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U.S. Citizenship and Immigration Services

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FILE: [redacted] Office: VERMONT SERVICE CENTER Date: JUN 10 2005
EAC 02 240 52110

IN RE: Petitioner:
Beneficiary: [redacted]

PETITION: Immigrant Petition for Alien Worker as an Alien of Extraordinary Ability Pursuant to Section 203(b)(1)(A) of the Immigration and Nationality Act, 8 U.S.C. § 1153(b)(1)(A)

ON BEHALF OF PETITIONER:

[redacted]

INSTRUCTIONS:

This is the decision of the Administrative Appeals Office in your case. All documents have been returned to the office that originally decided your case. Any further inquiry must be made to that office.

Robert P. Wiemann, Director
Administrative Appeals Office

DISCUSSION: The employment-based immigrant visa petition was denied by the Director, Vermont Service Center on August 8, 2003.[1] On March 3, 2004, the petitioner filed an appeal, which the director deemed untimely and treated as a motion to reopen. After granting the motion, the director issued a decision on May 19, 2004 affirming the denial of the petition. On June 3, 2004, the petitioner filed a subsequent appeal, which the director also deemed untimely and treated as a motion to reopen. After granting the motion, the director issued a decision on July 27, 2004 once again affirming the denial of the petition. On August 11, 2004, the petitioner filed a timely appeal, which is now before the Administrative Appeals Office. The appeal will be dismissed.

The petitioner seeks classification as an employment-based immigrant pursuant to section 203(b)(1)(A) of the Immigration and Nationality Act (the Act), 8 U.S.C. § 1153(b)(1)(A), as an alien of extraordinary ability in the sciences. The director determined the petitioner had not established the sustained national or international acclaim necessary to qualify for classification as an alien of extraordinary ability.

Section 203(b) of the Act states, in pertinent part, that:

> (1) Priority Workers. -- Visas shall first be made available . . . to qualified immigrants who are aliens described in any of the following subparagraphs (A) through (C):
>
> > (A) Aliens with Extraordinary Ability. -- An alien is described in this subparagraph 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 to the United States will substantially benefit prospectively the United States.

As used in this section, the term "extraordinary ability" means a level of expertise indicating that the individual is one of that small percentage who have risen to the very top of the field of endeavor. 8 C.F.R. § 204.5(h)(2). The specific requirements for supporting documents to establish that an alien has sustained national or international acclaim and recognition in his or her field of expertise are set forth in the regulation at 8 C.F.R. § 204.5(h)(3). The relevant criteria will be addressed below. It should be reiterated, however, that the petitioner must show that he has earned sustained national or international acclaim at the very top level.

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[1] The record reflects that counsel entered his appearance on March 5, 2003 by providing a Form G-28, Notice of Entry of Appearance as Attorney, in response to the director's request for evidence. The record contains no indication that counsel was issued a copy of the August 8, 2003 notice of denial. The regulation at 8 C.F.R. § 292.5(a), however, requires that such notice be provided to the attorney of record.

This petition, filed on July 13, 2002, seeks to classify the petitioner as an alien with extraordinary ability as a researcher and software engineer. At the time of filing, the petitioner was working in the Bioinformatics Department at Genaissance Pharmaceuticals, Inc.

The regulation at 8 C.F.R. § 204.5(h)(3) indicates that an alien can establish sustained national or international acclaim through evidence of a one-time achievement (that is, a major, international recognized award). Barring the alien's receipt of such an award, the regulation outlines ten criteria, at least three of which must be satisfied for an alien to establish the sustained acclaim necessary to qualify as an alien of extraordinary ability. The petitioner has submitted evidence that, he claims, meets the following criteria.

