

# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

## Ran Blekhman

Professor, University of Chicago

[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	49
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 a foundational link between human genetics and gut microbiome composition through a seminal 2014 study that has garnered extensive independent scholarly attention.*

**CLAIM:** The researcher’s primary contribution is the identification of how human genetics shape the gut microbiome, anchored by a core 2014 publication. This work stands as a singular, high-impact contribution without subsequent follow-up papers by the same author in this specific line of inquiry.

**ORIGINALITY:** The title suggests a novel investigation into the interplay between host genetic factors and microbial communities. By focusing on this intersection, the work appears to address a critical gap in understanding the biological determinants of microbiome variation, distinguishing genetic influence from environmental factors.

**SIGNIFICANCE:** The core paper has accumulated 3,743 citations, indicating substantial influence within the field. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has been widely adopted and validated by the broader scientific community rather than relying on self-citation or institutional echo chambers.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

#### CORE PAPER

### [Human genetics shape the gut microbiome](#)

2014 · 3,743 citations (GS)

Field-normalised: 2,728 Semantic Scholar citations place it in the top 1% of Biology papers from 2014 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="#">The human intestinal microbiome in health and disease</a> . (2016)	University of California, San Francisco, University of Copenhagen	Denmark, United States	—
3	<a href="#">Environmental factors shaping the gut microbiome in a Dutch population</a> (2022)	University Medical Center Groningen, University of Groningen and University Medical Center Groningen	Netherlands	—
4	<a href="#">Microbiome and Human Health: Current Understanding, Engineering, and Enabling Technologies</a> (2023)	National University of Singapore	Singapore	—
5	<a href="#">Akkermansia muciniphila: biology, microbial ecology, host interactions and therapeutic potential</a> (2024)	Wageningen University and Research	Netherlands	—
6	<a href="#">Key determinants of success in fecal microbiota transplantation: From microbiome to clinic</a> (2023)	Fondazione Policlinico Universitario Agostino Gemelli IRCCS, French Fecal Transplant Group (GFTF), Hospices Civils de Lyon	France, Italy	—

Independent citing papers only; self- and co-author citations excluded. The S2 column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2’s isInfluential signal, Valenzuela et al. 2015) — the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

## Contribution 2

### Claim – Contribution 2

*The researcher established that host genetic variation significantly influences microbiome composition across diverse human body sites, a foundational finding published in Genome Biology.*

CLAIM: The researcher’s primary contribution is the demonstration that host genetics play a critical role in shaping microbiome composition across various human body sites, as detailed in the 2015 Genome Biology paper.

ORIGINALITY: This work appears to address a key gap by linking host genetic factors to microbiome diversity across multiple body sites, moving beyond single-site analyses to provide a broader, systemic understanding of host-microbiome interactions.

SIGNIFICANCE: With 922 citations, the paper is highly influential. Notably, 100% of the classified citing papers originate from independent researchers, indicating that the scientific community widely recognizes and builds upon this foundational insight without reliance on the original author’s network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

### CORE PAPER

#### [Host genetic variation impacts microbiome composition across human body sites](#)

2015 · Genome Biology · 922 citations (GS)

Field-normalised: 680 Semantic Scholar citations place it in the top 1% of Biology papers from 2015 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Large-scale association analyses identify host factors influencing human gut microbiome composition</a> (2021)	Avera McKennan Hospital & University Health Center, Chinese Academy of Sciences, Christian-Albrechts-University of Kiel	Belgium, Canada, China	—
2	<a href="#">Environment dominates over host genetics in shaping human gut microbiota</a> (2018)	Tel Aviv Sourasky Medical Center, The Hebrew University of Jerusalem, University of Groningen, University Medical Center Groningen	Israel, Netherlands	—
3	<a href="#">The gut microbiome: Relationships with disease and opportunities for therapy</a> (2019)	University of California, San Francisco	United States	—

Independent citing papers only; self- and co-author citations excluded. The S2 column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2’s isInfluential signal, Valenzuela et al. 2015) — the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
University of California, San Francisco	United States	SCImago #98	2
University of Copenhagen	Denmark	SCImago #177 · THE 90 · QS 101	2

Institution	Country	World ranking	Citing papers
University of Groningen, University Medical Center Groningen	Netherlands	—	2
Weizmann Institute of Science	Israel	SCImago #739	2
University Medical Center Groningen	Netherlands	SCImago #448	2
Wageningen University and Research	Netherlands	THE 66 · QS =153	1
National University of Singapore	Singapore	SCImago #59 · THE 17 · QS 8	1
Chinese Academy of Sciences	China	SCImago #2	1
University of Tartu	Estonia	SCImago #1820 · THE 301–350 · QS =362	1
Erasmus MC University Medical Center	Netherlands	—	1
Institute for Genetic and Biomedical Research, National Research Council	Italy	—	1
KU Leuven	Belgium	SCImago #180 · THE 46 · QS 60	1
The Hebrew University of Jerusalem	Israel	SCImago #1097 · THE 251–300 · QS =240	1
Institute of Microbiology, Chinese Academy of Sciences	China	SCImago #517	1
Hospices Civils de Lyon	France	SCImago #1120	1

### Geographic distribution of citing authors

Country	Citing papers
Netherlands	4
United States	3
Denmark	2
Israel	2
Italy	2
Germany	1
Belgium	1
Singapore	1
South Korea	1
United Kingdom	1
Ireland	1
Canada	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.

2019 ████████████████████ 2

## 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	Human genetics shape the gut microbiome	6	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Host genetic variation impacts microbiome composition across human body sites	3	Dhanasar – Prong 2 (well-positioned)