

# Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

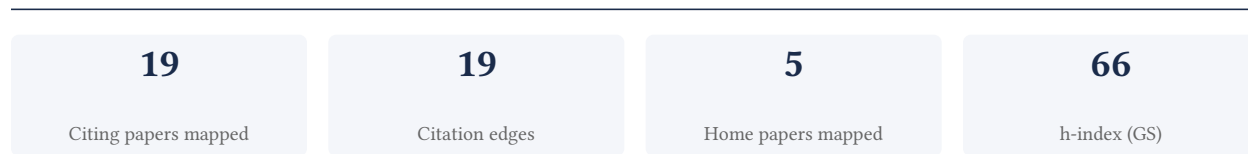
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[Google Scholar profile](#)

**Generated 2026-05-21 by CiteMap.** This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Criterion 5 (original contributions of major significance). 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



### 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.

**100.0% independent** of 19 classified citing papers

Citation type	Count
Independent	19
Self-citation	0
Co-author	0
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 that commensal microbiota is fundamental for the development of inflammatory pain, a finding supported by a seminal 2008 paper with 392 citations.*

The researcher's contribution centers on the seminal 2008 paper titled 'Commensal microbiota is fundamental for the development of inflammatory pain.' This work appears to have identified a critical link between gut bacteria and pain mechanisms, serving as the foundational piece in this specific line of inquiry.

This line of work appears to address a gap in understanding the biological origins of inflammatory pain by introducing the microbiome as a key factor. The title suggests a novel perspective that challenges or expands traditional views of pain pathology, positioning the microbiota not merely as a bystander but as a fundamental driver.

The significance of this contribution is evidenced by its 392 citations, indicating substantial uptake by the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has resonated widely across different institutions and has not been driven by self-citation or local collaboration.

#### INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

##### CORE PAPER

### [Commensal microbiota is fundamental for the development of inflammatory pain](#)

2008 · 392 citations (GS)

Field-normalised: 290 Semantic Scholar citations place it in the top 5% of Biology papers from 2008 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">The Microbiota-Gut-Brain Axis</a> (2019)	APC Microbiome Ireland, University College Cork	Ireland	—
2	<a href="#">From gut dysbiosis to altered brain function and mental illness: mechanisms and pathways</a> (2016)	South Australian Health and Medical Research Institute, SUNY Upstate Medical University	Australia, United States	—
3	<a href="#">Gut microbiota in health and disease.</a> (2010)	The University of British Columbia	Canada	Background
4	<a href="#">The progress of gut microbiome research related to brain disorders.</a> (2020)	Fudan University, Huashan Hospital, Fudan University, Karolinska Institutet	China, Sweden	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 2

### Claim – Contribution 2

*The researcher established evidence for using specific probiotic strains to prevent antibiotic-associated diarrhea in infants through a randomized controlled trial.*

The researcher’s contribution centers on a 2005 study investigating the efficacy of Bifidobacterium lactis and Streptococcus thermophilus in preventing antibiotic-associated diarrhea in infants. This work represents a focused clinical inquiry into probiotic interventions for a specific pediatric population.

This line of work appears to address the clinical challenge of managing gastrointestinal side effects of antibiotic therapy in vulnerable infant patients. By employing a randomized formula-controlled trial design, the researcher provided a rigorous methodological approach to evaluating these specific bacterial strains, distinguishing the study from observational or less controlled investigations.

The significance of this contribution is underscored by its substantial citation count of 355, indicating sustained interest in the field. Notably, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, suggesting that the findings have been widely adopted and validated by the broader scientific community rather than relying on self-citation or institutional bias.

#### INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

##### CORE PAPER

### [A randomized formula controlled trial of Bifidobacterium lactis and Streptococcus thermophilus for prevention of antibiotic-associated diarrhea in infants](#)

2005 - 353 citations (GS)

Field-normalised: 205 Semantic Scholar citations place it in the top 5% of Medicine papers from 2005 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#"><u>Gut microbiota in colorectal cancer development and therapy</u></a> (2023)	The Chinese University of Hong Kong	China	—
2	<a href="#"><u>The First Microbial Colonizers of the Human Gut: Composition, Activities, and Health Implications of the Infant Gut Microbiota</u></a> (2017)	Complutense University of Madrid, IPLA-CSIC, National University of Ireland, Cork	Finland, Ireland, Italy	Background
3	<a href="#"><u>Bifidobacteria and Their Role as Members of the Human Gut Microbiota</u></a> . (2016)	University College Cork	Ireland	Background
4	<a href="#"><u>Probiotics for the prevention of Clostridium difficile-associated diarrhea in adults and children</u></a> . (2017)	Bastyr University	United States	—
5	<a href="#"><u>Probiotics for the prevention of pediatric antibiotic-associated diarrhea</u></a> . (2019)	West China Second University Hospital	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).

### Contribution 3

#### Claim – Contribution 3

*The researcher established the essential role of intestinal microbiota in facilitating acute inflammatory responses, a foundational finding supported by a seminal 2004 paper with 323 citations.*

The researcher’s contribution centers on defining the critical function of intestinal microbiota in acute inflammatory responses. This work is anchored by a seminal 2004 publication that has accumulated 323 citations, indicating its status as a key reference in the field.

This line of work appears to address a fundamental gap in understanding host-microbe interactions during inflammation. By isolating the microbiota’s role, the researcher provided a novel perspective on immune mechanisms, distinguishing this contribution from prior studies that may have overlooked microbial influence.

The significance of this contribution is evidenced by its widespread adoption by the scientific community. With 323 citations, the work has clearly influenced subsequent research. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the findings have been validated and utilized by peers outside the researcher’s immediate network, underscoring the work’s broad impact and credibility.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

[The essential role of the intestinal microbiota in facilitating acute inflammatory responses](#)

2004 · 323 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">The role of inflammation in the development of epilepsy.</a> (2018)	Eastern Virginia Medical School	United States	—
2	<a href="#">Ischemia/Reperfusion</a> (2017)	University of Missouri School of Medicine	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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
National University of Ireland, Cork	Ireland	—	1
IPLA-CSIC	Spain	—	1
North Carolina Agricultural and Technical State University	United States	SCImago #4312	1
Washington University School of Medicine	United States	—	1
Baylor College of Medicine	United States	SCImago #560	1
Eastern Virginia Medical School	United States	SCImago #4940	1
Bastyr University	United States	—	1
University Medical Center Hamburg-Eppendorf	Germany	SCImago #743	1
Macquarie University	Australia	SCImago #1047 · THE =166 · QS =138	1
Université de Toulouse	France	SCImago #1059	1
Northwestern Polytechnical University	China	SCImago #203 · THE 251–300 · QS =499	1
University of Bordeaux	France	THE 401–500 · QS =494	1
Weizmann Institute of Science	Israel	SCImago #739	1

Institution	Country	World ranking	Citing papers
Complutense University of Madrid	Spain	SCImago #379 · THE 501–600 · QS =187	1
The University of British Columbia	Canada	SCImago #144 · THE 45 · QS 40	1

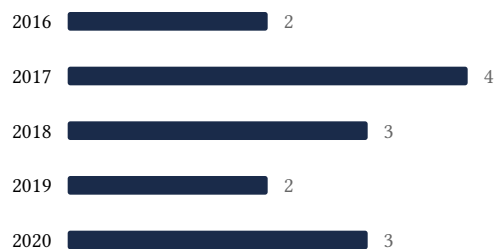
### Geographic distribution of citing authors

Country	Citing papers
United States	7
China	6
Ireland	3
France	3
Australia	2
Finland	1
Bangladesh	1
Germany	1
Iran	1
Israel	1
Italy	1
Netherlands	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	Commensal microbiota is fundamental for the development of inflammatory pain	4	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	A randomized formula controlled trial of Bifidobacterium lactis and Streptococcus thermophilus for prevention of antibiotic-associated diarrhea in infants	5	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	The essential role of the intestinal microbiota in facilitating acute inflammatory responses	2	8 CFR 204.5(h)(3)(v) – Criterion 5