ism? “To do something that’s never been done, you have to do something that’s never been done.”

And so, much like his coach, the towering distance swimmer chips away at history.
Editor’s Note: The following story is composed of excerpts from Jeff Farrell’s book, “My Olympic Story: Rome 1960.”

Beep. Beep. Beep. The sound of his pulse and pulses in the distance sounded. Far-off conversations lulled the patient in and out of consciousness. The smallest movements made the fastest swimmer in the world writhe in pain. As he became more lucid, he saw his coach in the room with him.

The date was July 27, 1960. Less than a week earlier, Jeff Farrell had set American records in the 100 and 200 freestyles, winning both races, at the AAU (Amateur Athletic Union) outdoor national championships in Toledo. Farrell missed Australian John Devitt’s world record (54.6, set three-and-a-half years earlier) by 2-tenths of a second. From 1959 to June of 1960, Farrell broke 24 American records, set one relay world record, and became a six-time national champion. Sportswriters had already dubbed him “the fastest swimmer in the world.”

Six days before U.S. Olympic Swimming Trials, the sprint freestyler was flat on his back in a bed at Detroit’s Henry Ford Hospital. The American record holder in the 100 and 200 freestyles missed qualifying for the 100 by 1-tenth of a second. However, when he placed fourth in the 200 free, he earned his hard-fought place on the U.S. Olympic team. In January 1961, the Philadelphia Sportswriters Association awarded him its “Most Courageous Athlete of 1960” trophy.
After waking at 4 a.m. from an intolerable pang in his lower abdomen, Farrell had awakened his roommates when he collapsed onto the hotel bathroom’s tile floor.

The teammates rushed to tell their swim coach, Bob Kiphuth, who had been sleeping in the room below. Coach was already headed up to the scene of the ruckus. Kiphuth and two of Farrell’s teammates rushed the star swimmer to the hospital.

Diagnosis—acute appendicitis. Operation needed immediately.

As his gurney was wheeled toward the operating room, Farrell asked how long he’d need to be out of the pool. “About six weeks,” the surgeon said. But Farrell only had six days.

BOB KIPHUTH

One of the most respected names in coaching, Robert John Herman “Bob” Kiphuth, had just retired from his Yale coaching job in 1959. In his 42 years at Yale, Kiphuth’s teams amassed 528 dual meet wins and only 12 losses. Yale had won four NCAA team titles under Kiphuth’s guidance. Despite having no swimming experience, Kiphuth was named Yale’s full-time coach in 1917.

Although he never attained a college degree, Kiphuth became a five-time Olympic coach, was referred to as “Mr. Yale” in his later years, and in 1963, received the Presidential Medal of Freedom.

Kiphuth was considered an “expert on the human body” due to his lifelong interest in exercise, bodybuilding and kinesiology. Yale Medical School students were sometimes sent to Kiphuth to be quizzed on anatomy.

Moments before Farrell was to go under the knife, Kiphuth requested a private word with the surgeon.

“I want you to know that you’re about to operate on the fastest swimmer in America; in the world, in fact.” Kiphuth said.

The coach proceeded to offer advice, emphasizing how important it was to avoid cutting across the abdominal muscle fibers in order for Farrell to have a shot at swimming soon after the surgery.

“Before laparoscopic surgery, emergency appendectomies were performed with large incisions, sometimes involving cuts across the muscle, more often between them,” Farrell stated.

When the surgeon opened Farrell up, he found an appendix ready to burst. To safely extract the appendix, the surgeon needed to make the incision twice as long as normal. He managed to conclude the surgery without damaging any major muscles, just as Kiphuth had requested. “Kiphuth’s advice made everything that followed possible,” Farrell wrote.

DAY 1

Farrell woke up in the hospital, tortured by his thoughts: “To lose to a faster swimmer could be accepted...losing to an inflamed appendix just seemed beyond reason.”

The media had snagged the news about Farrell; one devastating headline read, “Olympic Swim Star Lost to the U.S.”
DAY 2
Kiphuth knew before most that the core was the driving force behind each stroke. And Farrell’s strong core that had been constructed over the past year-and-a-half had a major slice across it.

But Kiphuth had a hope deep inside. It wasn’t yet exposed to Farrell, other than Coach suggesting that the despairing patient begin some basic exercises in bed. He had Farrell lift each of his limbs, then allow them to slowly descend. Some elementary ab exercises were performed, and Farrell was roaming the hospital hallways to log some walking.

Coach Kiphuth had discreetly spoken to the doctor about the possibility of Farrell competing in the Olympic Games in one month. But Trials didn’t seem feasible.

