

## Independent Summer Statistics Community (ISSC): Building a sustainable online undergraduate student community with Cocurricular Activities and Experiential Learning Opportunities

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# Meet the ISSC team



**Liza Bolton**



**Samantha-Jo Caetano**



**Nathalie Moon**



**Ivan Nguyen**



**Nathan Taback**



**Megan Whitehead-Douglas**



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# How the ISSC 2020 came to be



Why?



Who?



Where?



When?




What?

... and where to go from there?



# Why?

- COVID is awful
  - Everyone is feeling sad, scared and lonely
  - ‘Economic scarring’
  - It is hard to feel like you’re not *doing* anything, but also everything is exhausting
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The New York Times

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## ***Facing Adulthood With an Economic Disaster’s Lasting Scars***


Those entering the job market in a downturn may never catch up in pay, opportunities or confidence.

By **Eduardo Porter** and **David Yaffe-Bellany**




Published May 19, 2020   Updated May 20, 2020

<https://www.nytimes.com/2020/05/19/business/economy/coronavirus-young-old.html>





“A large body of research — along with the experience of those who came of age in the last recession — shows that young people trying to start their careers during an economic crisis are at a lasting disadvantage. **Their wages, opportunities and confidence in the workplace may never fully recover.**”









# Who?

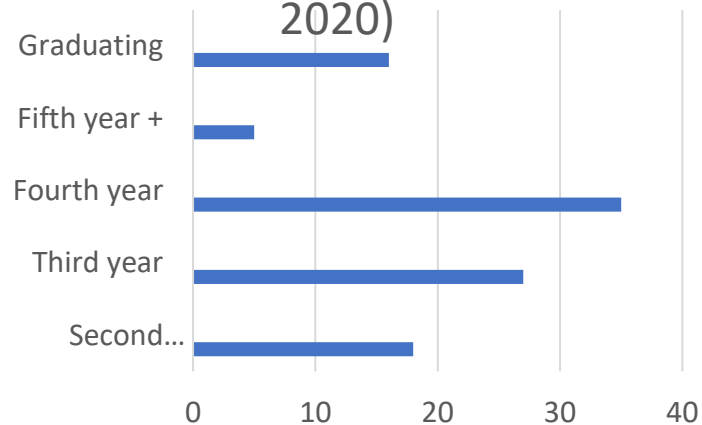
*Context: Department of Statistical Sciences @UofT St George*

- >4000 students in our statistics programs
    - Statistics Minors, Majors and two Specialists (Theory and Methods and Methods and Practice)
    - Data Science Specialist
    - Actuarial Science Major and Specialist
  - Rapid growth over the past few years leading to a sense of disconnection among students and between students and faculty
  - Our Chair (Radu Craiu) and Associate Chair Undergrad (Bethany White) are awesome and really supportive of our plans for the ISSC
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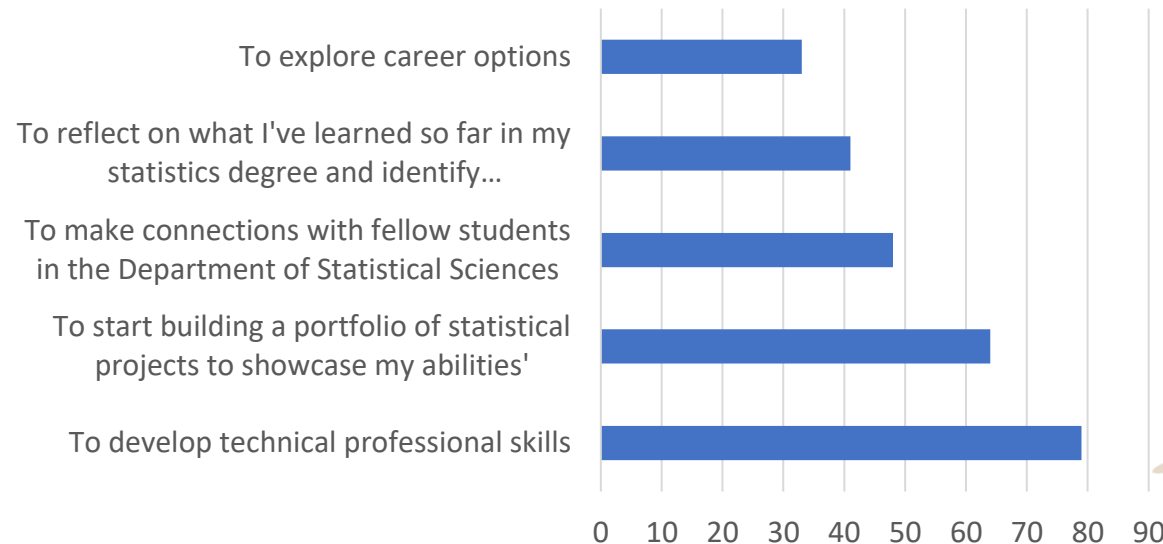
# Stats about our participants (May 2020)

