## NAS Section Procedures

## Section 11: Mathematics

May - July: Section chair solicits new nominations.
The deadline for submission of nominations is set by the section chair as are the dates for the submission and return of the Informal and Formal Ballots. These dates are chosen so as to conform with the NAS Bylaws for these ballots.

The members of the section are informed of the deadlines via electronic and paper mailings from the section chair.

A candidate who gets less than $1 / 3$ of the votes in the Informal Ballot each year for 3 consecutive years will be removed from the Straw Ballot on the fourth year unless renominated.

Election Procedures revised August 2007.

## Section 12: Astronomy

I. The Section Informal and Formal Ballots shall show for how many consecutive years each person has been a candidate.
II. A minimum of two-thirds ( 67 percent) of the votes in the Formal Ballot is required for the nominee to be automatically carried over as a candidate in the following year. (Academy default is 40 percent.)
III. No person can appear on the ballot through this automatic process (see II) for more than four consecutive years. This in no way limits the renomination of the candidate if any nominator so wishes. The four consecutive years applies only to the automatic process ( 67 percent of vote on Formal Ballot). Once such a renomination process is invoked it must be continued (if needed) for successive years.
IV. As needed or desired the Section may establish ad hoc rules and procedures for identifying candidates in underrepresented fields or call for additional section ballots (e.g., preliminary ballot as held in 1994).
V. There will be a standing Search Committee whose main responsibility is to identify potential new members and Foreign Associates who might not otherwise be nominated, and to recruit knowledgeable nominators for such candidates. This process is in addition to the privilege of any member to nominate a candidate.

Members, section associates, and Foreign Associates who wish to do so may submit suggestions to the Search Committee by forwarding one page to the committee with the candidate's name, address, affiliation and title, a one paragraph description of their scientific accomplishments and one paragraph describing why they deserve election to the National Academy of Sciences.
VI. All of these rules shall apply equally to potential Academy members and to Foreign Associates.

Election Procedures revised May 2008.

## Section 13: Physics

## I. Screening Panels

Candidates are screened by panels in the various subfields as well as possible additional panels devoted to specific issues (Foreign Associates or Diversity).

In May the section chair invites all regular members of the section to join not more than three panels. Foreign Associates and Secondary Affiliates are invited to join one panel. The panels will then consider all candidates who have been formally proposed before July 1 and any additional candidates proposed informally by panel members. In addition, panels must consider any candidate who received $40 \%$ or more of the vote on the Informal Ballot in the previous year ( $25 \%$ for intersectional candidates).

Each panel may endorse up to four candidates and should provide supporting statements signed by section members and secondary affiliates. These statements will be distributed with the Informal and Formal Ballots. There will be no more than three such statements per candidate, and each statement is limited to 100 words. There is no limit to the number of endorsers for each supporting statement. Members who nominate a candidate should not also endorse a supporting statement for the same candidate.

## II. Informal Ballot

The Informal Ballot includes:
A. The candidates endorsed by the panels. Panel chairs are encouraged to provide information on the total number of persons participating in the panel voting and on the closeness of the final results. Candidates who have appeared on the Informal Ballot for three years in succession must wait out two years unless they were included on the Formal Ballot in the third year.
B. Other candidates for whom a formal proposal is submitted to the section chair before June 1. Such candidates must be endorsed by two other members of the section who are affiliated with institutions in different cities before they are placed on the Informal Ballot. Candidates who received fewer than 25 percent ( $15 \%$ for intersectionals) of the votes on the Informal Ballot in the preceding year cannot be reproposed for two years.

## III. Formal Ballot

At the start of the election cycle, the section chair, after consulting with the panel chairs, will choose the number of regular candidates who qualify for the Formal Ballot that year. This number N , which will be no less than ten and no greater than fifteen, will be chosen with the goal of qualifying the proper number of candidates for the Class Membership Committee.

The Formal Ballot shall include the N regular candidates who received the largest numbers of votes on the Informal Ballot. Candidates must also be endorsed on at least forty percent of the ballots received on the Informal Ballot, as specified in the Academy's bylaws. The Formal Ballot shall also include any intersectional candidate who is endorsed on at least twenty-five percent of the ballots, and whose number of votes on the Informal Ballot, multiplied by 1.6 would place him or her ahead of at least one regular candidate qualifying for the Formal Ballot.

## IV. Foreign Associates

Foreign Associates may participate fully in the screening panel process, except that they may join only one screening panel. They may nominate candidates for membership (with a co-sponsor who is a member).

The same procedures apply for proposing Foreign Associates and for preparing the Informal Ballot for Foreign Associates as for candidates for membership.

## V. Secondary Affiliates

Secondary Affiliates have the right to participate in one Section 13 screening panel, as chosen by the Secondary Affiliate. They may participate fully in the voting in the screening panel of their choice.

Secondary Affiliates have the full right to propose names and supply statements of support for Section 13 candidates by way of this panel.

## Section 13 Practices (March 2011)

In contrast to the Section Procedures, which require a vote of the membership, this section describes practices and may be changed from time to time without a formal vote by the members.

## I. Diversity Committee

The Chair shall appoint a Diversity Committee whose aim is to identify candidates from groups that are underrepresented in the NAS (e.g., women, members of minorities, candidates from geographical areas, types of institutions, or subfields of physics) and propose these candidates to the disciplinary panels. The Diversity Committee may place one or two individuals on the Informal Ballot through the Plan B process (see above). The Section Chair should ensure that the different subfields of physics are well represented on the Diversity Committee.

## II. Annual Meeting

The Section Chair should poll the membership before the Annual Meeting to ask if there are topics the members would like to discuss, and send an agenda for the section meeting in advance. It is recommended that newly elected members be invited to make short scientific presentations to the section at that meeting. It is also recommended that the Annual Meeting not be used to have critical discussions about new members, since is so many would be excluded from these discussions.

## III. Selection of Panel Chairs, CMC Members and Section Chair

Panel Screening: The process begins with in June with the annual formation of the screening panels. In identifying the up-to-three candidates to be endorsed, the panels may conduct multiple ballots. The candidates to be endorsed and all the supporting materials are sent to the Section Chair in late August.

Panel Chairs: The (three-year) terms of the panel chairs should be staggered so that about one third change every year. During the last year of a Panel Chair's term the Section Chair should consult with the members of the panel to identify possible candidates as Panel Chair. The Section Chair appoints the new Panel Chair. The same procedure should be used for the Diversity Committee Chair.

Executive Committee: The Panel Chairs shall serve as the Executive Committee for the Section when the Section Chair needs to seek advice on matters pertaining to the Section.

CMC Members: The Section Chair shall solicit nominations for section representatives on the Class Membership Committee before the Annual Meeting (when the nominations are usually due). After consulting with the Executive Committee, the Section Chair will submit the names of the section representatives to the Class I Chair.

Section Chair: The Section Chair shall formally solicit nominations for a successor chair during his/her last year in office, and shall conduct a mail ballot before the following September 1, preferably with more than one candidate and in conjunction with either the Formal or Informal Ballot.

Election Procedures revised July 2011.

## Section 14: Chemistry

## I. Nominations

A list of continuing candidates and those ineligible to appear on the next First Written Caucus Ballot will be sent with the Second Written Caucus Ballot. Wholly new nominations, which must have biographical sketches in the proper format, obtainable from the Chair, will be welcomed at any time, but should arrive by November 30 if they are to be included in the First Written Caucus Ballot in January of the following year. It is extremely important that these sketches be addressed to the Academy as a whole and not just to chemists.

## II. Section Candidates

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A. First Written Caucus Ballot (January). The available candidates will be divided into four groups, roughly as to area of interest. Nominators are requested to make suggestions concerning the appropriate group placement of candidates. In cases of unresolved disagreements between the nominators and the Chair, the views of the Chair will prevail. Group IV would include nominations that the Chair considers to be an underrepresented field. Each member will pick out from any or all of these groups a maximum of 20 candidates he/she believes are worthy of election. He/she also will be asked (no requirement) to categorize himself/herself as being especially cognizant of the candidates in one of the groups. The votes for each candidate will be tabulated separately for each of the groups of Section members voting. The limit of 20 does not include intersectional candidates.
B. Second Written Caucus Ballot (February). The top 25 candidates, collectively from the four Groups, in the First Written Caucus Ballot will be presented to the Section membership for preference voting on the Second Written Caucus Ballot. Each member assigns candidates, irrespective of group, to categories A, B, C, and E where $A$ represents the highest preference and $E$ represents the lowest. The weights are $3,2,1$, and -1 , respectively. Precisely six candidates are to be assigned by a member to each of the categories, A, B, and C. The use of category E is optional with a maximum of one assignment. No ballots will be considered valid unless exactly six candidates are assigned to each of $A, B$, and $C$. There will be no duplication of names in the various categories.
C. Advisory Votes by Secondary Affiliates at Times of the First and Second Written Caucus Ballots.

Secondary affiliates will receive a First Written Caucus Ballot (FWCB) similar to that received by section members but marked with "Advisory" and will be invited to vote on the FWCB in the same manner as members. Their separately tabulated results will be distributed to the members for advisory purposes at the time that the Second Written Caucus Ballot (SWCB) is sent.

Secondary affiliates will receive a Second Written Caucus Ballot similar to that received by section members but marked with "Advisory" and will be invited to vote on the SWCB in the same manner as members. Their separately tabulated results will be distributed to the members for advisory purposes for use during the April caucus meeting and the Informal and Formal ballots.
D. Caucus Meeting (April). The Section meeting as a group will select an appropriately-sized group of candidates from the Second Written Caucus Ballot, along with eligible nominees who were not ranked by the previous Class Membership Committee, and nominees on the Preference Ballot who will likely not be elected at the next day's Final Ballot. The listings on the Informal Ballot should reflect proper balance either as to age or field. Every effort is to be made at this stage to locate, identify, and eliminate those candidates who will not be supported by the Section on later ballots.

The members present also will discuss possible candidates for Foreign Associate nominations.
E. Informal Ballot (September). The Chair of the Section shall submit to the members of the Section, no later than September 20 of each year, an Informal Ballot containing, in alphabetical order and without indication of rank on the Informal Ballot of the previous year, the names of all candidates chosen at the April Caucus Meeting.
F. Formal Ballot (November). The Chair of the Section shall submit to the members of the Section, no later than November I of each year, a Formal Ballot based upon the results of the Informal Ballot. This Formal Ballot shall include all candidates who received at least two-thirds of the votes cast on the Informal Ballot. If this requirement does not qualify at least ten candidates for the Formal Ballot, then the top ten candidates on the Informal Ballot shall be carried forth to the Formal Ballot. In the case of a tie vote, the Chair is authorized to list all candidates tied for the tenth place.

## III. Intersectional Candidates

A. First Written Caucus Ballot (January). The Section Chair will identify those candidates, who, in his/her opinion, are appropriate intersectional candidates. The Chair will prepare a separate First Written Caucus Ballot for Intersectional Candidates. This ballot will carry proposals for Intersectional Candidates made by at least one member of the Chemistry Section together with a member of another section who will submit a proposal to his or her section for processing as an Intersectional Candidate there.
B. Second Written Caucus Ballot (February). The Section Chair will prepare a separate Second Written Caucus Ballot for Intersectional Candidates. This ballot will include those Intersectional Candidates who receive at least as many votes on the First Written Caucus Intersectional Ballot as the lowest qualified candidate for the Sectional Second Caucus Ballot received on the First Written Caucus Sectional Ballot.

The Section Chair will simultaneously contact the Chair of the proposed co-sponsoring Section and determine the degree of support likely to be obtained from the other Section.

For an Intersectional Candidate to proceed from the Second Caucus Ballot to the Informal Ballot, the candidate must have received a majority of votes of the Section members voting on the Second Written Caucus Ballot. The Section should consider the vote in the co-sponsoring Section before placement of the candidate on the Informal Ballot.

## IV. Eligibility

A. Section Candidates. A candidate who has been on the First Written Caucus Ballot and is not advanced to the CMC will be continued on the First Written Caucus Ballot for the succeeding year, provided he or she received at least $(8+3 \mathrm{~N}) \%$ of the votes cast. The number N is the number of times that the candidate has appeared consecutively on the First Written Caucus Ballot, where $\mathrm{N}=1$ for the first appearance of a sequence of consecutive appearances. The calculation of the required minimum number of votes shall include round-off, with decimal fractions 0.5 adding 1 to the total. Candidates not eligible for continuation on the First Written Caucus Ballot may be renominated after a lapse of one year.

A candidate who receives more than 40 percent and less than two-thirds of the votes on the Informal Ballot, and who is not advanced to the Formal Ballot, will be listed on the next First Written Caucus Ballot, provided that the $(8+3 \mathrm{~N}) \%$ rule has been satisfied. Any candidate on the Informal Ballot who received the votes of less than 40 percent of the members voting is no longer a qualified candidate but may be renominated after a lapse of one election cycle.

