



# Master of Science Health Metrics Sciences



Dr. Laura Dwyer-Lindgren  
Sarah N Dillard





# Health Metrics Sciences



# What is Health Metrics Sciences?

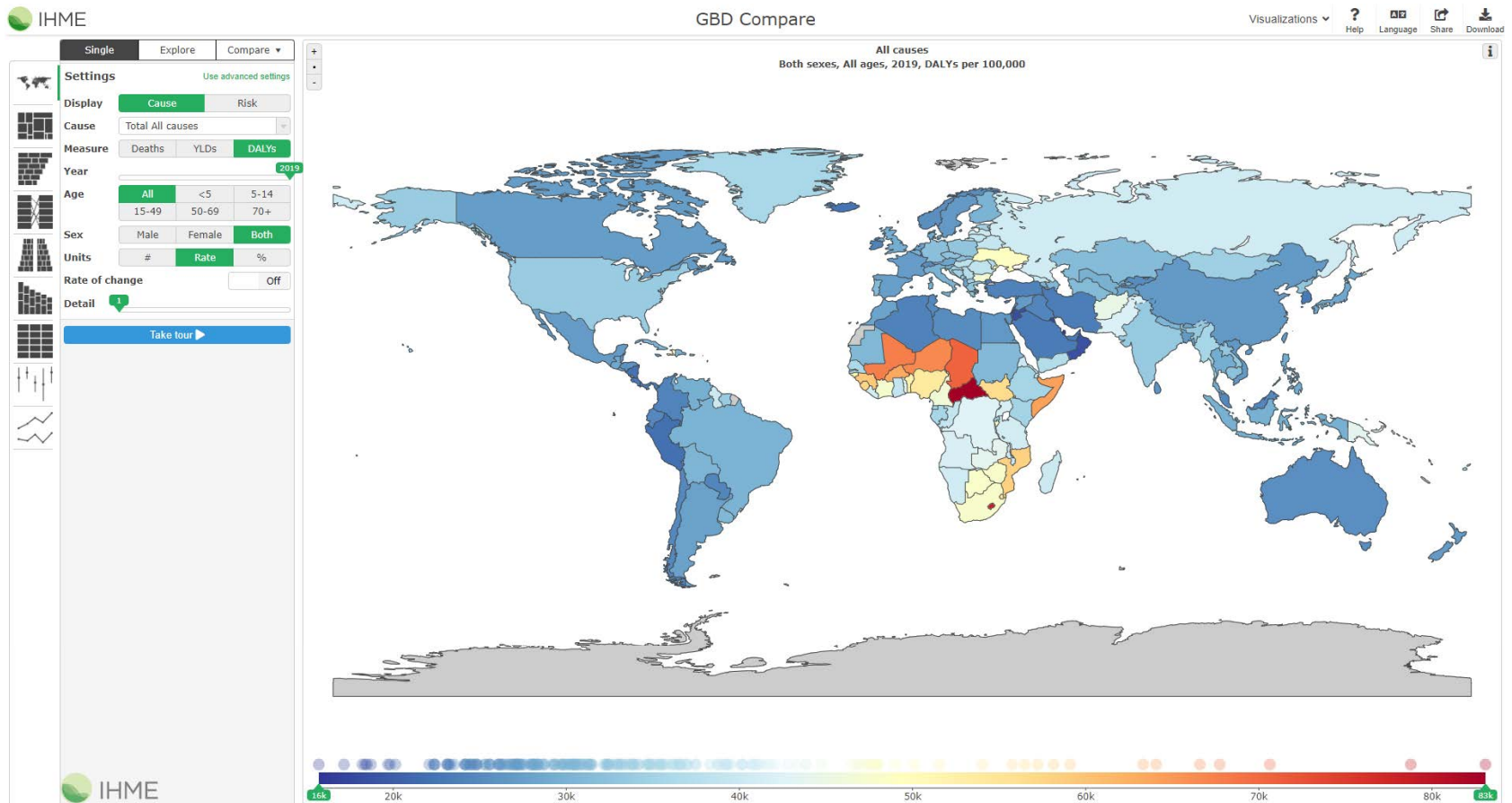
---

*Health metrics sciences is an integrated scientific field that is interdisciplinary, bringing together notions, methods, and techniques from statistics, demography, epidemiology, economics, and other social sciences aimed at providing rigorous measurement, using tested and high-performing instruments, to produce indicators that provide the empirical basis to understand the levels, relationships, and trends amongst health outcomes, drivers, and systems. It is a field that relies upon specialized knowledge and is deeply driven by data analysis.*

