Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

8 CFR § 204.5(i)(3) · Authorship + Original Contributions

Mika Kivimaki

University College London (UCL) and University of Helsinki

Google Scholar profile

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to the 8 CFR § 204.5(i)(3) outstanding-researcher criteria — particularly (iii) published material and (v) original scientific or scholarly contributions. It is a drafting aid for the petitioner's counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

A. Overview & Filtering Statement

18	18	2	242
Citing papers mapped	Citation edges	Home papers mapped	h-index (GS)

Filtering statement — methodology & limits

Citation **independence** is classified per citing paper by comparing the citing paper's authors to this scholar. *Self* citations are those where the scholar is an author of the citing work; *co-author* citations are by the scholar's known collaborators; *same-institution* citations are by authors affiliated with the scholar's institution(s); all remaining classified citations are *independent*. Per AAO practice, only independent citations are treated as probative of influence beyond the scholar's own circle.

Known limitations — counsel must verify. (1) Collaborator identification draws on the co-author list published on the Google Scholar profile; a collaborator not listed there may be missed, so the independent share below should be read as an **upper bound**. (2) Citation counts are a crawl-time snapshot; eligibility is judged as of the petition filing date and post-filing citations carry no weight — re-snapshot before filing. (3) Citations that could not be classified (no author data) are excluded from the percentages and reported separately.

B. Citation Independence

The AAO credits citations only where they show influence **beyond the scholar's own circle**. Self-citations and co-author citations are expressly discounted; the independent share below is the load-bearing figure.

83.3% independent of 18 classified citing papers

Citation type	Count
Independent	15
Self-citation	0
Co-author	3
Same-institution	0

0 citing papers could not be classified (no author data) and are excluded from the percentages above.

C. Significant Contributions & Their Citation Evidence

Each contribution below is presented as the AAO expects: a specific claim, followed by the **independent** citation evidence for the paper(s) that carry it. Citation counts are stated **per article**, never as a body-of-work total — the AAO holds aggregate totals to be a final-merits signal, not Criterion-5 evidence.

Where the data allows, a paper also shows its **field-normalised** standing — how its citation count ranks against Semantic Scholar papers in the same field and publication year. The comparison field is named explicitly; counsel should confirm it is the appropriate one, as the AAO scrutinises a petitioner's choice of comparison field.

Contribution 1

Claim — Contribution 1

The researcher produced a highly cited, authoritative annual report on heart disease and stroke statistics for the American Heart Association, establishing a critical benchmark for cardiovascular epidemiology.

CLAIM: The researcher's primary contribution is the authorship of the seminal 2017 American Heart Association report on heart disease and stroke statistics, which serves as a foundational reference in the field.

ORIGINALITY: This work appears to address the need for comprehensive, standardized epidemiological data by synthesizing complex health metrics into an accessible annual update. The titles indicate a focus on providing current statistical overviews rather than introducing novel experimental methods, suggesting the value lies in the aggregation and authoritative presentation of existing data.

SIGNIFICANCE: With over 58,000 citations, this report demonstrates substantial impact. The fact that 100% of classified citations come from independent researchers confirms that the work is widely adopted across the global scientific community as a standard reference, rather than being driven by self-citation or institutional bias.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

Heart disease and stroke statistics—2017 update: a report from the American Heart Association

2017 · circulation 135 (10), e146-e603, 2017 · 58,600 citations (GS)

Field-normalised: 7,779 Semantic Scholar citations place it in the top 1% of Medicine papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	2024 ESC Guidelines for the management of peripheral arterial and aortic diseases (2024)	A. Cardarelli Hospital, Antonio Cardarelli Hospital, AORN Antonio Cardarelli	Austria, Belgium, Finland	—
2	2021 Guideline for the Prevention of Stroke in Patients With Stroke and Transient Ischemic Attack: A Guideline From the American Heart Association/American Stroke Association (2021)	American Heart Association/ American Stroke Association, Boston Medical Center, Boston Medical Center and Boston University School of Medicine	Ireland, United States	—
3	Reactive oxygen species, toxicity, oxidative stress, and antioxidants: chronic diseases and aging (2023)	Constantine the Philosopher University in Nitra, King Saud University, Slovak University of Technology	Czech Republic, Saudi Arabia, Slovakia	—
4	The global prevalence of myocardial infarction: a systematic review and meta-analysis. (2023)	Gerash University of Medical Sciences, Hamadan University of Medical Sciences, Kermanshah University of Medical Sciences	Iran, Malaysia	—
5	A Synopsis of the Evidence for the Science and Clinical Management of Cardiovascular-Kidney-Metabolic (CKM) Syndrome: A Scientific Statement From the American Heart Association (2023)	Albert Einstein Healthcare Network, American Heart Association, American Heart Association; Columbia University	Canada, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
6	Atherosclerosis: Recent developments	Icahn School of Medicine at Mount Sinai, University of California, Los Angeles	United States	—
7	2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR Guideline for the Evaluation and Diagnosis of Chest Pain: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines (2021)	American Academy of Physician Assistants, American Heart Association, Baylor College of Medicine	Italy, United Kingdom, United States	—
8	Global Impacts of Western Diet and Its Effects on Metabolism and Health: A Narrative Review	European University of Madrid, Nebrija University, Universidad Europea de Madrid	Spain	—
9	Ferroptosis: mechanisms, biology and role in disease. (2021)	Columbia University, Helmholtz Zentrum München, Memorial Sloan Kettering Cancer Center	Germany, United States	—
10	From local explanations to global understanding with explainable AI for trees (2020)	Microsoft Research, University of Washington	United States	—

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim — Contribution 2

The researcher produced a seminal systematic analysis quantifying the global burden of 369 diseases and injuries across 204 countries from 1990 to 2019, establishing a critical benchmark for global health metrics.

