

TIGER TIMES

JUNE-JULY 2018 ISSUE

- 
- 2018 LC season recap... pg 2
 - DQ-Proof: The Breaststroke Pullout and
“Two Strokes Under”... pg 4
 - Meet Diaries... pg 9
 - Meet Coach Elizabeth... pg10
 - The benefits of Chocolate milk... pg 11
 - Make the most of your break... pg 14



Swimmer's newsletter for Princeton Tigers Aquatic Club

2018 Long Course Season Recap

by: Aditi Pavuluri

As 2018 long course season draws to a close, we take a look back at all that we've accomplished this past long course season. This past season has been a tremendous success for our team and here are some highlights:

Practices: Our team's success was a result of the work the coaches and swimmers put in all season. Swimmers recorded a high overall attendance, many of the swimmers over 90%. Our Senior group swimmers added gym training to their workouts, which was very beneficial to their swimming.

Meets: PTAC participated in 10 meets this season. Although many of them have qualifying times, many of our swimmers were able to make the cut and represent our team. Everyone on the team who participated in the meets did an excellent job, with everyone showing huge improvements in swimming skills since the beginning of the season.

Achievements: There were numerous new GOLD times, ZONE times and team records set during this season across all groups. Our 10U swimmers particularly had a great season. Our AG2 Coach Evelyn Yuen said "I have 10 kids from AG2 who qualify for Junior Olympics -- that's the most 9/10year olds PTAC has ever sent to JOS - I can't be more excited and more proud of the swimmers!"

A few swimmers from the Senior group attended the "Florida Gold Coast Senior Championship" Meet in Coral Springs Florida.

Erica Oake continues to move forward on the road to the 2020 OLYMPICS in Hong Kong and pursue her Olympics dreams. Special congratulations to her for all her achievements as a modern Pentathlete.

Team building activities: Coaches were successful in making practices fun by planning many fun activities for the team. JR/SR groups had a team activity at Water Works on June 24th, all swimmers and their families joined a team party at the Van Nest park on July 7th and there was an end of season pizza party on July 23rd.

Looking forward: We made a lot of great progress this past season. A few swimmers qualified for the Eastern Zone Championships in Richmond, Virginia. Good luck to those that are attending!

Let's enjoy the rest of our break, continue on all our success, and have a fantastic 2018-2019 Short course season!

Good bye LC 2018

For many Tigers swimmers, the Silver Bronze Championship Meet was the final meet of the season. For many, it was their last chance to achieve a goal they wanted.

Despite the pressure, our swimmers came out on top achieving many personal bests, silver times, and gold times!

Best of all, we showed that we were **LOUD** and **PROUD** by cheering for every swimmer with an immense amount of enthusiasm

GO TIGERS!!!

COACHES CHEER

A special recognition to highlight the effort of a few swimmers from the different groups each month. Coaches from each group nominated the hardest working swimmers at workouts for this special recognition. Congratulations to our recipients of the "Coaches Cheer!"

AG1 AND AG2 - For the month of June, I would like to recognize **Logan Hong** (AG1), **Matias Da Costa** (AG2), and **Kalp Ostawal** (AG2) for significant improvements in the last month. AG1 did their first ever freestyle test set and Logan swam exceptionally. Matias and Kalp who started the season in the back of the lane are now leading their respective lanes in IM sets.

AG3 - The swimmer of the month is **Alvin Tien**. Alvin is putting a lot of effort to get better on technique and stronger at kick. Alvin has set some hard goals for himself this season and has achieved some of them already!

VARSITY - The VAR group would like to recognize **Isabel Garcia-Carrillo** and **Akash Jain** for the month of June. Isabel brings a positive attitude to each practice and meet and is a great friend to her teammates. We saw an uptick in Akash's attendance this month. He has been working hard at practice and we look forward to seeing the pay off as the season goes on.

JUNIOR AND SENIOR: This past month we saw great results and drops from at our meets. There were a few standouts that we would like to highlight. **Dhruv Badarayan** has been putting in a lot of effort in workouts and meets, resulting in some huge improvements. His Summer Solstice results were exceptional and we look forward to seeing more from him this summer! **Erica Oake** went to compete at USA NATIONALS / US OPEN in Modern Pentathlon and took home FIRST PLACE in the under 19 category. She had a best time in the swim portion during this amazing performance!