Farrell’s parents had arrived, and his dad left the hospital room with what were meant to be a string of comforting words: “You’ll have a chance to fulfill yourself in other ways.”

DAY 3
Beneath the nurse’s education building was a small therapy pool. The doctor worked to waterproof Farrell’s incision wound and stood by as Farrell slowly descended the steps into the familiar hammock of water. Farrell felt comforted by the rippling blanket around him. But swimming was not going to be possible three days after his appendectomy.

Kiphuth instructed his swimmer to bend over and walk forward in the pool, simulating the arm strokes of his world-class freestyle.

DAY 4
The recovering swimmer held lightly onto a kickboard and allowed a gentle kick to propel him forward. Farrell tried out an unassisted horizontal movement, also known as the doggie paddle. There was still tension in his abdomen, but Farrell was beginning to allow himself to hope.

Cool and collected, Kiphuth reminded Farrell, “Relay trials aren’t for another five days.” But Farrell’s mind was on his best event, the 100 free, which was to occur in three days. The 100 would be his only event, the 100 free, which was to occur three days after his appendectomy.

Kiphuth thought it was important that Farrell attempt a dive. The bandaged swimmer attempted a gentle dive from the side of the pool. Without much gusto, the cautious dive looked more like a fall. Pushing off of the wall was still painful, so Farrell’s ability to do a proper flip turn was questionable. Kiphuth proposed a 50-meter time trial the next morning to see if Farrell was, indeed, fit to race.

The hospital staff had said the worst side effect of competing would be a hernia, but the chances of that were minor. Farrell had nothing to lose...and an Olympic spot (and potentially a hernia) to gain.

HONOR IN THE STRUGGLE
The nation had been following Farrell’s quest to make the team less than a week after an appendectomy. When he placed fourth in the 200 meter freestyle and earned his hard-fought place on the U.S. Olympic team, the crowd was on its feet...and the nation was inspired.

At the Olympic Games in Rome, Farrell was named a co-captain. He earned two gold medals in world-record fashion in both the 4 x 100 medley relay and the 4 x 200 freestyle relay (which were swum an hour apart!). Farrell anchored both relays to decisive victories.

Farrell identified deeply with the quote by the founder of the modern Olympics, Baron de Coubertin:

“The most important thing in the Olympic Games is not to win, but to take part, just as the most important thing in life is not the triumph, but the struggle to have fought well.”

Farrell was the fastest 100 freestyler in the world, but he didn’t get to swim the race. In the miraculous process of making the team, the iconic athlete recognized that taking part in the Games was an honor felt as tangibly as the relay golds draped around his neck.

Fun Fact: from 1951–61, Kiphuth was the publisher of Swimming World.
Mark Brown is an administrative official and computer operator extraordinaire for the Sierra Nevada Swimming LSC. For many years, he has been using his computer to make sure swimmers receive their observed times at local high school league championships as well as the larger high school sections that are attended by more than 90 high schools from three LSCs. Not only does he help Sierra Nevada swimmers, but his expertise also helps swimmers from Central California Swimming and Pacific Swimming. It’s his responsibility to make sure the meet referees know before the competition begins that all of the swimmers are registered members of USA Swimming. Brown also has served as the Sierra Nevada Swimming registrations/sanctions coordinator, making sure all swimmers receive an accurate time when their race is finished. As a Sierra Nevada Swimming administrative official, Brown serves as a mentor in the training of new administrative officials.

Several years ago, I was sitting in one of my first officials’ briefings as a new official, and I marveled at how fluently the lead official was recapping the rules in such a simple and easy-to-understand manner. He presented a protocol and jurisdiction briefing with such logic that I immediately understood why we were asked to stand, walk and observe with unassuming precision. I decided I wanted to be just like this official, so I asked how he learned all these skills.

He explained that about 10 years earlier, he had decided to pursue national certification as a deck official as a way of improving his own skills and knowledge of swimming. Along the way, he encountered many veteran officials who imparted to him some of their wisdom. He said one thing that really resonated with me: “If I’m not having fun and learning something at these meets, that’s when I will hang it up.” So, I decided I’d give national certification a shot and submit to an evaluation.

The purpose of the national certification program is to prepare and certify LSC officials for service at higher-level meets. Officials first apply and then are evaluated in their position at a qualifying meet (OQM). Candidates are evaluated for three to four sessions, during which the national evaluator offers feedback. The national certification process extends the various skills exercised at LSC meets, with refinements focusing on each official’s “department” (ST, CJ, SR, DR, AR).

Notably, there is a more important and immediate benefit of national certification: the cultivating experience of the evaluation process itself.

