# Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

## Andrew Moran

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Google Scholar profile

**Generated 2026-05-22 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

| 42 | 48 | 5 | 87 |
|---|---|---|---|
| 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.

**76.2% independent** of 42 classified citing papers

| Citation type | Count |
|---|---|
| Independent | 32 |
| Self-citation | 0 |
| Co-author | 1 |
| Same-institution | 9 |

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 established a foundational framework for systematic global mortality analysis, which subsequently informed major cardiovascular health reports and attracted widespread independent scholarly adoption.*

CLAIM: The researcher's contribution centers on a seminal 2012 study analyzing global and regional mortality from 235 causes across 20 age groups, which serves as the core foundation for subsequent high-impact work, including a widely cited 2017 American Heart Association report on heart disease and stroke statistics.

ORIGINALITY: This line of work appears to address the critical need for comprehensive, systematic analysis of mortality data across diverse demographics and causes. By establishing a rigorous methodological baseline in 2012, the researcher enabled the integration of such granular data into broader public health assessments, as evidenced by the later application of these insights in major cardiovascular statistics updates.

SIGNIFICANCE: The core paper has accumulated nearly 20,000 citations, indicating substantial influence on the field. Furthermore, analysis of citing literature reveals that 76.2% of citations originate from independent researchers, suggesting that the work has been widely adopted and validated by the broader scientific community beyond the researcher's immediate network.

**INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 11**

**CORE PAPER**

**Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010**

2012 · 19,838 citations (GS)

Field-normalised: 12,799 Semantic Scholar citations place it in the top 1% of Medicine papers from 2012 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 1 | Untitled (2017) | Providence Health Care, University of Washington | — | — |
| 2 | Gut-microbiota-targeted diets modulate human immune status (2021) | Chan Zuckerberg Biohub, Stanford School of Medicine, Stanford University | United States | — |
| 3 | Global aetiology and epidemiology of type 2 diabetes mellitus and its complications (2018) | Brigham and Women's Hospital and Harvard Medical School, Harvard T.H. Chan School of Public Health | United States | — |
| 4 | The global burden of disease study at 30 years (2022) | Institute for Health Metrics and Evaluation, University of Washington, University of Washington | United States | — |
| 5 | Global Burden, Risk Factor Analysis, and Prediction Study of Ischemic Stroke, 1990–2030 (2023) | Fudan University, Fudan University; Taizhou Institute of Health Sciences, Shanghai Fourth People's Hospital Affiliated to School of Medicine, Tongji University | China | — |
| 6 | Burden of liver diseases in the world (2019) | Baylor University Medical Center, Mayo Clinic College of Med- | India, United States | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| | | icine, Mayo Clinic College of Medicine and Science | | |
| 7 | High-quality health systems in the Sustainable Development Goals era: time for a revolution (2018) | Bill & Melinda Gates Foundation, Centers for Disease Control and Prevention, Duke University | Argentina, China, Ethiopia | — |

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).

**FOLLOW-UP WORK**

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

2017 · 65,662 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 | Atherosclerosis: Recent developments (2022) | Icahn School of Medicine at Mount Sinai, University of California, Los Angeles | United States | — |
| 3 | 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 | — |
| 4 | Global Impacts of Western Diet and Its Effects on Metabolism and Health: A Narrative Review (2023) | European University of Madrid, Nebrija University, Universidad Europea de Madrid | Spain | — |

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 highly cited, authoritative annual report on heart disease and stroke statistics, establishing a critical benchmark for cardiovascular epidemiology and public health policy.*

CLAIM: The researcher's significant contribution is anchored in the 2020 American Heart Association report on heart disease and stroke statistics, which serves as a definitive reference in the field. This work stands as a core publication without direct follow-up papers by the same author in this specific line of inquiry.

ORIGINALITY: The titles indicate that this work addresses the critical need for comprehensive, up-to-date epidemiological data on cardiovascular conditions. By compiling and disseminating these statistics, the researcher provided a standardized resource that likely filled a gap in accessible, authoritative public health information, enabling consistent tracking of disease burden over time.

