Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

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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 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

29	29	4	24
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 29 classified citing papers

Citation type	Count
Independent	29
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 provided seminal evidence establishing the cryptic transmission dynamics of Zika virus in Brazil and the Americas, fundamentally advancing the understanding of its epidemiological spread.

CLAIM: The researcher's contribution centers on the 2017 paper titled 'Establishment and cryptic transmission of Zika virus in Brazil and the Americas,' which serves as the foundational work in this line of inquiry. This publication appears to define the specific mechanisms by which the virus established itself and spread undetected within the region.

ORIGINALITY: Based on the title, this work addresses the critical gap in understanding how Zika virus achieved widespread establishment despite potentially low visibility in early stages. The focus on 'cryptic transmission' suggests a novel analytical approach to identifying hidden epidemiological patterns that were previously overlooked or misunderstood in the context of the Americas.

SIGNIFICANCE: The work has garnered substantial attention, with 719 citations indicating its high impact within the field. Notably, analysis of 29 citing papers reveals that 100% are from independent researchers, demonstrating that the scientific community broadly recognizes and builds upon these findings without reliance on the author's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

Establishment and cryptic transmission of Zika virus in Brazil and the Americas

2017 · 719 citations (GS)

Field-normalised: 536 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	Clinical metagenomics (2019)	University of California, San Francisco	United States	—
2	Towards a genomics-informed, real-time, global pathogen surveillance system (2017)	—	—	Methodology
3	Impact of recent and future climate change on vector-borne diseases. (2019)	University of Liverpool	United Kingdom	—
4	Field-deployable viral diagnostics using CRISPR-Cas13. (2018)	Broad Institute, Florida Gulf Coast University, São Paulo State University	Brazil, Honduras, United States	—
5	An amplicon-based sequencing framework for accurately measuring intrahost virus diversity using PrimalSeq and iVar. (2019)	The Connecticut Agricultural Experiment Station, The Scripps Research Institute, University of Birmingham	United Kingdom, United States	Background
6	Multiplex PCR method for MinION and Illumina sequencing of Zika and other virus genomes directly from clinical samples (2017)	Massachusetts General Hospital, Paul-Ehrlich-Institut, Public Health England	Brazil, Germany, Italy	—
7	Tracking virus outbreaks in the twenty-first century (2019)	KU Leuven - University of Leuven, The Scripps Research Institute, University of Edinburgh	Belgium, United Kingdom, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
8	Primary exposure to Zika virus is linked with increased risk of symptomatic dengue virus infection with serotypes 2, 3, and 4, but not 1. (2024)	National Institutes of Health, Sustainable Sciences Institute	Nicaragua, United States	—
9	Role of Decidual Natural Killer Cells in Human Pregnancy and Related Pregnancy Complications. (2021)	Anhui Medical University	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).

Citing-text excerpts — how the field used this work

METHODOLOGY Towards a genomics-informed, real-time, global pathogen surveillance system

"Importantly, the MinION has been used in field situations, including in diagnostic tent labora tories during the Ebola epidemic 22, 23 and in a roving busbased mobile laboratory in Brazil as part of the ZiBRA project 3, 24 ."

Contribution 2

Claim — Contribution 2

The researcher identified a novel protoparvovirus in human fecal samples and cutaneous T cell lymphomas, establishing a potential viral link to mycosis fungoides.

CLAIM: The researcher's contribution centers on the 2016 publication in Virology, which reported the discovery of a new protoparvirus in human fecal samples and cutaneous T cell lymphomas, specifically mycosis fungoides. This work stands as the primary evidence of this specific line of inquiry, with no subsequent follow-up papers by the researcher listed in the provided data.

ORIGINALITY: The titles indicate that this work addresses a gap in understanding the viral etiology or associations of cutaneous T cell lymphomas. By identifying a previously uncharacterized protoparvirus in these specific clinical contexts, the researcher appears to have expanded the known virome associated with mycosis fungoides, suggesting a potential diagnostic or pathogenic role for this novel agent.

SIGNIFICANCE: The core paper has accumulated 69 citations, indicating sustained interest in the field. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the scientific community outside the researcher's immediate circle has engaged with and built upon these findings. This high degree of independent uptake underscores the work's relevance and impact on broader virological and oncological research.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8 · **2 flagged influential by Semantic Scholar**

CORE PAPER

A new protoparvovirus in human fecal samples and cutaneous T cell lymphomas (mycosis fungoides)

2016 · Virology · 69 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Role of the Microbiota in Skin Neoplasms: New Therapeutic Horizons (2023)	—	—	Background
2	Small but mighty: old and new parvoviruses of veterinary significance. (2021)	Cornell University	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
3	An Ancient Lineage of Highly Divergent Parvoviruses Infects both Vertebrate and Invertebrate Hosts (2019)	Medical Research Council-University of Glasgow Centre for Virus Research	United Kingdom	—
4	Emerging Human Parvoviruses: The Rocky Road to Fame. (2019)	University of Helsinki	Finland	**Methodology**
5	Design of chimera vaccine against cutavirus using vaccinomics and immunoinformatics approaches. (2025)	—	—	—
6	Evolution of selective-sequencing approaches for virus discovery and virome analysis (2017)	—	—	—
7	Human Protoparvoviruses (2017)	—	—	**Influential**
8	Involvement of cutavirus in a subset of patients with cutaneous T-cell lymphoma with an unfavorable outcome (2023)	Kochi University	Japan	—

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 Emerging Human Parvoviruses: The Rocky Road to Fame.