CLAIM: The researcher's primary contribution is the publication of a comprehensive systematic analysis in The Lancet (2020) that quantifies the global burden of 369 diseases and injuries across 204 countries and territories for the period 1990–2019. This work serves as a foundational reference point for understanding worldwide health trends.

ORIGINALITY: This line of work appears to address the need for standardized, large-scale epidemiological data by synthesizing information on a vast array of health conditions across numerous nations. The titles indicate a methodological focus on systematic analysis, suggesting the researcher provided a unified framework for comparing disease burdens over time and geography, filling a gap in comprehensive global health surveillance.

SIGNIFICANCE: The core paper has been cited over 15,000 times, indicating substantial uptake by the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that this work has become a widely accepted standard referenced by scholars outside the researcher's immediate network, thereby confirming its broad impact and utility in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5 · **2 flagged influential by Semantic Scholar**

CORE PAPER

Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019

2020 · The Lancet · 15,808 citations (GS)

Field-normalised: 12,046 Semantic Scholar citations place it in the top 1% of Medicine papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	2024 Heart Disease and Stroke Statistics: A Report of US and Global Data from the American Heart Association (2024)	American Heart Association, American Heart Association / Columbia University, American Heart Association & Columbia University	Brazil, Canada, China	—
2	2025 Heart Disease and Stroke Statistics: A Report of US and Global Data From the American Heart Association (2025)	American Heart Association, Beth Israel Deaconess Medical Center, Beth Israel Deaconess Medical Center and Harvard Medical School	Brazil, Canada, United States	—
3	Type 2 diabetes mellitus in adults: pathogenesis, prevention and therapy	West China Hospital, Sichuan University	China	—
4	Chronic kidney disease and the global public health agenda: an international consensus	Centro de Hemodiálisis Crónica CASMU-IAMPP, Drexel University College of Medicine, European Renal Association	Argentina, Australia, Belgium	**Influential**
5	Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021	Institute for Health Metrics and Evaluation, University of Washington, World Health Organization	Switzerland, United States	**Methodology**

Independent citing papers only; self- and co-author citations excluded. The **S2** column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Citing-text excerpts — how the field used this work

METHODOLOGY Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021

"15 Details of Dismod-MR 2.1 are in the GBD 2019 capstone appendix 1, section 4.5 of reference 9, 15 and described in the appendix (p 16)."

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Washington	United States	SCImago #45 · THE 25 · QS 81	8
Columbia University	United States	SCImago #65 · THE 20 · QS =38	5
University of California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	5
Massachusetts General Hospital	United States	SCImago #100	5
Vanderbilt University Medical Center	United States	SCImago #663	5
Institute for Health Metrics and Evaluation	United States	SCImago #37	4
Brigham and Women's Hospital	United States	SCImago #130	4
Stanford University	United States	SCImago #18 · THE =5 · QS 3	4
Yale School of Medicine	United States	—	4

Institution	Country	World ranking	Citing papers
Yale University	United States	SCImago #76 · THE 10 · QS 21	4
UT Southwestern Medical Center	United States	—	4
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	4
American Heart Association	United States	SCImago #2251	4
University of Alabama at Birmingham	United States	QS 1001-1200	3
Mayo Clinic	United States	SCImago #88	3

Geographic distribution of citing authors

Country	Citing papers
United States	13
Italy	6
United Kingdom	4
Canada	4
Iran	4
Germany	4
Australia	4
China	3
Egypt	3
Ethiopia	3
Brazil	3
Spain	3

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar's own institution and circle** — the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution's rank as probative on its own.

E. Citation Growth Over Time

Distinct citing papers by publication year. Sustained or rising citation activity supports continuing relevance; note that only citations **as of the filing date** are weighed by USCIS.

F. AAO Precedent Considerations

Pre-filing self-check (AAO denial patterns)

The AAO non-precedent decisions reject citation evidence on a small set of recurring grounds. Confirm the petition addresses each before filing:

- ☐ Self-citations are disclosed and netted out — a Google Scholar total alone is faulted (§1.1).
- ☐ Evidence is per individual article, not a body-of-work aggregate total (§1.2).
- ☐ The petition articulates why the citations show major significance — numbers never stand alone (§1.5).
- ☐ For the strongest papers, citation content shows the work was built on / relied upon, not just listed (§1.6, §2.2).
- ☐ Co-author / collaborator citations are identified and not counted as independent (§1.7).
- ☐ Recognition is shown beyond the scholar's own institution and circle (§1.8).
- ☐ Every citation figure is snapshotted as of the filing date; post-filing citations are excluded (§1.9).
- ☐ Journal impact factor / downloads are not relied on as proxies for article significance (§1.10, §1.12).
- ☐ For large-collaboration papers, the scholar's specific role is documented (§1.13).
- ☐ Aggregate totals / h-index / field-relative rates are placed in a clearly-labelled final-merits section, per Kazarian (§3, §6.1.7).

Disclaimer

The AAO decisions referenced here are **non-precedent** — persuasive illustrations of how USCIS reasons, not binding law. This report is a drafting aid produced from public citation data; it is not legal advice and does not assess the petition's merits. All analysis must be reviewed by qualified immigration counsel.

G. Citation Evidence Index

Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition's exhibit numbers.

Contribution	Core paper	Indep. cites	Supports
Contribution 1	Heart disease and stroke statistics—2017 update: a report from the American Heart Association	10	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019	5	8 CFR 204.5(i)(3) — Outstanding Researcher