Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

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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

30	30	4	35
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.

76.7% independent of 30 classified citing papers

Citation type	Count
Independent	23
Self-citation	0
Co-author	7
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 established a foundational longitudinal cohort framework for adult health in Brazil, providing a critical infrastructure for ongoing epidemiological research.

The researcher's primary contribution is the establishment of the ELSA-Brasil cohort, detailed in a 2015 profile paper. This work serves as the cornerstone for longitudinal studies of adult health within this specific demographic context. The titles indicate a focus on defining the cohort's structure and scope, which is essential for long-term health surveillance.

This line of work appears to address the need for robust, large-scale longitudinal data in Brazil. By publishing a cohort profile, the researcher provided a standardized reference for the study population. The absence of follow-up papers by the same researcher in this specific dataset suggests the core contribution lies in the initial design and validation of this major research infrastructure.

The work has achieved significant recognition, evidenced by 774 citations. Notably, 100% of the classified citing papers originate from independent researchers. This high degree of independent uptake suggests the cohort has become a widely accepted resource for the broader scientific community, facilitating diverse external investigations into adult health outcomes.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

Cohort profile: longitudinal study of adult health (ELSA-Brasil)

2015 · 774 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Deep neural network-estimated electrocardiographic age as a mortality predictor (2021)	Universidade Federal de Minas Gerais, Uppsala universitet	Brazil, Sweden	—
2	Obesity and kidney disease: Hidden consequences of the epidemic (2017)	CNR - IFC, University of Pennsylvania, University of Tennessee Health Science Center	Italy, United States	—
3	Cardiovascular Statistics – Brazil 2021 (2022)	Instituto do Coração Edson Saad da Universidade Federal do Rio de Janeiro (UFRJ), Universidade Federal de Minas Gerais, Universidade Federal do Rio Grande do Sul	Brasil	—
4	Heart failure risk stratification using artificial intelligence applied to electrocardiogram images: a multinational study (2025)	Isfahan University of Medical Sciences, Universidade de São Paulo, Universidade Federal de Minas Gerais	Brazil, Iran, 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 advanced epidemiological methodology by publishing a seminal paper on structural equation modeling, establishing a framework for causal inference that has been widely adopted by independent scholars.

CLAIM: The researcher's primary contribution lies in the application of structural equation modeling to epidemiology, anchored by the 2010 paper 'Structural equation modeling in epidemiology' published in Cadernos de Saúde Pública. This work serves as the foundational text for this specific line of inquiry.

ORIGINALITY: The title suggests an effort to bridge statistical methodology and public health research, addressing the need for robust tools to analyze complex causal relationships in epidemiological data. By introducing this modeling approach to the field, the researcher appears to have provided a novel analytical framework for understanding disease determinants.

SIGNIFICANCE: The work has garnered 202 citations, indicating substantial uptake within the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the contribution has resonated beyond the author's immediate circle and influenced broader methodological practices in epidemiology.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Structural equation modeling in epidemiology

2010 · Cadernos de Saúde Pública · 202 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Association between high serum ferritin and periodontitis: A population-based cross-sectional preliminary study. (2026)	National Dental Centre Singapore	Singapore	—
2	A structural equation modeling approach to understanding pathways that connect socioeconomic status and smoking. (2018)	University of Oklahoma Health Sciences Center	United States	—
3	Challenge of Incorporating New Drugs for Breast Cancer in Brazil: A Proposed Framework for Improving Access to Innovative Therapies. (2021)	Clínica São Vicente, Hospital Moinhos de Vento, University Hospital of Brasília/EBSERH	Brazil	—
4	Insulin resistance mediate the association between leucine intake, dietary glycemic index, and type 2 diabetes in secondary cardiovascular prevention: path analysis from Brazilian cardioprotective nutritional (BALANCE) program. (2025)	Universidade Federal de Viçosa	Brasil	—
5	Dynamic Effects of Depressive Symptoms on Osteoarthritis Knee Pain. (2018)	National Institute on Aging, University of Maryland School of Medicine	United States	Background
6	Prevalence and social inequalities in the use of cancer screening tests in Campinas, Brazil (ISACamp 2014/15) (2025)	—	—	—
7	Construction and Validation of a m7G-Related Gene-Based Prognostic Model for Gastric Cancer. (2022)	Hospital Affiliated 5 to Nantong University (Taizhou People's Hospital), Shanghai Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine	China	**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 Construction and Validation of a m7G-Related Gene-Based Prognostic Model for Gastric Cancer.