A person whose name appears on the Informal and Formal Ballots and who received sufficient votes to be forwarded to the Class Membership Committee, but who is not elected, shall be continued on the following year's Informal Ballot for no more than two times. No candidate's name may appear on the Informal and Formal Ballots more than three consecutive years and, after three unsuccessful appearances on the Informal and Formal Ballots, a candidate must be renominated, skipping at least one election cycle, to receive further
consideration. If a candidate does not receive two-thirds of the votes on the Formal Ballot, he/she will require renomination after a lapse of at least one year.
B. Intersectional Nominations. These are conducted in accord with Section and Academy Bylaws. An Intersectional Candidate must be renominated each year.
C. Foreign Associates. At the time of the Second Written Caucus Ballot, the Section Chair will provide a preliminary ballot containing all names received over the four years immediately proceeding February 1 of the year of the ballot and not forwarded to the CMC of that same year. The results of this ballot will be presented at the April Caucus Meeting. The slate of Foreign Associate candidates to appear on the Informal Ballot will be chosen at that meeting. This slate will include Foreign Associate candidates forwarded to the CMC but not elected at the April meeting of that year, provided that he/she has not already been a Foreign Associate candidate for the previous 5 consecutive years. The Foreign Associate Informal Ballot will be forwarded to the section members at the time of the regular Informal Ballot. Each member shall be entitled to vote for up to five candidates on the Foreign Associate Informal Ballot.

At the time of the Formal Ballot, the Section Chair will submit a Foreign Associate Final Ballot to the Section members, for the purpose of endorsing, or not endorsing, the top two or three names selected by the Section Chair on the basis of the Informal Ballot results.

A candidate shall not be on the Foreign Associate Ballot for more than five consecutive years. It is the current policy of the Council, which has authority for the nomination of Foreign Associates, to nominate up to two Foreign Nationals who are resident within the United States.
D. Diversity Committee. The Chair shall appoint annually a Diversity Committee whose aim is to identify accomplished chemists warranting nomination from underrepresented groups, such as women, members of racial minorities, candidates from poorly represented geographical areas or subfields of chemistry. The Chair, with the assistance of the Committee, will identify appropriate nominators, with the aim that these candidates will appear on the First Written Caucus Ballot of the next election cycle. Persons nominated through this effort will not be identified as such at any stage of the election process.
E. Voluntary Nominating Groups. These are conducted in accord with Academy Bylaws. While the Section has no formal relationship to a Voluntary Nominating Group, the Section Chair will cooperate, informally, with the Chair of the Voluntary Nominating Groups. A nominee of a Voluntary Nominating Group who fails in election may be proposed for the next First Written Caucus Ballot.
F. Ad Hoc Nominating Committee. From time to time the Chair shall appoint a committee composed of Section members for the purpose of determining whether any individual not yet nominated should be, and then preparing the appropriate nominations.
G. Accuracy of Nomination Forms. Suggested corrections to nomination forms should be made to the Section Chair who will contact the nominators, act as intermediary for further discussion and decide, if necessary, on the final wording of the nomination form.


## Election Procedures Revised August 2011.

## Section 15: Geology

## I. Nominating and Balloting Procedures

Any regular member may nominate a person for membership in the National Academy of Sciences (NAS) at any time. The principal criterion for membership is excellence in scientific achievement. All nominations,
including those for intersectional and foreign associate candidates, must be in NAS format, carefully written and edited. Format instructions and forms may be obtained from the Office of the Home Secretary, the Section Chair, or the members section of the NAS home page. Nominations received by the Section Chair by the beginning of the voting cycle will be included in that year's voting. Nominations received after the cycle begins will wait until the following year, except that if less than six candidates survive the First Straw Ballot, additional nominations in good order may be accepted before August to add to the Second Straw Ballot. Nominations may not be made by members affiliated with the same institution as the nominee. The voting cycle includes two Section straw ballots, Section Informal and Formal ballots, and the NAS Preference Ballot for election in April of the year following the beginning of the voting cycle. All balloting is secret. It is desirable that the nominating committee receive nominations well before March so that the committee can help in editing the written citation and statement of qualifications and can transmit the nominations to the Section Chair before the voting cycle begins.

Nominations must emphasize the candidate's outstanding contributions to science in a way understandable to all members of the Academy, not only geoscientists. The goal is to start the cycle with a full list of qualified candidates and to arrive at the end of section voting with only a few candidates supported by a high percentage of section membership.

The voting cycle begins March 1.

## II. First Straw Ballot

This ballot is mailed with nominating documents to regular members only. Candidates who received 40 percent or more "yes" votes on the preceding Formal Ballot but were not elected to membership will automatically appear on the First Straw Ballot and will be so designated on the ballot. Candidates who did not reach the Formal Ballot during the last voting cycle will not be included on the First Straw Ballot unless they are renominated. A "yes," "no," or "abstain" vote may be cast for each candidate on this ballot. A "blank" left on the ballot will be counted as an abstention. The ballot must be placed in a single envelope with the member's signature and return address on the outside and returned to the Section Chair by the date indicated on the ballot.

## First Straw Ballot mailed in late March.

## III. Annual Meeting

Regular and intersectional candidates on the First Straw Ballot who receive at least 50 percent "yes" votes ( 35 percent for intersectional candidates) of the total number of valid ballots returned are discussed at the Section meeting during the Annual Meeting in late April. If there is a large number of abstentions, the nominator should revise the write-up in consultation with the nominating committee and Section Chair. A candidate who receives at least 45 percent "yes" votes may be advanced to the Second Straw Ballot if the original nominator submits to the Section Chair a revised and improved nomination in time to be mailed with the Second Straw Ballot. This procedure applies to regular and intersectional candidates as well as to foreign associate candidates.

## Candidates discussed in late April at Annual Meeting.

## IV. Second Straw Ballot

This ballot will include the names of those candidates for regular membership and for foreign associate who received at least 50 percent "yes" votes on the First Straw Ballot (except as noted in III.) with the percentages indicated and the names arranged by descending percentage of "yes" votes. Those candidates who appeared on the most recent Formal Ballot who were not elected to membership are also listed as well as intersectional candidates who received at least 40 percent "yes" votes. Voting shall be by "yes" only; a blank counts as a
"no." The ballot must be placed in a single envelope with the member's signature and return address on the outside, and returned to the Section Chair by the date indicated on the ballot.

## Ballot mailed in August.

## V. Informal Ballot

The procedures governing the Informal Ballot are specified in the NAS Bylaws. Included on this ballot are all regular and foreign associate candidates who received at least 60 percent "yes" votes, based on the total number of votes cast, on the Second Straw Ballot. Intersectional candidates who received at least 40 percent "yes" votes are also included. Regular and intersectional candidates are listed alphabetically (NAS Bylaw IV, 13). Foreign Associate candidates are listed separately. Percentage of "yes" votes from the Second Straw Ballot are shown next to the candidates' names. Voting is by "yes" only with a blank counting as a "no." The ballots must be returned to the Section Chair within four weeks after mailing. The ballot must be sealed within an inner blank envelope that is enclosed within an outer envelope bearing the typed or printed name and address of the member and his or her signature (NAS Bylaw IV, 13).

Ballot mailed by September 20th.

## VI. Formal Ballot

The procedures governing the Formal Ballot are specified in the NAS Bylaws. On this ballot candidates for regular member and foreign associate who received 60 percent "yes" votes on the Informal Ballot, 40 percent for intersectional candidates, are listed. The candidates are listed according to their ranking from the results of the Informal Ballot. The ballots must be returned to the Section Chair within four weeks after mailing. The ballots must be sealed within an inner blank envelope that is enclosed within an outer blank envelope bearing the typed or printed name and address of the member and his or her signature (NAS Bylaw IV, 13).

## Formal Ballot mailed by November 1.

## VII. Class Membership Committee

Results of the Formal Ballot are reported by the Section Chair to the Office of the Home Secretary and are used by the Class Membership Committee (CMC) to select candidates and their order of listing on the Preference Ballot. Only regular member candidates and foreign associate candidates with two-thirds or more "yes" votes are reported. For intersectional candidates, a majority of favorable votes is required, however distributed between the sections voting (NAS Bylaw IV, 14). Candidates on the Formal ballot who receive 40 percent or more, but less than two-thirds, of the votes shall continue as candidates in the next voting cycle.

CMC meets in Early February.

## VIII. Preference Ballot

All members receive the Preference Ballot, which is mailed by NAS about a month before the Annual Meeting.
Election Procedures revised July 2001.

## Section 16: Geophysics

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## Nominating Committee

Section 16 uses a Nominating Committee to identify candidates with greatest support from the Section, to review and discuss qualifications and to seek new names for candidacy.

The Nominating Committee is appointed by the Chairman of the Section, who normally chairs the Committee. Each member of the Committee is correspondent for a membership subsection covering an important area of Geophysics. From time to time the Section reviews and, if it is deemed to be appropriate, changes the number of subsections and their scope. Members of the Nominating Committee use the expert knowledge of members of their group to ensure that all suitable candidates from that area are identified, but their primary responsibility is to select the best list of Geophysics candidates, regardless of field.

## Procedure

The Nominating Committee devises its own procedures for preparing a list of candidates. The Nominating Committee encourages members to identify scientists worthy of nomination and prepare proposals for nomination and takes steps to ensure that possible candidates are not overlooked. A nominator must be at a different institution from his nominee. Proposals for nominations by members, made in accordance with Academy rules, and at a suitable time, are considered by the Committee at all stages of its deliberations.

Before the 1st of April each year the nominating committee canvasses the subsections to obtain evaluation of those proposed for nomination in the respective subsections. This procedure results in a list of candidates. which is discussed at the Annual Meeting. Subsequent revisions are made as required. The final list is prepared by July 1 and distributed soon thereafter by the Chairman as a Straw Ballot to be returned in time for the preparation of the Informal Ballot. This list is headed by the names of the candidates, judged by the nominating committee to have the highest level of support. In preparing this list the Committee will take into account trends established in recent straw ballots, so as to maintain, as much as possible, a coherent election strategy. These are followed by the names of the remaining candidates in alphabetical order.

## Timing

The Nominating Committee starts its annual cycle after the date designated by the Chairman for the receipt of the Formal Ballot (normally around 1 December). At this time, the Section Chairman sends to members a list of all potential candidates together with a call for nominations. Members are expected to make nominations in canonical form ( 50 word citation +250 word write-up +12 publications) for the Committee to consider. Current nominations should be renewed and updated every year so as to reflect recent significant contributions of the candidate not previously noted. If received in canonical form by the Chairman before 28 February, the Nominating Committee must give such nominations careful attention throughout all stages of its deliberations. Nominations received after 28 February may have their consideration by the Nominating Committee delayed until the following annual cycle. The Chairman informs the membership, by mail, of the Nominating Committee's findings in time for discussion at the Annual Meeting. Final recommendations by the Nominating Committee are made before 1 July.

## The Straw Ballot

On or about 1 July, A Straw Ballot slate will be assembled. It will contain the Nominating Committee's recommended short list and all other nominations made by members for that year. This slate, along with supporting material for all candidates, will be distributed to the Section and comments on the candidates will be solicited. The comments received will be collated with attribution and distributed with the Straw Ballot, which will be mailed out on or about 15 August. The Straw Ballot will have the categories of 'Yes', 'No', and 'No Vote'.. Foreign Associates may participate in Straw Balloting.

## The Informal Ballot

The numerical results of the Straw Ballot are distributed with the Informal Ballot. The Chair of the Nominating Committee is responsible for preparing this list of numerical results, which will identify the top scoring candidate and the two subsequent-scoring individuals in each subsection. The Informal Ballot will list the five candidates from the Straw Ballot who have the largest number of votes. Candidates who are endorsed by 50\% or more of the Section 16 members who cast Informal Ballots, will be carried forward to the Formal Ballot.

## Intersectional Candidates

These are handled in the same manner as Sectional Candidates, except that the Nominating Committee gives weight to the expectation that only a part of the candidate's achievements are in the field of Geophysics. At the appropriate time the Chairman holds discussions with the Chairman of the other Section involved in the nomination and participates in the completion of the canonical form of joint submission.

## Foreign Associates

Any Foreign Associate candidate receiving net votes equal to or greater than the number of net votes received by the fifth-ranking U.S. candidate shall be carried forward to the Informal Ballot. Foreign Associate nominations ultimately are reported to the Foreign Secretary and not to the Class I Membership Committee.

## Secondary Affiliates

Members of the National Academy of Sciences who have chosen to be Secondary Affiliates of Section 16 are accorded the following privileges. They will receive copies of Section 16's newsletters, and other communications circulated by the Section Chair unless there is good reason to restrict them to Section 16. They may affiliate with one or more of the four disciplinary membership groups within Section 16. They may participate in the earliest stages of candidate polling conducted by their disciplinary membership groups. Their opinions of the candidates on Section 16's Straw Ballot will be solicited and distributed, with attribution, to the Section. They will not, however, vote on Section 16's Straw Ballot.