> *Documentation of the alien's membership in associations in the field for which classification is sought, which require outstanding achievements of their members, as judged by recognized national or international experts in their disciplines or fields.*

In order to demonstrate that membership in an association meets this criterion, the petitioner must show that the association requires outstanding achievement as an essential condition for admission to membership. Membership requirements based on employment or activity in a given field, minimum education or experience, standardized test scores, grade point average, recommendations by colleagues or current members, or payment of dues, do not satisfy this criterion as such requirements do not constitute outstanding achievements. In addition, it is clear from the regulatory language that members must be selected at the national or international level, rather than the local or regional level. Therefore, membership in an association that evaluates its membership applications at the local or regional chapter level would not qualify. Finally, the overall prestige of a given association is not determinative; the issue here is membership requirements rather than the association's overall reputation.

The petitioner submitted evidence of his membership in the American Mathematical Society and [redacted] The Scientific Research Society. The record, however, contains no evidence of the bylaws or the official membership requirements of the American [redacted] to show that these societies require outstanding achievements of their members. Nor is there evidence showing that the petitioner was evaluated by national or international experts in consideration of his membership.

In a letter responding to the director's request for evidence, counsel states that the petitioner's invitation to the Institute for Advanced Study at Princeton "is perhaps the single greatest honor a mathematician could have and only the very best are in fact invited." A 1995 brochure from this institution states:

> The Institute for Advanced Study in Princeton, New Jersey, is an independent private institution devoted to the encouragement and patronage of learning.
>
> * * *
>
> Some 160 memberships are awarded annually to postdoctoral scholars from universities and research institutions throughout the world.
>
> * * *

> The School of Mathematics is an international center of research and postdoctoral training . . . .
>
> * * *
>
> Fifty to sixty mathematicians are invited to the School [of Mathematics] each year to study with the Faculty and to pursue research projects of their own.

Membership in the Institute for Advanced Study is open to recent Ph.D. graduates seeking to further their advanced training. We cannot artificially restrict the petitioner's field to exclude all those professional mathematicians who do not submit applications for "postdoctoral training" positions. We further note that the petitioner has provided no evidence of the specific criteria for admission to the School of Mathematics.

In this case, the record contains no evidence to establish that the preceding entities require outstanding achievement of their members in the same manner as highly exclusive associations such as the U.S. National Academy of Sciences.

> *Published materials about the alien in professional or major trade publications or other major media, relating to the alien's work in the field for which classification is sought. Such evidence shall include the title, date, and author of the material, and any necessary translation.*

In general, in order for published material to meet this criterion, it must be primarily about the petitioner and, as stated in the regulations, be printed in professional or major trade publications or other major media. To qualify as major media, the publication should have significant national or international distribution.

In a letter accompanying the petition, the petitioner claimed eligibility under this criterion based on the witness letters provided in support of the petition and a database listing on the American Mathematical Society's website with access to reviews of his published articles. The record, however, includes no evidence showing that the preceding reviews were published or the extent of their distribution. In regard to the comments from the petitioner's witnesses, such evidence is not qualifying "published materials about the alien." We find that the evidence presented here is not adequate to demonstrate the petitioner's sustained national acclaim in major media.

> *Evidence of the alien's participation, either individually or on a panel, as a judge of the work of others in the same or an allied field of specification for which classification is sought.*

The petitioner submitted evidence from the American Mathematical Society's website reflecting that he reviewed eleven papers for *Mathematical Reviews* between 1998 and 2002. The petitioner also submitted a letter from [redacted] Executive Editor, *Mathematical Reviews*, to the petitioner, stating: "The literature is growing rapidly and we need additional reviewers to keep up with this growth, speed up the reviewing process, and improve the quality of reviews by having specialists in all fields. . . . We ask our reviewers to be prepared to handle one article a month on the average."

We note here that peer review of manuscripts is a routine element of the process by which articles are selected for publication in scholarly journals. Occasional participation in peer review of this kind does not automatically demonstrate that the petitioner has earned sustained national or international acclaim at the very top of his field. Reviewing manuscripts is recognized as a professional obligation of those who publish in scholarly journals. For example, authors who repeatedly decline requests to review will be asked to submit their own manuscripts to other journals. Normally a journal's editorial staff will enlist the assistance of numerous professionals in the field who agree to review submitted papers. It is common for a publication to ask several reviewers to review a manuscript and to offer comments. The publication may accept or reject any reviewer's comments in determining whether to publish or reject submitted papers.

