U.S. Citizenship and Immigration Services

Non-Precedent Decision of the Administrative Appeals Office

In Re: 17586783

Date: JUL. 30, 2021

Appeal of Texas Service Center Decision

Form I-140, Immigrant Petition for Alien Worker (Extraordinary Ability)

The Petitioner, a postdoctoral associate in the computational chemistry field, seeks classification as an individual of extraordinary ability. *See* Immigration and Nationality Act (the Act) section 203(b)(1)(A), 8 U.S.C. § 1153(b)(1)(A). This first preference classification makes immigrant visas available to those who can demonstrate their extraordinary ability through sustained national or international acclaim and whose achievements have been recognized in their field through extensive documentation.

The Director of the Texas Service Center denied the petition, concluding that Petitioner did not establish, as required, that he meets at least three of the ten initial evidentiary criteria for this classification. On appeal, the Petitioner maintains that he satisfies the initial evidence requirements and is otherwise eligible for classification as an individual of extraordinary ability.

In these proceedings, it is the Petitioner's burden to establish eligibility for the requested benefit by a preponderance of the evidence. *See* Section 291 of the Act, 8 U.S.C. § 1361; *Matter of Chawathe*, 25 I&N Dec. 369, 375 (AAO 2010). Upon *de novo* review, we will dismiss the appeal.

I. LAW

Section 203(b)(1) of the Act makes visas available to immigrants with extraordinary ability if:

(i) the alien has extraordinary ability in the sciences, arts, education, business, or athletics which has been demonstrated by sustained national or international acclaim and whose achievements have been recognized in the field through extensive documentation,

(ii) the alien seeks to enter the United States to continue work in the area of extraordinary ability, and

(iii) the alien's entry into the United States will substantially benefit prospectively the United States.

The term "extraordinary ability" refers only to those individuals in "that small percentage who have risen to the very top of the field of endeavor." 8 C.F.R. § 204.5(h)(2). The implementing regulation at 8 C.F.R. § 204.5(h)(3) sets forth a multi-part analysis. First, a petitioner can demonstrate sustained acclaim and the recognition of his or her achievements in the field through a one-time achievement (that is, a major, internationally recognized award). If the petitioner does not submit this evidence, then he or she must provide sufficient qualifying documentation that meets at least three of the ten categories listed at 8 C.F.R. § 204.5(h)(3)(i) – (x) (including items such as awards, published material in certain media, and scholarly articles).

Where a petitioner meets these initial evidence requirements, we then consider the totality of the material provided in a final merits determination and assess whether the record shows sustained national or international acclaim and demonstrates that the individual is among the small percentage at the very top of the field of endeavor. *See Kazarian v. USCIS*, 596 F.3d 1115 (9th Cir. 2010) (discussing a two-part review where the documentation is first counted and then, if fulfilling the required number of criteria, considered in the context of a final merits determination); *see also Visinscaia v. Beers*, 4 F. Supp. 3d 126, 131-32 (D.D.C. 2013); *Rijal v. USCIS*, 772 F. Supp. 2d 1339 (W.D. Wash. 2011).

II. ANALYSIS

The Petitioner is a researcher in the field of computational chemistry and was employed as a postdoctoral associate in the Department of Chemistry at [redacted] University at the time this petition was filed.

A. Evidentiary Criteria

Because the Petitioner has not claimed or established that he has received a major, internationally recognized award, he must satisfy at least three of the alternate regulatory criteria at 8 C.F.R. § 204.5(h)(3)(i)-(x). The Petitioner has consistently claimed that he can satisfy three of these criteria. The Director determined that he met two, specifically the criteria related to judging the work of others in his field and authorship of scholarly articles, at 8 C.F.R. § 204.5(h)(3)(iv) and (vi).