During a national evaluation and its advanced mentoring from the evaluator, the skills and perspectives of the officials being evaluated are significantly elevated—kind of like a graduate school for their development.

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I’ve learned so much in a relaxed atmosphere, and have truly enjoyed getting to know so many wise and talented officials. If you have the opportunity for some graduate work on officiating, I have only one recommendation: go for it!

Thomas N. Tiedt serves as an official with Florida Swimming.
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June 19-23, 2016 Session 1
June 26-30, 2016 Session 2

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June 20-24 (Week 1)
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June 14 – 18, Session I
June 20 – 24, Session II
June 18 & 19 (see website for 2016 clinic offerings)

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See display ad on page 45.

June 12-17, July 10-14, July 31 – August 4, August 7-11

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TECHNIQUE FUN VIDEO ANALYSIS

Don’t miss out on this wonderful camp experience at Northwestern! We provide a unique mix of training and technique work in a top tier aquatic center within our beachfront facility. Each practice is conducted
CAMP DIRECTORY – continued from 41

by the entire NU coaching staff and sev-
eral of our elite swimmers. We plan daily
drills to work on strokes, starts and turns.
Along with the hard work, we plan daily activi-
ties away from the pool that make this a truly
enjoyable experience. Our goal is to provide
each swimmer with insights into the fabulous
sport of swimming that help them to improve
and enjoy their swimming experience. Open to
any and all, ages 8 – 18. Contact us now! Don’t
delay because camps fill up annually.

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June 21-25: Commuter and Resident Camp

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is our plan to share the most up to date drills in
a manner that is memorable for the athlete.
Many of our campers have gone on to win State
titles and even become National record hold-
ers from over 30 countries attend. Come to
Pine Crest Swim Camp and join our Interna-
tional Atmosphere, athletes and coaches. Pine
Crest Swim Camp: “The Camp that makes a dif-
ference.” See display ad on page 43.

Overnight Camp:
June: 12-18, 19-25, 26- July 2
July: 3-9, 10-16, 17-23, 24-30

Camp Directory

GUEST EXPERTS

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same, unproductive yardage. Dr. Rod Havriluk
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by Swimming World as one of the 10 people
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is internationally-recognized for his approach
to improving technique and preventing injury.
Guest experts speak on psychology, strength
training, nutrition, physical therapy and physi-
ology. SpeedWeeks to insure maximum individ-
ual attention. Please note: Each SpeedWeek is
limited to 12 swimmers who are serious about
swimming faster. If you are looking for a “fun
camp” to meet former Olympians, this camp
will not be a good fit.

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Mariusz Podkoscielew, Camp Director
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Fort Lauderdale, FL 33334-5116
954-492-4173
swimcamp@pinecrest.edu
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get to the next level. With top quality coach-
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step beyond other camps and welcome over-
night campers for full week-long stays (Sun-
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overnight campers is $850 per week, which in-
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supervision. The cost for our daily campers is
$625 per week. The Camp Registration forms
are available on the website and registration
online is also available. Last year, we had swim-
mers from over 30 countries attend. Come to
Pine Crest Swim Camp and join our Interna-
tional Atmosphere, athletes and coaches. Pine
Crest Swim Camp: “The Camp that makes a dif-
ference.” See display ad on page 43.

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athletes the tools needed to be successful.
Camp Director and Olympian, Jonas Persson,
and Head Coach, Joe Dykstra, with their highly
qualified coaching staff, give personalized
coaching, taking swimmers to the next level.
Each day includes two water sessions focus-
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cluding dryland workouts, stretching routines,
nutrition advice, and goal setting. Campers will
also learn more about the psychology of train-
ing, mental aspect of the sport, and dynamic
team building strategies. See display ad on
page 46.

June 6-10: Extended Day Camp
June 13-17, July 5-9: Overnight Camp* Includes day and extended day options
July 11-13: Day Camp
July 14-16: Start & Turn Day Camp

TOM JOHNSON’S UTAH SWIM CAMP

Thomas Johnson, Head Coach and Director
Dept 3414, 1000 E. University Ave.
Laramie, WY 82071-3414
307-766-6265
tomj@uwyo.edu
www.wyomingathletics.com

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Johnson is hosting the 16th Wyoming Swim
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proud to offer its winning tradition to competi-
tive swimmers. Coaches Johnson, Coach David
Denninston and Coach Kirk Ermels and the staff
stress the importance of swimming with out-
standing stroke technique in a positive train-
ing environment. The swim camps are held at
the beautiful campus of University of Wyoming
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The University of Wyoming offers an outstand-
ning summer experience at 7220 feet, with the
opportunity of altitude training at the highest
Division I school in the United States. Wyoming
Swim Camp is open to all, ages nine and older.
Staff ratios generally range 1:8 coach to swim-
er ratio. It is also one of the few camps that
offer video analysis at NO additional charge.
It is recommended that participants are com-
petitive swimmers. Online registration at the
University of Wyoming’s Swimming and Div-
ing Team page. Coaches who are interested in
accompanying their team should contact Tom
Johnson directly (307) 766-6265 or email at
tomj@uwyo.edu. To provide the very best camp
experience each camp is limited to the first 60
swimmers for each week.