<https://depts.washington.edu/healthms/about/>  
[https://doi.org/10.1016/S0140-6736\(08\)60526-7](https://doi.org/10.1016/S0140-6736(08)60526-7)



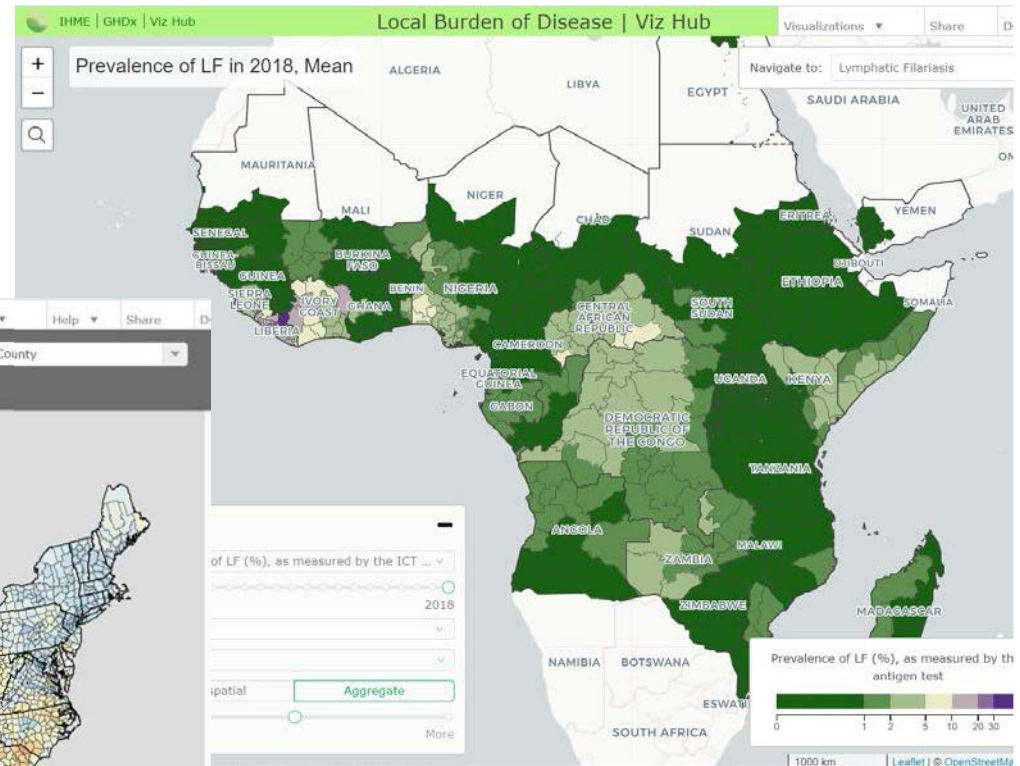
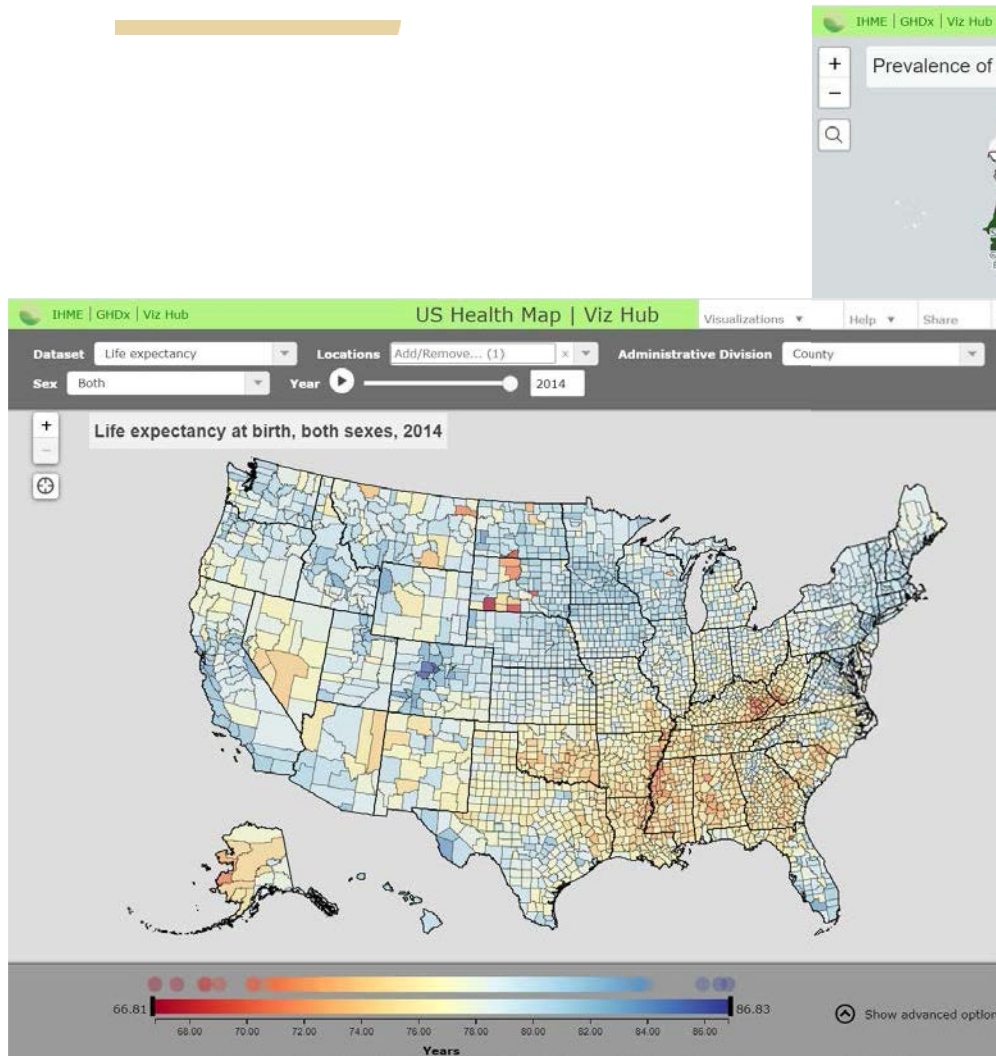
# What is Health Metrics Sciences?