- Over 700 registrants
- 33% of ISSC members *not* located in EST time zone

% of ISSCers by upcoming academic level (as of Fall 2020)



% of ISSCers who selected the following as one of their top 2 goals



*645/728 participants agreed to have their anonymized survey responses included in our reporting*





# Where?

*... online!*

- Hosting web-based workshops: Zoom and MS Teams
- Communications: Slack (free version)
- Website: Sharepoint
- Feedback surveys: MS Forms



# When?

*May – July/August (+ door open for events beyond that)*



# What?

Join the Independent Summer Statistics Community (ISSC)! All DoSS undergrads welcome.



## Build your portfolio

(exclusive access to ASA DataFest@UofT!)



## Prepare for your career



## Develop and reflect



- DataFest competition
  - Support from mentors
  - Joint support session with the University of Edinburgh and Mine Cetinkaya-Rundel
- Workshops
  - Getting Data from Messy Sources
  - R Basics
  - Intro to Shiny Dashboards
- Tidy Tuesday sessions
- Student-led talks
  - Stock data in R
  - Intro to SQL
  - Intro to Python

- Workshop: Navigating Career Uncertainty
- Alumni Career Panel



- Workshop: Managing time and motivation (thanks to the Sid Smith Commons team!)
- Strengths Quest questionnaire and workshop

... plus

- ten weekly newsletters linking to more resources / articles / external events falling under all three pillars!
- Access to an active Slack community exclusively for ISSC participants



# DataFest

- ASA DataFest (<https://ww2.amstat.org/education/datafest/>)
  - DataFest 2020: “Virtual Challenge”: Explore societal impact of the COVID-19 pandemic, apart from health outcomes, using open-source data
  - Over 100 students across 42 teams (record year for us!)
  - DataFest 2021: Online again, between Winter and Spring semesters
  - DataFest 2022: Perhaps in person?
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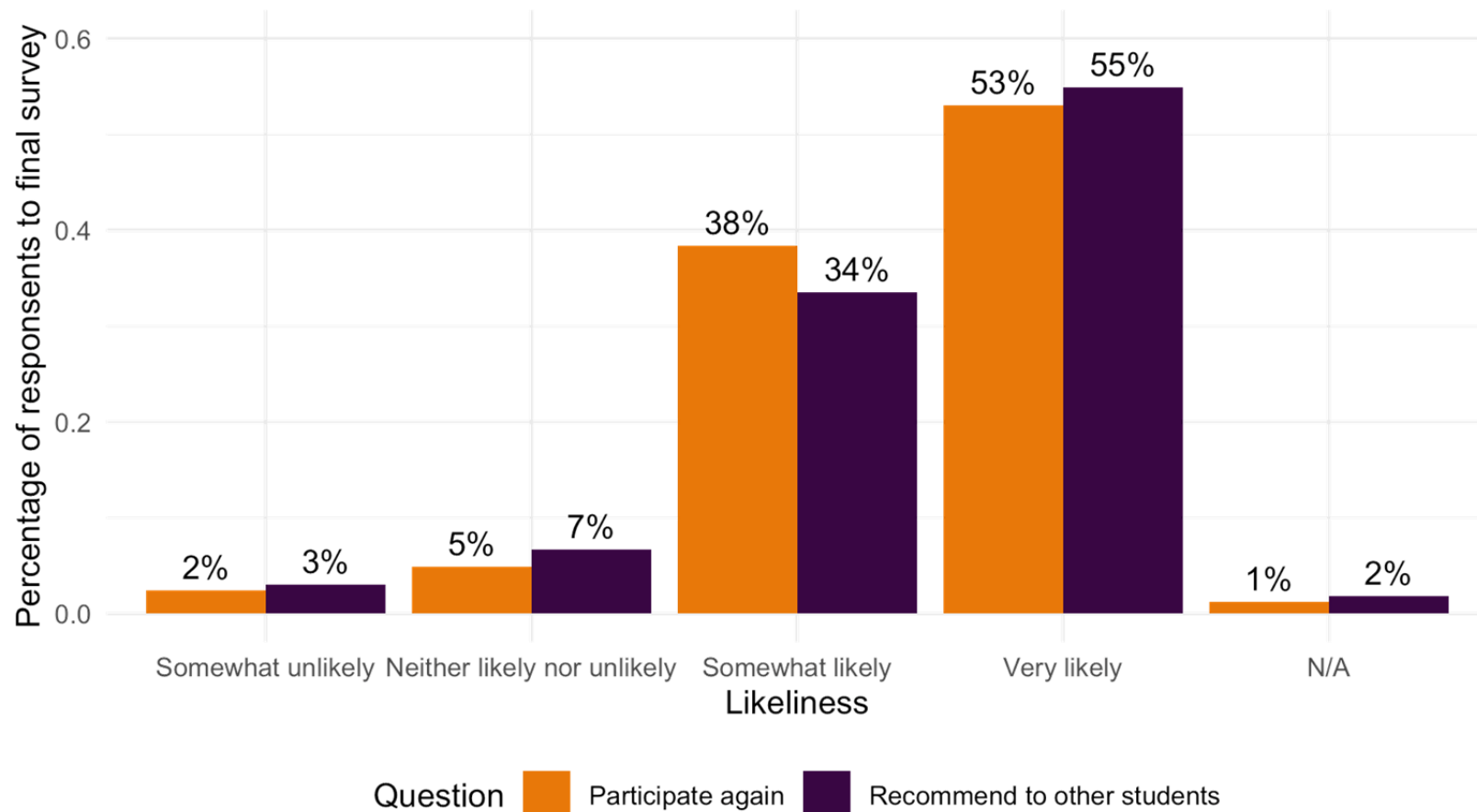


