Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

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

Adam S. Adler

GigaGen, Inc.

Google Scholar profile

Generated 2026-05-22 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

9	10	2	30
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 link between continual NF-κB activity and aging enforcement via motif module mapping, a seminal finding published in Genes & Development.

CLAIM: The researcher's contribution centers on the 2007 paper 'Motif module map reveals enforcement of aging by continual NF-κB activity,' published in Genes & Development. This work appears to propose that sustained NF-κB signaling plays a mechanistic role in driving the aging process, identified through motif module analysis.

ORIGINALITY: By focusing on the 'motif module map,' this line of work suggests a novel methodological or conceptual approach to understanding the regulatory networks underlying aging. The title implies a shift from viewing aging as a passive decline to an actively enforced state driven by specific inflammatory pathways, addressing a gap in understanding the molecular enforcement mechanisms of senescence.

SIGNIFICANCE: The core paper has accumulated 607 citations, indicating substantial uptake within the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, suggesting that the findings have resonated beyond the researcher's immediate circle and influenced broader independent investigations into NF-κB and aging biology.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

Motif module map reveals enforcement of aging by continual NF-κB activity

2007 · Genes & Development · 607 citations (GS)

Field-normalised: 426 Semantic Scholar citations place it in the top 5% of Biology papers from 2007 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Game changers in science and technology - now and beyond (2023)	Aché Laboratórios Farmacêuticos, Astex Pharmaceuticals, Bayer AG	Australia, Austria, Brazil	—
2	The hallmarks of aging (2013)	Instituto Universitario de Oncología (IUOPA), Universidad de Oviedo	Spain	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 2

Claim — Contribution 2

The researcher established a mechanistic link between SIRT6-mediated histone deacetylation and NF-κB-dependent gene expression, demonstrating its critical role in regulating organismal life span.

CLAIM: The researcher's seminal 2009 contribution identifies SIRT6 as a key regulator connecting histone H3 lysine 9 deacetylation to NF-κB-dependent gene expression and organismal life span. This work stands as a foundational piece in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry.

ORIGINALITY: The titles suggest this work addressed a significant gap by elucidating the molecular mechanism through which SIRT6 influences longevity. By linking specific epigenetic modifications to inflammatory pathways and lifespan, the research appears to have provided a novel framework for understanding the intersection of epigenetics and aging biology.

SIGNIFICANCE: With 1,335 citations, this paper is highly influential. Analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, indicating broad adoption and validation of these findings across the global scientific community rather than self-citation or institutional clustering.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

SIRT6 links histone H3 lysine 9 deacetylation to NF-κB-dependent gene expression and organismal life span

2009 · 1,335 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Oxidative stress and diabetic retinopathy: Molecular mechanisms, pathogenetic role and therapeutic implications (2020)	Shenzhen University	China	—
2	The sirtuin family in health and disease (2022)	Shengjing Hospital of China Medical University	China	—
3	Why does COVID-19 disproportionately affect older people? (2020)	Harvard Medical School	United States	—
4	Molecular mechanisms of dietary restriction promoting health and longevity (2021)	University of Sydney, University of Wisconsin-Madison	Australia, United States	—
5	Targeting cellular senescence with senotherapeutics: senolytics and senomorphics (2023)	University of Minnesota	United States	—
6	The hallmarks of aging (2013)	Instituto Universitario de Oncología (IUOPA), Universidad de Oviedo	Spain	—
7	Aging and age-related diseases: from mechanisms to therapeutic strategies (2021)	Henan Provincial People's Hospital, Zhengzhou University	China	—
8	NAD^+ in aging, metabolism, and neurodegeneration (2015)	University of California, San Francisco	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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Technical University of Denmark	Denmark	SCImago #404 · THE 121 · QS 107	1
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
Chinese Academy of Sciences	China	SCImago #2	1
University of Vienna	Austria	THE =95 · QS 152	1

Institution	Country	World ranking	Citing papers
Nanyang Technological University	Singapore	SCImago #137	1
University of Leeds	United Kingdom	SCImago #377 · THE 118 · QS 86	1
Shenzhen University	China	SCImago #229 · THE 351–400 · QS =452	1
Imperial College London	United Kingdom	SCImago #69 · THE 8 · QS 2	1
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	1
Roche	Switzerland	—	1
University of California, San Francisco	United States	SCImago #98	1
Inserm	France	—	1
The Francis Crick Institute	United Kingdom	SCImago #315	1
University of Minnesota	United States	SCImago #165 · THE 88 · QS 210	1
Zhengzhou University	China	SCImago #101 · QS =618	1

Geographic distribution of citing authors

Country	Citing papers
United States	5
China	4
Australia	2
Spain	2
Denmark	1
Egypt	1
France	1
Germany	1
Singapore	1
Austria	1
Sweden	1
Switzerland	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	Motif module map reveals enforcement of aging by continual NF-κB activity	2	8 CFR 204.5(i)(3) — Outstanding Researcher
Contribution 2	SIRT6 links histone H3 lysine 9 deacetylation to NF-κB-dependent gene expression and organismal life span	8	8 CFR 204.5(i)(3) — Outstanding Researcher