JUNE "Gold Medal" Attendance Club

These PTAC swimmers were committed to the team in the month of April! All swimmers here were over 90% attendance and swimmers in BOLD have %100 attendance for the month.

AG1 - Logan Hong, **Shivani Joshi**, **Claire Lee**, Kai Martin, **Varun Shenoy**

AG2 - Joshua Chen, **Kent Hong**, **Allison Lee**, Jerry Liu, Simran Malik, **Kalp Ostawal**, **Akhil Pavuluri**, Calvin Tien

AG3 - **Suhani Agarwal**, **Alvin Tien**, Nethmi Dharmasena, Madeleine Domantay, Riya Patel, Ved Shenoy

VARSITY - Karm Patel

JUNIOR Zaccharie Ouzilou, Aditi Pavuluri, Sanjna Moola, Apsara Saraswat, Tracey Liu

SENIORS - **Jeffrey Davenport**

DQ-Proof: The Breaststroke Pullout and “Two Strokes Under”

By Bill Bauer, USA Swimming Stroke and Turn Judge

It was the last lap of her 100-meter breaststroke and Danica put everything she had into it, capping it off with a strong finish into the wall. When she looked up to see her time, she knew she'd just dropped over two seconds. “Yes!”

As she climbed out of the pool she thought, “Maybe I even got a gold time!” Finishing second in her heat added some icing to the cake; but it was the gold she was really after.

Just then she noticed a man in a white shirt and blue pants standing next to the timers; an official—the kind that wears headphones. Later on she found out he was a Chief Judge, or “CJ.”

Their eyes met and her heart sank. She knew he was there to speak to her. “Why is he waiting for me?” she thought. Her mind raced ahead. “Am I DQed? For what?”

“Two strokes under.” His words cut into her like the blade of an axe felling a mighty oak. Her triumphant mood came crashing to the ground, leaving her in stunned silence.

The CJ paused. He was expecting her to say something. When she didn't, he added: “You had a great swim...but the Turn Judge for your lane reported that you broke the ‘two strokes under’ rule.”

“What's that!?” She asked, trying to keep her balance. Her mind was reeling.

She was thinking, “This has to be a mistake.” But she didn't say anything. Inside her head a voice cried out, pushing back at the situation: “This...Can't...Be...Happening.”

“At the beginning of the heat, after your pullout...remember the arm pull you did just before you came up to the surface?” he asked. “You're not allowed to finish that second stroke while you're still under the water. By the time your hands reach the widest part of that stroke—

mean, before your hands start turning inward—your head needs to be up above the water's surface.”

It didn't make any sense. As she wrestled with her confusion, she felt her anger rising up within her.

“What?!” she said, trying to hold back her rage and tears. “I didn't even know that's a rule!”

Danica walked back to her team, discouraged and disappointed. She was so confused about what had just happened. What could she tell them? It was so embarrassing.

Fortunately, some of her friends had been DQed for the same infraction—well, not exactly fortunately; but you know what I mean. They helped her feel better.



Officials watching breaststroke

Once she calmed down Danica was determined that this DQ would never happen to her again.

Have you ever been in her shoes? If so, you can probably relate. Week after week in practice, and then during your heat, you work hard to produce a solid result in the water and on the timesheet. Then your time is disqualified and it doesn't count toward your official record. (Even so, you showed you can drop that much time. It's good to keep that in mind, going forward.)

And then, to make matters worse, you have no idea what you did wrong! It's one thing to find out that you're not allowed to do another arm stroke underwater. It's especially hard when the first time you learn about the rule is a DQ for it.

Many of the rules for the breaststroke are confusing. It's a tricky stroke to learn. You need to develop a special rhythm so you can perform its unique stroke cycle with speed, making it the most challenging stroke to master. As a result there's a lot that can go wrong—and several ways you can get DQed: if your legs alternate or you do a scissors kick, for example, or if your elbows recover over the water's surface. (Keep an eye out for these future 'DQ-Proof' topics.) But the "two strokes under" rule is especially mystifying. In this *Tiger Times* I'd like to de-mystify this call, so all you breaststroke swimmers out there know what you can do to make yourselves, yes, DQ-Proof from this particular infraction.



