

*Guidelines for Voluntary Professional Accreditation  
by the American Statistical Association  
4/16/10 (revised 2/1/11, 11/22/13)*

## **1. Introduction**

This document, approved by the ASA Board of Directors on April 16, 2010 (and subsequently revised), provides the framework for voluntary professional accreditation. Additional details for applicants are found in “Instructions for Applicants’ document maintained on the ASA accreditation website.

PStat<sup>®</sup> accreditation is offered by the American Statistical Association as a service to those of its members who find added value in a voluntarily obtained credential that provides recognition by peers that they have statistical training and knowledge, have experience in applying that expertise competently, maintain appropriate professional development, agree to abide by ethical standards of practice, and are able to communicate effectively. Not all statisticians will need or seek PStat<sup>®</sup> accreditation, and the lack of PStat<sup>®</sup> accreditation should never be construed by itself as evidence of lack of education, expertise, or competence as a statistician. However, holders of the PStat<sup>®</sup> credential have voluntarily applied for this status, have submitted materials that have been carefully reviewed by peers and found to be deserving of the credential, and must periodically undergo further review to maintain this status.

ACCREDITED PROFESSIONAL STATISTICIAN™ status is awarded based on criteria that have been established by the ASA Board of Directors. In brief, the criteria cover the education, experience, and demonstrated competence of the candidate. Thus, ASA accreditation is a portfolio-based rather than an examination based designation.

Applications are considered in confidence by the ASA’s Accreditation Committee (AC); To apply, applicants must complete the official application form available online at the ASA’s accreditation website, and supply all other required materials as described elsewhere in this document. The ASA asks that application materials be submitted in English. If some materials were originally written in a language other than English, an English translation must be provided by the applicant.

Applicants will submit a covering letter of up to 1500 words summarizing the materials submitted and providing the reasons why the applicant feels she or he has met the criteria for accreditation.

Application materials will be submitted electronically to the ASA, and may be submitted at any time. Subgroups of the AC will meet on a regular basis to review applications. However, applications will not be reviewed until they are completed; that is, until all required materials have been submitted and the non-refundable application fee has been received.

Applicants must pay a non-refundable application fee as determined by the ASA. Unsuccessful applicants will receive written feedback from the AC, and may reapply. Successful applicants will be assessed an annual maintenance fee.

Applicants are fully responsible for ensuring that the materials submitted are sufficient to assess the candidacy.

In the application for accreditation, each applicant shall agree to hold the ASA harmless in the event that accreditation is not granted. Accreditation is not a guarantee of any sort that the statistician's client or any third party will be satisfied with the work undertaken by the accredited member, and the statistician, not the ASA, is responsible for his or her own work.

Graduate Statistician (GStat) status will be awarded to ASA members who in the judgment of the Accreditation Committee meet the educational requirements described below for PStat status and who agree to abide by the ASA's Ethical Guidelines for Statistical Practice. Its purpose is to provide an indication that an individual may eventually be PStat-accredited by the ASA, once that member meets the other requirements. Perhaps more importantly, it connects the GStat-accredited member to the network of accredited professionals, who can help mentor the member on the path to accreditation.

The requirements below (other than the educational requirement, the ethical requirement, and the ASA membership requirement) do not apply to GStat applicants.

All decisions, guidelines, and procedures of the ASA and its Accreditation Committee are solely to be determined at their unfettered and absolute discretion, not subject to external appeal or review of any kind.

## **2. ASA membership**

Applicants must be members of the ASA to apply for accreditation and must maintain membership to keep it. Applicants must be actively involved in the practice of statistics (See section 5).

If ASA membership lapses, so does the PStat<sup>®</sup> accreditation. Article I, part 4, of the ASA By-Laws sets the rules for membership lapses: “Privileges of membership in the Association shall automatically be suspended if a member has failed to pay dues within one month after the expiration of the membership year. The Secretary shall reinstate such privileges and retain the original membership year if a suspended member pays his or her dues within six months after the expiration of the membership year. If in the opinion of the Secretary the defaulting member has presented a satisfactory explanation for the default, a limited extension of time may be granted;” (Note: The Secretary is the Executive Director of the ASA) Accreditation, if granted, is considered a privilege of membership under this rule.