<https://vizhub.healthdata.org/gbd-compare/>



# What is Health Metrics Sciences?

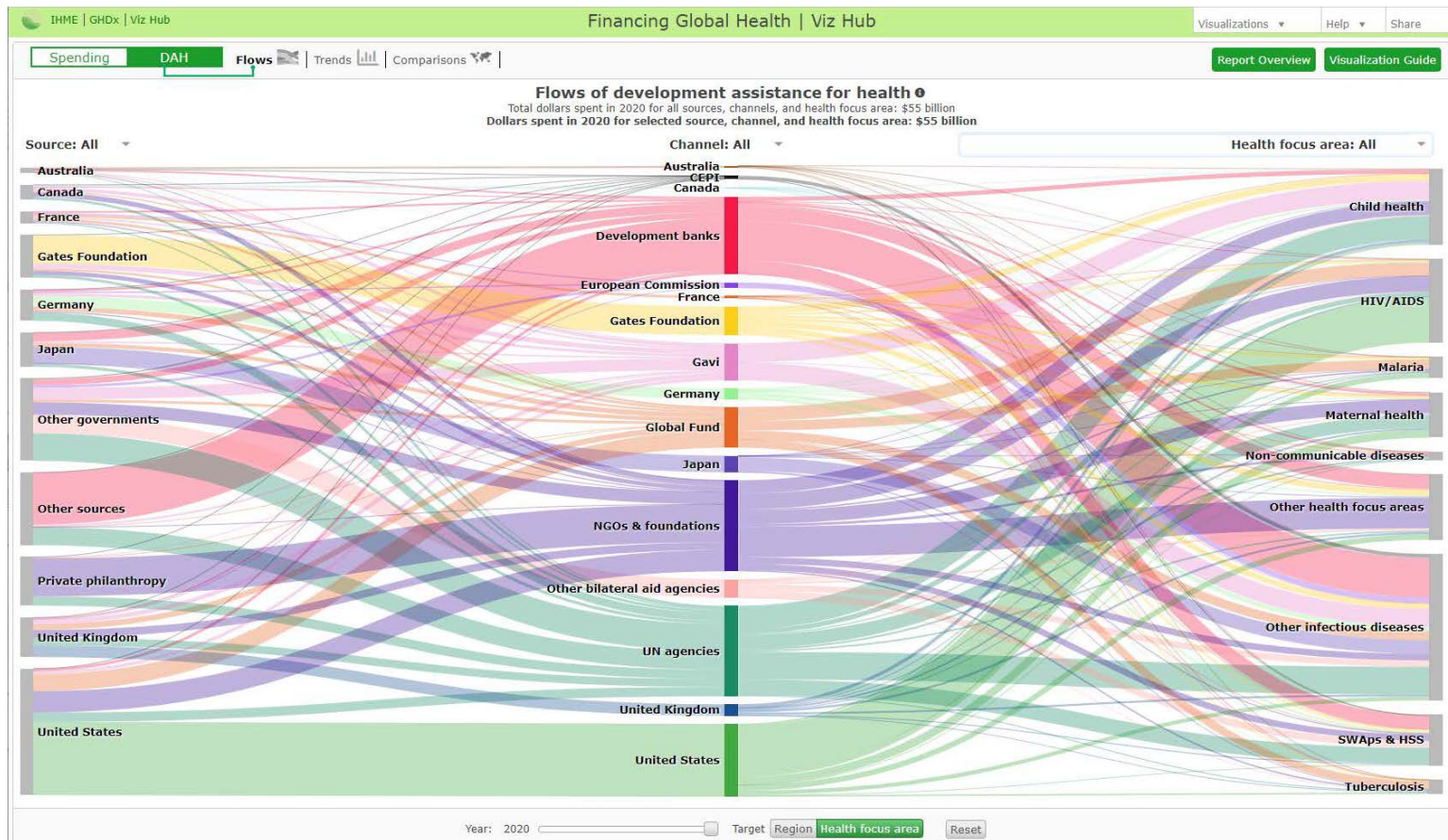


<https://vizhub.healthdata.org/lbd/lf>  