Breaststroke Pullout Demonstration

Let's rewind back to the beginning of Danica's heat and find out what the Turn judge saw (it wasn't me this time, honest!). After her dive, he watched her as she did the pullout and the single butterfly kick to bring herself toward the surface. So far, so good. As she glided upwards in a streamline position she started doing another arm pull. From the deck, the judge could see that she was still fully submerged. He also saw that,

when she pulled her arms back toward her body, as her hands started to come inward, her head had still not broken the surface. His hand shot up to let the CJ know he had an infraction to report. It was this CJ who called in the report, so another CJ could get over to Danica's lane to talk with her when she got out of the pool

When Danica dove into the pool at the horn's sharp cry, she plunged deep below the water's surface. At first she could feel the incredible momentum her dive generated. The burst of energy from her legs propelled her off the block, through the air, and into the water. It was one of her best starts.

But it turns out she'd gone much deeper than she wanted to. And well before she approached the surface, that initial burst of energy was already starting to fade. She needed to get herself up to the surface soon, and her pullout only got her part of the way up. What was she supposed to do? Obviously you can't swim the whole race under water, right?



Mens 200 meter breaststroke in 1955

In fact, this idea wasn't always so obvious. Before 1956, breaststroke swimmers normally remained underwater for much of the race, only surfacing for a portion of each length of the pool. There's a remarkable [video on YouTube](#) showing the world's fastest breaststroker, Masaru Furukawa from Nippon University breaking the world record

at the Fourth United States-Japan swim meet in Tokyo in 1955. During the entire 200-meter race Furukawa rarely surfaces from the Meiji Shrine Pool. But, as you'll see, neither did his competitors: All of the others also swam the race completely submerged much of the time!^[1]

It turns out that breaking the surface of the water slows you down—especially in the breaststroke. So the more you can swim your race underwater, the faster you can get to the finish. Until 1956 the rules against swimming underwater were somewhat vague. They generally discouraged swimmers from swimming the breaststroke underwater; and then, as now, they allowed the swimmer to stay underwater after the start or after each turn. But they failed to define how far one could go before surfacing—a loophole swimmers could easily take advantage of. And clearly, they did.

So it should not surprise us to learn that, the following year, at the Summer Olympics in Melbourne, Australia, off the start of the 200-meter breaststroke, Furukawa stayed under the water for much of the race. During the first 150 meters, he swam 45 meters of each length underwater. And it was all legal. In fact, he won the gold medal for the event, swimming it in 2:34.7. But the event stirred up a big argument about the rules.

As a result, several new rules for the breaststroke were introduced by the International Swimming Federation (aka [FINA, or Fédération internationale de natation](#)). Some of these remain in force to this day. The rule requiring some part of the swimmer's head to break the water's surface during each stroke cycle comes from this time. So does the rule allowing you to bring your hands past your hipline once each lap, during the first stroke after the start and each turn, aka the *pullout*. And it's from this time that we have the prohibition against doing more than one stroke with your arms while your head is entirely under the water—the “two strokes under” rule. One little-known rule from this time that did not survive is the “fifteen-meter” rule. To my surprise, this was first put

in place for the breaststroke—now the breaststroke is the only stroke for which this rule does *not* apply.^[2]

Getting back to Danica's DQ, even though the 15-meter rule no longer applies in the breaststroke, it still matters how deeply you dive at the start. Going too far under the water can make it hard to get yourself up to the surface in time to do your second stroke without getting DQed. In other words, you need to make sure your dive is shallow enough that you can surface with only one pullout. Your next arm stroke initiates the stroke cycle. If you dive too deep, you need to glide upward in a streamline position until you're close enough to the surface that, during that first stroke of the cycle your head can not only break the surface, but do so before your hands turn inward from the widest part of the stroke.



Marasu Furukawa winning gold in the 200 meter breaststroke in the Summer Olympics in Melbourne, Australia.

Speaking of depth, I've already gone much deeper into this subject than I'd planned to. So I'll save my thoughts about the single dolphin kick allowed at the start of each breaststroke lap until my next DQ-Proof. There's an amazing tale of international outrage and intrigue behind this rule and how it has changed over the years. Until then, stay DQ-Proof and let me know if you have any questions.

Note to parents

Have you ever considered being an official? If you'd like to learn more about what's involved, please get in touch with me before the fall. You can e mail me at: **WRBauer7@gmail.com**.