# How?

- Strong departmental support (thanks to Radu, Bethany, and others!)
- Funding for RA support from September 2020 – April 2021 to reflect on student feedback and plan more workshops/events



# Student feedback



*164/645 students responded to the post-ISSC survey*





# Student feedback

- *I really enjoyed ISSC because of how **well rounded** it was in terms of technical skills and career skills. I also found it very helpful that all the resources were there for us to access and we could **engage as much or as little as suited** our weekly schedule.*
- *ISSC really **helped me engage in stats/cs related learning** (taking linkedin learning courses, data visualization, and web dev) during the summer break and created opportunities for me to try new tools/methods & podcasts! Thank you very very much :)*
- *This was amazing. I loved the Tidy Tuesdays - I'm hoping I can continue these in the future! I definitely learned a ton from the ISSC - developed an even greater passion for statistics and R! I think it's a great place to **geek out and connect** with fellow stats nerds :) . Doing this during COVID was also special just do to the enormous amount of media that stats / epidemiology received.*



# Looking ahead

## How the ISSC 2020 came to be



Why?



Who?



Where?



When?



What?

## 2021 and beyond



What are student needs post COVID?



Opening up some events more broadly?



Online / in person / both?



Summer only vs all year?

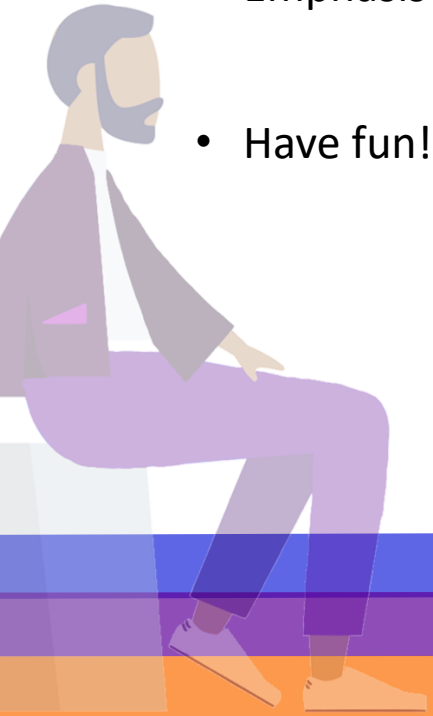


What does this look like?



# Final thoughts

- Create a *sustainable* learning community for statistics students
  - Leveraging existing resources and contacts
  - Opportunity for student leadership and peer-to-peer learning
  - Adopt a flexible framework
- Emphasis on independent / self-directed learning and exploration
- Have fun!





# Acknowledgements

- ISSC team: Liza Bolton, Samantha-Jo Caetano, Megan Whitehead, Ivan Nguyen, and Nathan Taback
- RA team
- Department of Statistical Sciences @ UofT (Radu, Bethany, and other faculty and grad students who volunteered to run workshops!)
- PIE funding
- ... and all of the enthusiastic student participants 😊