<http://www.healthdata.org/data-visualization/us-health-map>





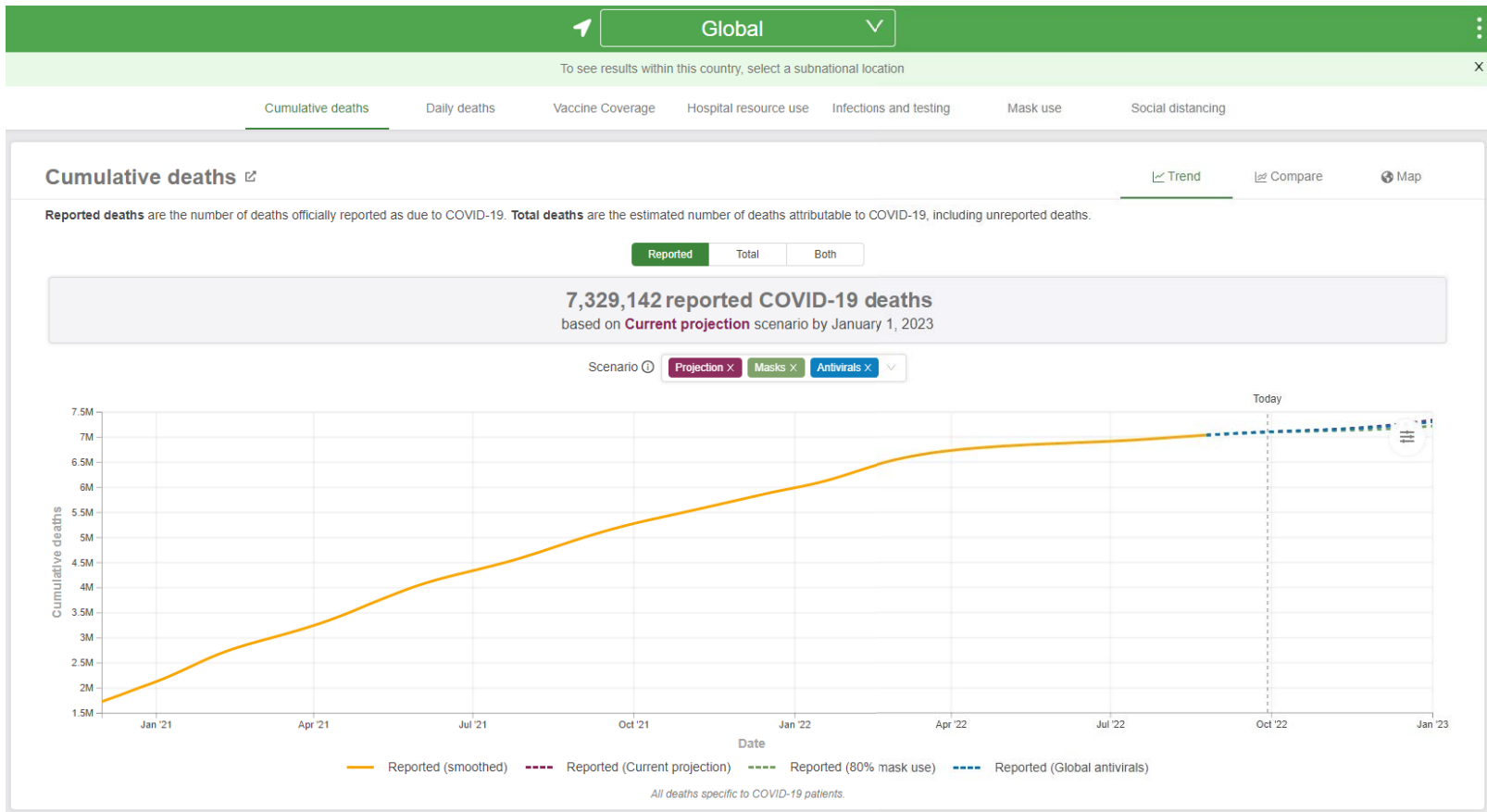
# What is Health Metrics Sciences?



