They changed their reporting for the second meet, in a way that broke `SwimmeR v0.5.0`. What a pain! I quickly patched the problem and was preparing another CRAN submission but then I thought “hmmm there’s more ISL meets next week. What if they do it again?”. I’ve decided that rather than pestering the good folks at CRAN with another version of `SwimmeR` every time someone at ISL decides to mess around I’m going to limit myself to releasing development versions of `SwimmeR` throughout the 2020 ISL season. Hopefully that will give ISL time to settle on a results format, at which point I’ll do another CRAN release. We start today with the now-available `SwimmeR v0.5.1`.

`SwimmeR v0.5.1` includes the function `swim_parse_ISL` specifically for dealing with ISL results. So update your version of SwimmeR with `devtools::install_github()` and let’s get going.

```
devtools::install_github("gpilgrim2670/SwimmeR", build_vignettes =
TRUE, force = TRUE)
```

In addition to the new `SwimmeR v0.5.1` we’ll use the always excellent `dplyr`, `purrr`, and `stringr` and take these new ISL results for a spin. I also want `flextable` for reporting, and my special `flextable_style` function.

```
library(SwimmeR)
library(dplyr)
library(purrr)
library(stringr)
library(flextable)

flextable_style <- function(x) {
  x %>%
    flextable() %>%
    bold(part = "header") %>% # bold header
    bg(bg = "#D3D3D3", part = "header") %>% # puts gray background
behind the header row
    align_nottext_col(align = "center", header = TRUE, footer = TRUE)
%>% # center alignment
    autofit()
}
```

ISL Results

There have been two ISL meets thus far, both in the “Budapest Bubble”. Results are available at SwimSwam.

```
match_1 <- "https://cdn.swimswam.com/wp-content/uploads/2020/10/
Results_Book_Match_1_V2.pdf"
match_2 <- "https://cdn.swimswam.com/wp-content/uploads/2020/10/
Results_Book_Full_M2-1.pdf"

ISL_matches <- c(match_1, match_2)
```

`swim_parse_ISL` works exactly the same way as our old friend `swim_parse`. It takes the

output of `read_results` and returns a dataframe. It's dead simple.

```
match_1 %>%
  read_results() %>%
  swim_parse_ISL()
```

We do have a list of match results though, so rather than doing them individually let's do them all at once with some `tidyverse` magic. All we have to do is pass our list of ISL match results to `read_results` and then to `swim_parse_ISL`. Since we have a list we'll use `map` to do the passing, applying `read_results` and `swim_parse_ISL` to each element, that is, each match result in the list of matches. Then we'll name the resulting list elements, which are two dataframes, by match number (1 and 2) with `setNames` and stick them together with `bind_rows`.

```
ISL_results <-
  map(ISL_matches , read_results) %>% # map SwimmeR::read_results over
the list of links
  map(swim_parse_ISL) %>% # now it's swim_parse_ILS's turn
  setNames(c(1, 2)) %>%  # name the dataframes 1 and 2 respectively
  bind_rows(.id = "Match") %>% # stick the dataframes together, with a
new column called "Match" which will contain the relevant dataframe
name, either 1 or 2
  mutate(Match = as.numeric(Match))
```

ISL Dataframe - Now What?

Now we have one big dataframe of ISL results, almost exactly like we do when we use `swim_parse`.

```
head(ISL_results) %>%
  flextable_style()
```

Match	Place	Lane	Name	Team	Time	Points	Event	DQ
1	1	4	SJOSTROM Sarah	ENS	56.00	9	Women's 100m Butterfly	0
1	2	3	SHKURDAI Anastasiya	ENS	56.07	7	Women's 100m Butterfly	0
1	3	5	DAHLIA Kelsi	CAC	56.70	6	Women's 100m Butterfly	0
1	4	6	BROWN Erika	CAC	56.80	5	Women's 100m Butterfly	0
1	5	8	SURKOVA Arina	NYB	57.18	4	Women's 100m Butterfly	0
1	6	7	OTTESEN Jeanette	NYB	57.81	3	Women's 100m Butterfly	0

Those of you who are close readers of `SwimmeR` documentation (so all of you, right?) know that Lilly King is a hero around these parts. Let's see how she's doing in the ISL.

```
ISL_results %>%
  filter(Name == "KING Lilly") %>% # only want Lilly's results
  flextable_style()
```

Match	Place	Lane	Name	Team	Time	Points	Event	DQ
1	1	5	KING Lilly	CAC	2:17.11	15	Women's 200m Breaststroke	0
1	1	5	KING Lilly	CAC	28.86	19	Women's 50m Breaststroke	0
1	1	3	KING Lilly	CAC	1:03.16	24	Women's 100m Breaststroke	0
1	1	3	KING Lilly	CAC	29.16	15	Women's 50m Breaststroke Skins	0
1	1	3	KING Lilly	CAC	29.25	14	Women's 50m Breaststroke Skins Round 2	0
1	1	4	KING Lilly	CAC	28.90	21	Women's 50m Breaststroke Skins Final	0

So Lilly swam 6 races and won all of them. That sounds like her. Lilly only swam in the first match though. Let's look at the women's breaststrokes in both matches. We'll exclude the skins matches because in match 2 the skins races weren't breaststroke. Probably because none of the teams in that match had Lilly King.

First we'll filter out events that aren't women's breaststroke. Then we'll create a new column with times in seconds format (total seconds) rather than minutes:seconds.hundreths using the `sec_format` function from `SwimmeR`. Next we'll `group_by` event, `arrange` the entries in order of time, change the places with `mutate` to reflect our new ordering and finally, check out the results.

```
ISL_results %>%
  filter(str_detect(Event, "Women's \\d{2,3}m Breaststroke$") == TRUE)
%>% # only want women's breaststroke events
  mutate(Time_sec = sec_format(Time)) %>% # convert times to second
format
  group_by(Event) %>%
  arrange(Time_sec) %>% # order entries by increasing time
  mutate(Place = rank(Time_sec)) %>% # recode place to new order, based
on time
  select(-Time_sec, Lane, Points) %>% # don't need these columns
  slice(1:3) %>% # top three finishers in each event
  flextable_style()
```

Match	Place	Lane	Name	Team	Time	Points	Event	DQ
1	1	3	KING Lilly	CAC	1:03.16	24	Women's 100m Breaststroke	0
1	2	5	PILATO Benedetta	ENS	1:03.67	7	Women's 100m Breaststroke	0

Match	Place	Lane	Name	Team	Time	Points	Event	DQ
2	3	4	ATKINSON Alia	LON	1:04.21	10	Women's 100m Breaststroke	0
1	1	5	KING Lilly	CAC	2:17.11	15	Women's 200m Breaststroke	0
1	2	7	ESCOBEDO Emily	NYB	2:18.46	7	Women's 200m Breaststroke	0
2	3	4	LAZOR Annie	LON	2:18.85	15	Women's 200m Breaststroke	0
1	1	5	KING Lilly	CAC	28.86	19	Women's 50m Breaststroke	0
1	2	4	PILATO Benedetta	ENS	28.97	7	Women's 50m Breaststroke	0
1	3	6	HANNIS Molly	CAC	29.04	6	Women's 50m Breaststroke	0

Turns out Lilly King is dominant in both matches. Makes sense. `SwimmeR v0.5.1` is working well.