We agree with the Director's conclusion that the Petitioner satisfied these two criteria. The record reflects that he has peer reviewed manuscripts for professional publications including *Journal of Molecular Modeling* and *Journal of Chemical Information and Modeling* and therefore satisfied the judging criterion. In addition, the record contains evidence that the Petitioner has authored scholarly articles published in various journals, including *Journal of Chemical Theory and Computation*, *Chemical Reviews*, *Journal of Chemical Information and Modeling*, and *Journal of Physical Chemistry B*.

The Director concluded that the Petitioner did not satisfy the third claimed criterion, relating to original contributions of major significance in his field at 8 C.F.R. § 204.5(h)(3)(v). On appeal, the Petitioner maintains that the Director's decision contains "almost no discussion of the particular evidence submitted" in support of this criterion, noting that much of the analysis was directly copied from the request for evidence issued prior to the denial of the petition.

8 C.F.R. § 204.5(h)(3)(v) calls for evidence of the individual's original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field. The Petitioner asserts that he has met this criterion through citation of his published research in molecular modeling and contributions to a widely used software program in his field. We agree with the Petitioner's assertion that the Director's decision did not adequately address certain evidence submitted in support of this criterion.

For example, the Petitioner submitted a letter from [redacted], the [redacted] in Organic Chemistry at University of [redacted] discusses the Petitioner's development of a [redacted] software program, the results of which he published in *Journal of Chemical Information and Modeling* in 2016. [redacted] discusses in detail why the Petitioner's [redacted] program, the first developed in [redacted], is recognized as having superior functionality and efficacy compared to previous programs of its type, noting that it "supports extensive [redacted] force fields as well as [redacted] ions." He explains that the Petitioner's program has been released as part of the [redacted] molecular dynamics software package since 2015, emphasizing that "[g]iven that the [redacted] software package is a widely used tool in molecular dynamics research, it is clear that [the Petitioner's] enhancements to this software serve to accelerate research in the field." [redacted] also emphasizes that the Petitioner's published article on the [redacted] program has received a significant number of citations and emphasizes the Petitioner has been invited to write a book chapter on the program "for a project in which the editors 'aim to selectively review some of the most influential advances' in the field." Finally, he explains how his own research team and others have used the Petitioner's [redacted] program in studies that have advanced [redacted] engineering techniques.

The record also contains evidence that the Petitioner has been listed as an author of the [redacted] software package since 2015, additional background information about [redacted] and how it is used to advance research in several fields, and a letter from [redacted] of [redacted] University's [redacted] for Quantitative Biomedicine, who is a primary author of the software. [redacted] explains that [redacted] is widely used in the field of computational chemistry and he echoes [redacted]'s statement that the Petitioner, "[b]y facilitating the simulation of [redacted] ions, . . . has vastly expanded the applications and utility of this software package."

The Petitioner's *Google Scholar* citation history submitted at the time of filing reflects that approximately two-thirds of his cumulative citations related to his publication on the [redacted] program and to the [redacted] software package that incorporated that program. The evidence in the record, including the evidence discussed above, is sufficient to demonstrate the nature and significance of the Petitioner's contributions to a widely used molecular dynamics modeling software in his field. Accordingly, we conclude that he established, by a preponderance of the evidence, that he satisfies the criterion at 8 C.F.R. § 204.5(h)(v) and meets the initial evidentiary requirements for this classification.

B. Final Merits Determination

As the Petitioner has established that he satisfies three criteria and meets the initial evidence requirement, we will evaluate below whether he has demonstrated, by a preponderance of the evidence, that he has sustained national or international acclaim and is one of the small percentage at the very top of the field of endeavor, and that his achievements have been recognized in the field through extensive documentation. In a final merits determination, we analyze a petitioner's accomplishments and weigh

the totality of the evidence to determine if his successes are sufficient to demonstrate that he has extraordinary ability in the field of endeavor. *See* section 203(b)(1)(A)(i) of the Act; 8 C.F.R. § 204.5(h)(2)-(3); *see also Kazarian*, 596 F.3d at 1119-20.