Effective August 9, 1990.
Revised November, 1993; August, 1994; April 26, 1999; April 15, 2002, July 24, 2003.

## Section 21: Biochemistry

## I. Sectional Candidates

Nominations must be submitted on the standard form (Office of the Home Secretary) on or before December 20 (or later at the Chairman's discretion).

## A. Eligibility

Nominations are accepted from individual members of the Section. Nominations will also be made by panels specializing in various aspects of biochemistry, and appointed each year by the Chairman. The names of all candidates will appear on the Caucus Ballot. Candidates chosen by the special panels will be marked on the Caucus Ballot. Candidates who do not advance beyond the Caucus Ballot in two successive years are removed from the list and may not appear on the next Caucus Ballot but may be renominated after a one-year interval by submission of a new nomination form.

## B. Advancement

1. Candidates who appear in the top three deciles of the Caucus Ballot are advanced to the Summer Ballot.
2. The top fifteen candidates on the Summer Ballot are advanced to the Informal Ballot.
3. In both Caucus and Summer ballots, ties at the boundary between inclusion and exclusion are resolved according to the rules appended.
4. The top seven candidates on the Informal Ballot advance to the Formal Ballot.
5. All candidates on the Formal Ballot who receive a number of votes equal to or greater than $2 / 3$ of the total number of members actually voting are advanced for consideration by the Class Membership Committee.

## II. Intersectional Candidates

These candidates, if any, first appear on the Summer Ballot.

## A. Eligibility

1. All of the following must be fulfilled:
a. Candidate must be in top 5 deciles of most recent Caucus Ballot of Section 21.
b. Chairman of Section 21 must receive a proper proposal (Bylaw IV.12.B) for Intersectional candidacy from a member of Section 21 before 15 May in the current year. The Chairman may initiate such a proposal.
c. The Chairman of another Section notifies the Chairman of Section 21 in writing, or vice versa, of its intent to nominate a candidate jointly, in accord with Bylaw IV.12.B.
2. Note: Nominations good for one year - a candidate unsuccessful in reaching the Formal Ballot may not be renominated as an Intersectional candidate during the following year.

## B. Advancement

1. The top 2 intersectional Candidates progress from the Summer Ballot to the Informal Ballot. (Two or fewer automatically advance.)
2. To progress from the Informal Ballot to the Formal Ballot, a candidate must receive at least 25 percent of the votes of each of the sponsoring Sections (Bylaw IV.12.B).
3. Those Intersectional Candidates on the Formal Ballot who receive 50 percent or more of the summed votes cast in both of the sponsoring Sections are declared nominees and the names are sent to the Class Membership Committee along with the regular Section Nominations.

## III. Candidates for Foreign Associate

Nominations must be submitted on the appropriate form (Office of the Home Secretary).

## A. Eligibility

Nominations will be made by a committee appointed each year by the Chairman. In addition, nominations are accepted from individual members of the section. The names of all candidates will appear on the Caucus Ballot. Candidates who do not advance beyond the Caucus Ballot in two successive are removed from the List but may be renominated after a one-year interval.

## B. Advancement

The top six candidates, or the top 25 percent (the lesser of the two) from the Caucus Ballot advance to the Summer Ballot. The top four candidates are advanced to the Informal Ballot. The top two advance to the Formal Ballot.

## IV. Nomination of Candidates for the Class Membership Committee

Each year, the Chairman will solicit nominations for candidates to the Class Membership Committee, and conduct a mail ballot to choose one member whose name will be submitted to the Class as a candidate to serve on the Class Membership Committee. The member chosen will be a candidate for two successive years. At the initiation of this system, staggered terms were established for the two nominations allowed the Section; therefore each year the Chairman will submit to the Class Secretary two names: the newly chosen candidate, and the candidate from the previous year serving his or her second term.

## V. Decision Process for Ranked Lists

The candidates are ranked by total vote.
$\mathrm{N}=$ total number of candidates
d = nominal decile rank for success
$\mathrm{i}=$ nominal actual rank for success $=$ integer value of $(\mathrm{Nd} / 10+0.5)$
$R=$ nominal absolute rank for success
In the absence of tie votes, the successful candidates are those in ranks:
1 through i with:
d = 3 for Caucus Ballot
d=5 for Intersectional Candidates, Summer Ballot
1 through R with:
$R=15$ for Summer Ballot
$R=9$ for Informal Ballot

In the presence of tie votes: (That is the nominal success rank, i or R , occurs within a group of candidates all of whom have the same total vote.)

If the nominal rank divides the tied group such that the number of individuals above this rank is greater than or equal to the number below, then the entire group is included with the successful candidates. If the tied group is divided such that the number below the nominal rank is greater than the number above, then the entire group is excluded from the list of successful candidates.

Election Procedures revised 2001.

## Section 22: Cellular and Developmental Biology

## I. Call for Nominees

In March and/or May, the Section Chairman shall mail out to the membership, plus the Foreign Associates, a call for nominees, to be returned to the chairman in time for preparation of the Straw Ballot as specified by the Chairman. Included with the returned names should be a brief informative statement of the qualifications of the nominee.

## II. Straw Ballot

New nominations must be received by the Chair by July 15. The Straw Ballot will be mailed/posted shortly after that deadline, and voting will end by August 25 or as specified by the Chair. This Ballot will contain, in alphabetical order, the names that appeared on last year's Straw Ballot [except for those removed for lack of support*] and those elicited by the call for new names. Also included shall be the brief informative statements concerning each nominee. For information only, the Ballot will also contain the names of those to be automatically carried over to the Informal Ballot from the previous year.

* Individuals who have appeared on the Straw Ballot for three consecutive years without advancing beyond the halfway point of the voting in any of those three years will be automatically ineligible for the Straw Ballot in the subsequent (fourth) year. They will then require a fresh nomination in the following (fifth) year. This "lack of support" definition will begin with the Straw Ballot of 2016.

Secondary Affiliates and Foreign Associates may vote in the straw ballot. Their votes will count toward advancement to the Informal Ballot, and will be listed separately in reports to Section members.

## III. Informal Ballot

A. On or before September 17, the Section Chairman shall mail out an Informal Ballot, to be returned by October 20. This Ballot will contain, in alphabetical order, candidates automatically carried over from the previous year (see III.B) plus those receiving support from at least one-third of the members voting on the Straw Ballot. If the total number of candidates exceeds 16 , then those receiving the highest number of Straw Ballot votes will be used, to make up the total of 16 candidates. Included with this Ballot will be the complete write-ups of the candidates, if available.
B. Candidates who are automatically carried over from the previous year will be those who received more than 40 percent of the votes cast on the previous year's Formal Ballot, and were not elected to membership.

## IV. Formal Ballot

On or before October 24, the Section Chairman shall mail out a Formal Ballot to be returned by November 24, which will contain the names of those who received at least 40 percent of the votes cast on the Informal Ballot, (or at least 25 percent in each of two sections in the case of intersectional candidates), and listed in order by the number of votes received on the Informal Ballot. In order to obtain a reasonable number of strongly supported candidates, Members will be asked to vote for at least half of the candidates on this Ballot. Included with this Ballot will be those complete write-ups which were not available at the time of the Informal Ballot voting.

## V. Foreign Associates

All the procedures adopted above for membership will ordinarily hold for Foreign Associates.

## VI. Class Membership Committee

The Chairman of the Section is automatically the Section Representative to the Class Membership Committee. If not available, he or she selects an alternate.

## VII. Election of New Chairman

During the last year of his three-year tenure, at the time of the call for names of new nominees, the Chairman shall send out a call to the membership for names for the new Chairman. If more than two names are solicited, then all names will be sent out for voting at the time of the Straw Ballot. The two candidates receiving the highest number of votes on this ballot will be sent out to the membership at the same time of the mailing of the Informal Ballot (see III.A above), to be returned by October 25, and the one having the most votes on this ballot will be the new Chairman. Alternatively, the Chairman may communicate the names solicited at the Annual Meeting to the Home Secretary who will then handle the balloting.

Election Procedures revised February 2014.

## Section 23: Physiology and Pharmacology

## I. Nominations and Balloting for Regular Members

## February 1:

Receipt of all new nominations by Section Chairman (final deadline, May 15). Nominations will be returned to the proposers unless they are on proper NAS forms and comply with prescribed format.

## April:

Annual Section Meeting discusses nominations circulated as described above. Members not able to attend the meeting should arrange for an advocate of their candidates to be present. Informal discussion of possible future candidates may also occur; such nominations would be formalized for the next deadline.

May 15:
Final deadline for receipt of new nominations. Chairman invites revision and updating of nomination papers, to be received prior to May 15 for inclusion with Straw Ballot (see below).

June 15:
Straw Ballot mailed to active and retired members, Foreign Associates, and Secondary Affiliates. Section Chairman sends each member a packet consisting of all completed nomination forms, including:
A. New nominations (see above), and
B. Sectional Candidates who failed election the previous April
C. Any other candidates ranking among the top ten on the most recent Straw Ballot.

If after three consecutive years, a candidate fails to qualify for the Formal Ballot, the nomination shall be withdrawn for the subsequent election cycle and a new nomination must be submitted thereafter. This will apply to candidates for Regular Membership and Foreign Associate.

Chairman invites revision and updating of nomination papers, to be received prior to May 15 for inclusion with Straw Ballot (see below).
A. Straw Ballot lists, alphabetically, all candidates whose nomination forms were circulated as described above and additional nominations received by May 15.
B. Straw Ballot is a rank voting instrument, with all N candidates listed alphabetically, and voted on by rank number from 1 (top) to N (bottom). Unranked or identically ranked candidates are assigned average scores for their positions in the ranking.
C. Straw Ballot is anonymous.
D. Votes by retired members, Foreign Associates, and Secondary Affiliates are counted separately and recorded as "advisory" in the Straw Ballot tabulation.

## August 15:

Deadline for receipt of Straw Ballot by Chairman.

## September 15:

Informal Ballot mailed according to the procedures described above for Straw Ballot, and including tabulation of Straw Ballot results, showing separately the actual votes and the advisory votes.
A. Informal Ballot lists the top-ranking five candidates from the Straw Ballot. In case of ties in the fifth-ranking position, all tied candidates are included.
B. In the above and in all other respects the Informal Ballot procedures comply with NAS Bylaws.

October 13:
Deadline for receipt of Informal Ballot by Chairman.

## November 1:

Formal Ballot mailed to members entitled to vote, together with tabulation of Informal Ballot results, showing separately the actual votes and the advisory votes.
A. Formal Ballot lists all candidates who received the votes of at least 50 percent of those voting on the Informal Ballot (for intersectional candidates 25 percent).
B. In the above and in all other respects the Informal Ballot procedures comply with NAS Bylaws.

November 29:
Deadline for receipt of Formal Ballot by Chairman. Candidates who receive at least two-thirds of the votes cast become the Section's nominees for the NAS Preference Ballot. Intersectional Candidates must receive a majority (however distributed) of the votes cast in any two sections.

## II. Nominations and Balloting for Foreign Associates

These procedures are identical to those for members except that the Straw Ballot lists, alphabetically:
A. new nominations and renominations, and
B. Sectional Candidates who failed election the previous April, and
C. any other candidates ranking in the top five of the most recent Straw Ballot; however,
D. a candidate who was on the Straw Ballot in the previous three years without qualifying for the Informal Ballot shall not be placed on the current Straw Ballot unless he or she is renominated.
E. Different ballots are used, and the results are tabulated separately.
F. The two top-ranked names on the Straw Ballot are placed on the Informal Ballot.

## II. Actions of the Annual Section Meeting

In recognition of the geographic and other limitations that sometimes prevent members from attending, substantive actions voted at the Annual Section Meeting are subject to ratification by a majority of members voting in a mail ballot. In the case of a controversial issue, the Chairman solicits statements representing different opinions and distributes these with the ballot.

Election Procedures revised September 2010.

## Section 24: Cellular and Molecular Neuroscience

## I. Nominations

Nominations are due in the Section Chair's office by July 15. Candidates from previous years are placed on the preliminary ballot if they received 25 percent or more of the vote on the previous year's Informal Ballot. Nominees remain on the ballot (even with 25 percent or more of the vote) for a maximum of three years; after that, they must be renominated.

## II. Preliminary Ballot

The Preliminary Ballot is sent by August 1 and is due in the Section Chair's office by August 31. Members will be asked to rank nominees on scale of 1-4 (1, exceptional; 2, excellent; 3, good; and 4, marginal). The top half
of the ranking will move forward to the Informal Ballot. Foreign Associates and Secondary Affiliates may vote in this ballot.