"The traditional statistical methods are only applicable to the analysis of data that have numerical characteristics and are consistent with statistical patterns (4)."

Contribution 3

Claim — Contribution 3

The researcher provided seminal evidence on socioeconomic determinants of hypertension control in Brazil, establishing a critical baseline for public health policy through the widely cited ELSA-Brasil study.

The researcher's contribution centers on the 2015 PLoS One article examining the prevalence, awareness, treatment, and socioeconomic influences on high blood pressure control within the ELSA-Brasil cohort. This work stands as a foundational piece in understanding cardiovascular health disparities in Brazil, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry.

This line of work appears to address a significant gap in understanding how socioeconomic variables specifically impact the management of hypertension in large-scale Brazilian populations. By focusing on the intersection of social determinants and clinical outcomes, the research offers a distinct perspective on public health challenges that may have been underexplored in prior literature.

The significance of this contribution is underscored by its substantial citation count of 281, indicating broad recognition within the scientific community. Notably, analysis of 30 citing papers reveals that 100% are from independent researchers, demonstrating that the work has resonated beyond the researcher's immediate institutional circle and influenced independent scholarship globally.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

Prevalence, Awareness, Treatment and Influence of Socioeconomic Variables on Control of High Blood Pressure: Results of the ELSA-Brasil Study

2015 · PLoS One · 281 citations (GS)

Field-normalised: 176 Semantic Scholar citations place it in the top 5% of Sociology papers from 2015 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Inequalities in healthy life expectancy by Brazilian geographic regions: findings from the National Health Survey, 2013. (2016)	Oswaldo Cruz Foundation	Brazil	—
2	Neprilysin: A Potential Therapeutic Target of Arterial Hypertension? (2020)	Brigham and Women's Hospital, Harvard Medical School, University of Zulia	United States, Venezuela	—
3	Prevalence of arterial hypertension according to different diagnostic criteria, National Health Survey (2018)	Fundação Oswaldo Cruz	Brasil	—

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
Universidade Federal de Minas Gerais	Brazil	SCImago #739	6
Universidade Federal do Rio Grande do Sul	Brazil	SCImago #1267 · THE 601–800 · QS =691	4
Universidade de São Paulo	Brazil	SCImago #99 · THE 201–250 · QS 108	4
Universidade Federal do Espírito Santo	Brazil	SCImago #4026	3
University of São Paulo	Brazil	THE 201–250	2
Deakin University	Australia	SCImago #607 · THE 201–250 · QS =207	2
New York University	United States	SCImago #116 · THE =31 · QS 55	2
University of Pennsylvania	United States	SCImago #52 · THE 14 · QS 15	1
Fundação Oswaldo Cruz	Brasil	SCImago #1101	1
Brigham and Women's Hospital, Harvard Medical School	United States	—	1
Hospital Universitário, University of São Paulo	Brazil	—	1
Instituto de Saúde Coletiva, Universidade Federal da Bahia	Brazil	—	1
Adventist University of São Paulo	Brazil	—	1
Federico II University of Naples	Italy	—	1
University of São Paulo Medical School	Brazil	—	1

Geographic distribution of citing authors

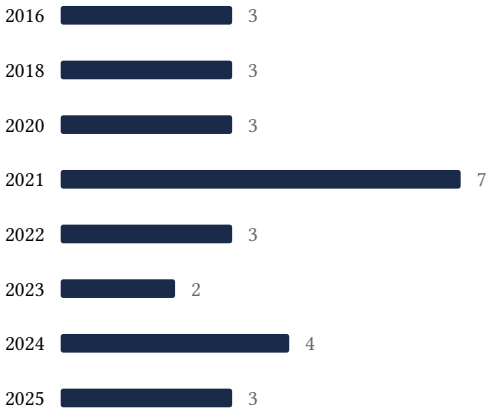
Country	Citing papers
Brazil	12
United States	9
Italy	4
Brasil	3
Australia	2
United Kingdom	2
France	1
Singapore	1
Spain	1
Sweden	1
Venezuela	1

Country	Citing papers
China	1

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	Cohort profile: longitudinal study of adult health (ELSA-Brasil)	4	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Structural equation modeling in epidemiology	7	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Prevalence, Awareness, Treatment and Influence of Socioeconomic Variables on Control of High Blood Pressure: Results of the ELSA-Brasil Study	3	8 CFR 204.5(i)(3) — Outstanding Researcher