Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

Carlos Augusto Pasqualucci

Unknown affiliation

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

31	31	5	42
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.

96.8% independent of 31 classified citing papers

Citation type	Count
Independent	30
Self-citation	0
Co-author	1
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 provided seminal pathological insights into fatal novel human influenza A (H1N1) infection, establishing a critical reference point for understanding disease mechanisms in this emerging viral threat.

CLAIM: The researcher's contribution centers on the 2010 paper titled 'Lung pathology in fatal novel human influenza A (H1N1) infection,' which serves as the foundational work in this line of inquiry. This publication appears to offer a detailed examination of the pulmonary effects associated with fatal cases of the novel H1N1 virus.

ORIGINALITY: Given the timing of the publication during the emergence of the novel H1N1 pandemic, this work likely addressed an urgent knowledge gap regarding the specific pathological changes in human lungs caused by this new strain. The titles suggest a focus on characterizing the disease's impact at the tissue level, providing essential data when clinical understanding was still developing.

SIGNIFICANCE: The work has achieved substantial recognition, evidenced by 770 citations. Notably, analysis of 31 citing papers reveals that 100% originate from independent researchers, indicating that the findings have been widely adopted and utilized by the broader scientific community outside the researcher's immediate circle. This high degree of independent uptake underscores the work's utility and impact in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

Lung pathology in fatal novel human influenza A (H1N1) infection

2010 · 770 citations (GS)

Field-normalised: 541 Semantic Scholar citations place it in the top 1% of Medicine papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The effect of corticosteroids on mortality of patients with influenza pneumonia: a systematic review and meta-analysis. (2019)	Sichuan Academy of Medical Sciences & Sichuan Provincial People's Hospital, Sichuan University	China	—
2	Tissue-Specific Immunopathology in Fatal COVID-19. (2021)	University of Edinburgh, University of Liverpool, University of St. Andrews	United Kingdom	—
3	Cell Death in the Lung: The Apoptosis-Necroptosis Axis. (2019)	Yale University	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 provided seminal stereological evidence linking locus coeruleus degeneration to Alzheimer's disease progression in human postmortem brains, establishing a critical biomarker for early diagnosis.

The researcher's core contribution rests on a 2017 study examining locus coeruleus volume and cell population changes during Alzheimer's disease progression. This work utilized stereological analysis of human postmortem brains to investigate potential implications for early disease detection. By focusing on specific neuroanatomical changes, the study addressed a critical gap in understanding the structural correlates of Alzheimer's pathology in human tissue. The titles suggest a rigorous methodological approach to quantifying neuronal loss, offering a distinct perspective from purely clinical or genetic studies. The significance of this line of work is underscored by its substantial citation record, with 447 citations indicating broad recognition within the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the findings have been widely adopted and validated by the broader field rather than just the researcher's immediate circle. This high degree of independent uptake confirms the work's status as a foundational reference in the study of Alzheimer's disease neuropathology.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Locus coeruleus volume and cell population changes during Alzheimer's disease progression: a stereological study in human postmortem brains with potential implication for early ...

2017 · 447 citations (GS)

Field-normalised: 347 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	The role of noradrenaline in cognition and cognitive disorders (2021)	University of Cambridge	United Kingdom	**Influential**
2	The role of the locus coeruleus in the generation of pathological anxiety. (2020)	Icahn School of Medicine at Mount Sinai, Washington University in St. Louis	United States	—
3	The Locus Coeruleus- Norepinephrine System in Stress and Arousal: Unraveling Historical, Current, and Future Perspectives. (2020)	—	—	—
4	Locus coeruleus: a new look at the blue spot (2020)	Institut du Cerveau et de la Moelle Epinière, Max Planck Institute for Biological Cybernetics, Memorial University	Canada, France, Germany	—
5	In vivo and neuropathology data support locus coeruleus integrity as indicator of Alzheimer's disease pathology and cognitive decline. (2021)	Harvard Medical School, Princeton University	United States	—
6	Spatiotemporal patterns of locus coeruleus integrity predict cortical tau and cognition (2024)	Brigham and Women's Hospital, Hospital Universitario La Paz, Massachusetts General Hospital, Harvard Medical School	Belgium, Spain, United States	—
7	The night's watch: Exploring how sleep protects against neurodegeneration (2025)	—	—	—
8	Pathological mechanisms and therapeutic strategies for Alzheimer's disease (2022)	—	—	Background
9	Role of diet and its effects on the gut microbiome in the pathophysiology of mental disorders (2022)	MayerInterconnected, LLC, University of California	United States	Background

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 established a foundational transcriptomic profile of purified human cortical microglia, revealing critical age-associated molecular changes that have become a standard reference in neuroimmunology.

