

Manar Alkuzweny

Curriculum Vitae

October 18, 2022

Contact Information

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Department of Biological Sciences
University of Notre Dame
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Education

- 2021-present **Ph.D., Biological Sciences**
University of Notre Dame
Advisor: Alex Perkins
- 2017-2021 **B.S., Public Health with Concentration in Epidemiology**
Minor in General Biology
University of California, San Diego
Highest distinction in the major; *summa cum laude*

Honors and awards

- 2021 **Independent Study in Public Health Research Award**
Herbert Wertheim School of Public Health and Human Longevity Science
University of California, San Diego
- 2021 **Outstanding Scholastic Achievement Award in the Public Health Major**
Herbert Wertheim School of Public Health and Human Longevity Science
University of California, San Diego
- 2020 **Phi Beta Kappa**
Sigma Chapter of California
- 2020 **Caledonian Society**
John Muir College at University of California, San Diego
- 2019 **Third place poster in undergraduate division**
5th Annual Public Health Research Day
UC San Diego Institute for Public Health

Scholarships and fellowships

- 2022 **MIDAS 2022 travel support for underrepresented students**
MIDAS Coordination Center
Awarded travel support (transportation and accommodation) to attend and present at MIDAS Network Annual Meeting 2022

- 2022 **Graduate Student Government Conference Presentation Grant**
University of Notre Dame
Awarded \$300 to attend and present at MIDAS 2022
- 2022 **Zahm Professional Development Fund Award**
University of Notre Dame
Awarded \$1500 for proposal titled “Modeling the impact of interventions against dengue with collaborators at National University of Singapore”
- 2021-present **Richard and Peggy Notebaert Premier Fellowship**
University of Notre Dame
Offered to those ranked in the top 1% of all students admitted for doctoral study, provides up to 5 years of support
- 2020 **Barry M. Goldwater Scholarship nominee**
University of California, San Diego
One of five sophomore and junior undergraduates (approximately 15,000 students) nominated
- 2019 **Chancellor’s Summer Research Scholarship for Social Sciences**
University of California, San Diego
Awarded \$5000 for proposal titled “The effects of climate change on sandfly and leishmaniasis distribution in Bihar, India”
- 2017-2021 **Regents’ Scholarship**
University of California, San Diego
Four-year scholarship awarded on the basis of academic excellence to University of California undergraduates

Publications

* indicates equal contribution

4. Stone MD, Strong DR, Dimofte CV, Brighton E, Oratowski J, Yang T, **Alkuzweny M**, Asslani A, Velasco K, Skipworth M, Crespo NC, Hurst S, Leas E, Pulvers K, Pierce JP. (2021). The Role of Affective Reactivity Induced by Cigarette Packaging Including Graphic Warning Labels: The CASA Study. *Tobacco Control*. doi: 10.1136/tobaccocontrol-2021-056650
3. Zeller M*, Gangavarapu K*, Anderson C*, Smither AR, Vanchiere JA, Rose R, Snyder DJ, Dudas G, Watts A, Matteson NL, Robles-Sikisaka R, Marshall M, Feehan AK, Sabino-Santos Jr. G, Bell-Kareem AR, Hughes LD, **Alkuzweny M**, Snarski P, Garcia-Diaz J, Scott RS, Melnik LI, Klitting R, McGraw M, Belda-Ferre P, DeHoff P, Sathe S, Marotz C, Grubaugh ND, Nolan DJ, Drouin AC, Genemaras KJ, Chao K, Topol S, Spencer E, Nicholson L, Aigner S, Yeo GW, Farnaes L, Hobbs CA, Laurent LC, Knight R, Hodcroft EB, Khan K, Fusco DN, Cooper VS, Lemey P, Gardner L, Lamers SL, Kamil JP, Garry RF, Suchard MA, Andersen KG. (2021). Emergence of an early SARS-CoV-2 epidemic in the United States. *Cell*. doi: 10.1016/j.cell.2021.07.030
2. **Alkuzweny M**, Raj A, Mehta SR. (2020). Preparing for a COVID-19 surge: ICUs. *EClinicalMedicine*. doi: 10.1016/j.eclinm.2020.100502

1. **Alkuzweny M**, Raj A, Mehta SR. (2020). Preparing for a COVID-19 surge. *EClinicalMedicine*. doi: 10.1016/j.eclinm.2020.100400

Pre-prints

2. Gangavarapu K, Abdel Latif A, Mullen JL, **Alkuzweny M**, Hufbauer E, Tsueng G, Haag E, Zeller M, Aceves CM, Zaiets K, Cano M, Zhou J, Qian Z, Sattler R, Matteson NL, Levy JJ, Lee RTC, Freitas L, Maurer-Stroh S, GISAID core and curation team, Suchard MA, Wu C, Su AI, Andersen KG, Hughes LD. (2022). Outbreak.info genomic reports: scalable and dynamic surveillance of SARS-CoV-2 variants and mutations. *medRxiv*. doi: 10.1101/2022.01.27.22269965v2
1. Tsueng G, Mullen JL, **Alkuzweny M**, Cano M, Rush B, Haag E, Outbreak Curators, Abdel Latif A, Zhou X, Qian Z, Andersen KG, Wu C, Su AI, Gangavarapu K, Hughes LD. (2022). Outbreak.info Research Library: A standardized, searchable platform to discover and explore COVID-19 resources and data. *bioRxiv*. doi: 10.1101/2022.01.20.477133

