# Office of Institutional Analytics

## Director's Column

BY HEATHER MECHLER

One of the most quoted lines from the movie Jurassic Park (1993) is from a scene where Dr. Ian Malcolm (Jeff Goldblum) is criticizing the wealthy John Hammond (Richard Attenborough) for his possibly chaotic experiments with dinosaur DNA at his tropical island park. Hammond defends himself by lauding the novel work of his scientists, and Dr. Malcolm responds, "Yeah, yeah, but your scientists were so preoccupied with whether or not they could that they didn't stop to think if they should."

Out in the world of data, one finds a lot of John Hammonds. People constantly seek more data, better data, and maybe some more data just out of curiosity. By this logic, more data necessarily means knowing more and doing better. Sometimes, however, the possible rewards are far outweighed by the risks. In our quest for more data, we don't stop to think about whether we should have a particular data point and what implications this would have for our students. For some, an ideal world is where the university would have data on a student's every move and moment. In theory, this level of surveillance creates optimized services and better outcomes. In practice, it can be at best unsettling for students and at its worst, dangerous.

In their recent article, "Bad Data Are Not Better Than No Data," Martha Fay Burtis and Jesse Stommel critique the uncritical use of educational technologies in higher education. In considering the question of data collection, they write, "Some data, when they are collected and retained, can be a direct security risk to students; as we saw with students protected under the Deferred Action for Childhood Arrivals policy, data collected with good intentions at one point can later be weaponized." When collecting data, we should be mindful of the actual and potential risks to the people behind the numbers and make every effort to protect both people and their data.

## In This Issue

# What's new in the UNM data community?

BY MONTE-ANGEL RICHARDSON

At the end of 2023, OIA team members presented at the annual New Mexico Women In Technology (WIT) conference. The vision of UNM WIT is to promote a supportive, inclusive environment to advance the professional goals and aspirations of UNM women in technology and is open to all UNM Faculty and Staff. Presentations given by our team included an introduction to data visualization and the use of data and tech to address social issues. Information on the 2023 UNM WIT annual event and how to get inovlved can be found Here.

This year's Art & Science of Data event is coming up, this time together with UNM Tech Days! Save the Date for Thursday and Friday, April 25 and 26, 2024 as we'll participate for the first time as a Data Track within the UNM Tech Days in-person event. A limited live-streaming option is in the works for those who may need to attend virtually. The Call for Proposals is now open and will run through March 15, 2024. Please click here to submit a proposal. The link to register for the event will be made available on the website and on the techdays.unm.edu website in early Spring 2024. You can find materials from previous Art & Science of Data events here.

Lastly, the UNMH Tableau team has recently announced the creation of a Tableau Prep support group. This group is open to members of the UNM community. Whether you're a complete beginner, or a data prep wiz, you're welcome to join! UNMH plans to host User Group events every even month of the year. More information regarding the group can be found at their website.

# Featured OIA Staff: Kevin Mulcaire

BY JING FENG

Kevin Mulcaire became OIA's newest team member in September 2023. He earned his Bachelor's degree in Biology from Oklahoma State University in 2021, and earned his Master's degree in Cybersecurity and Business Analytics from UNM in 2023. Prior to joining OIA, he worked as a Chemical Specialist for the Department of Environmental Health and Safety at UNM. As a Data Manager at OIA, he is interested in exploring data analytics, particularly in aggregation and visualization.

Kevin is originally from Clarecastle, Ireland, and is one of eight siblings in his family. As an elite distance runner, he earned a full ride scholarship to the US as a student athlete in track and field. In December 2023, he represented Ireland at the European Cross-Country Championships. He also enjoys woodworking as a hobby.

# RECENT OIA ACCOMPLISHMENTS

BY YURY BOSIN

**Jing Feng** has recently managed to complete a level 10 auto-belay route in indoor rock climbing. This is her best result since she took up the sport in 2022. An auto-belay is the safety device mounted at the top of the rock-climbing wall that winds up the rope connected to the ascending climber. Auto-belay route levels range from 8 to 13, where 13 is the most difficult.

**Zacharia Kibuta** completed a Master's degree in Data Science at the University of Wisconsin-Green Bay. His thesis focused on the impact of automation on the flight safety in commercial passenger airplanes.

**Heather Mechler** was invited to give a presentation about higher education data resources at the New Mexico Data Users' Conference on November 15, 2023.