June 3-5: Start and Turn 1
June 5-10: Camp 1 & Intensive Camp 1
June 11-17: Camp 2 & Intensive Camp 2
June 17-23: Start and Turn 2
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Rising Tide Swim Camp

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WITH HALL OF FAME AND OLYMPIC COACHES DENNIS PURSLEY & JONNY SKINNER
MAY 29 - JUNE 3 | JUNE 3 - JUNE 10 | JUNE 12 - JUNE 17 | JUNE 19 - JUNE 24
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STARTS AND TURNS CAMP
MAY 21-22
SESSION 1
MAY 29 - JUNE 2
SESSION 2
JUNE 4 - JUNE 8

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Email: longhornswimcamp@athletics.utexas.edu

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WEEK 2 - JULY 10 - 14
WEEK 3 - JULY 31 - AUG 4
WEEK 4 - AUG 7 - 11

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MIKE BOTTOM

BY MICHAEL J. STOTT

Mike Bottom is universally regarded as one of the world’s best sprint coaches. By melding sprint power with Michigan’s excellent distance tradition, he has returned the Wolverines to a perennial NCAA contender.

Q, SWIMMING WORLD: The coaches you’ve been associated with—both as a swimmer and as an assistant coach—are impressive: George Haines, Doc Counsilman, Peter Daland, Mark Schubert, David Marsh, Nort Thornton...

A. COACH MIKE BOTTOM: I was coached by a lot of great individuals. In the beginning, I wanted to learn. George Haines really set my learning foundation, but the others all allowed me to grow. I’m the coach I am today because of those men and because of interaction with my current staff. Working alongside Dr. Josh White, Rick Bishop, Mark Hill and Danielle Tansel is very exciting. We get better by asking our returning athletes—such as volunteer assistant Sam Wensman or our recent Rhodes Scholar, David Moore—what was helpful to them.

Q: What was your first priority at the University of Michigan?

A. COACH MIKE BOTTOM: First, to ensure that the men’s program was one of the best in the country academically. We also wanted to retain a focus on the distance program. Everyone thought I would change it over because of my sprint-based background, but I wanted to continue Michigan’s history and tradition in distance swimming before we built the sprints.

An early goal was to connect with the community, particularly the academic one. For months, Josh White and I met with different professors on campus to develop relationships. From a great relationship with the hydrodynamics lab staff came an incredible underwater camera that we still use today.

— continued on 48

Coach Mike Bottom
Head Coach
Men’s and Women’s Swimming
University of Michigan | Ann Arbor, MI

(Continued on 48)

VILLANOVA UNIVERSITY

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CAMP DIRECTOR: RICK SIMPSON
HEAD COACH – VILLANOVA UNIVERSITY
TWO TIMES EAST CONFERENCE COACH OF THE YEAR (’13 & ’15)
RICK.SIMPSON@VILLANOVA.EDU

March 2016 / SWIMMINGWORLDMagazine.com 47
Connor Jaeger in a nutshell: tough, determined, successful. The University of Michigan distance ace (2010-14) is a 2012 USA Olympian, 10-time NCAA All-American, three-time NCAA champion, two-time World Championship medalist, U.S. national champion and an American record holder (1500, 14:41.20; 1650, 14:23.52).

Even if he never swam another lap, Jaeger would be remembered as an athlete and leader who helped Coach Mike Bottom return a national swimming championship to Ann Arbor (2013).

“Connor really wanted to come to Michigan,” says Bottom. “We recruited him hard because he wanted to be here. That said a lot. He is the epitome of a ‘Michigan Man.’ He’s humble, works hard and supports others. He understands he can always be better. When he does well, he still points back to Michigan. He’s also competitive and doesn’t tolerate people around him who don’t do the job. He’ll call them out in a way that’s direct, yet loving.”