## III. Informal Ballot

Informal Ballot is sent by September 15 and is due in the Section Chair's office by October 20. Candidates must receive at least 50 percent of the vote on the Informal Ballot ( $25 \%$ in each of the two Sections if Intersectional) to advance to the Formal Ballot.

## IV. Formal Ballot

The Formal Ballot is sent by November 1 and is due in the Section Chair's office by November 30.
Election Procedures revised August 2013.

## Section 25: Plant Biology

I. Candidates for regular membership and foreign associateship can be nominated by any individual member. Nominations with the supporting material required by the Academy (biography, 50-and 250-word statements, bibliography of not more than 12 titles) should be sent to the Section Chair not later than by March 15 of the year preceding the Academy elections. They will be distributed to the membership and discussed at the sectional meeting during the annual meeting of the Academy. Nominations can be withdrawn only by the nominating member(s); additional nominations can be made at the sectional meeting if approved by a majority of the members present.
II. Two preliminary ballots are to be held, one reaching the membership on or about June 1, and the other reaching the membership on or about August 15 . The Section Chair will not put any name on the ballot without having the required supporting documentation for the nominee in hand.

On the first preliminary ballot, nominees will be voted upon by Yes - Neutral - No, and the results thus shown on the second preliminary ballot. The first preliminary ballot will be distributed to Foreign Associates, Section Affiliates, as well as to active Members.

The second preliminary ballot will be by approval vote only (i.e., vote for, or no vote).
Individuals receiving 40 percent (intersectional nominees 25 percent) or more of the vote on the second preliminary ballot will be advanced to the Informal Ballot of the Academy.
III. Nominees remaining on our ballots for three years without being elected are to be dropped (unless they have to be carried on according to Academy Bylaws). They can be renominated on submission of new supporting documentation.

The Chair can ask members of the Section to canvass particular areas of plant biology for individuals most worthy of nomination by the Section.

Election Procedures revised May 2003.

## Section 26: Genetics

## I. Procedures for Election of Members, Section 26, Genetics

Members of Section 26, Genetics, may partake in the nomination and voting of Candidates at the approximate times designated below:

## Nomination Deadline, June 15.

1. Preliminary Ballot 1, sent by E-mail or mail June 30, return by July 20;
2. Preliminary Ballot 2, sent by E-mail or mail August 1, return by September 5
3. Informal Ballot, online or by mail, return by October 19;
4. Formal Ballot, online or by mail, return by November 30; (Class Membership Committee Meeting, late January or early February);
5. Preference Ballot, online or by mail, return by April 16; (Final Ballot at the Annual Business Session in April).

A member will have the option of affiliating with one secondary section. As with a member's primary affiliation, a secondary affiliation may be changed no more often than once every three years.

Secondary affiliates will be permitted and encouraged to participate in any scientific programs and discussions of Section 26 activities. Secondary affiliates, for example, may attend Section 26 meetings and participate in discussions of candidates for membership. Also, secondary affiliates will be encouraged to submit nominations for membership to Section 26. Although any member of the Academy may attend the meeting of any Section and may nominate a candidate for membership in any Section, introducing a secondary affiliate status should increase such cross-Section activities. Secondary affiliates will be permitted to vote on Section 26 Preliminary Ballots 1 and 2, but not on Section 26 Informal and Formal Ballots.

Nominations by an Individual. Any member of the Section or any member of the NAS may nominate an individual as described by Academy Bylaws by submitting the nominee's Biographical Supporting Material to the Section Chairman on the appropriate form.

Nominations by a Committee. At the suggestion of the Section Chairman, and with the approval of Section 26 at the Annual Meeting, an ad hoc Nominating Committee may be appointed to refresh and refurbish the list of candidates between that Annual Meeting and the next. The ad hoc search committee, consisting of three members of Section 26, will serve a period of three years concomitant with the Chairman's term as chairman. The purpose of the Committee is to assist the Section in identifying qualified candidates that represent the several disciplines of the Section, as well as in identifying candidates that represent disciplines not currently embodied in the Section.

Preliminary Ballot 1. The Preliminary Ballot 1 will contain an alphabetical list of all the individuals duly proposed to the Section, accompanied by their complete supporting biographical materials, the name(s) of the nominator(s), and previous rankings. Members voting will indicate one of three degrees of support for each candidate: 2 , strong support; 1 , mild support; and 0 , no support.

Any name that falls below the top 20 for three consecutive years shall be removed. Reinstatement of a name is possible a year after removal upon receipt by the Chairman of an updated nomination form.

The Chairman shall send the Preliminary Ballot 1 to each member by E-mail or mail on June 30, and members shall return it by July 20.

Preliminary Ballot 2. Members will choose twelve candidates from those listed on Preliminary Ballot 2, which will contain the results of the Preliminary Ballot 1. The Chairman shall send the Preliminary Ballot 2 to each member by E-mail on August 1, and members shall return it by September 5.

Informal Ballot. The top 12 candidates from the Preliminary Ballot 2 shall be listed alphabetically on the Informal Ballot, which should be mailed to members by September 20 and returned to the Chairmen four weeks later. Voting instructions on the Informal Ballot should include the statement: "Vote for no fewer than four and not more than six candidates."

Formal Ballot. The Formal Ballot will contain the names of those who received at least 40 percent of the votes cast on the Informal Ballot, or at least 25 percent in each of two sections in the case of intersectional candidates. The names will be listed in order by the number of votes received on the Informal Ballot. Instructions should include the statement: "Vote for at least ___ Candidates or no less than two-thirds of the number of names on the Formal Ballot." The Section Chairman shall submit the Formal Ballot to the members no later than November 2 of each year, and members shall return it by November 30.

The Section Chair is encouraged to work with the members of the Section in the balloting process to ensure selection of the best quality scientists most likely to succeed in election.

One week later the Section Chairman shall forward the results of the Formal Ballot to the Home Secretary who will then prepare the material of all the Sections in each Class for the Class Membership Committee in February. Those candidates receiving $2 / 3$ or more of the votes shall be considered by the CMC. Intersectional candidates with more than $50 \%$ of the sum of total votes in both sections will also advance to the CMC.

Each voting member of the CMC shall, by secret ballot, vote for 15 (provisionally increased to 23) Nominees. The top 23 (provisionally increased to 35) shall be designated Class Nominees and shall be ranked on the Preference List according to the number of votes received, provided, however, that each Section shall have at least one Nominee placed not lower than position 12 on the Preference List.

## II. Procedures for Election of Foreign Associates

Members can nominate candidates for Foreign Associates at any time of the year by submitting to the Section 26 Chairman an appropriate form, containing appropriate biographical material. The candidates will be voted on at the next Informal and Formal Ballots. The results of the Formal Ballot shall be reported to the Foreign Secretary no later than December 8. The name of any candidate receiving less than one-third of the votes in the Section for three consecutive years shall be removed from the list.

## III. Nomination of Candidates for the Class Membership Committee

The voting members of the Class II Membership Committee (CMC) shall be the Section chairs (or their designated alternates), members-at-large elected by the Class, and Council designees, as provided by the Bylaws of the Academy. Each year, prior to the NAS Annual Meeting, the Chairman will solicit nominations by E-mail for candidates to serve on the Class Membership Committee. At the NAS Annual Meeting, Section 26 Members will vote for one or two candidates. The member chosen by highest number of votes can be a candidate for three successive years. Each year at the Annual Meeting the Chairman will submit to the Class Secretary the following two names: the newly chosen candidate, and the candidate from the previous year serving a second or third term.

## IV. Liaison to the NRC

One member from each Academy Section serves as liaison between the Section and the National Research Council (NRC). Liaisons are called upon by the Academy president to suggest potential NRC committee members or report reviewers and to comment on matters pertaining to the NRC in general. Liaison to the NRC from Section 26 is appointed for three years concomitant with the Chair's term. The Liaison to the NRC is selected by the Chair with the approval of Section 26 Members at the Annual Meeting.

## V. Election of a New Section Chair

During the last year of the three-year tenure, at the time of the call for names of new nominees, the Chair shall send out a call by E-mail to the membership for names for the new Chair. If more than two names are submitted, then all names will be sent out for voting at the time of the Preliminary Ballot 1. The two candidates receiving the highest number of votes on this ballot will be sent out to the membership at the same time of the mailing of the Preliminary Ballot 2, and the one having the most votes on this ballot will be the new Chair.

At the end of his or her term of office, the Section Chair shall provide the incoming Section Chair with all relevant records and correspondence, except those concerning the votes of the new Section Chair that was elected during the term of office of the retiring Section Chair.

Election Procedures revised February 2012.

## Section 27: Evolutionary Biology

## I. Duties of the Chair:

A. To preside at the Annual Meeting of the Section.
B. To transmit the Sectional minutes of the Annual Meeting to the Home Secretary.
C. To conduct all Sectional balloting.
D. To make certain that a completed nomination statement accompanies the Straw Ballot for each nominee and to review biographical supporting material for scientific accuracy and content; the Chair also is responsible for coordinating the "fine-tuning" of the biographical data sent to the Home Secretary.
E. To represent the Section at Class Meetings, or if the Chair is not able to attend, to appoint a representative and so inform the Home Secretary; it is the duty of the Chair to brief the representative about the nominees for membership and other important matters that may come before the Class Meeting.
F. To transmit to Sectional members communications requiring their action or important suggestions sent to the Chair by other members of the Section.
G. To maintain records of balloting and other important records of the Section and to pass these records along to the next Chair of the Section.
H. To assist in the preparation of memoirs of deceased members by recommending authors and reviewing drafts of memoirs.

## II. Election of the Chair:

The election of the Chair shall be done in accordance with the Bylaws of the National Academy of Sciences.

## III. Sectional Procedures for Submitting Candidates for Nomination for Membership to the National Academy of Sciences:

A. Any member of the Section may submit the name of a nominee to the Chair of the Section for consideration.

Such nomination must be accompanied by a completed, formal nomination statement, including a summary, not to exceed 250 words, of the person's scientific accomplishments, a selected bibliography of not more than 12 publications, and a citation, not to exceed 50 words, identifying the primary scientific achievements of the nominee. The nomination statement must be signed by at least one member of Section 27.
B. Candidates receiving greater than 40 percent of the vote on the Straw Ballot shall be placed on the Informal Ballot in alphabetical order in accordance with the Bylaws.
C. Candidates receiving 40 percent or more of the votes on the Informal Ballot shall be placed on the Formal Ballot; in the Formal Ballot the names of the candidates shall be listed in rank-order according to the votes received on the Informal Ballot, and the number of votes received shall be shown.
D. A candidate who received 40 percent or more of the Sectional votes on the Formal Ballot, but is not elected to the National Academy of Sciences, shall be carried forward to the Sectional ballot for the next year.
E. Nominees receiving less than 40 percent of the vote on the Straw Ballot for three consecutive years, or less than $25 \%$ of the vote on the Straw Ballot in any one year, shall be dropped from the ballot in the succeeding year.
F. All straw ballot candidates whose nomination forms have not been updated for two years shall be removed from consideration. The nominators of such candidates must be notified so that they can update their nomination.

## IV. Intersectional Nominations:

Anyone may be suggested as a candidate provided that:
A. Bibliographic data are supplied, as for Sectional nominees.
B. The other Section designated will place the name of the Intersectional candidate on their ballot.
C. If a candidate receives at least 25 percent of the votes cast on the Informal Ballot in each of the two Sections, then the candidate shall be added to the Formal Ballot; the Chair of the Section must notify the Chair of the other cooperating Section as to whether or not the candidate is viable after the Informal Ballot.
D. Other procedures leading to election are set forth in Article IV, Section 12.B of the Bylaws.

## V. Foreign Associates:

Any name submitted as a candidate for Foreign Associate must be accompanied by a nomination statement as set forth for Sectional nominees above. The details of the election procedures for Foreign Associates are set forth in Article IV, Section 12.E of the Bylaws. Names of the Foreign Associates will be placed on the Straw Ballot if possible, and must be placed on the Informal Ballot.

## VI. Secondary Affiliates and Foreign Associates:

Secondary affiliates and foreign associates of Section 27 will participate in the straw ballot, but their votes will be tallied and reported separately.

Election Procedures revised January 2012.

## Section 28: Systems Neuroscience

## I. Nominations

Nominations are due in the Section Chair's office by June 15. For the Preliminary Ballot informal nominations, consisting of 2-3 sentences briefly describing the candidates' accomplishments, are acceptable. Full nominations of candidates who have passed the threshold on the Preliminary Ballot are due in the Section Chair's office by August 31. Candidates from previous years are placed on the Preliminary Ballot if they received 25 percent or more of the vote on the previous year's Informal Ballot. Nominees remain on the Ballot (even with 25 percent or more of the vote) for a maximum of three years; after that, they must be renominated.

