

# MSAM

Mathematics & Statistics Awareness Month

# Change the World with DATA

Every April is Mathematics and Statistics Awareness Month, but people solve problems with statistics every day! Check out these students and statisticians who work to make the world more informed.



PHOTO COURTESY OF ERIC LABER

Alison Wu builds computer vision models for Laber Labs' robot, Nona.



PHOTO BY LISA WONG

Doctoral students Alex Cloud, second from right, and Longshaokan Wang, third from right, work with undergraduate students on data analytics for the online game League of Legends as part of a Laber Labs project.



PHOTO BY EMILY GALLAGHER/DREXEL UNIVERSITY

Drexel University doctoral student Ruby Bayliss (left) and associate professor Loni Tabb are biostatisticians.

## AI/MACHINE LEARNING

**Eric Laber** and his students use artificial intelligence (AI) to teach statistics.



**Advice to students considering a career in statistics:** "[Talk] to practicing statisticians from a wide range of areas to learn more about what we do and what kinds of problems we work on. Statistics has tremendous variety ..."

**Three words Laber uses to describe his work:** Evidence. Inference. Decision-making.

## SPORTS

**Stephanie Kovalchik** helps athletes understand how they learn and excel.



**Advice to students considering a career in statistics:** "It's about dreaming big and never being bored. In that respect, working as a statistician has never let me down."

**Three words Kovalchik uses to describe her work:** Performance. Prediction. Improvement.

## ENVIRONMENT

**Erin Schliep** uncovers the secrets of environmental processes.



**Advice to students considering a career in statistics:** "Students should be excited to explore the vast environmental applications of their work and be enthusiastic about developing strong collaborations with researchers spanning multiple disciplines."

**Three words Schliep uses to describe her work:** Collaborative. Spatial. Data-driven.

## BIOSTATISTICS

**Ruby Bayliss and Loni Tabb** show how where we live affects our health.



**Bayliss' advice to students considering a career in statistics:** "...

[T]ry to find opportunities to learn programming languages that are efficient for analytics. ... The amount of programming experience you have will only benefit you in your career."

**Three words Bayliss uses to describe her work:** Patterns. Disparities. Investigation.

**Tabb's advice for students considering a career in statistics:** "... [R]ead and write as much as possible.

... [R]eading is key to becoming an excellent communicator and, as a direct result, one becomes an even better writer."



**Three words Tabb uses to describe her work:** Health. Place. Time.