GStat applicants must also be members of the ASA and must maintain membership to keep it, as described above for PStat.

### **3. Ethical standards**

Applicants must agree to uphold the ASA’s “Ethical Guidelines for Statistical Practice.” Accredited members who do not, in the judgment of the AC, uphold these ethical guidelines may be subject to disciplinary action (see section 14).

### **4. Educational requirements**

Applicants must possess an advanced degree in statistics or a related quantitative field with sufficient concentration in statistics. For applicants with a degree from the United States, an advanced degree in statistics means that an applicant has a Masters or Doctoral degree in the field of statistics from a regionally accredited university. The field of statistics may include such areas as mathematical or applied statistics, and may extend to major application areas, such as biostatistics. In situations where an applicant has an advanced degree in another field, especially when the degree does not have a specific statistics concentration, it will be left to the judgment of the AC to determine if this criterion is met.

Professional masters degrees are considered an advanced degree.

Candidates possessing their highest degree from a non-US institution may be asked to submit the relevant university transcript to provide the AC with information to help it understand the equivalence to US advanced degrees described above. The ASA reserves the right to use an independent source to judge the equivalence of such degrees, and reserves the right to charge the applicant for those costs (after duly advising the applicant of the cost).

The AC shall have discretion to grant exceptions to these educational requirements, though such exceptions will be granted only in special and well documented circumstances. Applicants without an advanced degree must present compelling evidence of a breadth of knowledge and understanding of both theoretical and applied statistics equivalent to an advanced degree. The burden of proof lies entirely upon the applicant.

## 5. Experience

An applicant must have at least five years of documented experience in the employment of appropriate statistical concepts and techniques. This is not merely a matter of marking time. The professional statistician should demonstrate greater practical knowledge, experience, and expertise, indicative of a breadth and depth of statistical knowledge and practice, and should be able to take greater responsibility for statistical work, than would be expected of a recent graduate or a junior statistician.

With this in mind, applicants must demonstrate a history of five years of statistical experience (full-time equivalent), normally since the date of earning the first advanced degree. Graduate work in a 'stat lab' that involves practical consulting will be counted toward the five years, but must be prorated on the time actually spent in consulting activities. Similarly, graduate work that consists of providing statistical support for research in other fields will also be counted, prorated on the time spent in these support activities. No more than 1.5 years will be counted for such professional activities (consulting or research support) conducted while working toward a degree. Applicants will need to carefully document such activities if they wish them to be counted toward the experience requirement.

Any relevant practical professional statistical experience will be considered. The following list is suggestive but not exhaustive:

- leading projects with a substantial amount of statistical analysis or modeling;
- undertaking statistical analysis of data and reporting on the results;
- having responsibility for the interpretation and presentation of statistical information;
- teaching statistics based on practice; work/consulting/collaboration and any resulting teaching of statistics for a field of application;
- working as a statistical consultant;
- carrying out and implementing research to develop new methods to solve significant applied statistical problems;
- taking responsibility for the design and analysis of statistically based surveys;
- managing a statistics section with work in one or more of the above areas;
- generally recognized as having made a substantial contribution to the sound practice of

statistics.

Citing a variety of such experiences will typically help with the required demonstration of breadth and depth of statistical knowledge and practice.

## **6. Professional Competence**

Applicants must provide evidence that their work as an applied statistician is of high quality. This criterion is demonstrated through two means: letters of support and samples of work product. Letters of support are addressed in section 9. The following is a suggestive but not exhaustive list of indicators of high quality work:

- substantial positive impact on decision making
- appropriately applied methods and techniques
- adequate discussion of limitations of the data, methods, techniques.
- proper attention to accuracy, reliability, relevancy, reproducibility and transparency
- recognition of applied work by peers

The covering letter should clarify for the AC how the applicant's submitted work product demonstrates the applicant's professional competence. In addition, the applicant is encouraged to use the covering letter to describe how their use of statistical thinking and application of statistical methodology has led to improvement in problem solving in their professional environment.