## II. Preliminary Ballot

The Preliminary Ballot is sent by July 1 and would be due in the Section Chair's office by July 31. Members will rate the candidates using a 1-4 rating system (1—truly exceptional, 2-excellent, 3-good, 4-marginal).

Candidates will be ranked according to the average of their voted scores. Candidates at the top half of the ranking order will advance to the Informal Ballot.

## III. Informal Ballot

The Informal Ballot is sent by September 15 and is due in the Section Chair's office by October 20. Candidates must receive at least 50 percent of the vote on the Informal Ballot to advance to the Formal Ballot.

## IV. Membership Committee

The Section Chair will appoint a Membership Committee consisting of a Chair and 2-3 members which will develop and implement procedures for identifying promising candidates. Before the Formal Ballot, the Committee will designate the 2-3 candidates they believe best qualified for election, and their choices will be transmitted to the membership of the Section by the Section Chair along with the Formal Ballot. These communications may include brief summaries of the cases for status of "best qualified."

## V. Formal Ballot

The formal Ballot is sent by November 1 and is due in the Section Chair's office by November 30.

## VI. Foreign Associates

Members may nominate Foreign Associates by providing the Section Chair the nomination material by June 15. The top four candidates on the Preliminary Ballot will advance to the Informal Ballot, and the top two on the Informal will advance to the Formal Ballot. Nominees with $25 \%$ or more of the vote on the previous year's Informal Ballot remain on the Ballot for a maximum of three years; after that they must be renominated.

## VII. Secondary Affiliates

Secondary Affiliates will be invited to attend Section meetings and nominate candidates in the Section. They will also be sent candidate information and the Preliminary Ballot as will Foreign Associates and Retired Members. These votes will be recorded separately in the Preliminary Ballot tabulation.

Election Procedures created May 2010.

## Section 29: Biophysics and Computational Biology

## I. Election Procedures for new members

1. Nominations with the supporting material required by the Academy (biography, 50-and 250 -word statements, bibliography of not more than 12 titles) should be sent in the proper format to the Section Chair by March 1 of the year preceding the Academy elections. Nominations for regular member and foreign associate can be prepared by any member or foreign associate of Section 29. In the case of a nomination prepared by a foreign associate, the Chair will assist in identification of a member to be the official nominator once the nomination is forwarded to him or her. Nomination forms are available on the Academy website. This list of candidates can be augmented by the Canvassing Committees which have been set up by the Chair of the Section. These Canvassing Committees will report their top nominees to the Section Chair by March 1 each year, along with the required supporting documentation.
2. Two preliminary ballots are to be held. An additional preliminary Canvassing Ballot may also be instituted by the Chair, if deemed essential in identifying top candidates within each subspecialty of the section, or within underrepresented groups.
3. A Caucus Ballot will be sent to the membership on or about March 15. The Section Chair will not put any name on the Caucus Ballot unless he/she has received the required supporting documentation for that
nominee by March 1. The names of nominees will appear on the Caucus Ballot in alphabetical order. They will be voted upon by approval (i.e, only votes in favor will be counted), with members being required to vote for at least 10 nominees, or $20 \%$ of the current nominees, whichever number is greater, but for no more than 20, or $40 \%$ of current nominees, whichever number is greater, the exact integer numbers within these ranges to be determined by the Chair. The Caucus Ballot will be distributed to active Members and Foreign Associates as well as to Secondary Affiliates. Nominees placing in either in the top third in this ballot, or in the top 20, whichever number is greater, will advance to the Straw Ballot. If there is a tie vote for the last position in this group, the names of all nominees receiving that number of votes will appear on the Straw Ballot. Those nominees will be discussed by the membership at the Annual Meeting.
4. A Straw Ballot will reach the membership on or about June 15 that lists the names of all the candidates successful in the Caucus Ballot in alphabetical order. Members will be allowed to vote for at least 5 nominees, or $20 \%$ of those nominated, whichever is greater, and for no more than 10 nominees, or $40 \%$ of those nominated, whichever is greater. The Straw Ballot will be distributed to active Members and Foreign Associates as well as to Secondary Affiliates.
5. The section chair shall submit to the members of the Section, not later than September 20 of each year, an Informal Ballot containing in alphabetical order, the names of all candidates successful in the Straw Ballot. The 10 candidates receiving the most votes on the Straw Ballot will appear on the Informal Ballot. If more than one candidate is tied for 10th place on the Straw Ballot, then the names of all those so tied will appear on the Informal Ballot. Ballots shall be received by the Section Chair within four weeks. If the Academy approves a procedure for electronic voting, the electronic procedure can be substituted for the mail ballot. On this Informal Ballot, each member shall place a mark by the names of those Candidates endorsed for nomination. The Chair may instruct participants to vote for a number of candidates designed to insure a clear ranking, e.g. at least 40 to $50 \%$ of the total candidates, but no more than 70 to $80 \%$ of the total candidates. The ballot thus inscribed shall be sealed in an envelope bearing the printed or typed name and the signature of the member, and transmitted to the Section Chair. Ballots shall be received by the Section Chair within four weeks. The results of this Informal Ballot shall be reported to the home secretary and to the members of the Section.
6. The Chair of the Section shall then, not later than November 1 of each year, submit to the members of the Section a Formal Ballot based upon the results of the Informal Ballot and ranked on the Formal Ballot accordingly. The Formal Ballot shall include the top 5 candidates from the Informal Ballot, and in the case of ties for the last position(s), the entire tied group shall be included if the number below the cut-off of 5 is equal to or greater than the number above the cut-off, and the entire tied group shall be excluded if the number below the cutoff is greater than the number above. In addition to the above top 5 candidates, the Formal Ballot shall include up to three additional candidates who are intersectional or will appear on a Temporary Nominating Group Formal Ballot, chosen according to their rank on the Informal Ballot. All candidates appearing on the Formal Ballot must also have received, as specified by Academy Bylaws, $40 \%$ or more of the votes cast on the Informal Ballot, or in the case of Intersectional Candidates, $25 \%$ or more of the vote on the Informal Ballot of each of the two Sections. In order to obtain a reasonable number of strongly supported candidates, the Chair may ask participants to vote for a minimum number of candidates, e.g. at least 70 to $80 \%$ of the total candidates. Each member shall be expected to return this marked Formal Ballot to the chair within four weeks, enclosed in an envelope bearing the printed or typed name and signature of the member.
7. The Chair of the Section shall then certify to the home secretary, prior to December 8, the names of all candidates who have been voted for on the Formal Ballot, together with a statement of the number of votes each Candidate received and of the number of members voting.
8. Calls for new nominations shall be sent out in December with the results of the Formal Ballots.
9. Nominees remaining on Section ballots for three years without being elected are to be dropped (unless they have to be carried on according to Academy Bylaws). They can be renominated on submission of new supporting documentation; however, to eliminate unprofitable repetitions, nominees that have not advanced
to the Informal Ballot, and have also been ranked in the lowest third in each of the two most recent Caucus Ballots, may not be renominated until the following year.

## II. Foreign Associates and Secondary Affiliates

The Section welcomes Foreign Associates, and invites them to participate in all business of the Section permitted by the Academy bylaws, including the Caucus Ballot and the Straw Ballot (vide supra).

The Section also welcomes Secondary Affiliates, and invites them to participate in all business of the Section permitted by the bylaws, including the Canvassing Ballot (if any), the Caucus Ballot, and the Straw Ballot.

## III. Section Chair

The term of service of the Section Chair shall be three years, to date from the May 1 following election. The Chair of the Section shall be elected by mail ballot of the Section, the member receiving the highest number of votes cast to be deemed elected. Each Chair shall solicit nominations for a successor, either at the Section meeting preceding the Chair's last year of service or by mail. The Chair shall then conduct the election at a time not later than the Informal Ballot in the Chair's last year of service, and shall report the results to the Home Secretary. No Chair shall be elected to serve two successive terms. Should the office of Section Chair become vacant, the Academy President is empowered to appoint a temporary chair to serve until a successor is elected.

## IV. Class Membership Committee

The Chair of the Section is automatically the Section Representative to the Class Membership Committee. If not available, he or she selects an alternate.

## V. Nomination of Candidates for the Class Membership Committee

Each year, the Chairman will solicit nominations for candidates to the Class Membership Committee. Each year the Chairman will submit to the Class Secretary two names.

Election Procedures established January 2012.

## Section 31: Engineering Sciences

I. Any member of the Academy may submit nominations, on completed nomination forms, directly to the Section Chairman for inclusion in the Section balloting process.
II. Members are also encouraged to make informal suggestions for nominations to the Section Chairman who will then seek advice from other members on those suggestions and help find a nominator if appropriate.
III. The Section Chairman should actively seek nominations in areas where the Section is underrepresented.
IV. On July 1, the Section chairman will assemble all new nominations and those carried forward from the previous year for mailing to the Section Members along with a Straw Ballot. The purpose of the Straw Ballot is to obtain a preliminary ranking of candidates and a Section-wide review of the nomination write-ups before the official election process begins. As a result of an amendment to the section rules that was approved in June, 2002, all Secondary Affiliate Members, Emeriti and Foreign Associates of Section 31 will be allowed to vote, but ONLY on the Straw Ballot with their votes tabulated and recorded separately. These Affiliated Members as well as Emeriti and Foreign Associates will also continue to receive all the material that is sent to the Regular Members of Section 31, but will not be allowed to vote on subsequent ballots.
V. Nominations may be revised and new nominations may still be accepted until the Academy suggested deadline of September 6. They then provide the basis for the Informal and Formal Ballots on the schedule prescribed by the Academy.
VI. Unsuccessful nominations are automatically carried forward to the next year unless they receive vote percentages on the Informal Ballot that are:
A. less than 10 percent in any year
B. less than 20 percent two years in a row
C. less than 30 percent three years in a row

Nominations not carried forward may be resubmitted in new form after one year.
D. If the Informal Ballot vote is less than 40 percent three years in a row, the nomination must be rewritten before being carried forward.
VII. Nominations of those candidates who receive more than two-thirds vote on the Formal Ballot should be updated, revised for clarity and checked for compliance with Academy form before being submitted for Class Membership Committee consideration.

## Class Membership Committee

At the Annual Meeting, the Section Chairman solicits nominations for Section representatives to the Class Membership Committee. Two representatives will then be elected by the Section by mail ballot. The Section Chairman serves as, or appoints, a third representative, and the Council of the Academy appoints a fourth. (The Section Chairman is asked for suggestions.) Representatives should be well informed about likely candidates for election by our Section and should be prepared to present strong cases on their behalf to the Class Membership Committee.

Election Procedures revised July 2002.

## Section 32: Applied Mathematical Sciences

I. Candidates for Nomination Carried Over from Previous Year
A. Section Nominees who reach the Final Ballot but fail election shall be Candidates on the Straw Ballot in the following year and carried through to the Informal Ballot.
B. Section Nominees who are dropped from the Preference Ballot by the Class Committee shall be Candidates on the Straw Ballot in the following year and carried through to the Informal Ballot.
C. Section Candidates who receive 40 percent or more of the vote on the Informal Ballot and are then considered on the Formal Ballot but receive less than two-thirds of the vote shall be Candidates on the Straw Ballot in the following year irrespective of the number of consecutive years they may have appeared on the Informal Ballot.
D. Section Candidates who appear on the Straw Ballot but are not rank ordered by any Search/Screening Committee in that year shall be Candidates on the Straw Ballot in the immediately following year. This rule shall not be applied to any Candidate in two successive years.
E. Section Candidates who receive less than 40 percent but 30 percent or more of the vote on the Informal Ballot shall be Candidates on the Straw Ballot in the following year if and only if they have already appeared on the Informal Ballot no more than three immediately previous consecutive years.
F. Section Candidates who receive less than 30 percent but 20 percent or more of the vote on the Informal Ballot shall be Candidates on the Straw Ballot in the following year if and only if they have already appeared on the Informal Ballot no more than two immediately previous consecutive years.
G. Section Candidates who receive less than 20 percent but 10 percent or more of the vote on the Informal Ballot shall be Candidates on the Straw Ballot in the following year if and only if they have already appeared on the Informal Ballot for no more than one immediately previous year.
H.Section Candidates who receive less than 10 percent of the vote on the Informal Ballot shall not be Candidates in the Section in the immediately following year.

## II. Proposal of New Candidates for Nomination

A. The Chairman of the Section shall send a letter to the members of the Section before May 1 each year calling for proposals of new Candidates for Nomination, and listing all names which have been submitted by that date by members of the Academy or by others as worthy of proposal for nomination.

This letter shall also identify by categories:

1. Candidates carried over to the Informal Ballot in accordance with Procedures I above.
2. Candidates carried over to the Straw Ballot in accordance with Procedures I above.
3. Candidates ineligible to be carried over for the current year in accordance with Procedures I above.
B. Any member of the Academy may submit proposals or reproposals of Candidates for Nomination from the Section. For consideration in any year such proposals must reach the Chairman by June 1 along with supporting biographical/bibliographical material prepared on current NAS forms.
C. Proposals of Intersectional Candidates involving the Section shall include at least one member of the Section.