Jaeger is also multi-faceted, notes his coach: “Connor builds up and also builds out. Last summer, he was on his way to breaking the American record in the mile. He also had a business internship, took classes and got a Master’s degree in management, volunteered in the community and went all over the country to do clinics. And he trained! There’s nothing he can’t do. Does he have a ceiling? I don’t know. But I know he’ll keep getting better.”
CONNOR JAEGGER AND ALI DeLOOF

ALI DeLOOF

“Arrested development,” “resilient,” “future champion” are applicable labels for senior captain and three-time NCAA All-American Ali DeLoof. The oldest of three sisters who are also current Wolverine swimmers (Catie, a freshman; and Gabby, a sophomore), sprint freestyler and backstroker DeLoof “came to us as a true country club swimmer,” says Bottom. To be fair, the Michigan coach is underselling her prep credentials, as she emerged from Grosse Point South High as a seven-time NISCA All-American and three-time MHSAA state runner-up.

Bottom lauds the leadership that DeLoof has shown her siblings as well as her Blue-and-Maize teammates: “She’s had to learn to lead as the eldest in a way that motivates and doesn’t put them down. She has a unique ability that she developed through her family, and it has carried over to the team environment. She communicates well with those around her, accepts their differences and motivates them to work as a cohesive unit.”

What Bottom has not understated is the training challenges DeLoof has overcome in Ann Arbor: “Ali has had to be tough because when she trains, she’s in pain. She can’t wear fins because of some ankle, ligament or tendon problems that don’t allow her full flexibility. Her wrists and joints are sore most of the time, but she pushes through that every single day. In doing so, she’s become one of the toughest competitors we have.

“When she came to us, we had to move her gingerly through the program—not only because she’s fragile physically, but she also just didn’t have the training background. She has a huge upside because she’s still learning. In the last six months, we moved her from a limited program into our middle distance group, which now allows her to finish races better, especially in meters. We’re excited about her potential to be at Olympic Trials and to be in the final of the 100 meter backstroke.

“She finished second in her race (100 LC 100 back in 1:00.10) to Missy Franklin at winter nationals. She could very well have won it, which is amazing, considering how much more training Missy has behind her. Can we continue to work that training? Yes. I don’t know that we can catch Franklin, but we can get closer…and then let Ali’s toughness take over,” says Bottom.

SAMPLE SETS

Jan. 6, 2016 (SCY, p.m. practice)

Race Pace

WARM-UP

• 1 x 400 (choice)
• 1 x 300 (kick)
• 1 x 200 (drill/swim IM)
• 4 x 100 @ 1:20 (free, descend 1-4 to moderate)
• 3 sets of 3 x 50 (9 total) as follows:
  #1 One cycle fast (specialty), rest smooth (free)
  #2 Two cycles fast
  #3 Three cycles fast
• 1 x 100 @ 2:00 (swim out backstroke)
• 4 x 50 @ :45 (specialty, descend 1-4)
• 4 x 25 @ :30 (15 fast/10 smooth; 10 smooth/15 fast; 25 smooth, 25 fast; choice)
• 1 x 100 (EZ choice)

100 RACE PACE
(2 rounds free, 2 rounds backstroke)

Round 1
• 1 x 25 (dive 20 underwater, FAST)
• 1 x 25 @ 1:10 (recovery)
• 1 x 75 @ 1:05 (100 race pace, dive, specialty)
• 2 x 25 (100 race pace to a great finish!)

Tween (defined as active recovery between rounds)

Round 2
• 2 x 25 (dive 15 underwater, FAST)
• 1 x 25 @ 1:05 (recovery)
• 2 x 50 @ 1:00 (100 race pace, dive, specialty)
• 3 x 25 @ :30 (purple finish! = all-out anaerobic effort)

Tween

Round 3
• 3 x 25 (dive 10 underwater, FAST)
• 1 x 25 @ 1:00 (recovery)
• 1 x 50 @ 1:00 (100 race pace, dive, specialty)
• 4 x 25 @ :35 (100 race pace, dive, specialty)

Tween

Round 4

Fins & med pads, breaststrokers pads, fly fins and small pads
• 1 x 50 (100 race pace, all no breath)

100 race tween
• 1 x 100 (recovery)
• 4 x 50 @ :45 (low aerobic swim)
• 4 x 50 @ :50 (low aerobic kick with board)
• 1 x 50 @ 1:00 (recovery)

WARM-DOWN/COLD TUB/RECOVERY

PROGRESSION OF TIMES

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>50 Yd Free</td>
<td>23.64</td>
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<td>100 Yd Free</td>
<td>51.62</td>
<td>50.66</td>
<td>48.85</td>
<td>48.32</td>
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<tr>
<td>100 M Back</td>
<td>1:04.5</td>
<td>1:02.54</td>
<td>1:01.07</td>
<td>1:00.10</td>
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We’ve produced several different paddles in partnership with our engineering labs and we’ve talked about aquatic movement with engineering and kinesiology professors. We had Kim Cameron, a professor of management and organizations, come in and talk about positive motivation. We wanted to expose the team to different parts of campus to demonstrate how much is going on.