Without evidence that sets the petitioner apart from others in his field, such as evidence that he has peer-reviewed an unusually large number of manuscripts for publication in various scientific journals, received multiple independent requests for his services from a substantial number of journals, or served in an editorial position for a distinguished journal (in the same manner as some of his witnesses, such as [redacted] Professor of Mathematics, Harvard University, who served as an editor of *Inventiones Mathematicae*, or [redacted] Professor of Mathematics, Penn State University, who served on the editorial board of *Proceedings of the American Mathematical Society*), we cannot conclude that the petitioner meets this criterion.

> *Evidence of the alien's original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field.*

The petitioner submitted several letters in support of the petition.

[redacted] who taught a number theory course taken by the petitioner at Sichuan University, states:

> [The petitioner] has written five important papers published or to appear in internationally renowned math journals. His work concerns the Birch and Swinnerton-Dyer conjecture, one of the most famous unresolved burning questions in mathematics. In fact, the Clay Foundation has announced a one million dollar award to whomever solves this conjecture. Using all sorts of techniques, [the petitioner] verified various parts of this conjecture in certain cases. Given the current state and the degree of difficulty of this conjecture (which is far from being proven), each positive result is an important step forward. It is rather rare to find a new Ph.D. who has achieved like [the petitioner] . . . .
>
> After receiving his Ph.D., [the petitioner] has been working in industry in the area of biotechnology. By using his skills and knowledge acquired in mathematics, he has developed a new theory for testing Hardy-Weinberg equilibrium, which is well-suited for genetic research where there is a small sample size, a situation for which the classical test for Hardy-Weinberg equilibrium fails.

While solving the Birch and Swinnerton-Dyer conjecture and receiving the award from the Clay Foundation would represent a "contribution of major significance" in mathematics, the petitioner has not shown that verifying "various parts of this conjecture in certain cases" rises to the same level of acclaim. The petitioner's contributions appear to be incremental rather than fundamental. [redacted] indicates that the petitioner has made

impressive contributions as "a new Ph.D.," but her observations do not significantly distinguish the petitioner's contributions from those of established professionals (such as mathematicians who hold professorships at prominent universities).

[redacted] states: "I am acquainted with [the petitioner] because he was a graduate student in the Department of Mathematics and Statistics at Boston University during the years 1996-2000." [redacted] further states: "I can attest both as a number theorist and as a member of his thesis defense committee to the sophistication of his work in number theory."

[redacted] of Mathematics, Boston University, was the petitioner's thesis supervisor. [redacted] Stevens states that the petitioner's "combination of research skills with his broad mathematical talents place him in an excellent position to make significant contributions to mathematics and biology."

[redacted] who met the petitioner at the Isaac Newton Institute for Mathematical Science at Cambridge University and at Boston University, states:

> [The petitioner's] work in pure mathematics was in algebraic number theory and more precisely on elliptic curves and on *p*-adic [redacted] representations. These are both extremely exciting and active subjects for research. One indication of this is that they both played key roles in the celebrated proof by [redacted] (completed in collaboration with me) of Fermat's last theorem about ten years ago. (This result made the front page of the *New York Times*, inspired a Nova special, a musical, ...) The topic of *p*-adic [redacted] representation of p-adic fields is playing an increasing key role in much of number theory. . . . It is extremely important for number theory in the USA that we develop expertise in this area. [The petitioner's] [redacted] s perhaps the leading researcher in this area in the USA. [The petitioner] himself made a wonderful contribution to this subject in his Ph.D. thesis, providing a significant extension of the very important recent work of [redacted] and Colmez on explicit reciprocity laws in the theory of *p*-adic Galois representations.

Reputation by association with [redacted] s not adequate to demonstrate the petitioner's national or international acclaim. There is no evidence showing that the petitioner's work on p-adic [redacted] representations is of comparable significance to "the celebrated proof by [redacted] or "the very important recent work of [redacted] We accept that the petitioner has contributed to the pool of knowledge in his field, but it has not been shown that that other mathematicians view him as a "leading researcher" in the same manner as [redacted] for example.