In September, USA Swimming will offer several one-hour training sessions for the most basic level, Stroke and Turn, at a facility nearby. Stepping into this role gives you a great opportunity to support the sport of swimming here in New Jersey, to help the team, and to engage with your child's competitive swimming career at a deeper level (no pun intended:-)

I'm really happy I decided to become an official, in part because it enables me to contribute the PTAC's team effort. But the main thing is that it gives me a concrete way to show Kentaro my support for his efforts. I assure you, swim meets look very different from the deck. I hope to see you down there during the next short course season!

[1] At 00:45-1:23 of the video you can see this incredible event. According to *Telenews Daily News Film* (the source of this rare footage), the 200-meter Breaststroke was the "[m]ost spectacular event of the day...a grueling contest that keeps the swimmers underwater most of the way."

[<https://www.youtube.com/watch?v=Ca6JEMWab0Y>]. Story No. NY-2 *TELENEWS DAILY NEWS FILM* Vol. 8, Issue No. 157 PRODUCED: August 8, 1955 Origin: TOKYO: JAPAN SETS TWO WORLD MARKS IN U.S.-JAPAN SWIM MEET

[2] See Olivier Poirier-Leroy, "The Breaststroke: Everything You Ever Wanted to Know." [<https://www.yourswimlog.com/breaststroke/>].

See also Pat Windschitl, "The Ever Changing Breaststroke" (posted Feb 10, 2012). [<http://www.ellisaquatics.net/home/swimtip/theeverchangingbreaststroke/>].

See also Rick Madge, "More Than You Want to Know About Swimming Disqualifications." [<https://coachrickswimming.com/2015/01/24/more-than-you-want-to-know-about-swimming-disqualifications/>].

MONTHLY NUTRITION TIP

Sleep! Many kids, now that school is out, think that they can stay up as late as they want. As athletes, to ensure the best possible physical performance, we should try to get as much sleep as possible.

Just as athletes need more calories in their body to properly function, they also need more sleep. If sleep is cut short, be able to make the necessary connections for the best possible practices. Some outcomes of sleep deprivation are slower reaction times, and even risk of injury. You can risk injury because of general fatigue, or because your body has not had enough time to recover.

Some of us, as high schoolers might think, *how in the world am I going to be able to get 8 hours of sleep every night? I am in high-school!* And you are right! It will be hard to get sleep at first but there are things you can do to get to sleep faster. First of all, avoid watching TV or using a computer before bed. It is easier to get to bed with a clear mind. And secondly, avoid caffeine, such as soda, energy drinks or coffee right before bed.

Sleep Well!

Monthly Motivation

What have you accomplished this season?

By: Aditi Pavuluri

When analyzing our season, we tend to think about what we *haven't* accomplished.

We *haven't* dropped time in our best events.

We *haven't* beaten our rival in competition.

Than what *have* we accomplished?

Sometimes, it's okay to miss out on a goal, when you know you put in the work.

It's okay to *fail* sometimes, knowing you tried your best.

Cherish all of your accomplishments.

Even if it was attending all of the practices.

Or taking care of your nutrition.

Focusing on everything you can.

And when have this mindset, how many *great* things can we accomplish?

The possibilities are endless.

ASK TIGER...

Dear Tiger,

This past season, I've been dropping quite a bit in the 50 Backstroke. I've also gotten very close to a gold time in this event. I was hoping to finish off the season with another drop in the 50 Back, and also get the gold time. Much to my dismay, I added! Does this mean that I'm not good at backstroke anymore?

-Down About Not Dropping

Dear Down About Not Dropping,

Especially when you are good at a certain event, you shouldn't expect your journey to success to be a clear path upwards. You are going to have ups and downs, and the best thing you can do is learn from your mistakes, and come back even stronger next season!

-Tiger

INSPIRATION DOSE

"Hard work beats talent when talent doesn't work hard."

- Tim Notke

Meet Diaries

Swimmers & Coaches reflections about Long Course 2018.

Jeff Davenport (SR)

Something I think went well this season was that I got my first two Zones and JOs of the season at the first meet, which was the Tiger Challenge.

Something that I look forward to next season is dropping the second in my 200 Backstroke needed to qualify for Sectionals.

Grace Davis (SR)

Something that went well this season is that the Senior group got the opportunity to swim at a meet in Florida.