**Kevin Mulcaire** participated in the SPAR European Cross Country Championships that took place at Laeken, Brussels Park, on December 10th, 2023. Mr. Mulcaire ran for Team Ireland as part of a six-man team in the 9 km senior men's race. He finished 37th out of 95 athletes from 31 countries. The team came in fourth overall.

**Charla Orozco** won first place at the data visualization competition at Tableau Days held by UNM Health Sciences on October 25-26, 2023. Her winning dashboard is titled "What Does It Take to "Make It" on Youtube?" and visualizes Global Youtube Statistics in 2023. You can check out Charla's winning dashboard <u>here</u>.

**Monte-Angel Richardson** recently published two articles in peer reviewed journals. The first paper is titled "Predicting Violent Extremism with Machine Learning: A Scoping Review" and evaluates the machine learning tools used in research to address and prevent violent extremism. The second paper is titled "Understanding Latine perceptions of gun violence prevention strategies across New Mexico: A conceptual paper". International Health Trends and Perspectives, and explores theory and research to better understand how gun violence impacts Latine communities.

**The OIA team** under the name "Is ChatGPT Cheating?" participated in the trivia contest for four consecutive weeks in September 2023 at High and Dry Brewing, Albuquerque NM. Under the leadership of the OIA director, Heather Mechler, the team dominated throughout the competition and finished first ahead of six other teams.

# FEATURED DASHBOARD: OFFICIAL ENROLLMENT REPORT

## BY ZACHARIAH KIBUTA

The Official Enrollment Reports (OER) reflect enrollment data as of the census for each fall semester for students enrolled in the UNM Main Campus and Branch Campuses. The OER constitutes 5 graphs:

- Student headcount by credit hours and time status
- Student headcount by majors and college
- Student credit hours by college and subject
- New students by category (dual credit, readmit, transfer, first time, etc.)
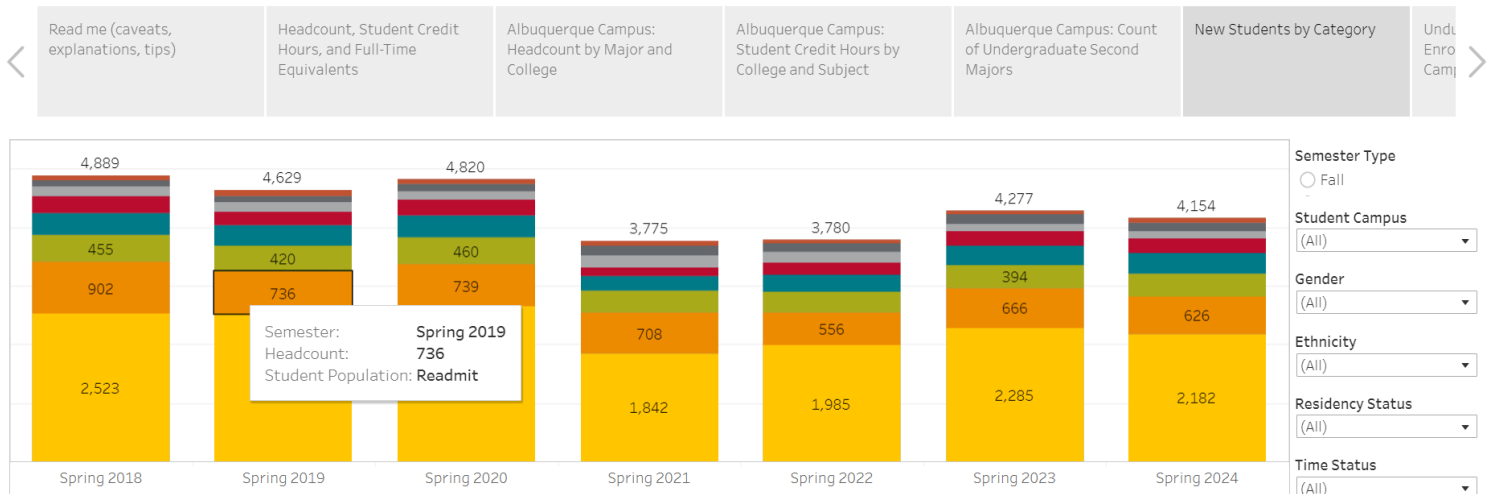- Branch enrollments by campus and major



Figure 1. Students Enrollment by Category

Each bar in the graph above displays the total number of enrollments by different categories (dual credit, readmit, transfer from out-of-state, first time, etc.) for the past 5 years. The data can be filtered by a student campus, student level, major, ethnicity, gender, and residency status.