<https://vizhub.healthdata.org/fgh/>



# What is Health Metrics Sciences?



<https://covid19.healthdata.org/>



# Department of Health Metrics Sciences

---

- > **First** department of Health Metrics Sciences in the world, formed in 2018
- > Two degree programs:
  - MS in Health Metrics Sciences (launched 2020)
  - PhD in Global Health – Metrics Track
- > People:
  - 31 core faculty, 27 affiliate faculty, and 7 adjunct faculty
  - 22 master's students; 16 doctoral students
  - 8 post-doctoral fellows
  - 4 staff





# Department of Health Metrics Sciences

---

## > **Vision:**

All people living long lives in full health.

## > **Mission:**

The Department of Health Metrics Sciences (HMS) applies innovative, multidisciplinary and comprehensive health metrics science to critical health problems and their drivers, and collaborates worldwide in pursuit of policy impact, change in practice, and dissemination of information to improve health for all people. HMS advances the field and the Academy through nurturing and training the next generation of diverse and high-potential scientists and leaders with mentorship by renowned faculty, and with access to top tier data, resources, infrastructure, and networking strategies.



# Department of Health Metrics Sciences

---

## > Diversity, Equity, and Inclusion

- HMS is committed to developing and applying innovative data science to health challenges. This requires creativity and innovation, which is cultivated by an inclusive, diverse, and equitable environment that respects and appreciates differences, embraces collaboration, and invites the voices of all students, staff, faculty, and community members.

<https://depts.washington.edu/healthms/diversity-equity-and-inclusion/>



# HMS & IHME

---



IHME

Measuring what matters

## > **Institute for Health Metrics and Evaluation (IHME)**

An independent population health research center at UW Medicine, part of the University of Washington, that provides rigorous and comparable measurement of the world's most important health problems and evaluates the strategies used to address them

## > **HMS & IHME are separate, but aligned, entities within the University of Washington**

- IHME is a research institute
- HMS is an academic department



# HMS Lecture Series

YouTube

Search

UW Department of Health Metrics Sciences  
161 subscribers

HOME VIDEOS PLAYLISTS CHANNELS ABOUT

Uploads SORT BY

HMS lecture series: A multipronged approach to...  
67 views • 3 months ago

HMS lecture series: Formulating statistical...  
78 views • 4 months ago

HMS lecture series: Variable selection in regression...  
101 views • 5 months ago