The record reflects that the Petitioner received a bachelor of science in chemistry from [redacted] University in China in 2011 and earned his doctorate degree in chemistry at [redacted] University in 2016. According to his curriculum vitae, the Petitioner has worked as a graduate research assistant at both [redacted] and the University of [redacted] and as a visiting graduate scholar at [redacted] University. After completing his Ph.D., the Petitioner worked as a postdoctoral researcher at the University of [redacted] before joining [redacted] University's Department of Chemistry as a postdoctoral associate in January 2018. He remained in that position, in F-1 nonimmigrant student status, at the time he filed this petition in July 2019.

As mentioned above, the Petitioner has judged the work of others in his field through the peer review process, has made contributions to his field, and has authored scholarly articles in professional publications. However, the record does not demonstrate that his achievements to date are reflective of a "career of acclaimed work in the field" as contemplated by Congress at H.R. Rep. No. 101-723, 59 (Sept. 19, 1990), or the sustained national or international acclaim that the statute requires.

As it relates to his experience judging the work of others in his field, the Petitioner provided evidence that he has peer reviewed at least 50 manuscripts for 14 different journals in his field since 2015.[1] Participation in the peer review process does not automatically demonstrate that an individual has sustained national or international acclaim. An evaluation of the significance of the Petitioner's peer review experience is appropriate to determine if such evidence is indicative of the extraordinary ability required for this highly restrictive classification. *See Kazarian*, 596 F. 3d at 1121-22.

The Petitioner argues that the frequency with which he has peer reviewed articles, and the reputation and rankings of the journals that invited him to serve as a peer reviewer, support a determination that he is at the top of his field of endeavor. Specifically, he maintains that his "standing as a leading expert is clear from his 50 reviews for many prestigious journals." In addition, he has asserted that "only top-level experts in their field are invited to perform this important review work, so this frequent review activity further demonstrates [his] important standing the field." The Petitioner provided journal rankings from *Google Scholar* indicating that many of the journals for which he has served as a peer reviewer are ranked in the top ten in their respective subject matter sub-categories in terms of their "h-5 index," a measure related to the journals' respective impact factors.

However, the record does not contain sufficient support for his claim that only "top-level experts" are typically invited to participate in the peer review process for scientific journals. The Petitioner did not, for example, provide evidence that the specific journals that invited him to serve as a peer reviewer reserve those invitations for researchers who are recognized as being at the very top of the field or otherwise enjoy standing in the field consistent with sustained national or international acclaim. [redacted], who served as the Petitioner's Ph.D. advisor at [redacted] University, provided a

[1] The record reflects that the Petitioner had completed 16 reviews for *Journal of Molecular Modeling*, 13 reviews for *Journal of Chemical Information and Modeling*, and one or two reviews for most of other 12 journals that have invited him to review manuscripts.

letter in which he mentions that the Petitioner is an "active peer reviewer" for a number of leading journals, noting that "peer review service is a critical component of the academic research process" and that "only verified experts are entrusted with such a duty." [redacted] asserts that the Petitioner's "frequent peer review service confirms his overall expertise" and his standing as a "valuable researcher" in their shared field.

We do not question [redacted]'s opinion that the Petitioner's activities as a peer reviewer demonstrate his acknowledged expertise in chemistry, particularly in computational chemistry and molecular modeling, and his stature as a valued and active researcher in this field. At issue here is the extent to which the Petitioner's peer review activities have required, reflected, or resulted in his national or international acclaim. As noted, the Petitioner did not establish the various journals' requirements for selection of peer reviewers, and therefore we are unable to evaluate his peer review activities in light of those requirements. For example, reviewing manuscripts for journals that select peer reviewers based on subject matter expertise would not provide strong support for the petition, because possessing expertise in a given field is a considerably lower threshold than enjoying sustained acclaim in the field.