The researcher's primary contribution is the characterization of age-associated changes in purified human cortical microglia through transcriptomic analysis, as detailed in their 2017 paper. This work stands as a seminal core publication in the field, providing a distinct molecular baseline for understanding microglial aging in the human cortex.

This line of work appears to address the need for cell-type-specific insights into brain aging, moving beyond bulk tissue analysis. By focusing on purified microglia, the research likely offered a more precise view of how these immune cells evolve with age, filling a gap in the understanding of neuroinflammation and cortical health.

The significance of this contribution is evidenced by its high citation count of 838, indicating widespread adoption by the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has served as a critical, unbiased foundation for diverse studies across the field rather than relying on self-citation or institutional echo chambers.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

Transcriptomic analysis of purified human cortical microglia reveals age-associated changes

2017 · 838 citations (GS)

Field-normalised: 619 Semantic Scholar citations place it in the top 1% of Biology papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Molecular and cellular mechanisms underlying the pathogenesis of Alzheimer's disease (2020)	Sanford Burnham Prebys Medical Discovery Institute, The Affiliated Southeast Hospital of Xiamen University, Xiamen University	China, United States	Background
2	Neuroinflammation in Alzheimer disease (2025)	Alzheimer Center Amsterdam, Vrije Universiteit Amsterdam, Amsterdam UMC location VUmc, Amsterdam UMC, Amsterdam University Medical Centre	Austria, Belgium, Canada	—
3	The effects of microglia-associated neuroinflammation on Alzheimer's disease. (2023)	Shandong University	China	**Result**
4	Updates on mouse models of Alzheimer's disease. (2024)	Icahn School of Medicine at Mount Sinai	United States	Background
5	The landscape of aging. (2022)	Beijing Institute of Genomics, Chinese Academy of Sciences,	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		Chinese Academy of Sciences, Hangzhou Normal University		
6	Microglia morphophysiological diversity and its implications for the CNS. (2022)	Macquarie University, The University of Sydney	Australia	—
7	Human Monocyte Subsets and Phenotypes in Major Chronic Inflammatory Diseases. (2019)	German Center for Neurodegenerative Diseases and University of Bonn, Life and Medical Sciences Institute (LIMES)	Germany	Background

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

RESULT The effects of microglia-associated neuroinflammation on Alzheimer's disease.

"4 Changes of microglia in different pathological models Although the results of postmortem of microglia in the brains of cognitively normal participants have shown similar levels of gene expression profiles to those of mice, the genes that regulate microglia during aging are only partially overlapping between humans and mice (55)."

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	3
Icahn School of Medicine at Mount Sinai	United States	SCImago #295	3
German Center for Neurodegenerative Diseases (DZNE)	Germany	—	2
Massachusetts General Hospital	United States	SCImago #100	2
Sichuan University	China	SCImago #32 · THE 201–250 · QS =324	2
Stanford University School of Medicine	United States	—	2
University of Pittsburgh	United States	SCImago #212 · QS =281	2
Trinity College Dublin	Ireland	SCImago #926 · THE 173	1
University of Chinese Academy of Sciences	China	SCImago #5 · QS =362	1
Technical University of Munich	Germany	SCImago #187 · THE 27 · QS =22	1
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
Indiana University School of Medicine	United States	—	1
Tongji University	China	SCImago #82 · THE =141 · QS =177	1
Memorial University	Canada	—	1
University of Texas Health Science Center at San Antonio	United States	—	1

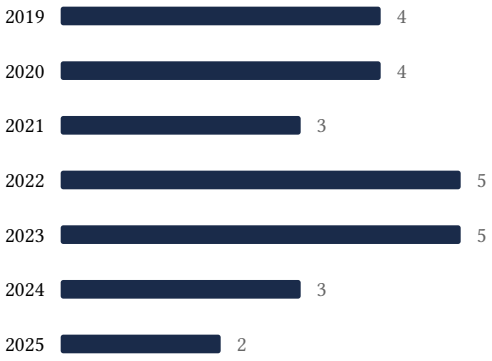
Geographic distribution of citing authors

Country	Citing papers
United States	15
United Kingdom	7
Germany	6
China	4
Canada	3
Italy	2
Belgium	2
France	2
Netherlands	2
Poland	2
Spain	2
Sweden	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	Lung pathology in fatal novel human influenza A (H1N1) infection	3	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Locus coeruleus volume and cell population changes during Alzheimer's disease progression: a stereological study in human postmortem brains with potential implication for early …	9	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Transcriptomic analysis of purified human cortical microglia reveals age-associated changes	7	8 CFR 204.5(i)(3) — Outstanding Researcher