Something that I am looking forward to next season is short course because I get to swim some of my best events.

Crosby Davidson (SR)

Something that went well this season was that our team dynamic was better. A lot of people were motivating others during workouts.

Something that I look forward to next season is stadium runs.

Akansha Joshi (JR)

Something that went well this season was that we did a good job at integrating the new swimmers.

Something I look forward to next season is when we bond at meets and swim new sets to build my endurance.

Kent Hong (AG2)

Something I think went well this season was that people were nice and we were all working together.

Something I look forward to next season is to just go for what's coming at me, because I don't really have any expectations.

Samantha Kent (AG2)

I think something that went well this season was that a lot of my times improved.

Something that I am looking forward to next season is going to JOs

Naqsh Mitra (SR)

Something that went well this season was our last test set which I think I did well on.

Something that I look forward to next season is the gym training that we are going to get.

Coach Elizabeth (JR/SR)

Something that went well this season was that the groups really stepped up their training for the championship meets.

Something that I look forward to next season is all of your smiling faces!

Coach Miles (JR/SR)

Something that went well for the Senior Group was the additional gym training. For the team as a whole, I loved watching the team come together and cheer.

Something that I look forward to for next season is watching all of the younger swimmers move up to the older groups because I think that they will bring a new energy to the group.

Matt Chen(SR)

Something that went well this season was that I dropped a lot from my converted times, which was surprising.

Something that I look forward to for next season is beating my converted times.

Max Domantay(AG2)

Something that went well this season was that I got the Jo in the 50 Breast, because I had been trying all year to get it.

Something that I look forward to next season, is trying to match my converted times in short course.

Zac Ouzilou (JR)

Something that went well this season was that the team spirit was stronger, especially in our group.

Something that I look forward to next season is getting more Zone times in short course.

Allison Li (AG2)

Something that went well this season was that the team was working together more than before.

Something that I look forward to next season is adjusting to the 11-12 silver and gold times.

Dedeepya Tadapaneni (AG1)

Something that went well this season were the meets, because a lot of people got new silver and gold times.

Something that I look forward to next season is going to JOs.

MEET COACH ELIZABETH PRAGER

By: Aditi Pavuluri

Coach Elizabeth joined PTAC family in July 2018 as an assistant coach for JR/SR group. She studied at the University of Pittsburg. She comes from a family of swimmers and it is no surprise that her life revolves around the sport. She swam club swimming, college swimming, and has now transitioned to a swim coach. Aside from swimming she enjoys camping, hiking, scuba diving, rock music, and going to concerts. She is always ready for a challenge and tries to live life to the fullest.

Reporter: What have you learned from being on Tigers so far?

Coach Elizabeth: From my time with the team so far, I learned that Tigers definitely like to talk! But the chattiness aside, they are very friendly to each other and to the coaches.

Reporter: In your mind, what sets us apart from other teams?

Coach Elizabeth: I think that the atmosphere of our team is definitely a lot different than a lot of the club teams I've known. The swimmers here are able to have fun while also working extremely hard. The team is a good group of people, which is overall hard to find.

Reporter: Can you tell me a little bit about your experiences as a high school and college swimmer, if so?

Coach Elizabeth: I did not swim for my high school, which is a little bit unusual for college swimmers. On the other hand, I did keep swimming with my club team. I had a great time as a college swimmer. I studied at the University of Pittsburgh, where I could help build a legacy, and be a part of helping turn our team into a family.

Reporter: How was your experience as a club swimmer?

Coach Elizabeth: So in my club team, my dad was my coach. And since I was the coach's kid, I kind of had a lot of responsibility. Apart from swimming the

set, I had to lead and coach my lane. Also, I had a lot of friends on the team that I still keep in touch with today. It was just a great place where I made friends and memories that would last a lifetime.

Reporter: What is some advice you have for swimmers?

Coach Elizabeth:

Some advice that I have for younger swimmers is that life gets hard in general and you can't stop working hard because of it. I did a bunch of things outside of swimming when I was younger, like jazz band, and I learned that you can't give up. You will realize that you are happier you just put in the effort.

Reporter: Which do you like better? Coaching swimmers or swimming?

