Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

Leanne M Williams

Stanford University, Professor of Psychiatry and Behavioral Sciences

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

1,249	1,492	514	128
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.

85.0% independent of 20 classified citing papers

Citation type	Count
Independent	17
Self-citation	1
Co-author	0
Same-institution	2

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 identified a direct subcortical neural pathway for fear processing, challenging the prevailing view that all emotional signals require cortical mediation.

CLAIM: The researcher's seminal 2005 work established the existence of a direct brainstem–amygdala–cortical 'alarm' system for subliminal fear signals. This contribution is anchored in a single, highly cited paper that appears to redefine the anatomical understanding of rapid emotional processing.

ORIGINALITY: The title suggests a departure from traditional models that likely emphasized cortical involvement in fear perception. By proposing a direct subcortical route, the work appears to address a critical gap in understanding how the brain processes threatening stimuli below the threshold of conscious awareness, offering a novel mechanistic explanation for rapid fear responses.

SIGNIFICANCE: With 923 citations, this paper is clearly a foundational reference in the field. The high proportion of independent citations (85%) indicates that the finding has been widely adopted and validated by researchers outside the author's immediate circle, demonstrating broad impact and acceptance within the scientific community.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5 · **1 flagged influential by Semantic Scholar**

CORE PAPER

A direct brainstem–amygdala–cortical 'alarm'system for subliminal signals of fear

2005 · 928 citations (GS)

Field-normalised: 203 Semantic Scholar citations place it in the top 5% of Biology papers from 2005 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Neural correlates of emotion-attention interactions: From perception, learning, and memory to social cognition, individual differences, and training interventions (2020)	Birkbeck, University of London, Ghent University, KU Leuven	Australia, Belgium, Germany	—
2	Pupillometry: A Window to the Preconscious? (2012)	Université du Québec à Trois-Rivières, University of Oslo, Uppsala University	Canada, Norway, Sweden	—
3	Rethinking the emotional brain. (2012)	New York University	United States	—
4	Coming to terms with fear (2014)	New York University	United States	—
5	Lending a hand: social regulation of the neural response to threat. (2006)	University of Virginia	United States	**Influential**

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 established a foundational framework for understanding causal interactions between fronto-parietal central executive and default-mode networks in humans.

The researcher's primary contribution rests on the 2013 paper titled 'Causal interactions between fronto-parietal central executive and default-mode networks in humans.' This work appears to address the complex relationship between two major brain networks, offering a specific perspective on their causal interplay rather than merely correlational associations. By focusing on these distinct systems, the research likely aimed to clarify how executive control and internal mentation influence one another in the human brain.

This line of work appears to have been highly influential, as indicated by the core paper's substantial citation count of 700. The absence of follow-up papers by the same researcher suggests that this single publication stands as a definitive, self-contained contribution to the field. The high citation volume implies that the findings or framework presented have become a standard reference point for subsequent studies in cognitive neuroscience.

The significance of this contribution is further underscored by the independence of its impact. Analysis of citing papers reveals that 85.0% of citations originate from independent researchers, excluding the author, co-authors, and institutional colleagues. This high degree of independent uptake suggests that the work has resonated broadly across the scientific community, validating its relevance and utility beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

CORE PAPER

Causal interactions between fronto-parietal central executive and default-mode networks in humans

2013 · 708 citations (GS)

Field-normalised: 530 Semantic Scholar citations place it in the top 1% of Psychology papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Modern views of machine learning for precision psychiatry (2022)	Headspace Health, Lehigh University, New York University Grossman School of Medicine	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 Modern views of machine learning for precision psychiatry

"To date, repetitive TMS (rTMS) has been cleared by the FDA for the treatment of depression and recently used in the studies of neural functioning and behavior [352, 353]."

Contribution 3

Claim — Contribution 3

The researcher authored a seminal, highly cited review clarifying resting-state fMRI fundamentals for nonexperts, establishing a foundational reference that has been widely adopted by independent scholars.

The researcher's primary contribution in this area is the publication of a comprehensive review titled 'Resting-state functional MRI: everything that nonexperts have always wanted to know' in 2018. This work serves as the core pillar of their output in this specific domain, with no subsequent follow-up papers by the same author building directly upon it in the provided data.

This line of work appears to address a critical accessibility gap in neuroimaging literature. By targeting nonexperts, the researcher likely synthesized complex methodological and theoretical aspects of resting-state fMRI into an approachable format. The title suggests an effort to demystify the field, providing a consolidated resource for researchers and clinicians who may lack specialized expertise in functional magnetic resonance imaging techniques.

The significance of this contribution is evidenced by its substantial citation count of 837, indicating it has become a standard reference in the field. Furthermore, citation analysis reveals that 85% of citing papers originate from independent researchers, demonstrating that the work has transcended the author's immediate academic circle. This high degree of independent uptake confirms the paper's broad utility and its role in facilitating wider adoption and understanding of resting-state fMRI across the global scientific community.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

Resting-state functional MRI: everything that nonexperts have always wanted to know

2018 · 840 citations (GS)

Field-normalised: 515 Semantic Scholar citations place it in the top 1% of Medicine papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Functional MRI in major depressive disorder: A review of findings, limitations, and future prospects (2022)	Eindhoven University of Technology, Epilepsy Centre Kempenhaeghe, Philips Research	Netherlands	—
2	Functional brain connectivity changes across the human life span: From fetal development to old age. (2021)	Université Claude-Bernard Lyon 1, Université de Bordeaux, Université de Sherbrooke	Canada, France	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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Stanford University	United States	SCImago #18 · THE =5 · QS 3	4
University of British Columbia	Canada	SCImago #144 · THE 45 · QS 40	3
Stanford University School of Medicine	United States	—	3
Northern Kentucky University	United States	SCImago #9412	2
New York University	United States	SCImago #116 · THE =31 · QS 55	2
Deakin University	Australia	SCImago #607 · THE 201–250 · QS =207	2
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	2
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	2
Yale University	United States	SCImago #76 · THE 10 · QS 21	2
Maastricht University	Netherlands	SCImago #783 · THE =131 · QS 239	2
UNSW Sydney	Australia	SCImago #107 · THE 79 · QS 20	2

Institution	Country	World ranking	Citing papers
Shandong University	China	SCImago #79 · THE 251–300 · QS =339	2
Washington University School of Medicine	United States	—	2
University of Melbourne	Australia	SCImago #72 · THE 37 · QS 19	2
Ghent University	Belgium	SCImago #330 · THE 115 · QS 162	2

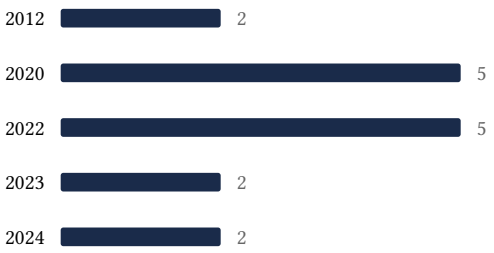
Geographic distribution of citing authors

Country	Citing papers
United States	42
China	15
Australia	10
Canada	9
United Kingdom	8
Netherlands	6
Germany	6
Italy	3
Spain	3
Belgium	2
Ireland	2
Sweden	2

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	A direct brainstem–amygdala–cortical 'alarm'system for subliminal signals of fear	5	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Causal interactions between fronto-parietal central executive and default-mode networks in humans	1	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Resting-state functional MRI: everything that nonexperts have always wanted to know	2	8 CFR 204.5(i)(3) — Outstanding Researcher