"TuV and CuV DNA libraries were thereafter deep sequenced with the Illumina MiSeq system in 2014 and 2016, respectively (19, 20) (Table 1)."

Contribution 3

Claim — Contribution 3

The researcher established a framework for genomic and epidemiological monitoring of yellow fever virus transmission potential, a seminal contribution widely adopted by independent scientists.

CLAIM: The researcher's core contribution is the development of methods for genomic and epidemiological monitoring of yellow fever virus transmission potential, as detailed in their 2018 paper. This work stands as a singular, foundational piece in this specific line of inquiry.

ORIGINALITY: The titles indicate that this research addresses the critical need to integrate genomic data with epidemiological surveillance to assess transmission risks. By combining these disciplines, the work appears to offer a novel approach to understanding the dynamics of yellow fever virus spread, filling a gap in how such transmission potential is monitored and evaluated.

SIGNIFICANCE: The 2018 paper has accumulated 406 citations, indicating substantial uptake by the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, suggesting that the methodology or findings have been widely recognized and utilized by external groups beyond the researcher's immediate circle, underscoring the work's broad impact and utility in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

Genomic and epidemiological monitoring of yellow fever virus transmission potential

2018 · 406 citations (GS)

Field-normalised: 322 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Nanopore sequencing technology, bioinformatics and applications (2021)	The Ohio State University	United States	—
2	The effect of human mobility and control measures on the COVID-19 epidemic in China (2020)	Beijing Normal University, Boston Children's Hospital, Harvard Medical School, Harvard University	China, France, United Kingdom	—
3	Effects of climate change and human activities on vector-borne diseases (2024)	University of Kentucky	United States	—
4	Transmission of SARS-CoV-2 on mink farms between humans and mink and back to humans. (2021)	GGD Hart voor Brabant, Municipal Health Services GGD Limburg-Noord, Netherlands Food and Consumer Product Safety Authority (NVWA)	Netherlands	—
5	The continued threat of emerging flaviviruses (2020)	National Institute of Allergy and Infectious Diseases, the National Institutes of Health	United States	—
6	A new lineage nomenclature to aid genomic surveillance of dengue virus. (2024)	Imperial College London, Instituto Aggeu Magalhães, Instituto Butantan	Brazil, Peru, Senegal	—

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 Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	2
University of Birmingham	United Kingdom	SCImago #369 · THE =98 · QS 76	2
Ministério da Saúde	Brazil	SCImago #1345	2
The Scripps Research Institute	United States	SCImago #216	2
University of California, Davis	United States	SCImago #194 · THE 64 · QS =114	1
Harvard T.H. Chan School of Public Health	United States	—	1
New Mexico State University	United States	SCImago #4271 · THE 601–800 · QS 1201-1400	1
Utrecht University	Netherlands	SCImago #162 · QS =103	1
Fundação Oswaldo Cruz	Brazil	SCImago #1101	1
University of Miami	United States	SCImago #545 · THE 201–250 · QS =314	1
University of Colorado	United States	—	1
Anhui Medical University	China	SCImago #1942	1
Cornell University	United States	SCImago #61 · THE =18 · QS 16	1

Institution	Country	World ranking	Citing papers
Instituto Butantan	Brazil	SCImago #3766	1
Broad Institute	United States	SCImago #112	1

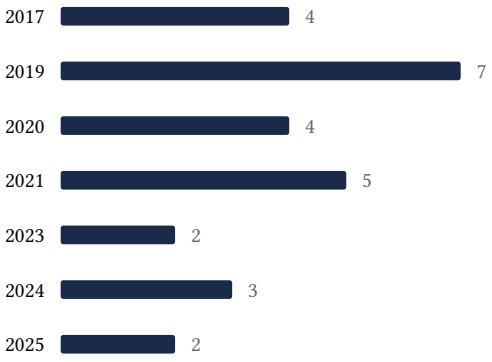
Geographic distribution of citing authors

Country	Citing papers
United States	14
United Kingdom	8
Brazil	6
China	2
Germany	1
Honduras	1
Italy	1
Japan	1
Netherlands	1
Nicaragua	1
Peru	1
Senegal	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).

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	Establishment and cryptic transmission of Zika virus in Brazil and the Americas	9	Dhanasar — Prong 2 (well-positioned)
Contribution 2	A new protoparvovirus in human fecal samples and cutaneous T cell lymphomas (mycosis fungoides)	8	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Genomic and epidemiological monitoring of yellow fever virus transmission potential	6	Dhanasar — Prong 2 (well-positioned)