[redacted] University of Washington, also met the petitioner at the Isaac Newton Institute for Mathematical Science at Cambridge University. [redacted] that he and the petitioner later collaborated on a research project at the University of Washington. [redacted] sserts that the petitioner has made "outstanding contributions to the theory of L-functions, Birch and Swinnerton-Dyer conjectures concerning elliptical curves, and the theory of the exponential maps occurring in conjectures [redacted]

[redacted] Associate Professor of Public Health and Genetics, Yale University School of Medicine, states:

I first knew [the petitioner] when I served as a statistical consultant for Genaissance Pharmaceutical Inc. and got to know more of him when he took my course on "Statistical Methods in Human Genetics" in the fall semester of 2001.

* * *

Within a short period of time at Genaissance, [the petitioner] has made important contributions to the algorithm developments that are at the heart of the company's foundation. In particular, he developed a novel approach to studying [redacted]equilibrium, a key step in identifying either potential errors in genotyping studies or candidate genes associated with complex diseases, e.g. cancer and hypertension.

[redacted]of Bioinformatics, Genaissance Pharmaceuticals, Inc., states:

[The petitioner] has found a mathematical formula for the heterozygote distribution for genotypes in a population, which can be used to prove that the test is equivalent to the classical chi-square test. This piece of work is not only an outstanding contribution to Genaissance, but it is also an important contribution to the fields of biostatistics and bioinformatics.

[redacted]indemuth, Director of Algorithm Development, Genaissance Pharmaceuticals, Inc., asserts that a scientific publication showing that the petitioner's theory is equivalent to the classical chi square test is now "in preparation." The record, however, contains no evidence showing that the petitioner's mathematical theory was published as of the petition's filing date. *See Matter of Katigbak*, 14 I&N Dec. 45 (Comm. 1971). New circumstances that did not exist as of the filing date cannot retroactively establish eligibility as of that date. Nor is there evidence showing that other biotechnology companies seek to utilize the petitioner's mathematical formula or view it as a major contribution.

[redacted]in a letter submitted in response to the director's request for evidence, states that director of Biostatistics at Genaissance Pharmaceuticals asked him "to comment on the importance of the test that [the petitioner] developed for assessing [redacted] equilibrium." [redacted]

The test used by the petitioner and his colleagues is an alternative to the classical chi-square test, and it is valid for small data sets, because unlike the chi-square test it makes no distributional assumptions.

* * *

The challenge in implementing this sort of "exact" test is to write an algorithm that avoids listing all the possibilities; it is sufficient to compute the number of time each possibility could occur. [The petitioner's] algorithm is very efficient in this regard, and in fact it is so efficient that Genaissance uses it for all genotypes, even those for which a chi-square approximation could be used.

* * *

> In short, [the petitioner's] theory and its implementation are very important parts of a very impressive system employed by Genaissance in order to achieve its important scientific and commercial goals.

The preceding letters indicate that the petitioner's work has benefited projects undertaken by his employer, but his ability to significantly impact the fields of mathematics, bioinformatics, or biostatistics beyond his employer's immediate projects has not been adequately demonstrated.

[redacted]f Maryland, states that he met the petitioner at the Institute for Advanced Study in Princeton. In the same manner as[redacted] notes that the petitioner "is one of the top mathematicians to have received a Ph.D. in the last ten years." Dr. Washington's observation, which limits comparison of the petitioner to those in his approximate age group, does not indicate that that petitioner's contributions are unusual for an established mathematician who has long since completed his or her educational training. [redacted]urther states that the petitioner's "thesis will surely spawn significant advances over the next few years." The assertion that the petitioner's thesis holds future promise, however, is not adequate to establish that petitioner's findings are already nationally or internationally acclaimed as a major contribution.