## III. Straw Ballot

A. The Chairman shall submit to the members of the Section before June 8 a Straw Ballot listing in alphabetical order all new proposals of Candidates for Nomination received by June 1 and all Candidates for Nomination carried over from the previous year in accordance with Procedures I. Each member voting shall return a signed ballot to the Chairman by July 1 with crosses against the names of those Candidates endorsed for nomination.
B. For the guidance of the members of the Section, the Straw Ballot shall include information about the number of votes received on the previous year's Informal Ballot for each Candidate carried over from the previous year. For a Candidate newly proposed for nomination, information shall be included about the number of Section members who have proposed or formally endorsed the Candidate. The Chairman shall also enclose with the Straw Ballot the most recent rank-ordered lists prepared by the Search/Screening Committees for the Candidates included on the Straw Ballot.
C. The Chairman shall report the results of the Straw Ballot to the Section before July 8.

## IV. Candidates Carried Forward to the Informal Ballot

A. All Section Candidates who receive 10 percent or more of the vote on the Straw Ballot shall be carried forward to the Informal Ballot.
B. All Section Candidates who receive less than 10 percent of the vote on the Straw Ballot shall be eliminated from all further ballots for that year except those Candidates who are carried forward to the Informal Ballot in accordance with Procedures I.
C. All Section Candidates who receive 10 percent or more of the vote on the Straw Ballot shall not be Candidates in the Section in the immediately following year except those who were not ranked by any Search/Screening Committee of the Section.

## V. Informal Ballot

A. In conformity with the Bylaws of the Academy, the Chairman shall submit to the Section no later than September 20 an Informal Ballot containing in alphabetical order the names of Candidates carried forward in accordance with Procedures IV together with any others carried forward in accordance with Procedures I. The Informal Ballot shall be accompanied by a list of the number of votes each Candidate received on the Straw Ballot, as well as by any available reports of the Search/Screening Committees including all that have been received by September 15.
B. The Informal Ballot shall be returned to the Chairman by October 18 with the member's signature and with crosses placed against the names of those Candidates endorsed for nomination.

## VI. Search/Screening Committees

A. A group of members of the Section representing a recognized scientific discipline included in the purview of the Section and preferably including at least six members may form a Voluntary Search/Screening Committee. They shall invite all other members of the Section belonging to that discipline to join the Committee.
B. The Voluntary Search/Screening Committees may choose their own Chairpersons (or Cochairpersons), but no Chairperson shall serve for more than three consecutive years.
C. The duties of a Search/Screening Committee shall be to identify worthy individuals in its area of science and propose them as Candidates for Nomination, and to rank-order all Candidates in its area of science proposed for nomination in the Section, with rank 1 representing the most excellent Candidate. Each Search/Screening Committee shall convey a preliminary rank-ordered list to the Chairman by June 1. The final rank-ordered list developed by each Search/Screening Committee shall be submitted to the Chairman by September 15 of each year.
D. The Chairperson of each Search/Screening Committee shall notify the Chairman of the Section by June 1 of each year of the membership and chairmanship of the Committee and of the names of the Candidates whom it expects to rank order.
E. No member of the Section shall vote on the rankings reported by more than one of its Voluntary Search/Screening Committee.
F. The Chairman shall appoint, whenever needed, a Temporary Search/Screening Committee chosen without restriction from the members of the Section to consider and report on any Candidates not considered by any Voluntary Search/Screening Committee of the Section.

## VII. Nominations of Foreign Associates

A. Proposals of Candidates for Nomination as Foreign Associate may be submitted by any member of the Section to the Chairman and must be received prior to September 15 with supporting biographical/bibliographical material prepared on appropriate NAS forms for inclusion on the Foreign Associate Informal Ballot.
B. The Chairman of the Section shall appoint members of a Search/Screening Committee for Foreign Associates by May 30 of each year and announce the membership of the Committee to the Section at the time of the Straw Ballot, along with a call for proposals of Candidates for Nomination. The members of the Committee shall serve staggered terms of no more than three consecutive years.
C. The duties of the Search/Screening Committee for Foreign Associates shall be to identify and propose individuals worthy of being Candidates for Nomination as Foreign Associates and report them to the Chairman of the Section by September 15.
D. The Chairman shall submit to the members of the Section not later than September 20 a Foreign Associate Informal Ballot listing in alphabetical order all proposals and reproposals of Candidates for Nomination as Foreign Associates that have been received by September 15. Those Candidates that have been proposed by the Foreign Associate Search/Screening Committee shall be so identified on the ballot. Each member voting shall return a signed ballot to the Chairman by October 18 with crosses against the names of those Candidates endorsed for Nomination.
E. The Chairman shall submit to the Section not later than November 1 a Foreign Associate Formal Ballot which shall include all Candidates who received 40 percent or more of the votes cast on the Foreign Associate Informal Ballot. Each member shall be expected to sign and return this ballot to the Chairman by November 29 with crosses placed against the names of those Candidates considered worthy of nomination.

## VIII. Section Representative to Class Committee

A. The Section shall normally be represented on the Class Committee by the Section Chairman.
B. If the Chairman determines prior to September 20 that it will be impractical to serve as Section Representative on the Class Committee, the Chairman shall appoint a Section Representative not later than September 20 from among the eligible members of the Section, and shall announce this appointment to the Section at the time of the Informal Ballot.
C. If the Chairman or appointed Representative cannot attend the Class Committee meeting for any reason the Chairman shall appoint an alternate.
D. Neither the Chairman nor the Secretary of the Class III (even if a member of the Section) shall be eligible for appointment as Section Representative to the Class Committee.

Election Procedures revised October 1998.

## Section 33: Applied Physical Sciences

## I. Candidates for Nomination carried over from previous year.

A. All Section 33 Nominees who reach the Final Ballot but fail of election shall be Candidates on the Straw Ballot in the following year and carried through to the Informal Ballot.
B. All Section 33 Nominees who are dropped from the Preference Ballot by the Class Committee shall be Candidates on the Straw Ballot in the following year and carried through to the Informal Ballot.
C. All Section 33 Candidates who receive 40 percent or more of the vote on the Informal Ballot and are then considered on the Formal Ballot but receive less than two-thirds of the vote shall be candidates on the Straw Ballot in the following year irrespective of the number of consecutive years they may have appeared on the Informal Ballot.
D. All Section 33 Candidates who receive less than 40 percent but 30 percent or more of the vote on the Informal Ballot shall be candidates on the Straw Ballot in the following year if and only if they have already appeared on the Informal Ballot no more than 3 immediately previous consecutive years.
E. All Section 33 Candidates who receive less than 30 percent but 20 percent or more of the vote on the Informal Ballot shall be candidates on the Straw Ballot in the following year if and only if they have already appeared on the Informal Ballot no more than 2 immediately previous consecutive years.
F. All Section 33 Candidates who receive less than 20 percent but 10 percent or more of the vote on the Informal Ballot shall be candidates on the Straw Ballot in the following year if and only if they have already appeared on the Informal Ballot for no more than 1 immediately previous consecutive year.
G. Section 33 Candidates who receive less than 10 percent of the vote on the Informal Ballot shall not be Candidates in the Section in the immediately following year.

## II. Proposal of New Candidates for Nomination

A. The Chair of Section 33 shall send a letter to the members of the Section before May 1 each year calling for proposals of new Candidates for Nomination as either Regular member or Foreign Associate, and listing all names which have been submitted by that date by members of the Academy or by others as worthy of being proposed for nomination. This letter shall also identify by categories:

1. Candidates carried over to the Informal Ballot in accordance with Procedures I above.
2. Candidates carried over to the Straw Ballot in accordance with Procedures I above.
3. Candidates who are ineligible to be carried over for the current year in accordance with Procedures I above.
B. All candidates who appear on the Straw Ballot must be rank ordered by a Screening Committee.
C. New Proposals or re-proposals of Candidates for Nomination may be made by any member of the Academy including any member of Section 33 . To be qualified for consideration in any year they must be received by the Section Chair and the Chair of the appropriate Screening Committee by June 1 with supporting biographical/bibliographical material prepared on current NAS forms.
C. Proposals of Intersectional Candidates involving Section 33 shall include at least one member of Section 33.

## III. Straw Ballot

A. The Chair shall submit to the members of the Section before July 1 a Straw Ballot listing in alphabetical order all new proposals of Candidates for Nomination received by June 1, and all Candidates for Nomination carried over from the previous year in accordance with Procedures I. Each voting member shall indicate (by X's on a paper version of the ballot or as instructed on an electronic version) on this ballot all those candidates he or she endorses for nomination by August 1.
B. For the guidance of the members of the Section, information will be provided at the time of the Straw Ballot about the number of votes received on the previous year's Informal Ballot for each Candidate carried over from the previous year. For a Candidate newly proposed for nomination, information shall be provided about the number of Section members whose names appear on the nomination. The Chair shall also provide at the time of the Straw Ballot the most recent rank order lists prepared by the Search/Screening Committees for the Candidates included on the Straw Ballot.
C. The Chair shall report the results of the Straw Ballot to the Section on or before August 10.
D. Foreign Associates and Secondary Affiliates are permitted to vote in the Straw Ballot and participate in the Search/Screening Committees.

## IV. Candidates Carried Forward to the Informal Ballot

A. All Section 33 Candidates who receive 10 percent or more of the vote on the Straw Ballot shall be carried forward to the Informal Ballot.
B. All Section 33 Candidates who receive less than 10 percent of the vote on the Straw Ballot shall be eliminated from all further ballots for that year except those Candidates who are carried forward to the Informal Ballot in accordance with Procedures I.
C. All Section 33 Candidates who receive less than 10 percent of the vote on the Straw Ballot shall not be candidates in the Section in the immediately following year.

## V. Informal Ballot

A. In conformity with the Bylaws of the Academy, the Chair shall submit to the Section not later than September 20 an Informal Ballot containing in alphabetical order the names of candidates carried forward in accordance with Procedure IV plus any others carried forward in accordance with Procedures I. The Informal Ballot shall be accompanied by a list of the number of votes each Candidate received on the Straw Ballot. The Informal Ballot shall be accompanied by any available reports of the Section's Search/Screening Committees including all that have been received by September 15.
B. Voting in the Informal Ballot must be completed by October 18 and may be done either online or by written ballot (provided on request by the Section Chair).
C. In the Informal Ballot and the Formal Ballot, ballots will be invalid if they have fewer than four (4) candidates with crosses.

## VI. Search/Screening Committee

A. Search/Screening Committees work to identify candidates for nomination to the Academy, receive nominations from Academy members, and rank order nominees for the Straw Ballot.
B. The Section Chair will appoint Chairmen for at least two Search/Screening Committees of sufficient breadth (for example Theory and Experiment) to collectively screen any candidate. The Section Chair may also appoint search/screen committees to identify candidates from underrepresented groups.
C. A group of members of Section 33 representing a recognized scientific discipline included in the purview of Section 33 and preferably including at least 6 regular members of the Section may form a Voluntary Search/Screening Committee in addition to the committees formed by the Section Chair. They shall invite all other members of Section 33 belonging to that discipline to join the committee.
D. The Voluntary Search/Screening Committees may choose their own Chairs (or Co-Chairs) from among the regular members, but no Chair shall serve for more than 3 consecutive years. Each Chair shall invite the Foreign Associates and Sectional Affiliates of Section 33 to join in the work of the Search/Screening Committee.
E. The duties of a Search/Screening Committee shall be to identify and propose Candidates in its area of science who are worthy of being proposed as Candidates for Nomination, and to rank-order all Candidates in its area of science proposed for Nomination in the Section. Candidates shall be ranked in order, with rank 1 representing the most excellent Candidate. Each Search/Screening Committee shall convey a preliminary rankorder list to the Chair by June 1. Each Search/Screening Committee shall convey a rank-order list to the Section Chair by June 23.
F. The Chair of each Search/Screening Committee shall notify the Chair of the Section by June 15 of each year of the membership and chairship of the Committee and of the names of the Candidates whom it expects to rank order.