Therefore, although the record shows that the Petitioner has reviewed numerous manuscripts for reputable journals, it does not demonstrate how his peer review activity compares to or differentiates him from his peers in the field. Similarly, the evidence in the record does not demonstrate that the Petitioner has received any independent acclaim or recognition for his service as a peer reviewer. Without this or other evidence differentiating him from others in his field, the Petitioner has not established how his peer review experience contributes to establishing his sustained national or international acclaim or how it places him among that small percentage at the very top of the field of endeavor. *See* 8 C.F.R. § 204.5(h)(2).

With respect to his authorship of scholarly articles, the Petitioner emphasized that his work has resulted in "15 peer-reviewed articles and 5 published software packages," and "has been published in some of the most prestigious high impact journals in his field." He acknowledges that "publication is a relatively common activity for researchers and thus is not necessarily indicative of one's extraordinary ability." However, he asserts that he has consistently published in "top-ranked journals" and highlights the ranking and impact factor of seven of the journals that have published his work, including *Chemical Reviews* and *Journal of the American Chemical Society*. The Petitioner emphasizes that this record of publication establishes that "his work has been recognized as some of the best in the field," noting that publication in such journals is "a rare accomplishment achieved by only the best researchers in the field."

A high ranking or impact factor reflects a publication's overall citation rate. It does not, however, show the influence of any particular author or demonstrate how an individual's research has had an impact within the field. Further, the evidence in the record does not establish that publication in a journal with a high impact factor alone demonstrates that an individual researcher has achieved wide recognition consistent with national or international acclaim. The Petitioner did not provide sufficient support for his claim that publication in highly ranked journals is an accomplishment only achieved by those at the very top of the field, or one which automatically elevates a researcher to the top of the field.

As authoring scholarly articles is often inherent to the work of scientists and researchers, the citation history or other evidence of the influence of his articles can be an indicator to determine the impact and recognition that his work has had on the field and whether such influence has been sustained. Such an analysis at the final merits determination stage is appropriate pursuant to *Kazarian,* 596 F. 3d at 1122. Here, the Petitioner has consistently emphasized that his research productivity and the individual and collective citations to his work, according to several metrics and statistics, "quantitatively place [him] at the very top of his field of endeavor."

At the time of filing, the Petitioner submitted his *Google Scholar* profile indicating that his most-cited research article, published in 2013, had 230 citations. This was followed by articles published in 2017, 2016 and 2015 that had received 104, 74 and 69 citations, respectively.[2] The Petitioner maintains that a number of his individual publications have been cited "at a much higher rate than those of other researchers in the field." The Petitioner submitted an "InCites Essential Science Indicators" chart published by Clarivate Analytics in 2019. This evidence shows "baseline" citation rates in a small number of broad fields for the years 2008 through 2018, as well citation figures by percentile for the same fields and years. The Petitioner emphasizes that based on this data, he has four published papers with citations that fall within the top 10 percent, two in the top 1 percent, and one in the top 0.1 percent. He states that his article citation rates for these seven papers are "between 3 and 29 times higher than the average number of citations in the [chemistry] field for their respective publication years, clearly distinguishing him from other researchers in the field."

This evidence demonstrates that several of the Petitioner's individual articles have been cited at a rate that is above average in his field, and in some cases, well above the average rate. The comparative ranking of his individual papers to baseline or average citation rates, however, does not automatically establish that he is widely recognized as being among the small percentage of researchers at the top of his field.[3] The Petitioner has not demonstrated how citation to his publications, individually or collectively, compares to scientists who enjoy sustained national or international acclaim in the field.

The Petitioner also presented a document regarding his citation count percentiles and paper count percentiles which appears to have been self-compiled using "Microsoft Academic" as the data source. The Petitioner states that this data compares his research impact to that of other researchers in the broad fields of biology, chemistry, and computer science, and maintains that this evidence demonstrates that he is "in the top 1.42% in terms of research productivity" compared to other researchers in these fields, and "in the top 0.14% in terms of overall citation impact."[4] While the

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[2] The Petitioner's most cited work according to *Google Scholar* was the software package [redacted] which accounted for 1049 (over 58 percent) of his 1797 citations at the time of filing. Overall, 62 percent of the Petitioner's cumulative citations were to different releases of the [redacted] software package, for which he was credited as one of dozens of contributors.