[redacted] – Newark, also met the petitioner at the Institute for Advanced Study in Princeton. [redacted] "[The petitioner's] Ph.D. thesis shows . . . his great potential to be ranked with well-known mathematicians in history." The visa classification sought by the petitioner, however, is intended for aliens already at the top of their respective fields, rather than for those individuals progressing toward the top at some unspecified future time.

On appeal, the petitioner submits a letter from[redacted] stating:

> Two of [the petitioner's] works which I know well are his papers "On Explicit Reciprocity Laws over Formal Groups" and "On a Trivial Zero Problem," both recently published in the *International Journal of Mathematics and Mathematical Sciences*. The first of these . . . is an important generalization of the work of two prominent French mathematicians[redacted] . . . In the second paper, [the petitioner] uses his explicit reciprocity law to establish a prediction of[redacted] about the value of the derivative at k=1 of a certain p-adic L-function of k. . . . I understand that [the petitioner] had worked some time before with[redacted] a first-rate mathematician. The fact that he collaborated with [the petitioner] is an indication of the latter's strength.

The petitioner's appellate submission included evidence showing that the above papers cited in[redacted] letter were published in the *International Journal of Mathematics and Mathematical Sciences* in 2004. A petitioner, however, must establish eligibility at the time of filing. 8 C.F.R. § 103.2(b)(12); *see Matter of Katigbak* at 45. Evidence relating to subsequent developments in the petitioner's career cannot retroactively establish that he was already eligible for the classification sought as of the filing date. We accept that petitioner's work has yielded some useful and valid results; however, it is apparent that any Ph.D. thesis or mathematics paper, in order to be accepted in for publication, must offer new and useful information to the pool of knowledge. It does not follow that every individual whose scholarly research is accepted for publication has

made a major contribution in his field. Without extensive documentation showing that the petitioner's published findings have been unusually influential or highly acclaimed throughout the greater field, we cannot conclude that he fulfills this criterion. The petitioner's publications will be further addressed under the next criterion.

Yunbiao Lu, Staff Fellow of the Immuno-pathology Section of the National Institutes of Health, states:

> I have read [the petitioner's] paper on [redacted]quilibrium, which represents original, creative, and insightful contributions to our understanding of genotype distribution in an ethnic group. . . . [The petitioner's] discovery could lead the discovery of the more precise correlations between the drug response and the HAP markers, which people in the world are still using the imprecise permutation test to discover this relationship.

With regard to the witnesses of record, many of them discuss what may, might, or could one day result from the petitioner's work, rather than how his past efforts rise to the level of a contribution of major significance in mathematics. In the present case, we cannot conclude that petitioner's past contributions far exceed those of established mathematicians.

We further note that almost all of the testimonials in this case were written by individuals from institutions affiliated with the petitioner. This fact indicates that while the petitioner's work is valued by his current and former colleagues, others outside his immediate circle are largely unaware of his findings and do not attribute the same level of importance to his work. With regard to the personal recommendation of individuals from institutions where the petitioner has studied and worked, the source of the recommendations is a highly relevant consideration. These letters are not first-hand evidence that the petitioner has earned sustained acclaim for his contributions outside of his affiliated institutions. If the petitioner's reputation is limited to those institutions, then he has not achieved national or international acclaim regardless of the expertise of his witnesses. An individual with sustained national or international acclaim should be able to produce ample unsolicited materials reflecting that acclaim.

In conclusion, we find that the documentation presented in regard to this criterion is not adequate to support a finding that the petitioner's work is nationally or internationally recognized throughout his field as a major contribution.

> *Evidence of the alien's authorship of scholarly articles in the field, in professional or major trade publications or other major media.*

The petitioner provided evidence of his authorship of articles appearing in publications such as *Advances in Mathematics* and *Mathematical Proceedings of the Cambridge Philosophical Society.* We do not find, however, that publication of scholarly articles is presumptive evidence of sustained national or international acclaim; we must also consider the greater scientific community's reaction to those articles. When judging the influence and impact that the petitioner's work has had, the very act of publication is not as reliable a gauge as is the citation history of the published works. If a given article in a prestigious journal (such as the *Proceedings of the National Academy of Sciences of the U.S.A.)* attracts the attention of other researchers, those researchers will cite the source article in their own published work, in much the same way that the

petitioner himself has cited sources in his own publications. Numerous independent citations would provide firm evidence that other researchers have been influenced by the petitioner's work and are familiar with it. If, on the other hand, there are few or no citations of an alien's work, suggesting that that work has gone largely unnoticed by the greater field, then it is reasonable to conclude that the alien's work is not nationally or internationally acclaimed. In the present case, there is no evidence showing that the petitioner's published papers are widely cited.