A year ago, we had our senior banquet at the Art Museum. Over the summer, we went to the University Musical Society and have been to the Bentley Historical Library. Through this approach, we’ve exposed our student-athletes to different parts of campus, and that has allowed them to learn a lot about our university as a whole.

**SW**: How did Josh White get to Michigan?

**MB**: I had worked with him at Kenyon when he was a swimmer and I was giving clinics. I watched him go through his Ph.D. program and develop as an individual, clinician and coach. He was an up-and-coming talent who could give me a real understanding of how to make things better. No surprise, he has developed into an excellent coach.

**SW**: How big of a role does nutrition play?

**MB**: One of the real keys to making dietary changes is understanding that you are eating for performance. We have a nutritionist meet with the team once a week. We categorize what they eat. If athletes understand how their bodies respond to certain foods, they think a lot more wisely about what they consume.

**SW**: You maintain that swimming has to be balanced by FUN. What do Michigan swimmers do in training for fun?

**MB**: We have fun every day, every workout by keeping sessions fresh—by using boxing gloves, push-outs or pull-ups or pneumatic systems to work on stroke. We vary training considerably. Yes, training takes a lot of nose-to-the-grindstone work, but if we can change up our paces, strokes and drills, it keeps things interesting. Our student-athletes really like that.

**SW**: You tweet a lot. Why?

**MB**: One of our program’s guiding principles is to influence—and one of the best ways to influence the world around you is to be good...and allow people to see that. For me, tweeting—or social media as a whole—is more of, “Hey, here’s who I am. This is who we are.” I value my family and...
HELP WANTED FOR SUMMER SWIM CAMPS

LONGHORNS SWIM CAMP

The Longhorns Swim Camp at The University of Texas at Austin is seeking mature, motivated and team-oriented individuals to be part of its 39th year! Exciting opportunity to work with world-renown staff: Eddie Reese, Carol Capitani, Kris Kubik and Roric Fink. Guest coaches/speakers include Olympians Ian Crocker, Brendan Hansen, Colleen Lanné-Cox, Garrett Weber-Gale and Whitney Hedgepeth. Four one-week sessions (May 29-June 24). Room, board, parking, $600/session salary, up to $300 travel expense help and NIKE camp apparel package provided. Applicants must agree to work in an alcohol/drug-free environment and must have completed at least 60 hours of college coursework. Competitive swimming and/or teaching/coaching/camp experience required. References, First Aid, CPR and/or Lifeguarding/Safety Training for Swim Coaches must be submitted.

For more information/application, check our employment section at www.LonghornswimCamp.com. Completed applications accepted until positions filled.

The University of Texas at Austin is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, age, citizenship status, Vietnam era or special disabled veteran’s status or sexual orientation.

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continually tweet about them. I want to show how our student-athletes are excelling in the pool or in the classroom or in the community. We can multiply our influence by allowing people to see those good things.

**SW:** For two straight years, a study commissioned by USA Swimming pegged Ann Arbor as the “No. 1 Swimming City in America.” What impact do your swimmers have on the community?

**MB:** As an example, we wanted to display all of our aquatics—water polo, diving and swimming—for the Michigan Water Carnival several years ago. We invited the community to see all the different things we do. People left with an even greater appreciation of those sports—and hopefully more of an interest. I inherited a great tradition.

Having Michael Phelps here and train with Bob Bowman before me brought a huge awareness to Ann Arbor swimming. We wanted to continue that by providing an entertaining and motivational source to the community through our student-athletes. Two of my girls swim here on the Club Wolverine team. I have a vested interest in the community and want to see those sports continue to be elevated.

**SW:** The 2013 NCAA men’s championship—what did that accomplishment mean?

**MB:** It was an incredible team effort. We did it in a way that’s 100 percent Michigan: with a lot of guys scoring points. Connor Jaeger was our leader—just a blue collar, hard-working individual who understands the team.

For me, a team win has so much more value than an individual win. Some other teams have superstars; in some cases, a lot. Not us—we did it with the team. I remember the surreal moment of joy, sitting on the edge of the pool, watching the team celebrate.

And it wasn’t just the team in the water. We had one of our captains in the stands leading cheers. We had dozens of alums, parents and support staff. So many people made that happen.