Applicants must submit copies of at least two and at most five pieces of written work. These may be (in-house) technical reports, (submitted) publications [to/in (refereed) journals], or extracts from other work, that provide evidence of professional competence. First time applicants (i.e., those not applying for renewal of accreditation) must submit at least two pieces of recent work (i.e., work conducted during the last three years prior to the application).

It is recognized that, in many instances, such materials may be sensitive or proprietary in nature and must be handled in confidence. Thus, the confidential nature of the application process is emphasized. Application materials may be accessed by the AC during its deliberations on an application but are stored confidentially by the ASA Office. All AC members and all ASA staff members with access to these materials are required to sign a non-disclosure agreement. The information in these materials may be released only with consent of the applicant concerned.

Applicants are responsible to ensure they have permission from their employers to use materials for the purpose of application for accreditation.

Sensitive materials may be de-sensitized in a variety of ways (by replacement of specific numbers with placeholders (letters), or deletions of certain key words, etc.). The key is that proprietary or confidential information be protected while providing the AC with sufficient information to make its judgment.

Applicants may alert the AC that some members of the committee should not see their application materials due to confidentiality, conflict-of-interest, or other specified reasons. Members of the AC may also recuse themselves from reviewing particular applications for such reasons (see section 15).

In rare instances where work product cannot be provided to the AC even with the protections noted above, the applicant may request that the AC conduct interviews with people knowledgeable about the applicant's contribution to the work product; The applicant must demonstrate to the AC's satisfaction that such a request is warranted. Since such interviews are time-consuming, applicants in such situations should be aware there may be a delay in reviewing the application.

## **7. Communication Skills**

Applicants must show evidence of effective communication skills in the principal language in which they practice statistics. This criterion is also demonstrated through letters of support and work product. The professional statistician should be able to report the statistical details of a project for other statisticians to follow, convey subject matter content and general statistical concepts to subject specialists, and communicate essential statistical concepts and results to a general audience.

## **8. Professional development**

Applicants must have an ongoing record of professional growth.

It is expected that members maintain their competencies in their chosen area(s) of statistical practice. Such competence is a fundamental ethical requirement of professional practice. It is the responsibility of each practitioner to determine what activities are most appropriate for maintaining their competence.

A professional development activity should be relevant to the educational requirements of an area of statistical practice (e.g., biostatistics, financial statistics, industrial statistics, sample

survey statistics). The practitioner will ordinarily decide if the activity is relevant, though such decisions will often be subject to an employer's approval.

Individual areas of practice may change over time as professional interests and activities change. However, it is the applicant's responsibility to ensure expertise appropriate to their area(s) of statistical practice.

Accredited members are expected to file a list of professional development activities with the ASA each year. Accredited members are expected to complete at least 60 hours of professional development each year, though consideration will be given to extenuating circumstances such as part-time employment, medical absence, or unemployment. Accredited members are expected to have completed professional development activities in at least three (exceptionally, two) of the following five categories of professional development during each 12 month filing period:

- Work-based learning
- Professional activity
- Formal/Educational
- Self-directed learning
- Other

Meeting this expectation will be an important consideration in the renewal of accreditation.

## **9. Letters of support**

Two supporting letters from persons of substantial stature and firsthand knowledge of the work and skills of the applicant are required. These letters should address the issues of experience, competence, written and oral communications skills, professional growth, and any other relevant topics.

Supporting letters are a key component in applicants' materials, so applicants should carefully select individuals who can write clearly and authoritatively on their behalf. Applicants will submit the names and contact information for the persons who will write on their behalf. The AC will then contact such individuals directly and invite them to submit their letters directly to the Committee.

## **10. Accreditation Committee**

The AC oversees the entire accreditation process, makes all decisions about accreditation, and provides constructive feedback to applicants who are not approved. The AC has the flexibility to

deal on a case-by-case basis with unusual situations such as an applicant who lacks formal training credentials but otherwise is obviously well qualified for PStat<sup>®</sup> accreditation.