Coach Elizabeth: I really like both for different reasons. I love to swim for me, because it releases my anxieties, and I can leave all of my emotions in the pool. I love to coach because it allows me to connect with people. I love that I can help them see the best in themselves, and push them to be better swimmers and better people.

Reporter: What is one thing you would like to change or improve on the team?

Coach Elizabeth: Technique wise, definitely body position when swimming, and generally, I would love to get more swimmers going to Zones.

Reporter: How did you balance academics and swimming at the same time?

Coach Elizabeth: As a high school student, I was very organized and I relied a lot on planning. I also stayed very diligent about setting goals. You have to be smart about getting enough sleep and hydration. You have to especially get enough sleep before morning practices.

Thank you, Coach Elizabeth!



The Benefits of Chocolate Milk

By: Aditi Pavuluri

In a recent survey with the Junior and Senior groups, the favorite after-work out snack or drink amongst them was chocolate milk.

So I decided to find out what makes chocolate milk such a good thing to have after workouts, and here's what I found.

Studies show that after any intensive workout, chocolate milk beats many sports drinks. What chocolate milk does is replenishes something called glycogen, which is also known as muscle fuel. Replenishing your glycogen after workouts is beneficial for future performances.

Compared to plain milk, water, or sports drinks, chocolate milk has double the amount of carbohydrates, and protein content, which is healthy for tired muscles.

Research shows that the ideal ratio of carbohydrates to protein in a recovery drink should be between 3:1 and 4:1. Chocolate milk lies exactly there.

What does the protein in chocolate milk do? Well, after a workout, your muscles are under stress, and sometimes, individual muscle fibers might have undergone some damage. Protein helps muscle growth and tissue repair. One cup of chocolate milk has 8 grams of proteins.

What do the carbohydrates in chocolate milk do? Exercises uses up glycogen, which like I said, supplies energy to muscles. If glycogen is not refueled, the body uses up protein for nutrition, which is bad for the muscles. One cup of chocolate milk has 25 grams of carbohydrates.

Other things that chocolate milk contains are sodium and potassium, which are need to replace electrolytes lost. Another drink containing these is Gatorade.

But when am I supposed to have the chocolate milk? 30 to 45 minutes after workout is what many call the power hour because it is when the muscles are most receptive to sugar and protein in order to rebuild.

Next time when you are grocery shopping, try to get chocolate milk to try out after workouts. This relatively inexpensive drink compared to sports drinks has proven itself delicious and healthy.



Olympic Gold Medalist Alison Schmitt refueling with chocolate milk after a workout.



2018 PTAC ANNUAL TEAM PARTY



PTAC Annual team party was held at Van Nest Park in West Windsor on July 7th. Games, food, great

weather, friends, Coaches & parents made it yet another memorable annual celebration.



12U NJ JO meet @ Rutgers



SR group @ Florida Gold Coast Senior Championship



JR/SR/VAR group - Last day of LC practice @ DeNunzio

Make the most of your break!

By: Aditi Pavuluri

This past week, I swam at my last meet of the Long course season. I have not been in the pool for a couple of days now and I do not smell like chlorine any more. It feels like the days have gotten so much longer. I miss being at practice tremendously; however, here is how I plan to use my free time.

- 1) **Family & friends:** This is a great time to spend extra time with family and friends. Many of us have a break from school as well, so enjoy as much time as you can with them. For e.g. my grandparents are visiting us and it has been wonderful spending time with them. I also plan to play outside with my friends.
- 2) **Hobbies:** I am sure there are many hobbies that we put away during the year, as we do not have time. This is a great time to get back to those pending projects or explore new hobbies. For e.g. I have received a birthday few gifts related to Calligraphy writing and I plan to put them to use during this break.
- 3) **Staying Fit:** According to Coach Miles, his best advice is to stay active the same number of times each week you normally have practice. Please refer to the 'Ask Tiger' column for specific advice from him based on your age.
- 4) **Review Goals:** Long course is finished. A new season provides us an opportunity to set new goals for the next season, both in and out of water. It is the best time to break in a new habit.

Calling for contributions to the PTAC Newsletter for the 2018-2019 Short Course Season

If you would like to contribute to the newsletter in the upcoming short course season, please contact Aditi Pavuluri at aditipavuluri@gmail.com

Your submission can be in the form of writing, artwork, or photography, but must have to relate to swimming.

Thank You!