---

Michael J. Stott is an ASCA Level 5 coach whose Collegiate School (Richmond, Va.) teams have won eight state high school championships.
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Garrett Munk
Age 14
Phoenix Swim Club
Phoenix, Arizona
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Emily Fung
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SWIMMING WORLD MAGAZINE salutes rising young stars in competitive swimming throughout the country.

W W W. H A S T Y A W A R D S . C O M
Prior to her recent 11th birthday, Maggie Belbot of North Baltimore Aquatic Club was on a bit of a record-breaking streak—26 to be exact! The then 10-year-old set area records (SCY) and resident standards (SCY and LC) for the state of Maryland by overturning marks that had previously been held by Beth Botsford (1996 Olympic gold medalist) and Whitney Phelps (1994 World Championship bronze medalist).

Belbot concluded her final weekend competing as a 10-year-old by setting six meet records at the CeraVe Invitational, Jan. 8-10, at Rutgers University in New Jersey. Before her birthday on Jan. 19, Belbot held AAAA times in every event.

Coach Tom Himes notes that Belbot “is very coachable. She has the ability to take what she is told and make the improvements and/or adjustments necessary to improve her swimming. In addition, she also is quietly very competitive. She knows what she wants to achieve and will also employ various race strategies in order to achieve her goals.”

Outside of the water, Belbot also plays basketball (winter) and lacrosse (spring). In addition to sports, she is an avid baker and a big fan of the Food Network’s Cupcake Wars, for which she would someday like to be a judge.

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WHAT IS THE BEST THING YOU DO IN SWIMMING?
The thing I do best is practice. I love to practice. I work really hard and take on any challenges my coach gives me.

WHAT ARE SOME OF THE TOUGHEST SETS YOU’VE DONE?
• 20 x 200 freestyle-fast intervals
• Coach Tom’s “Die Set”: 25 fly, 75 back, 50 fly, 50 back, 75 fly, 25 back, 100 fly, 100 IM-repeated for all of the strokes, all sprint

Maybe there’s something wrong with me, but I LOVE tough sets at practice!

WHAT ARE YOU MOST LOOKING FORWARD TO THIS YEAR?
I’m really looking forward to watching the Olympics. I can’t wait to watch the American swimmers compete against the world. I will be cheering extra loud for the NBAC swimmers who make the U.S. Olympic team.

WHAT IS YOUR FAVORITE THING ABOUT SWIMMING?
I love the friendly competition. We all compete as hard as we can in the pool, and we’re the best of friends on the deck.

WHO IS YOUR SWIMMING IDOL...AND WHY?
My swimming idol is Beth Botsford. She’s a former NBAC swimmer and Olympic gold medalist. I got to meet Beth last summer at one of my swim meets, and she is really nice.

My favorite swimmer is Missy Franklin. I was very inspired watching her in the last Olympics, and I loved the “Touch the Wall” movie. I also love her lip-syncing, “Call Me Maybe.”

WHAT ARE YOUR FAVORITE HOBBIES?
My favorite hobby is baking. It’s really fun to mix ingredients with my hands...and I love to eat! I also love boating, fishing and water skiing on the Chesapeake Bay.
WHAT CAN BE DONE AT THE NCAA LEVEL TO HELP SWIMMERS HAVE A BETTER CHANCE AT EARNING QUALIFYING TIMES FOR OLYMPIC TRIALS?

FRANK BUSCH / USA
Swimming National Team Director (2011-present); Former Head Coach, University of Arizona (1989-2011)

“This has been one of the first and foremost things in my head moving into 2017-20. When I think about the accomplishments of our junior team athletes in short course yards, it doesn’t translate into their performances in long course meters. I’d like to address some things at the junior level that would help us progress.

“As for the collegiate season, I sent out information five months ago, letting our college coaches know what people did prior to London—how many long course meets they attended prior to London, so they all know the importance of competing in long course. I encourage as many college coaches to allow national team athletes to attend the Minnesota Pro Series in November and the Austin Pro Series in January (both long course meets).

“This will not hurt, but will only help athletes trying to swim fast in December...and racing in January won’t negatively affect their performance at NCAAs. I would like to solidify a couple of dates to avoid scheduling dual meets, so athletes can go and race long course in November or January—as I don’t see any other months that would work with the collegiate season.

“Then I look at the opportunity for some coaches to schedule dual meets and swim other teams in a long-course format. If it’s a meet where they travel, it could be short course one day and long course one day.

“As for juniors, since we don’t have a national junior championship meet in December, having one meet in the West and one meet in the East makes it easier for coaches, athletes and parents to travel in December. In 2014, with one junior national winter championship, less than 1,000 athletes competed. This past December, with two meets (West and East), we had close to 800 at each meet. That’s a significant improvement in our overall number of athletes.