The AC consists of distinguished accredited (or formerly accredited, now retired) members of the ASA who are broadly representative of the membership. Members serve staggered three year terms. AC members are appointed by the President-Elect according to the usual committee appointment practices of the ASA. The chair of the committee is also appointed by the appropriate President-Elect to serve a three year term, again in accordance with the ASA's usual processes.

The AC sets its own procedures for reviewing applications. It is not necessary for each committee member to review every application, but each application should be reviewed by at least three AC members, and a majority vote of the participating reviewers is required for a favorable recommendation for accreditation.

The AC is also responsible for making recommendations to the Board of Directors regarding changes to the accreditation process. The AC also assists in the planning and provision of services to accredited members.

The AC will annually make a report of its activities and actions to the ASA Board of Directors. This report will contain no personal information and will uphold the confidentiality of the accreditation process.

### **10.1 Appeals of negative decisions**

Applicants who are denied accreditation will receive written feedback from the AC. Appeals of accreditation decisions must be made in writing to the chair of the AC within 30 days of notification of a negative decision regarding accreditation.

The Chair and two members (not involved in the original review) of the AC will consider the appeal, and will vote to overturn the original decision only if it finds that relevant information provided by the applicant as part of the original review was not properly understood or considered. No new or additional material may be submitted for the appeal. The decision on appeal is final, and may not be appealed again to the AC, nor may any other entity within the ASA hear an appeal of an accreditation decision.

## **11. Maintenance of accreditation**



PStat<sup>®</sup> and GStat members maintain their accredited status through annual payment of membership dues and accreditation fees to the ASA. (See section 2 for issues related to lapse of ASA membership. See section 17 for issues related to effects of lapses on usage of the PStat<sup>®</sup> designation.)

Failure to pay accreditation fees are grounds for loss of accredited status. Individuals whose lapse of accreditation fees is less than six months may be automatically reinstated to accredited status through payment of lapsed fees. Lapses of six months or more are permanent lapses, and such individuals must reapply for accreditation. Exceptions may be granted by the Executive Director under special circumstances (for example, a prolonged illness).

Accredited members may choose to terminate accreditation at any time, though membership dues and accreditation fees are non-refundable.

## **12. Renewal of accreditation**

PStat<sup>®</sup> accreditation covers a five-year period after which renewal is necessary to maintain accredited status. Accredited status will begin on the date of approval by the AC and this five-year period will end five years from the beginning of the accredited member's next full membership year at the time of accreditation. (Example: Jane Doe has a membership that is annually renewable on 06/30/11. She is accredited on 04/01/11. Her five-year period will end 06/30/16;) Life members' five year accreditation period ends five years from the date of initial accreditation.

The applicant for renewal of PStat<sup>®</sup> status will provide the AC with any relevant updates to educational status, with information about professional development activities during that preceding five years, with evidence of continuing statistical practice, a CV/resume, and a cover letter indicating how the member is still engaged in the practice by outlining the member's statistical activities over the previous five years. Applicants for renewal must also agree to continue to abide by the ASA's Ethical Guidelines for Statistical Practice.

The Accreditation Committee will review the updated materials provided by the accredited member, and either

- Approve reaccreditation for five years, or
- Provide the applicant for reaccreditation with specific steps that must be completed within a specified period of time (generally, six to nine months) in

order for reaccreditation to be given. This will usually involve increased CPD hours or improved documentation of CPD.

The AC will take into account temporary interruptions to employment including, but not limited to, those for illness and parental leave.

GStat status expires after seven years. Two-year extensions can be granted by the Accreditation Committee at the request of the individual if such extension will in the judgment of the committee be useful to the individual in ultimately obtaining PStat® status.

During the period of time between attaining Graduate Statistician status and eligibility to apply for PStat® accreditation, the Graduate Statistician may ask for an Accreditation Committee review of the GStat's progress toward PStat® accreditation.