HMS lecture series: High blood pressure and lessons...  
41 views • 5 months ago

HMS lecture series: Estimating the burden of...  
74 views • 6 months ago

HMS lecture series: IHME COVID-19 model update  
142 views • 7 months ago

HMS lecture series: Verbal Autopsy in Ethiopia  
151 views • 8 months ago

HMS lecture series: Validating the addition of...  
66 views • 8 months ago

HMS lecture series: Implementation of SmartVA...  
36 views • 9 months ago

HMS lecture series: Verbal autopsy and mortality...  
122 views • 9 months ago

HMS lecture series: The analysis of causes of death...  
409 views • 10 months ago

HMS lecture series: Antimicrobial National...  
110 views • 10 months ago

UW MS in Health Metrics Sciences Information...  
431 views • 10 months ago

HMS lecture series: Influence of environmental factors on...  
76 views • 11 months ago

HMS lecture series: Blood lead and mortality risk...  
58 views • 11 months ago

What is health metrics science?  
354 views • 11 months ago

HMS lecture series: Climate and health: Connecting the...  
51 views • 11 months ago

HMS lecture series: Wildfire smoke and health: From loc...  
48 views • 1 year ago

<https://depts.washington.edu/healthmetrics/involved/lecture-series/>





# MS in Health Metrics Sciences



# MS Snapshot

---

- > 1 year (full-time) or 2-3 year (part-time) program
- > A rich, interdisciplinary curriculum
- > An engaging capstone experience in preparation for your career following graduation





# MS Outcomes

---

## > Skills

- Competence in applying health metrics concepts and methods
- Contextual understanding of major issues and trends in global health
- Comfort using a diversity of quantitative and analytic methods
- Ability to apply data science tools and techniques to a variety of data sources
- Capacity to conduct rigorous research

## > Career

- Academia
- Governmental agencies
- Non-governmental organizations
- Private industry



# MS Curriculum

---

- > Core coursework in...
  - Health Metrics
  - Statistics
  - Data Science
  - Demography, Epidemiology, or Economics
- > Elective coursework
  - Quantitative methods electives
  - Topical electives
- > HMS Seminar
- > HMS Capstone

***45 credits total***



# MS Curriculum

**Full-time** students can complete this degree program in 1 year (4 quarters)

**Part-time** students can complete this degree program in 2-3 years

Sample full-time course schedule\*:

Autumn	Winter	Spring	Summer
<ul style="list-style-type: none"><li>• HMS Seminar (1)</li><li>• Principles of Health Metrics (3)</li><li>• Biostatistics I (4)</li><li>• Intro to Programming (3)</li><li>• Elective (3)</li></ul>	<ul style="list-style-type: none"><li>• HMS Seminar (1)</li><li>• Global Burden of Disease (3)</li><li>• Biostatistics II (4)</li><li>• Visualizing data (4)</li><li>• Machine Learning (3)</li></ul>	<ul style="list-style-type: none"><li>• HMS Seminar (1)</li><li>• HMS Capstone I (2)</li><li>• Health Economics (3)</li><li>• Elective (3)</li><li>• Elective (3)</li></ul>	<ul style="list-style-type: none"><li>• HMS Capstone II (4)</li><li>• Elective (2)</li></ul>
<i>Credits: 14</i>	<i>Credits: 15</i>	<i>Credits: 12</i>	<i>Credits: 6</i>

*\*Actual schedule will depend on course selections*





# Admissions



# Applicant profile

---

- > **Quantitative aptitude:** mathematics, statistics, economics, etc.
- > **Analytical aptitude:** logical reasoning, critical thinking, problem-solving, etc.
- > **Can be demonstrated through...**
  - **Coursework**
    - > Not limited to a particular discipline
  - **Professional experience**
  - **Research experience**



# Applicant profile

---

## > Interest in...

- Health data and metrics, data science
- Public health, population health, health inequalities
- Measuring health at the population level
- Generating knowledge that can be used to promote health and reduce health disparities
- Joining a collaborative and interdisciplinary educational environment





# Application

---

- > **Apply through UW's Graduate School**
  - <https://grad.uw.edu/admission/apply-now>
- > **Deadline: December 1, 2022**
- > **Decisions:** communicated prior to **March 1, 2023**



# **Application components**

---

- **Unofficial transcript**
- **Resume or curriculum vitae**
- **Recommendations (2)**
- **Application fee**



# Application components

---

- **Essays (2)**

- > **Personal history statement:**

- Maximum of 500 words.

