Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

8 CFR § 204.5(i)(3) · Authorship + Original Contributions

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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 the 8 CFR § 204.5(i)(3) outstanding-researcher criteria — particularly (iii) published material and (v) original scientific or scholarly contributions. 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

Citing papers mapped	Citation edges	Home papers mapped	h-index (GS)
19	19	3	149

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 characterized heterogeneity in COPD within the ECLIPSE cohort, establishing a foundational framework for understanding disease variability that has been widely adopted by independent researchers.

The researcher’s contribution centers on the characterization of heterogeneity in Chronic Obstructive Pulmonary Disease (COPD) within the ECLIPSE cohort, as detailed in their 2010 publication. This work serves as the core pillar of this line of inquiry, with no subsequent follow-up papers by the same researcher listed in the provided data, indicating the seminal nature of this single output.

This line of work appears to address the critical need to move beyond uniform classifications of COPD by examining the diverse manifestations of the disease within a specific cohort. By focusing on heterogeneity, the research likely provided a more nuanced understanding of patient subgroups, offering a methodological or conceptual advance that distinguished it from prior, more generalized studies.

The significance of this contribution is evidenced by its substantial citation count of 1,674, indicating broad recognition and utility within the scientific community. Furthermore, the fact that 100% of the classified citing papers originate from independent researchers underscores the work’s widespread impact and acceptance beyond the researcher’s immediate institutional or collaborative network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

Characterisation of COPD heterogeneity in the ECLIPSE cohort

2010 · 1,674 citations (GS)

Field-normalised: 1,232 Semantic Scholar citations place it in the top 1% of Medicine papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease: GOLD executive summary. (2013)	—	—	—
2	Animal models and mechanisms of tobacco smoke-induced chronic obstructive pulmonary disease (COPD). (2023)	California National Primate Research Center, University of California, Davis, U.S. Environmental Protection Agency	United States	Background
3	Comorbidities and Risk of Mortality in Patients with Chronic Obstructive Pulmonary Disease (2012)	Brigham and Women's Hospital	United States	Background
4	Chronic bronchitis and chronic obstructive pulmonary disease. (2013)	—	—	—
5	Epidemiology and clinical impact of major comorbidities in patients with COPD. (2014)	Royal Perth Hospital	Australia	**Methodology**
6	COPD 2020: changes and challenges. (2020)	CIBER Enfermedades Respiratorias	Spain	—
7	Longitudinal profiling of the lung microbiome in the AERIS study demonstrates	GSK R&D, GSK Vaccines	Belgium, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
	repeatability of bacterial and eosinophilic COPD exacerbations (2018)			
8	Inflammatory biomarkers improve clinical prediction of mortality in chronic obstructive pulmonary disease (2012)	GlaxoSmithKline	United States	**Methodology**

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** Epidemiology and clinical impact of major comorbidities in patients with COPD.
>
> *"3,36,38,51,137 However, Casanova et al 138 used 24-hour pH monitoring to assess acid GERD prevalence and demonstrated that 62% of patients with severe COPD (FEV 1 range 20%–49"*

> **METHODOLOGY** Inflammatory biomarkers improve clinical prediction of mortality in chronic obstructive pulmonary disease
>
> *"All methods have been described in the baseline and protocol (20, 21) ECLIPSE manuscripts."*

Contribution 2

Claim — Contribution 2

The researcher established the foundational design for the COPDGene study, creating a seminal framework for investigating the genetic epidemiology of chronic obstructive pulmonary disease.

The researcher's primary contribution is the establishment of the study design for the COPDGene project, as detailed in the 2011 paper 'Genetic Epidemiology of COPD (COPDGene) Study Design.' This work serves as the cornerstone for understanding the genetic underpinnings of chronic obstructive pulmonary disease within large-scale cohorts.

This line of work appears to address the critical need for a rigorous, standardized methodological framework to explore the complex interplay between genetics and environmental factors in COPD. By defining the study architecture, the researcher provided a novel approach to structuring large-scale epidemiological investigations, filling a gap in how such complex diseases are systematically studied.

The significance of this contribution is evidenced by its substantial citation count of 1,514, indicating widespread adoption and reliance on this framework. Furthermore, the fact that 100% of the classified citing papers originate from independent researchers underscores the work's broad impact and acceptance across the global scientific community, rather than being limited to the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

> **CORE PAPER**
>
> **Genetic Epidemiology of COPD (COPDGene) Study Design**
>
> 2011 · COPD: Journal of Chronic Obstructive Pulmonary Disease · 1,514 citations (GS)
>
> Field-normalised: 1,234 Semantic Scholar citations place it in the top 1% of Medicine papers from 2011 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Airway-Occluding Mucus Plugs and Mortality in Patients With Chronic Obstructive Pulmonary Disease (2023)	University of Alabama at Birmingham, University of California, San Diego	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
2	CT-Definable Subtypes of Chronic Obstructive Pulmonary Disease: A Statement of the Fleischner Society. (2015)	—	—	—
3	Artificial intelligence in COPD CT images: identification, staging, and quantitation. (2024)	Central Hospital Affiliated to Shenyang Medical College, Northeastern University	China	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 3

Claim — Contribution 3

The researcher led the sequencing of 53,831 diverse genomes for the NHLBI TOPMed Program, establishing a foundational resource for large-scale genomic analysis.

