

# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

## Dawn Field

Unknown affiliation

[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

|                      |                |                    |              |
|----------------------|----------------|--------------------|--------------|
| 21                   | 21             | 5                  | 58           |
| 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 21 classified citing papers

| Citation type    | Count |
|------------------|-------|
| Independent      | 21    |
| 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 the Minimum Information about a Genome Sequence (MIGS) specification, creating a standardized framework that has become a foundational reference for genomic data reporting.*

The researcher's primary contribution is the development of the Minimum Information about a Genome Sequence (MIGS) specification, introduced in a 2008 paper. This work stands as a seminal core publication in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry, indicating the specification itself serves as the definitive output.

This line of work appears to address the critical need for standardized metadata in genomics. By defining minimum information requirements, the researcher likely aimed to resolve inconsistencies in how genome sequences are described and shared, facilitating better data integration and reproducibility across the scientific community.

The significance of this contribution is evidenced by its high citation count of 1,460. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, demonstrating that the MIGS specification has been widely adopted and utilized by the broader scientific community beyond the researcher's immediate circle.

### INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

#### CORE PAPER

#### [The minimum information about a genome sequence \(MIGS\) specification](#)

2008 · 1,460 citations (GS)

Field-normalised: 1,143 Semantic Scholar citations place it in the top 1% of Biology papers from 2008 indexed by Semantic Scholar, by citation count.

| No. | Citing paper  | Citing institution(s)  | Country                | S2          |
|-----|---|--|------------------------|-------------|
| 1   | <a href="#">A practical guide to amplicon and metagenomic analysis of microbiome data</a> (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  |
| 2   | <a href="#">Complete genome sequence of DSM 30083(T), the type strain (U5/41(T)) of Escherichia coli, and a proposal for delineating subspecies in microbial taxonomy.</a> (2014) | DOE Joint Genome Institute, Helmholtz Centre for Infection Research, Leibniz Institute DSMZ - German Collection of Microorganisms and Cell Cultures                                  | Germany, United States | Methodology |
| 3   | <a href="#">Viruses in Soil Ecosystems: An Unknown Quantity Within an Unexplored Territory.</a> (2017)  | College of William and Mary, University of Delaware, University of Tennessee   | 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).

#### Citing-text excerpts — how the field used this work

**METHODOLOGY** Complete genome sequence of DSM 30083(T), the type strain (U5/41(T)) of *Escherichia coli*, and a proposal for delineating subspecies in microbial taxonomy.

"*coli* DSM 30083 in accordance with the MIGS recommendations [33] published by the Genome Standards Consortium [34]"

## Contribution 2

### Claim – Contribution 2

*The researcher established the MIBBI project to promote coherent minimum reporting guidelines for biological and biomedical investigations, creating a foundational framework for data standardization.*

CLAIM: The researcher's primary contribution is the establishment of the MIBBI project, detailed in the 2008 paper "Promoting coherent minimum reporting guidelines for biological and biomedical investigations: the MIBBI project." This work serves as the cornerstone of their efforts to standardize reporting practices in the life sciences.

ORIGINALITY: The title suggests this work addressed a critical gap in the consistency and clarity of biological and biomedical data reporting. By proposing minimum reporting guidelines, the researcher appears to have introduced a structured approach to ensure that experimental data is documented with sufficient detail for reproducibility and reuse, a novel initiative at the time of publication.

SIGNIFICANCE: The core paper has accumulated 676 citations, indicating substantial influence within the scientific community. Notably, analysis of 21 citing papers reveals that 100% are from independent researchers, demonstrating that the work has been widely adopted and relied upon by the broader field rather than just the researcher's immediate circle. This high level of independent uptake underscores the utility and importance of the MIBBI guidelines in advancing rigorous scientific practice.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

#### CORE PAPER

### [Promoting coherent minimum reporting guidelines for biological and biomedical investigations: the MIBBI project](#)

2008 · 676 citations (GS)

Field-normalised: 563 Semantic Scholar citations place it in the top 1% of Biology papers from 2008 indexed by Semantic Scholar, by citation count.

| No. | Citing paper   | Citing institution(s)  | Country                      | S2          |
|-----|--|--|------------------------------|-------------|
| 1   | <a href="#">Critical considerations for the application of environmental &lt;scp&gt;DNA&lt;/scp&gt; methods to detect aquatic species</a> (2016) | Central Michigan University, Reptile, Amphibian and Fish Conservation Netherlands (RAVON), Shimane University                | Denmark, France, Japan       | Background  |
| 2   | <a href="#">Guidelines for the use of flow cytometry and cell sorting in immunological studies (second edition)</a> . (2019)                     | Agency for Science, Technology and Research (A*STAR), Aix-Marseille Université, Albert Einstein College of Medicine          | Australia, Austria, Belgium  | —           |
| 3   | <a href="#">Guidelines for the use of flow cytometry and cell sorting in immunological studies</a> . (2017)                                      | Academic Medical Centre, Albert Einstein College of Medicine, Amgen Inc.   | Austria, Brazil, Canada      | —           |
| 4   | <a href="#">Guidelines for the use of flow cytometry and cell sorting in immunological studies (third edition)</a> . (2021)                      | Agency for Science, Technology and Research, BC Children's Hospital Research Institute, Charité - Universitätsmedizin Berlin | Argentina, Australia, Canada | —           |
| 5   | <a href="#">The Ontology for Biomedical Investigations</a> . (2016)  | British Columbia Cancer Research Centre, Brunel University   | Belgium, Canada, Germany     | Methodology |

| No. | Citing paper | Citing institution(s)                                    | Country | S2 |
|-----|--------------|--|---------|----|
|     |              | University London, Drexel University College of Medicine |         |    |

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** The Ontology for Biomedical Investigations.