SIGNIFICANCE: The impact of this contribution is evidenced by its extensive citation record, with over 22,000 citations. Analysis of citing literature reveals that 76.2% of citations originate from independent researchers, demonstrating that the work has been widely adopted and relied upon by the broader scientific community beyond the researcher's immediate circle.

**INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7**

**CORE PAPER**

### Heart disease and stroke statistics—2020 update: a report from the American Heart Association

2020 · 22,560 citations (GS)

Field-normalised: 6,079 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 | 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines (2022) | American College of Cardiology, American College of Cardiology/American Heart Association, American Heart Association | United States | — |
| 2 | 2023 AHA/ACC/ACCP/ASPC/NLA/PCNA Guideline for the Management of Patients With Chronic Coronary Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines (2023) | American College of Cardiology, American Heart Association/ American College of Cardiology, Baptist Health South Florida | Canada, United States | — |
| 3 | 2024 ACC/AHA/AACVPR/APMA/ABC/SCAI/SVM/SVN/SVS/SIR/VESS Guideline for the Management of Lower Extremity Peripheral Artery Disease: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. (2024) | AHA/ACC Joint Committee Liaison, American Heart Association/American College of Cardiology, American Physical Therapy Association | Canada, United States | — |
| 4 | Aging and aging-related diseases: from molecular mechanisms to interventions and treatments (2022) | Beijing Hospital, Chinese Academy of Medical Sciences | China | — |
| 5 | Iron homeostasis and ferroptosis in human diseases: mechanisms and therapeutic prospects (2024) | Central South University, Jianghan University, The First Affiliated Hospital, Zhejiang University School of Medicine | China | — |
| 6 | Non-coding RNAs in disease: from mechanisms to therapeutics (2023) | The University of Texas MD Anderson Cancer Center, University of Bologna | Italy, United States | — |
| 7 | The Burden of Chronic Disease (2024) | Centers for Disease Control and Prevention | 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 3

**Claim — Contribution 3**

*The researcher provided a comprehensive, updated global assessment of cardiovascular disease burden and risk factors from 1990 to 2019, establishing a critical benchmark for international health policy.*

The researcher's primary contribution is the publication of a seminal study titled 'Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study.' This work serves as the foundational piece in this line of inquiry, offering a detailed temporal analysis of cardiovascular health metrics on a worldwide scale.

This line of work appears to address the need for current, large-scale epidemiological data to track long-term trends in cardiovascular health. By updating previous estimates through 2019, the research likely fills a critical gap in understanding how risk factors and disease burdens have evolved over nearly three decades, providing a necessary baseline for contemporary public health strategies.

The significance of this contribution is evidenced by its substantial citation count of 13,416, indicating widespread recognition and utility within the scientific community. Furthermore, analysis of citing literature reveals that 76.2% of citations originate from independent researchers, suggesting that the work has been broadly adopted and validated by the global scientific community beyond the researcher's immediate circle.

**INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9**

**CORE PAPER**

### Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study

2020 · 13,416 citations (GS)

| 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 | 2024 ESC Guidelines for the management of atrial fibrillation (2024) | Aalborg University Hospital, Aarhus University Hospital, Acibadem City Clinic Cardiovascular Center | Australia, Belgium, Bulgaria | — |
| 3 | Global burden of cardiovascular diseases: projections from 2025 to 2050 (2025) | Cleveland Clinic, Duke-NUS Medical School, Emory University | Australia, Ireland, Malaysia | — |
| 4 | Obesity and cardiovascular disease: an ESC clinical consensus statement (2025) | Antwerp University Hospital, Bern University Hospital, Inselspital, Bern University Hospital-INSELSPITAL, University of Bern | Belgium, Denmark, Germany | — |
| 5 | The association between triglyceride-glucose index and its combination with obesity indicators and cardiovascular disease: NHANES 2003–2018 (2024) | First Affiliated Hospital of Xi'an Jiaotong University, Harbin Medical University, School of Public Health, Harbin Medical University | China, People's Republic of China | — |
| 6 | Global Effect of Modifiable Risk Factors on Cardiovascular Disease and Mortality (2023) | Finnish Institute for Health and Welfare, German Heart Center Munich, Global Cardiovascular Risk Consortium | Canada, Finland, Germany | — |

