Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

Bryn C. Taylor

Scientist, Computational Chemistry, Janssen

Google Scholar profile

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. 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

9	9	2	13
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.

100.0% independent of 9 classified citing papers

Citation type	Count
Independent	9
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 foundational best practices for microbiome analysis, a seminal contribution that has been widely adopted by independent researchers globally.

The researcher's primary contribution is the establishment of standardized best practices for analyzing microbiomes, as detailed in their 2018 paper. This work serves as the cornerstone of their cited output, with no subsequent follow-up papers listed in this specific line of inquiry, indicating the core paper stands alone as the definitive reference.

This line of work appears to address the critical need for methodological rigor and standardization in microbiome research. By defining best practices, the researcher likely provided a necessary framework to ensure reproducibility and accuracy in a field that may have previously lacked unified analytical protocols.

The significance of this contribution is evidenced by its high citation count of 2,170. Furthermore, analysis of citing papers reveals that 100% of classified 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: 6

CORE PAPER

Best practices for analysing microbiomes

2018 · 2,170 citations (GS)

Field-normalised: 1,465 Semantic Scholar citations place it in the top 1% of Biology papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The Microbiota-Gut-Brain Axis (2019)	APC Microbiome Ireland, University College Cork	Ireland	—
2	A practical guide to amplicon and metagenomic analysis of microbiome data (2020)	Children's Hospital, Zhejiang University School of Medicine, China Academy of Chinese Medical Sciences, Institute of Genetics and Developmental Biology, Chinese Academy of Sciences	China	Background
3	Gut microbiota-derived metabolites as key actors in inflammatory bowel disease (2020)	Sorbonne Université	France	—
4	The gut microbiota–brain axis in neurological disorder (2023)	China University of Geosciences, Hazara University Mansehra, Ministry of Agriculture	China, Pakistan	Background
5	Microbiome definition re-visited: old concepts and new challenges (2020)	Agricultural University of Athens, Agriculture and Agri-Food Canada, AIT Austrian Institute of Technology	Austria, Belgium, Canada	Background
6	The microbiome(s) and cancer: know thy neighbor(s) (2021)	H. Lee Moffitt Cancer Center and Research Institute	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 established a causal link between gut microbiota from individuals with autism spectrum disorder and behavioral symptoms in mice, a finding published in Cell with over 1,300 citations.

CLAIM: The researcher's primary contribution is the demonstration that human gut microbiota associated with autism spectrum disorder can promote behavioral symptoms in mouse models. This work is anchored by a seminal 2019 paper published in Cell, which has accumulated 1,370 citations, indicating substantial recognition within the scientific community.

ORIGINALITY: This line of work appears to address the critical gap in understanding the mechanistic role of the gut-brain axis in neurodevelopmental disorders. By utilizing a translational approach involving human microbiota and animal models, the research suggests a novel pathway for investigating the biological underpinnings of autism-related behaviors, moving beyond correlational observations to experimental causality.

SIGNIFICANCE: The high citation count reflects the work's impact on the field. Notably, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, rather than the author's own institution or collaborators. This widespread independent uptake underscores the broad relevance and foundational nature of the findings for the global research community.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

Human Gut Microbiota from Autism Spectrum Disorder Promote Behavioral Symptoms in Mice

2019 · Cell · 1,370 citations (GS)

Field-normalised: 971 Semantic Scholar citations place it in the top 1% of Medicine papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Microbiota–gut–brain axis and its therapeutic applications in neurodegenerative diseases (2024)	Monash University Malaysia, Taylor's University, University College London	Malaysia, United Kingdom	—
2	The Role of Short-Chain Fatty Acids From Gut Microbiota in Gut-Brain Communication (2020)	Oswaldo Cruz Institute, Oswaldo Cruz Foundation	Brazil	Background
3	Gastrointestinal and brain barriers: unlocking gates of communication across the microbiota–gut–brain axis (2024)	University College Cork	Ireland	—

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
University of Waterloo	Canada	SCImago #491 · THE =162 · QS =119	1
Sichuan University	China	SCImago #32 · THE 201–250 · QS =324	1
University of Vienna	Austria	THE =95 · QS 152	1
Pacific Northwest National Laboratory	United States	SCImago #1240	1
H. Lee Moffitt Cancer Center and Research Institute	United States	SCImago #838	1
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	1
University College London	United Kingdom	SCImago #30	1
Sorbonne Université	France	SCImago #138	1
Tallinn University of Technology	Estonia	SCImago #4194 · THE 601–800 · QS =635	1
Helmholtz Zentrum München	Germany	—	1
Guizhou University	China	SCImago #1456	1
Agriculture and Agri-Food Canada	Canada	SCImago #1119	1
University College Cork	Ireland	SCImago #1176 · THE 351–400 · QS 246	1
Institute of Genetics and Developmental Biology, Chinese Academy of Sciences	China	SCImago #623	1
China University of Geosciences	China	SCImago #402 · QS 851-900	1

Geographic distribution of citing authors

Country	Citing papers
China	3
France	2
Ireland	2
United Kingdom	2
United States	2
Estonia	1
Austria	1
Greece	1
Malaysia	1
Netherlands	1
Pakistan	1
Portugal	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	Best practices for analysing microbiomes	6	Dhanasar — Prong 2 (well-positioned)

Contribution	Core paper	Indep. cites	Supports
Contribution 2	Human Gut Microbiota from Autism Spectrum Disorder Promote Behavioral Symptoms in Mice	3	Dhanasar — Prong 2 (well-positioned)