## VII. Foreign Associates

A. Foreign Associate Candidates not elected in a given year will be carried forward to the Straw Ballot of the succeeding year in accordance with Procedures I.
B. Nominations of new Candidates for Foreign Associate follow Procedures II. Screening Committees will provide a ranking of these candidates among themselves and not include the Regular Candidates.
C. Candidates for Foreign Associate whose nominations are received by June 1 and those who are carried over from the previous year in accordance with Procedures I will appear in a separate section of the Straw Ballot with the same information that is provided for the Regular Member Candidates as outlined in Procedures III.
D. The rules of Procedures IV determine which Foreign Associate Candidates advance to the Informal Ballot.
E. Rules for advancement of Foreign Associates to the Informal and Formal Ballots are the same as those for Regular Candidates. They will appear in a separate section of these ballots.
F. The Candidates for Foreign Associate, up to a maximum of three, in accordance with Academy Bylaws IV.E, with the highest number of votes on the Formal Ballot will be submitted to the Class Membership Committee

## VIII. Section 33 Representative to Class Committee

A. Section 33 shall normally be represented on the Class Committee by the Section Chair.
B. If the Chair determines prior to September 15 that he or she cannot serve as Section Representative on the Class Committee, the Chair shall appoint a Section Representative not later than September 15 from among the eligible members of the Section, and this appointment shall be announced to the Section at the time of the Informal Ballot.
C. If the Chair or appointed Representative cannot attend the Class Committee meeting for any reason the Chair shall appoint an alternative.
D. If the Chair or Secretary of Class III are members of Section 33 they shall not be eligible for appointment as Section Representative to the Class Committee.

Election Procedures revised October 2012.

## Section 34: Computer and Information Sciences

## I. Voting Procedures

A. There shall be two ballots submitted to the members of Section 34:

Mailing Date Return Deadline
Informal Ballot: September 20 October 20
Formal Ballot: November 1 December 1
B. The deadline for all new nominations shall be September 6 .
C. The Informal Ballot will include all nominations submitted by members received before the September 6 deadline and those carried forward from previous elections provided the nominators so approve. However, any candidate receiving less than $10 \%$ approval vote on the previous year's Informal Ballot will not be considered. A ballot will be considered valid if $50 \%$ or more of the candidates are endorsed. For candidates carried forward, the result of the voting on the previous year's Informal Ballot shall be noted.
D. The Formal Ballot will include all candidates who receive $40 \%$ or more of the votes on the Informal Ballot. The results of the voting on the Informal Ballot will be indicated. A ballot will be considered valid if $50 \%$ or
more of the candidates are endorsed. Candidates receiving $2 / 3$ or more of the votes on the Formal Ballot will be carried forward to the Class Committee.
E. The same procedure shall be applied to nominations of candidates for Foreign Associate as is applied for regular members.

## II. Search/Screening Committees

A. A group of members of the Section representing a recognized scientific discipline included in the purview of the Section and preferably including at least six members may form a Voluntary Search/Screening Committee. They shall invite all other members of the Section belonging to that discipline to join the Committee.
B. The Voluntary Search/Screening Committees may choose their own Chairpersons (or Cochairpersons), but no Chairperson shall serve for more than three consecutive years.
C. The duties of a Search/Screening Committee shall be to identify worthy individuals in its area of science and propose them as Candidates for Nomination, and to rank-order all Candidates in its area of science proposed for nomination in the Section, with rank 1 representing the best Candidate. Each Search/Screening Committee shall convey a preliminary rank-ordered list to the Chairman by June 1. The final rank-ordered list developed by each Search/Screening Committee shall be submitted to the Chairman by September 15 of each year.
D. The Chairperson of each Search/Screening Committee shall notify the Chairman of the Section by June 1 of each year of the membership and chairmanship of the Committee and of the names of the Candidates whom it expects to rank order.
E. No member of the Section shall vote on the rankings reported by more than one of its Voluntary Search/Screening Committee.
F. The Chairman shall appoint, whenever needed, a Temporary Search/Screening Committee chosen without restriction from the members of the Section to consider and report on any Candidates not considered by any Voluntary Search/Screening Committee of the Section

## III. Section Representative to the Class Committee

A. The Section shall normally be represented on the Class Committee by the Section Chairman.
B. If the Chairman determines prior to September 20 that it will be impractical to serve as Section Representative on the Class Committee, the Chairman shall appoint a Section Representative not later than September 20 from among the eligible members of the Section, and shall announce this appointment to the Section at the time of the Informal Ballot.
C. If the Chairman or appointed Representative cannot attend the Class Committee Meeting for any reason the Chairman shall appoint an alternate.
D. Neither the Chairman of Class III nor its Secretary (even if a member of the Section) shall be eligible for appointment as Section Representative to the Class Committee.

Election procedures revised June 2013.

## Section 41: Medical Genetics, Hematology, and Oncology

## I. Search and Screening Committee

A. Function

A Search and Screening Committee shall serve two functions: (1) it shall be responsible for scrutinizing the fields of Hematology, Oncology and Medical Genetics, and for forwarding the names of potential candidates to the Section Chairman; and (2) it shall consider all nominations formally received and rank the candidates. This ranking in order of priority shall be presented to the membership of the Section at the time of the Straw Ballot.

## B. Appointment

Members of the Search and Screening Committee are appointed by the Chairman at the time of the Annual meeting. The Section Chairman shall serve as a nonvoting member of this committee during his/her term of office. The three members of the committee who have completed their term of service on the committee will be replaced by three new members who will serve four-year terms.

## II. Nomination of Members

A list of suggested candidates for membership developed by the Search and Screening Committee shall be forwarded to the Section Chairman by January 1. The Section Chairman will request an appropriate member of the Section to prepare a formal nomination if such a nomination has not been arranged by the Search and Screening Committee. In accordance with the rules of the Academy; any member of the Section may initiate a proposal for membership.

Proposals for the nomination to membership shall be in writing in accordance with the requirements of the Academy, and shall be sent to the Chairman of the Section not later than April 1 unless the date is extended to June 8 by the Chairman, as noted below.

Proposals for nomination of Foreign Associates shall be in writing, containing the same information is required of candidates for membership, and they shall be sent to the Section Chairman not later than April 1 unless this date is extended to June 8 by the Chairman, as noted below.

Proposals for nomination to membership of intersectional candidates shall be received by the Chairman of each Section not later than April 1 unless this date is extended to June 8 by the Chairman, as noted below.

The names of all of candidates, together with formal proposals, shall be distributed by the Section Chairman to the membership of the Section no later than two weeks prior to the Annual Meeting, to permit review and preparation for discussion of candidates at the Annual Meeting.

Where appropriate, the Section Chairman shall discuss potential intersectional candidates with Chairmen of the relevant Sections.

On recommendation of the Search and Screening Committee and with the majority vote of the members present at the Annual Section Meeting the deadline of April 1 may be extended to June 8.

## III. Procedures for Carry-over and Renomination

Except when listed in accordance with Articles IV-12 to IV-14 of the Academy Constitution and Bylaws (Edition of April 25, 1995), a candidate may appear in the Straw Ballot for no more than three consecutive years. The exception is that those candidates receiving $40 \%$ or above on the Formal Ballot in his or her third year shall be carried over for one year and shall remain in candidate status for no more than four consecutive years. Any candidate not appearing on the Straw Ballot for one year may be nominated again.

## IV. Foreign Associates

Candidates for election to Foreign Associate shall be processed in the Section in the same manner as candidates for membership, providing these procedures do not conflict with those specified in the Academy Constitution and Bylaws.

## V. Straw Ballot

The Section Chairman shall distribute a Straw Ballot to the membership no later than June 30. This shall be an alphabetical listing of candidates. Accompanying this ballot shall be the ranking of the candidates, in order of preference, developed by the Search and Screening Committee. At the sectional meeting, a preliminary vote on prospective candidates may be taken. If such a vote is taken, those attending the meeting shall also decide by majority vote on a written ballot whether to circulate the results of the preliminary vote taken at the sectional meeting with the Straw Ballot.

Members are to vote by placing crosses against the names of those candidates they can support for nomination. Members are requested by the Chairman to vote for a specific number of candidates (at the present time the number is twenty). The Straw Ballot must be received by the Section Chairman by August 15. All candidates, sectional or intersectional, receiving at least 40 percent of the votes cast on the Straw Ballot will be placed on the Informal Ballot provided that no fewer than twelve candidates are thereby placed on the Informal Ballot. If fewer than twelve candidates receive 40 percent of the votes cast, the twelve candidates receiving the most votes will be placed on the Informal Ballot.

Secondary Affiliates and Foreign Associates may vote in the straw ballot, and their votes will be listed separately in reports to Section members.

## VI. Informal and Formal Ballots

The Informal Ballot and Formal Ballot shall be conducted in accordance with Article IV-13 and IV-14 of the Academy Constitution Bylaws; in Section 41, only candidates receiving 40 percent of the votes on the Informal Ballot will be listed on the Formal Ballot.

Election Procedures revised October 2014.

## Section 42: Medical Physiology and Metabolism

## I. Endorsement of Candidates at the Time of the Annual Section Membership Meeting in Washington, DC

Members who wish to propose a candidate for election to Section 42 should complete the standard nomination forms and submit them to the Section Chairperson by April 1 preceding the annual Section Membership meeting so that copies can be circulated to the membership in advance. All such formally proposed candidates will be presented to the assembled membership for discussion and possible endorsement. Under exceptional circumstances a candidate may be proposed at the time of the annual meeting. All candidates endorsed in open vote by at least 30 percent of the Section Members present and voting shall be carried forward to the Search and Screening committee for further evaluation.

In addition to newly proposed candidates, candidates submitted to the annual section Membership meeting for discussion will automatically include:
A. Sectional Nominees who had appeared on the Preference Ballot of the preceding year but were not elected.
B. Nominees who in the preceding year had been proposed by a VNG, had been assigned by the Class Membership Committee to Section 42, had appeared on the Preference Ballot of that year but were not elected.
C. Candidates who in the preceding year had received at least 50 percent of the vote on the Informal Ballot but were not elected.

## II. Search and Screening Committee

A Search and Screening (S\&S) committee composed of 10 members of Section 42 will be appointed prior to the annual meeting each year. The appointment process will begin with the Section Chair, who will choose a member of Section 42 to serve as chair of the S\&S committee for a one year term, renewable for no more than two additional years at the discretion of the Section Chair. Together, the Section chair and the S\&S committee chair will then choose 9 other section members who will be invited to join the committee for terms not to exceed three years. Each year three of the nine members will be rotated off the committee and replaced with section members who have not served for at least one full year. The selection of rotating members will be made jointly by the Section chair and the committee chair. The Section chair will be an ex officio nonvoting member of the S\&S committee.

The S\&S committee will have two functions: 1) to actively search for new candidates for election to Section 42; and 2) to rank all of the candidates in order of preference prior to the conduct of the Informal Ballot. The search for new nominees by the S\&S committee will in no way impinge upon the right and duty of each Section member to propose nominees. At some time after the Annual Meeting, but before the issuance of the Informal ballot, the $S \& S$ committee will meet through one or more telephone conference calls to discuss all nominees to Section 42. The committee members will then vote in such a way as to rank-order the candidates. The precise method of voting will be determined by the $S \& S$ committee chair. The rank order preference list will be distributed to all voting members of the Section at the same time that the Informal Ballot is conducted. This rank order will serve as a voting guide for the general membership of the Section, but any member may choose to disregard any or all of the recommendations.

## III. Foreign Associates

Proposals for Foreign Associates shall be submitted to the Section Chairperson on the standard nominating forms by April 1, as discussed above for American citizens. Their names shall appear in alphabetical order on the Informal Ballot. To be placed on the Formal Ballot, endorsement by at least 66 percent of the members voting in the Informal Ballot is required.

## IV. Class Membership Committee

The Section Chairperson shall represent the Section on the Class Membership Committee. If the Section Chairperson is unable to serve, he/she shall appoint an alternate.

Election Procedures revised March 2006.

## Section 43: Immunology and Inflammation

I. Any member of the Academy may propose a scientist for consideration for candidacy on the Section's ballot.
II. An ad hoc search committee consisting of three members of Section 43 will be appointed by the Chairman to serve a period of three years concomitant with the Chairman's term as chairman. The purpose of the Committee is to assist the Section in identifying qualified candidates that represent the several disciplines of the Section. The nominations must be properly prepared, signed by a Section member, and submitted in accordance with item III.
III. All nominations submitted by any member of Section 43 or any other member of the Academy must be submitted to the Section Chairman by 1 April if they are to be considered at the April Section meeting and entered into the ballot process for that year. For each nominee, nominators must complete the NAS biographical form and the publications form. The nomination must be signed by a member of the Academy.
IV. All new nominees, and all of those eligible for reconsideration in accordance with the bylaws as adopted by the NAS in April 1981 will be discussed at the annual meeting. The Chairman of the Section will circulate all supporting material on the nominees to the members of the Section in advance of the annual meeting.
V. The Chairman will appoint members of the Section on an ad hoc basis to review the supporting material supplied on each nominee. The nominator will be informed of any suggestions for revision or improvement of the nomination.
VI. Voting procedure.
i) Section review during the Annual meeting. Nominations should be sent to the Section chair by April 1st and will be posted in the Academy's website. Candidates will be presented at the meeting of the Section during the Annual meeting of the Academy. The sponsoring members will present a brief analysis of the candidate's accomplishments. All members attending will be able to comment during the discussion. After reviewing all candidates, there will be a ballot in which each member lists the top five of the candidates, in no order of preference. From the votes we will rank order the top candidates. The results which reflect the evaluations of those attending the Section meeting, will be circulated as an information-only item to all members.
ii) Straw Ballot. The objective of the Straw Ballot is to identify those individuals who have the greatest support within the Section. The members are asked to pay particular attention to the balloting made during the meeting of the Section (see above). The names of nominees will be listed in alphabetical order on the Straw Ballot. For domestic candidates, vote for the top five candidates whom you consider deserve election to the Academy in the next year. Please vote for five, in no order of priority. Do not vote for more than five.The names of the top ten selected candidates will be placed in the Informal ballot. Please be aware that the number of candidates that are taken to the final Class Membership Committee from any of the Sections that comprise class IV ranges from two to four per Section. The Straw Ballot listing all the candidates will be sent to the membership no later than the last week of July. Ballots must be returned to the Chairman by the first week of September.