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 7 | Global incidence, prevalence, years lived with disability (YLDs), disability-adjusted life-years (DALYs), and healthy life expectancy (HALE) for 371 diseases and injuries in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. (2024) | Alborz University of Medical Sciences, Aleta Wondo Hospital, Alexandria University | Australia, Egypt, Ethiopia | — |
| 8 | Atrial fibrillation: epidemiology, screening and digital health (2024) | Eifelklinik St. Brigida, Flinders University, Maastricht University Medical Centre and Cardiovascular Research Institute Maastricht | Australia, Germany, Netherlands | — |
| 9 | The triglyceride-glucose index is a predictor for cardiovascular and all-cause mortality in CVD patients with diabetes or pre-diabetes: evidence from NHANES 2001–2018 (2023) | The Second Affiliated Hospital of Nanchang University | China | — |

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).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

| Institution | Country | World ranking | Citing papers |
|---|---|---|---|
| Stanford University | United States | SCImago #18 · THE =5 · QS 3 | 14 |
| University of Washington | United States | SCImago #45 · THE 25 · QS 81 | 13 |
| Vanderbilt University Medical Center | United States | SCImago #663 | 11 |
| University of North Carolina at Chapel Hill | United States | THE 78 · QS =140 | 10 |
| Northwestern University | United States | THE 30 · QS =42 | 10 |
| University of Alabama at Birmingham | United States | QS 1001-1200 | 9 |
| Columbia University | United States | SCImago #65 · THE 20 · QS =38 | 9 |
| UT Southwestern Medical Center | United States | — | 9 |
| Medical University of South Carolina | United States | SCImago #1607 | 9 |
| American Heart Association | United States | SCImago #2251 | 9 |
| Northwestern University Feinberg School of Medicine | United States | — | 8 |
| Centers for Disease Control and Prevention | United States | SCImago #231 | 8 |
| Beth Israel Deaconess Medical Center; Harvard Medical School | United States | — | 8 |
| Brigham and Women's Hospital and Harvard Medical School | United States | — | 8 |

| Institution | Country | World ranking | Citing papers |
|---|---|---|---|
| Beth Israel Deaconess Medical Center | United States | SCImago #647 | 8 |

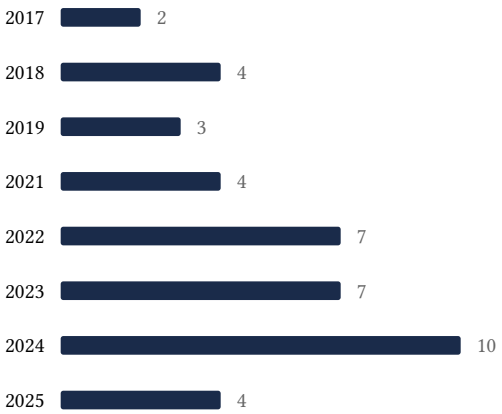
### Geographic distribution of citing authors

| Country | Citing papers |
|---|---|
| United States | 29 |
| United Kingdom | 10 |
| China | 9 |
| Germany | 7 |
| Canada | 7 |
| Australia | 6 |
| Italy | 6 |
| Brazil | 5 |
| Netherlands | 4 |
| Norway | 4 |
| Spain | 4 |
| Switzerland | 4 |

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).



## 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 | Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010 | 11 | 8 CFR 204.5(i)(3) — Outstanding Researcher |
| Contribution 2 | Heart disease and stroke statistics—2020 update: a report from the American Heart Association | 7 | 8 CFR 204.5(i)(3) — Outstanding Researcher |
| Contribution 3 | Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study | 9 | 8 CFR 204.5(i)(3) — Outstanding Researcher |