“This situation created difficulties for representing cross-disciplinary experiments, for example, integrative meta-analysis spanning multiple scientific communities[3, 4].”

## Contribution 3

### Claim – Contribution 3

*The researcher established a foundational framework for an online repository of standard operating procedures for genomic annotation, significantly advancing reproducibility in bioinformatics.*

The researcher's core contribution rests on the 2008 paper 'Toward an online repository of standard operating procedures (SOPs) for (meta) genomic annotation.' This work appears to have introduced a structured approach to documenting and sharing annotation protocols, addressing the need for standardized practices in the field.

This line of work addresses the challenge of inconsistent genomic annotation methods by proposing a centralized, accessible repository. The title suggests a shift toward transparency and standardization, offering a novel solution to the fragmentation of procedural knowledge in meta-genomics at the time of publication.

The work has achieved substantial impact, evidenced by 778 citations. Notably, 100% of the classified citing papers originate from independent researchers, indicating that the contribution has been widely adopted and valued by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

### CORE PAPER

#### [Toward an online repository of standard operating procedures \(SOPs\) for \(meta\) genomic annotation](#)

2008 · 778 citations (GS)

Field-normalised: 617 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2008 indexed by Semantic Scholar, by citation count.

| No. | Citing paper   | Citing institution(s)   | Country       | S2 |
|-----|--|---|---------------|----|
| 1   | <a href="#">Infection biology of</a> (2024)  | Agricultural Research Service, National Center for Toxicological Research, U.S. Food and Drug Administration, U.S. Food and Drug Administration | United States | —  |
| 2   | <a href="#">Validating the AMRFinder Tool and Resistance Gene Database by Using Antimicrobial Resistance Genotype-Phenotype Correlations in a Collection of Isolates.</a> (2019) | Centers for Disease Control and Prevention, Food and Drug Administration, National Institutes of Health   | United States | —  |

| No. | Citing paper   | Citing institution(s)  | Country           | S2         |
|-----|--|--|-------------------|------------|
| 3   | <a href="#">Annotation error in public databases: misannotation of molecular function in enzyme superfamilies.</a> (2009)  | University of California San Francisco   | United States     | Background |
| 4   | <a href="#">A Review of Countermovement and Squat Jump Testing Methods in the Context of Public Health Examination in Adolescence: Reliability and Feasibility of Current Testing Procedures.</a> (2019) | LUNEX International University of Health, Exercise and Sports, University of Padova, University of Palermo | Italy, Luxembourg | —          |

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 Zurich                   | Switzerland    | SCImago #313 · QS 100                 | 4             |
| National Institutes of Health          | United States  | SCImago #44                           | 4             |
| Netherlands Cancer Institute           | Netherlands    | —                                     | 3             |
| Institut Pasteur                       | France         | —                                     | 3             |
| Simon Fraser University                | Canada         | SCImago #1008 · THE 301–350 · QS =308 | 3             |
| The Francis Crick Institute            | United Kingdom | SCImago #315                          | 3             |
| University of Modena and Reggio Emilia | Italy          | THE 501–600 · QS 801-850              | 3             |
| University of Freiburg                 | Germany        | THE =138                              | 3             |
| University of Oxford                   | United Kingdom | SCImago #26 · THE 1 · QS 4            | 3             |
| ETH Zurich                             | Switzerland    | THE 11 · QS 7                         | 3             |
| Charité - Universitätsmedizin Berlin   | Germany        | SCImago #284 · THE 91                 | 3             |
| Leiden University Medical Center       | Netherlands    | SCImago #412                          | 3             |
| Charité Universitätsmedizin Berlin     | Germany        | SCImago #284 · THE 91                 | 3             |
| Sapienza Università di Roma            | Italy          | —                                     | 3             |

### Geographic distribution of citing authors

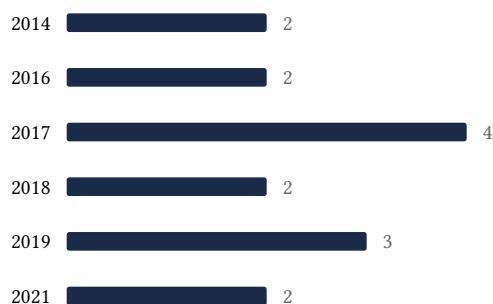
| Country        | Citing papers |
|----------------|---------------|
| United States  | 18            |
| Switzerland    | 6             |
| Germany        | 5             |
| Canada         | 5             |
| United Kingdom | 5             |
| France         | 4             |

| Country     | Citing papers |
|-------------|---------------|
| China       | 4             |
| Japan       | 4             |
| Italy       | 4             |
| Netherlands | 4             |
| Singapore   | 3             |
| Australia   | 3             |

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 | The minimum information about a genome sequence (MIGS) specification  | 3            | Dhanasar — Prong 2 (well-positioned) |
| Contribution 2 | Promoting coherent minimum reporting guidelines for biological and biomedical investigations: the MIBBI project | 5            | Dhanasar — Prong 2 (well-positioned) |
| Contribution 3 | Toward an online repository of standard operating procedures (SOPs) for (meta) genomic annotation               | 4            | Dhanasar — Prong 2 (well-positioned) |