- > **Statement of purpose:**

- Maximum of 750 words.



# Finances

---

- > **Approximate degree costs:**
  - Full-time resident: \$24,039
  - Full-time non-resident: \$42,003
  - More tuition levied each additional quarter
- > **Limited funding available through UW's Graduate School**
  - <https://grad.uw.edu/graduate-student-funding>
- > **Admitted students can consult the Graduate Student Funding Service**
  - Recorded workshop available here:  
<https://www.youtube.com/watch?v=54xldOqu7aA>



# Funding webinar

---

> **Wednesday, November 9 at 10am PT**

– **Register on our website:**

[depts.Washington.edu/healthms/master-of-science-in-health-metrics-sciences/](https://depts.Washington.edu/healthms/master-of-science-in-health-metrics-sciences/)

## Master of Science in Health Metrics Sciences

**Applications are now open for autumn 2023! [Click here to apply.](#)**

In this unique master's degree, students develop quantitative, data science, and research skills, alongside an understanding of the health metrics concepts, methods, and data sources required to meet the challenge of measuring and improving the health of the world's population. Graduates will have mastered the technical skills and contextual knowledge required to produce, interpret, and effectively communicate health metrics estimates and research across a diversity of settings. In this way, the MS in Health Metrics Sciences trains the next generation of leaders and scientists in the expanding field of health metrics and launches careers in helping all people to live long lives in full health.

Highlights of the program include:

- A rich, interdisciplinary curriculum
- Access to a large, global network of renowned professors and scientists

### SEARCH

Search for:



### UPCOMING EVENTS

---

**Attend a webinar to learn more about the MS in Health Metrics Sciences:**

- Info session: Tuesday, November 8, 2022 at 10am PT [[register here](#)]
- Funding your MS: Wednesday, November 9, 2022 at 10am PT [[register here](#)]





DEPARTMENT OF HEALTH METRICS SCIENCES

---

UNIVERSITY *of* WASHINGTON

# The University of Washington

---

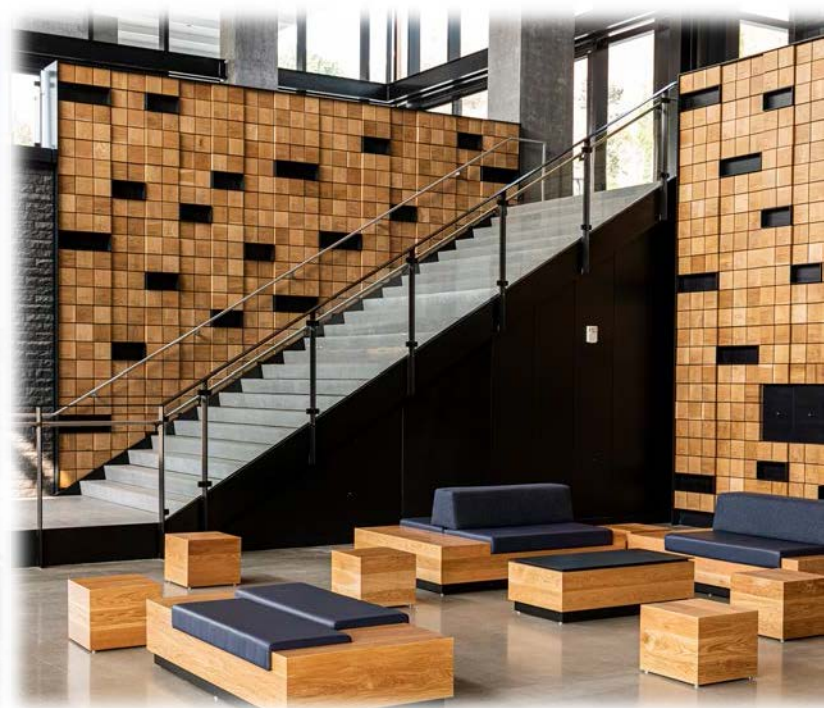
UNIVERSITY *of* WASHINGTON

















# Questions?

---

Contact Sarah at [healthms@uw.edu](mailto:healthms@uw.edu)