### **13. Accreditation from other statistical societies**

Members of the ASA who are accredited at the highest level by other international statistical societies that have been designated as a “partner society” in accreditation, and are in good standing with their society will automatically become accredited members of the ASA upon written request with proof of accredited status, agreement to maintain their accreditation in the other society, agreement to abide by the ASA's Ethical Guidelines for Statistical Practice, and payment of ASA accreditation fees. However, at the end of five years of ASA accreditation, such members must have their ASA accreditation renewed through the procedure described in section 12.

Partner society designation will be made by the ASA Board of Directors upon recommendation from the AC after due consultation with the society concerned.

### **14. Disciplinary matters**

Accreditation may be revoked for a specified period by the ASA Board of Directors if, in its judgment, an accredited member has (1) refused or neglected to comply with the provisions of ASA membership; (2) willfully acted in a manner prejudicial to the interests of the ASA or the statistical profession, including non-compliance with the ASA's Ethical Guidelines for Statistical Practices; or (3) supplied incorrect information in an application for accreditation or renewal of accreditation.

When the ASA receives a formal complaint against an accredited member regarding one or more of the grounds for revocation (above), the member shall be notified of the complaint and given the opportunity to respond. The AC will conduct a preliminary investigation and may exonerate the member based on this preliminary investigation. If further consideration is needed, the ASA Board of Directors, after seeking legal advice, will decide whether the member should be exonerated, receive advice or warning regarding specified violations (such as ethics violations), or have his/her accreditation revoked. The Board will notify the member of its decision within 14 days of its decision.

Revocation of accreditation results in removal of the member's name from the list of accredited members (see section 16) and the loss of accreditation fees. There is no other public report of such action.

A member whose accreditation has been revoked may appeal through written notice to the Executive Director of the ASA within 30 days of receipt of notification of revocation. The Executive Committee of the ASA Board of Directors will review the member's appeal and will determine whether the revocation should be upheld or overturned.

## **15. Conflict of Interest**

A member of the AC who has a conflict of interest with respect to any individual with an action ("case") before the committee shall declare that conflict of interest, and be absent from the deliberations related to the case. Conflicts of interest include (but are not limited to) the following examples:

- the committee member and the applicant are colleagues, having worked or conducted research together within the last six years;
- the Committee member has supervised the applicant in the case in a graduate program;
- the Committee member has written a letter of reference for the applicant in the previous six years.

An applicant may indicate the names of up to three committee members who the applicant believes may have a conflict of interest in reviewing her/his application. AC members thus identified will not participate in the review of this application.

## **16. Public Information about accreditation**

The ASA maintains a public list (e.g., a web page) of accredited members. Inclusion in the list does not represent an endorsement by the ASA. The list may include the member's name and

contact information, and (optionally) a link to a personal website, where the member may provide additional information about the member's experience and expertise;

If a member's accreditation lapses or is revoked, the member's information shall be removed from the public listing within 90 days.

### **17. Member's usage of designation**

An accredited member may declare themselves accredited by the ASA and use the certification mark PStat® pursuant to the guidelines promulgated by ASA which may be changed from time to time. The member may not state that the designation is an endorsement by the ASA. If a member's accreditation lapses or is revoked, the member must cease usage of the designation within 90 days.

### **18. Dissolution of Accreditation Committee and the Accreditation Program**

The Board of Directors of the American Statistical Association may, upon six months notice, dissolve the AC and cease awarding accreditation. In such circumstance, accredited members may continue to use the PStat® designation through the period for which accreditation fees have been paid.

### **19. History of changes to this document**

November 23, 2013 revision (approved by the Board of Directors): Added the Graduate Statistician status (sections 1,2,11,12) and updated the renewal procedures (section 12).

Feb. 1, 2011 revision (approved by the ASA Executive Committee): Changes were made to sections 1,2,3,10,11,14,16,18 on advice of legal counsel. These changes were pursuant to the ASA's obtaining a certification mark on the designation PStat® and on filing for a mark on "Accredited Professional Statistician™."