[3] For instance, according to the data from Clarivate Analytics, chemistry papers published in 2017 that received only 11 citations were in the top 10%, and only 3 citations were needed to reach this threshold for papers published in 2018. A supporting explanation regarding the reported citation rates indicates that "[t]he citation rate in any single year can serve as a baseline to assess the impact of a paper in the same research field published in that year." The publisher does not claim that such percentile figures are intended to provide information regarding a given author's standing in a particular field.

[4] The document he provided indicated that the model used to obtain these figures included over 29 million authors and over 20 million publications published between 2011 and 2019, but there is no further explanation for how these percentiles were derived.

Petitioner provides documentation corroborating the values, he does not submit evidence demonstrating how these metrics were calculated or how these percentiles reflect his sustained national or international acclaim in the field of computational chemistry.

In addition to the various metrics discussed above, the Petitioner provided the *Google Scholar* profiles of "12 other extraordinary researchers" in his field. He emphasized that he has accrued more total citations than each of these scientists "all of whom conduct research at top-tier institutions in his field." The submitted profiles were those of assistant and associate professors in chemistry (mainly at public and private U.S. universities) who had accrued total citations to their published work that ranged from 243 to 2095 citations.[5] The evidence objectively shows that the Petitioner had accumulated more cumulative citations than each of the 12 researchers that he specifically selected as a basis for comparison. However, while the Petitioner submitted copies of these individuals' resumes or biographical pages from their universities' websites, he did not explain how this evidence supports a determination that any of them enjoy recognition as "extraordinary researchers" or leading scientists at the top of his field.

The Petitioner's citation evidence indicates that he has been a productive researcher during his career thus far, and that other researchers in the field have noticed his work by citing to his publications and using the [redacted] software package that incorporates his [redacted] program. However, he did not show that the citations to his research and software represent attention at a level consistent with being among small percentage at the very top of his field. *See* 8 C.F.R. § 204.5(h)(2). The statute demands "extensive documentation" of recognition. Despite his reliance on various metrics and data relating to citation rates, the Petitioner did not, for instance, compare his citations to others in his field of endeavor that are recognized as already being at the top in his field. We have taken the Petitioner's publication and citation record into consideration, but he cannot rely primarily on that record to mathematically place himself at the top of the field without other persuasive evidence of his sustained acclaim.

The Petitioner also provided examples of eight "notable independent citations" to his work and asserted that such citations distinguish him "as one of the top contributors" to his field of study. A study published by Khavana et al. in *Journal of Molecular Liquids* states that "[t]he parameters of the metal cations were obtained from the report of Li et al.," citing to the Petitioner's 2013 *Journal of Chemical Theory and Computation* article. An article published by Turner et al. in the *Journal of Biomolecular Structure and Dynamics* states that "metal parameters were obtained using the MCPB.py program," citing to the Petitioner's 2016 *Journal of Chemical Information and Modeling* article. Other articles submitted as examples of "notable citations" reference this 2016 article in a similar fashion.

The Petitioner maintains that such citations show that his work has been singled out for special attention, but he has not established how mentions of this kind translate into sustained national or international acclaim. With the exception of a *Biochemistry* article in which the authors state that they based their molecular dynamics simulation models on "pioneering work" by the Petitioner, the articles generally discuss the dozens of cited source articles in similar terms; there is no special emphasis on his work. The submitted articles acknowledge the Petitioner's research contributions to the

[5] At the time the Petitioner submitted this evidence in November 2019, he had received 2124 cumulative citations to his articles and software packages.

advancement of what appears to be an active field of research but are not indications that he has been recognized by the field as one of the small percentage of researchers at the very top.