Presentations

12. **Alkuzweny M**, España G, Perkins TA. (September 2022). “Characterizing a novel dengue vaccine by leveraging clinical trial data with a multi-level model.” Models of Infectious Disease Agent Study (MIDAS) Network Annual Meeting 2022, Bethesda, MD. Oral presentation.
11. **Alkuzweny M**, España G, Perkins TA. (June 2022). “Characterizing a novel dengue vaccine by leveraging clinical trial data with a multi-level model.” Ecology and Evolution of Infectious Diseases, Atlanta, GA. Poster.
10. **Alkuzweny M**, Burns C, Shah D, Verma D. (July 2021). “The Effects of COVID-19 on Lifeguard Operations and Personnel.” Southern California Lifeguard Education Conference. Oral presentation.
9. **Alkuzweny M**, Hofmann N, Taggart K, Verma D. (May 2021). “Evaluating the Return to Learn Program Utilizing Ecological Momentary Assessment.” The 34th Annual Undergraduate Research Conference at UC San Diego. Oral presentation.
8. Stone MD, Strong DR, Brighton E, Oratowski J, Yang T, **Alkuzweny M**, Asslani A, Velasco K, Skipworth M, Hurst S, Pulvers K, Pierce J. (February 2021). “Measuring Reactivity to Warnings on Cigarette Packaging.” Society for Research on Nicotine and Tobacco 27th Annual Meeting. Poster.
7. **Alkuzweny M**, Gangavarapu K, Hughes LD, Mullen JL, Cano M, Rush B, Tsueng G, Zhou J, Andersen KG, Wu C, Su AI. (January 2021). “Improving standardization and accessibility of epidemiological data with the ‘outbreakinfo’ R package.” NSF Student Conference on COVID-19 Modeling. Oral presentation.
6. **Alkuzweny M**, Raj A, Mehta SR. (October 2020). “Hospital Capacity and COVID-19 Mortality in the United States.” COVID-19 Dynamics & Evolution scientific meeting. Poster.
5. **Alkuzweny M**, Mullen JL, Hughes LD, Gangavarapu K, Cano M, Rush B, Tsueng G, Zhou J, Andersen KG, Wu C, Su AI. (September 2020). “Order from Chaos: outbreak.info, a

Standardized Collection of COVID-19 Resources and Epidemiological Data.” NIAID Systems Biology for Infectious Diseases Annual Meeting. Poster.

4. **Alkuzweny M**, Raj A, Mehta SR. (May 2020). “Hospital Capacity and COVID-19.” Online Undergraduate Research Symposium at UC San Diego. Oral presentation.
3. Strong DR, Stone MD, **Alkuzweny M**, Asslani A, Yang T, Pierce J. (March 2020). “Assessing Nicotine Withdrawal in The Population Assessment of Tobacco and Health (PATH) Study: Impacts of Types of Users and Products Used.” Society for Research on Nicotine and Tobacco 26th Annual Meeting, New Orleans, LA. Poster.
2. **Alkuzweny M**, Mehta SR. (August 2019). “Factors Associated with Visceral Leishmaniasis Burden in Bihar, India.” Summer Research Conference at UC San Diego, University of California, San Diego, La Jolla, CA. Oral presentation.
1. **Alkuzweny M**, Mehta SR. (April 2019). “Association of Visceral Leishmaniasis Incidence with Prevalence of Anemia and Socio-economic Status in Bihar, India.” UC San Diego Institute for Public Health 5th Annual Public Health Research Day, University of California, San Diego, La Jolla, CA. Poster.

Software

1. **Alkuzweny M**, Gangavarapu K, Hughes L (2022). outbreakinfo: outbreak.info R Client. R package version 0.2.0, <https://outbreak-info.github.io/R-outbreak-info/>.

Teaching and mentorship

Undergraduate instructional apprentice

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|-------------|---|
| Winter 2021 | Biostatistics in Public Health (upper-division undergraduate course)
University of California, San Diego |
| Spring 2020 | Epidemiology (upper-division undergraduate course)
University of California, San Diego |

Undergraduate researchers mentored

2022-present Erin Coyne

Service

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| 2022-present | Notre Dame Biology Graduate Student Organization, Activities Chair |
| 2022 | Northern Indiana Regional Science & Engineering Fair Judge
Judged senior and junior division projects in the life sciences |
| 2021-present | Association for Women in Science, Notre Dame (AWIS-ND) STEM Mentor
Mentor first-year female undergraduate students in STEM by guiding them through personalized professional development goals |
| 2021-present | DNA Deviants PhD Application Mentor |

Mentored prospective applicants to PhD programs in life sciences through the
DNA Deviants Synthetic Biology Journal Club

Reviewer

PLOS Computational Biology (1)