Evidence that the alien has performed in a leading or critical role for organizations or establishments that have a distinguished reputation.

In order to establish that he performed in a leading or critical role for an organization or establishment with a distinguished reputation, the petitioner must establish the nature of his role within the entire organization or establishment and the reputation of the organization or establishment.

In a letter accompanying the petition, the petitioner asserts that he performed in a leading or critical role as a reviewer for *Mathematical Reviews*. The petitioner's occasional participation as a peer reviewer for this journal was already addressed under the "judge of the work of others" criterion. We note here that the petitioner was never employed by *Mathematical Reviews*, nor did he ever serve in a leading or critical capacity in the same manner as that of an editor or editorial board member, for example.

The petitioner also claims that he performed in a leading or critical role as a researcher and software engineer at Genaissance Pharmaceuticals, Inc. In response to the director's request for evidence, the petitioner submitted a letter from [redacted] Senior Vice President, Medical Affairs and Informatics, Genaissance Pharmaceuticals, Inc., stating that the petitioner "is currently at Genaissance Pharmaceuticals analyzing the correlation between genetic variability and drug response, which is . . . vital to Genaissance's business."

In this case, there is no evidence showing that Genaissance Pharmaceuticals, Inc. has earned a distinguished reputation when compared to other companies in the pharmaceutical industry (such as [redacted] Nor is there evidence establishing the relative importance of the petitioner's duties when compared to others employed by his company. It is certainly reasonable to conclude that the relative importance of the role of individuals such as [redacted] of Algorithm Development, [redacted] Director of Bioinformatics, and [redacted] and Informatics, is far greater than that of the petitioner. We accept that the petitioner played a central role in the particular research projects to which he was assigned, but there is no evidence showing the extent to which the petitioner has exercised substantial control over personnel or research decisions executed on behalf of Genaissance Pharmaceuticals as a company.

For the above reasons, we find that the petitioner's evidence falls short of establishing that he has performed in a leading or critical role for a distinguished organization, or that his involvement has earned him sustained national or international acclaim.

Evidence that the alien has commanded a high salary or other significantly high remuneration for services, in relation to others in the field.

In a letter accompanying the petition, the petitioner stated that he was earning a salary of $71,700 as of April 2002. The petitioner submitted copies of three pay statements from Genaissance Pharmaceuticals as evidence of his salary. The petitioner, however, offers no basis for comparison to show that this salary is significantly high in relation to others in his field.

The documentation submitted in support of a claim of extraordinary ability must clearly demonstrate that the alien has achieved sustained national or international acclaim, is one of the small percentage who has risen to the very top of the field of endeavor, and that the alien's entry into the United States will substantially benefit prospectively the United States. The petitioner in this case has failed to demonstrate that he meets at least three of the criteria that must be satisfied to establish the sustained national or international acclaim necessary to qualify as an alien of extraordinary ability.

Review of the record does not establish that the petitioner has distinguished himself to such an extent that he may be said to have achieved sustained national or international acclaim or to be within the small percentage at the very top of his field. The evidence is not persuasive that the petitioner's achievements set him significantly above almost all others in his field at the national or international level. Therefore, the petitioner has not established eligibility pursuant to section 203(b)(1)(A) of the Act and the petition may not be approved.

The burden of proof in visa petition proceedings remains entirely with the petitioner. Section 291 of the Act, 8 U.S.C. § 1361. Here, the petitioner has not sustained that burden. Accordingly, the appeal will be dismissed.

ORDER: The appeal is dismissed.