As discussed above, we have acknowledged the significance of the Petitioner's contribution of the [redacted] program to the widely used [redacted] software package. The submitted evidence reflects that he was one of 39 contributors to the codes for the 2015 release and establishes that his [redacted] program represented an important advance to the software package's capabilities and utility. However, it does not establish the level or scope of individual recognition or acclaim he has received as a result of this contribution, and the record does not support a determination that credited contributions to this software package are sufficient to elevate a researcher to the top of the field. The Petitioner indicates in the "professional services" section of his curriculum vitae that he "serves the [redacted] mailing list and is consulted about issues related to metal ion modeling," and the record contains email correspondence confirming that he is consulted by other scientists in this capacity. The Petitioner's curriculum vitae also shows that he has delivered updates and other oral presentations at several annual [redacted] developer meetings, but he does not claim to have received widespread sustained individual recognition within the broader field based on his participation at these conferences.

We have also reviewed four recommendation letters that summarize the Petitioner's research and other achievements. Letters of this kind can help to explain the nature and impact of the Petitioner's contributions and, as noted, we have weighed this evidence in determining that the Petitioner has made significant contributions to the computational chemistry field. However, such letters should be supported with sufficient corroborating documentary evidence to establish that the Petitioner is recognized as being among that small percentage at the very top of the field of endeavor and that he has garnered the required sustained national and international acclaim for his achievements.

In his letter [redacted] describes the Petitioner's research contributions and the benefits those contributions provide to the field. As noted, he also asserts that the Petitioner's "peer review service confirms his overall expertise," and that the combination of his credentials, research, and peer review service "confirm him to be a uniquely valuable researcher." [redacted] states that his own reliance on the Petitioner's research "affirms that he is a respected and valued member of the field" and he further concludes that the Petitioner is "a renowned scholar whose work is vital to continued progress in chemistry." While both of these letters offer praise for the Petitioner's research achievements to date, they do not offer sufficient support for a conclusion that he has garnered sustained acclaim and that he is currently recognized as being among the small percentage of researchers at the top of his field.

[redacted] an associate professor of chemistry at the University of [redacted] attests to the "quality and importance of [the Petitioner's] ongoing research in chemical modeling techniques." She emphasizes that the Petitioner's works "have accrued over 1500 citations, a remarkable quantity affirming that he is at the very top of his field," but she does not elaborate on her basis for drawing this conclusion. [redacted], a professor at [redacted] University in Sweden, discusses the Petitioner's citation history in somewhat different terms, noting only that his record "exceeds the usual standards for a chemist" and indicates that he is "a highly influential researcher overall." For the reasons already discussed, the Petitioner's citation history alone is insufficient to establish his eligibility for this classification. While [redacted] and [redacted] also discuss the importance and influence of the Petitioner's work in their shared field, and the benefits that may be derived from such work, they do not

offer additional explanation for how the Petitioner's achievements as a postdoctoral researcher to date have earned him recognition that places him at the top of that field.

The record as a whole, including the evidence discussed above, does not establish the Petitioner's eligibility for the benefit sought. He seeks a highly restrictive visa classification, intended for individuals already at the top of their respective fields, rather than those progressing toward the top. USCIS has long held that even athletes performing at the major league level do not automatically meet the statutory standards for classification as an individual of "extraordinary ability." *Matter of Price*, 20 I&N Dec. 953, 954 (Assoc. Comm'r 1994). The record reflects that the Petitioner, although still quite early in his postdoctoral career, has made significant research findings and contributions that advance his field. The evidence related to his scholarly articles, citation rates and peer review service reflects that he has been recognized for his contributions and expertise in his field, but falls short of establishing that he satisfied all requirements for this classification at the time of filing. While the Petitioner need not establish that there is no one more accomplished to qualify for the classification sought, we find the record insufficient to demonstrate that he has sustained national or international acclaim and is among the small percentage at the top of his field. *See* section 203(b)(1)(A)(i) of the Act; 8 C.F.R. § 204.5(h)(2).

III. CONCLUSION

For the reasons discussed above, the Petitioner has not established his eligibility as an individual of extraordinary ability.

ORDER: The appeal is dismissed.