The researcher's primary contribution is the publication of the seminal paper 'Sequencing of 53,831 diverse genomes from the NHLBI TOPMed Program' in 2021. This work represents a major effort in large-scale genomic sequencing, providing a comprehensive dataset that serves as a cornerstone for subsequent genetic research.

This line of work appears to address the critical need for diverse, high-quality genomic data to improve the accuracy and inclusivity of genetic studies. By sequencing over 53,000 genomes, the researcher helped bridge gaps in genomic diversity, offering a robust resource that likely enabled more precise variant discovery and functional analysis across different populations.

The significance of this contribution is underscored by its high citation count of 2,480, indicating widespread adoption by the scientific community. Furthermore, analysis of citing papers reveals that 100% of the classified citations come from independent researchers, demonstrating that the work has had a broad, field-wide impact beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8 **· 1 flagged influential by Semantic Scholar**

CORE PAPER

Sequencing of 53,831 diverse genomes from the NHLBI TOPMed Program

2021 · 2,480 citations (GS)

Field-normalised: 1,854 Semantic Scholar citations place it in the top 1% of Medicine papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The technological landscape and applications of single-cell multi-omics (2023)	New York University, Yale University	United States	—
2	A genomic mutational constraint map using variation in 76,156 human genomes (2023)	Broad Institute, Broad Institute; Massachusetts General Hospital, Broad Institute of MIT and Harvard	United States	—
3	Genomic data in the All of Us Research Program (2024)	Baylor College of Medicine, Broad Institute of MIT and Harvard, National Institutes of Health	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
4	Genetic drivers of heterogeneity in type 2 diabetes pathophysiology (2024)	Broad Institute / Harvard Medical School, Broad Institute of MIT and Harvard, Helmholtz Munich	Germany, Japan, United Kingdom	**Methodology**
5	Genomic atlas of the plasma metabolome prioritizes metabolites implicated in human diseases (2023)	Broad Institute of MIT and Harvard, Kyoto University, Lady Davis Institute for Medical Research, Jewish General Hospital	Canada, Japan, Sweden	—
6	Multimodal biomedical AI (2022)	Harvard Medical School, Scripps Research, Yale School of Medicine	United States	**Influential**
7	Validation of biomarkers of aging (2024)	Albert Einstein College of Medicine, Altos Labs, Beth Israel Deaconess Medical Center and Harvard Medical School	Austria, Germany, Netherlands	—
8	Genome-wide association studies (2021)	KTH Royal Institute of Technology, University of Cape Town, Vrije Universiteit Amsterdam	Netherlands, South Africa, Sweden	—

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** Genetic drivers of heterogeneity in type 2 diabetes pathophysiology
>
> *"Within each ancestry group-specific GWAS, we conducted quality control of genotype data and imputed up to reference panels from the Trans-Omics for Precision Medicine Program 51 , Haplo-type Reference Consortium 52 , 1000 Genomes Project (phase 1, March 2012 release; phase 3, October 2014 release) 53,54 , or population-specific whole-genome sequencing 55–61 (Supplementary Table 3)."*

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Broad Institute of MIT and Harvard	United States	SCImago #112	4
Yale University	United States	SCImago #76 · THE 10 · QS 21	3
Vanderbilt University Medical Center	United States	SCImago #663	2
Brigham and Women's Hospital	United States	SCImago #130	2
Baylor College of Medicine	United States	SCImago #560	1
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
KTH Royal Institute of Technology	Sweden	SCImago #497 · THE =98 · QS 78	1
U.S. Environmental Protection Agency	United States	—	1
University of California, Davis	United States	SCImago #194 · THE 64 · QS =114	1
National University of Singapore	Singapore	SCImago #59 · THE 17 · QS 8	1

Institution	Country	World ranking	Citing papers
University of Cape Town	South Africa	SCImago #1052 · THE =164 · QS 150	1
Brigham and Women's Hospital	United States	SCImago #130	1
University of California, San Diego	United States	SCImago #120 · THE 47 · QS 66	1
University of Gothenburg	Sweden	SCImago #573 · THE 201–250 · QS 202	1
Beth Israel Deaconess Medical Center and Harvard Medical School	United States	—	1

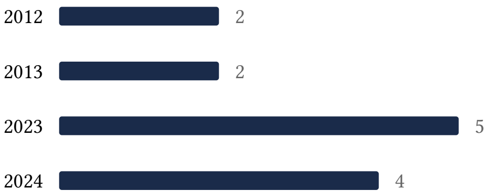
Geographic distribution of citing authors

Country	Citing papers
United States	12
United Kingdom	4
Sweden	3
Netherlands	2
Germany	2
Japan	2
Austria	1
Australia	1
Singapore	1
South Africa	1
Spain	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.



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	Characterisation of COPD heterogeneity in the ECLIPSE cohort	8	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	Genetic Epidemiology of COPD (COPDGene) Study Design	3	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 3	Sequencing of 53,831 diverse genomes from the NHLBI TOPMed Program	8	8 CFR 204.5(i)(3) — Outstanding Researcher