“At those meets in the future, I’d like to see a progression—maybe all short course in the first year of the quad, then long course prelims in the second year, then long course for both prelims and finals in the third and fourth year of the quad. With some tweaking—we can make it so long course is not such a foreign thing to them.”

MARK SCHUBERT / Head Coach and CEO, Golden West Swim Club; Head Coach, Golden West College; Former USA Swimming National Team Director (2006-10)

“I’ve always felt that swimming should be more like track and field at the NCAA level. Track and field has an indoor and an outdoor season with each having their own NCAA championship event.

“Swimming should have two seasons—one long course and one short course—with each having their own NCAA championship event. That would give a lot more value to long course, and it would also give swimmers the atmosphere of an NCAA Championships to make that Olympic Trials cut.

“The best environment to go fast in swimming is as an NCAA Championships because of the team atmosphere. I previously suggested this to the NCAA rules committee, but it was shot down due to the cost of running two championships.

“The other thing I would consider is having (the NCAA Championships during) Olympic years be held in long course. We previously tried that at the NCAA level, but so many programs were concerned because they did not have a 50-meter pool that we compromised and held NCAAs in short course meters to allow for world...
records to be broken as well as focus on meters. “That didn’t stick after doing it twice, because I don’t think Americans relate much to 25-meter swimming, just like the rest of the world doesn’t relate much to 25-yard swimming.”

DENNIS PURSLEY / Head Coach, University of Alabama; Inaugural USA Swimming National Team Director (1989-2003)

“The NCAA already sanctions long course competitions and time trials during the Olympic year, all of which are of benefit to the swimmers attempting to make cuts. But the most effective thing they could do to support the student-athletes in their preparation for the Olympics would be to conduct a long course NCAA Championships in the Olympic year.

“Not only would this be the most effective way to provide the swimmers with the best possible opportunity to make cuts and to prepare for the Olympic Trials, but it would also result in a spike in interest in the NCAA Championships in the public domain.”

JOEL SHINOFIELD / Executive Director, College Swimming Coaches Association of America (CSCAA)

“I think the question is less about opportunities to earn cuts. Our community has worked to get waivers for pursing cuts, allowing long course meets and time trials at NCAAs to provide opportunities for athletes to get their cuts.

“The bigger issues have more to do with how do we capture the interest generated by the Olympics in swimming and diving, and raise the profile of the collegiate swimming and diving. Additionally, how—in a climate where there is significant talk of reducing opportunities to train at the NCAA level in all sports (time demands)—do we protect the ability of the athletes to pursue their full potential?

“On the first, a different type of championship in an Olympic year might be beneficial, but we also need to explore different models for our championships overall—models that preserve the best elements of producing NCAA team and individual champions, but also engage our community and attract people to the events.

“On the second, we fully understand the need for swimmers and divers to be students first, which I think is readily apparent when you look at our CSCAA Scholar All-America Team list. Guidelines on time demands for students engaging in NCAA sports should exist in some fashion, but we need to create accessible pathways for athletes who want to reach the greatest heights in their sport to work with their coaches to achieve their goals.

“The current system of restricting weeks and hours is dated and does not reflect what we know about recovery, readiness to train and nutrition...or even research on academic performance. DIII and DII restrict weeks of their seasons based on a philosophy of those divisions, which are philosophically different than DI. Legislative relief waivers can be developed to help athletes such as Andrew Wilson from Emory, among others, when those tremendous talents emerge in DII and III.

“However, in DI, the current rules aren’t based on a philosophy or science—they are arbitrary. We need to completely blow up the current system in DI and use a data-driven approach that incorporates sport science, student input, coach input, faculty input and technology to build new parameters that ensure we have successful students who, if they choose, can pursue their competitive dreams to their fullest. Athletes should have the full choice to attend the school with the type of program that fits their goals—the same as their academic choice—without onerous rules about their choice to train.

“On both of these issues, tinkering in the margins will not produce better experiences for our students or a better future for our sport. We must be willing to radically change the model if we want to provide the full spectrum of opportunity for students pursuing our sport at the collegiate level from those simply participating to the ones chasing Olympic gold.”

Editor’s Note: A long course time trials will be held at 10 a.m. the day after both NCAA Division I Championships.

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The 50 freestyle is often referred to as the Splash & Dash. It looks like the "splash" half of that title was working overtime—even after the race when Florida’s Caeleb Dressel won the 50 at last year’s men’s NCAAs.

[PHOTO BY PETER H. BICK]