Regular members, foreign associates, secondary affiliates and emeritus members are eligible to vote on the Straw Ballot.
iii) Informal Ballot. If there are more than ten nominations on the Straw Ballot, the ten rated highest will be carried over to, and listed in the Informal Ballot. Only regular members are eligible to vote. Eligible members are asked to vote for those candidates that they estimate to be qualified for election to the Academy. They may identify as few as one or as many as ten candidates. The Informal Ballot will be sent to the regular members in mid-September and must be returned by mid-October.
iv) Formal Ballot. Those candidates that received $40 \%$ of the vote in the Informal Ballot will be taken forward to the Formal Ballot. Candidates receiving $2 / 3$ of the votes on the Formal Ballot will be taken to the Class Membership Committee (CMC). Voting on the Formal Ballot begins the first week of November and ends the first week of December.
(The procedures for Informal Ballot and Formal Ballot are conducted in accordance with Article IV-13 and IV-14 of the Academy Constitution Bylaws.)
v) Class Membership Committee (CMC). Candidates receiving $2 / 3$ of the votes on the Formal Ballot are taken to the CMC. Candidates are discussed in the CMC, together with those from Sections 41, 42 and 44, and any relevant TNG or VNG, and selected for inclusion on the Academy-wide Preference Ballot.
vi) Summary:

1. NAS annual meeting of the Section: all candidates are presented and discussed. A vote is taken in which members list their top five candidates. The list reflects the preferences of those attending the meeting and is circulated to all as an information item.
2. Straw Ballot - all candidates are listed; top 10 are selected and placed in the Informal Ballot.
3. Informal Ballot - members select their preferred candidates. Candidates receiving $40 \%$ approval move forward.
4. Formal Ballot- members select candidates who they consider to be the most outstanding. Candidates receiving 2/3 approval move to the CMC.
5. CMC- top candidates from all the four Sections of class IV are discussed to generate a list of preference for the Academy-wide Preference Ballot.

It has been the Section experience that the voting on the formal ballot is crucial in bringing a strong slate of candidates to the CMC. Prioritizing the top 3-4 outstanding candidates places us in a strong position. Candidates that receive $80 \%$ or more of the Section votes indicate the unqualified support needed for candidates to compete with others from different Sections of class IV. This support is critical for both getting our candidates on the Preference Ballot and at the highest ranking.
VII. Renomination.
i) Candidates that did not receive sufficient votes to be placed on the Informal or Formal ballots will need to be renominated.
ii) All candidates listed in the Formal Ballot will be automatically renominated for the following year. The sponsoring member, however, has the right to withdraw the nomination.
iii) There is a time limit of five consecutive years for a candidate to obtain the support required to be taken to the CMC. After five consecutive failed attempts there will be two-year lapse, before a new nomination can be considered.
iv) Candidates that are failing to obtain the votes necessary for moving forward to the CMC can be withdrawn by their
sponsor(s) before the five-year limit time. Such a candidate can be nominated any time afterwards and will be considered as a new nominee insofar as the 5 -year limit.
VIII. Nominations for foreign associate will be prepared on the same nomination forms that are used for nominations for membership. These nominations should be submitted to the Chairman of the Section by 1 April of each year, so that they can be considered at the annual meeting. All nominees for foreign associate will be listed on the straw ballot. The membership will be asked to vote either "yes" or "no."
IX. Representation on the class membership committee. The Section Chairman will serve automatically as Section representative for the term of his office as recommended by the proposed revised bylaws.
X. Selection of Section 43 suggestions for members-at-large for nomination at the annual class meeting. Each year the Chairman shall appoint an ad hoc committee to serve one year to select three (3) Section 43 members to be submitted as suggestions for members-at-large. These 3 members will become the suggestions of the Section if the slate receives two-thirds of the votes of those who attend the annual Section meeting.
XI. Additional suggestions for candidates for members-at-large may be proposed from the floor at the annual Section meeting.

Election Procedures revised May 2013.

## Section 44: Microbial Biology

I. Any member of the Academy may propose a scientist for consideration for candidacy on the Section's ballot.
II. An ad hoc search committee consisting of three members of Section 44 will be appointed by the Chairman to serve a period of three years concomitant with the Chairman's term as chairman. The purpose of the Committee is to assist the Section in identifying qualified candidates that represent the several disciplines of the Section. The nominations must be properly prepared, signed by a Section member, and submitted in accordance with item III.
III. All nominations submitted by any member of Section 44 or any other member of the Academy must be submitted to the Section Chairman by 1 April if they are to be considered at the April Section meeting and entered into the ballot process for that year. For each nominee, nominators must complete the NAS biographical form and the publications form. The nomination must be signed by a member of the Academy.
IV. All new nominees, and all of those eligible for reconsideration in accordance with the bylaws as adopted by the NAS in April 1981 will be discussed at the annual meeting. The Chairman of the Section will circulate all supporting material on the nominees to the members of the Section in advance of the annual meeting.
V. The Chairman will appoint members of the Section on an ad hoc basis to review the supporting material supplied on each nominee. The nominator will be informed of any suggestions for revision or improvement of the nomination.
VI. Secondary affiliates of the Section are permitted to vote on the Sectional (preliminary and straw) ballots that precede the informal ballot.
VII. A Sectional preliminary ballot listing the nominees by discipline will be sent to the membership after the annual meeting. The names of the nominees will be listed in alphabetic order by discipline and the section members will vote only in the discipline of their expertise. The vote will be cast by placing a number beside each name, giving the value of one to the person considered most worthy and successively larger numbers to the remaining individuals in order of decreasing preference. For such a ballot to be valid it is necessary that a member vote for every one on the specific discipline list. The objective of this preliminary ballot is to identify those nominees within each discipline area who have the greatest support from members of that discipline within the Section.
VIII. A Sectional straw ballot listing the nominees will be sent to the membership no later than 23 July. Ballots must be returned to the Chairman by 6 September. The names of nominees will be listed in alphabetical order on the straw ballot and the vote will be cast by placing a mark beside the name of each nominee deemed qualified for election to the Academy. The objective of the straw ballot is to identify those individuals who have the greatest support within the Section.
IX. If there are more than ten nominations on the straw ballot those ten that are rated highest on the straw ballot will be carried over to the informal ballot. Those nominees who are not placed on the informal ballot may be nominated through the regular process the following year. A nominee who does not receive sufficient Sectional support to reach the Formal Ballot for three consecutive years cannot be re-nominated for a period of 2 years.
X. Nominations for foreign associate will be prepared on the same nomination forms that are used for nominations for membership. These nominations should be submitted to the Chairman of the Section by 1 April of each year, so that they can be considered at the annual meeting. All nominees for foreign associate will be listed on the straw ballot. The membership will be asked to vote either "yes" or "no." Among the candidates for foreign associate, those that receive support equal to or greater than that received by the tenth most highly ranking domestic candidate will be considered on the Informal Ballot.
XI. Representation on the class membership committee. The Section Chairman will serve automatically as Section representative for the term of his office as recommended by the proposed revised bylaws.
XII. Selection of Section 44 suggestions for members-at-large for nomination at the annual class meeting. Each year the Chairman shall appoint an ad hoc committee to serve one year to select three (3) Section 44 members to be submitted as suggestions for members-at-large. These 3 members will become the suggestions of the Section if the slate receives two-thirds of the votes of those who attend the annual Section meeting.
XIII. Additional suggestions for candidates for members-at-large may be proposed from the floor at the annual Section meeting.

Election Procedures revised February 2012.

## Section 51: Anthropology

I. Any member of the section may propose a scientist as a candidate for nomination for election to membership in the National Academy of Sciences.
II. At each annual meeting of the section the members present shall review possible candidates. Prior to that meeting the section chair shall solicit lists of names for possible consideration from all the members, with special attention to subfields, conduct straw ballots, and prepare a list for review at the annual meeting. The chair may, at his or her discretion, include other names subsequently suggested by the members for the straw ballots.

Secondary affiliates may vote in the Section's straw ballots. Votes of secondary affiliates will not count toward advancement and will be listed separately in reports to Section members.
III.The section chairman shall determine at that meeting and by mail thereafter as necessary who is to prepare the biographical materials on each person agreed on as worthy of candidacy at the section meeting. Members proposing candidates independently of the section meeting are responsible for preparing the biographical materials on those whom they propose. In any case, the preparation of proper full nomination papers before the June 15 deadline is a prerequisite for a new candidate's appearing on the Informal Ballot. The biographical materials can be further revised and updated after that time.
IV. The Informal Ballot lists in alphabetical order the names of all scientists
A. for whom new full nomination materials have been received by the chair by the June 15 deadline, or
B. who are eligible under section rules for automatic continued consideration, or
C. whose candidacy from a prior year is reactivated; reactivation can be made by request to the chair any time before September 6, with or without submitting revised biographical materials.
V. Persons eligible for automatic continued consideration as candidates (and whose names therefore will appear on the Informal Ballot as per IV.B above) are:
A. those who appeared on the previous Preference Ballot but were not elected to membership and
B. those who appeared on the previous Formal Ballot and received at least $2 / 5$ but less than $2 / 3$ of the vote of the section.
VI. There is no limit to the number of names that may appear on the Informal and Formal Ballots, nor is there a limit as to the number of candidates for whom a member of the section may vote on either of these ballots.
VII. Biographies of all candidates on the previous Informal Ballot are sent to new members at the time of the annual meeting. Biographies of candidates not previously considered are mailed to all members at the same time. Members are instructed to maintain these biographies for future reference in ensuing years. Each year the section chair shall ensure that members have these biographies in their possession.
VIII. On mailing out the Formal and Informal Ballots, the section chair shall remind the members of the functions of these ballots in the nomination and election process.
IX. At the end of his or her term of office, the section chair shall provide the incoming section chair with all relevant records and correspondence, except that all information on actual numbers of votes cast shall be expunged if the new section chair was elected during the term of office of the retiring section chair.
$X$. The section chair is encouraged to work with the members of the section in the balloting process to ensure selection of the best quality scientists most likely to succeed in election.

Election Procedures revised July 2002.

## Section 52: Psychological and Cognitive Sciences

## I. Ballots

In addition to the Informal and Formal Ballots mandated by the NAS-wide Bylaws, the section will have a Straw Ballot and may also conduct informal polls of the membership. The Straw Ballot and informal polls will allow multiple-choice responses, e.g., ratings, rather than just yes-no responses.

## II. Membership Committee

The Section Chair will appoint a Membership Committee consisting of a chair and 4-5 other section members that represent the range of subfields within the Section. The role of the Membership Committee will be to determine if an informal poll is necessary and if so to formulate the poll and assemble supporting materials, to assist in the formulation of the straw ballot, to ensure that materials for nominees on the various ballots are in good order, and to develop recommendations to the membership for voting on the Informal and Formal ballots.

## III. Section Election Process

A. In December of each year, the Section Chair will report the results of the just completed Formal Ballot to the full membership of the section. As per NAS-wide Bylaws, those receiving positive votes from $2 / 3$ of those voting on the Formal Ballot will go forward for consideration by the Class Membership Committee (CMC). The CMC will determine which candidates will appear on the NAS-wide Preference Ballot, which produces the list of those whose election will be finalized at the Annual Meeting.
B. All those receiving positive votes from 40 percent of those voting on the Formal Ballot in a given year will automatically appear on the next year's Informal Ballot (the following September) unless they are elected to the Academy at the Annual Meeting according to the process described in III.A.
C. Along with the report of the Formal Ballot results mentioned above, the Chair will invite all members to submit nominations of individuals they would like to see considered on the Straw Ballot, including nominees for regular membership as well as Foreign Associate status. The membership committee will build on these nominations, adding additional proposals of their own for candidates, and developing a preliminary list of names for the Straw Ballot prior to the Section Meeting at the Annual Meeting in April.
D. At any time the membership committee may poll the membership for ratings of support for potential candidates. In such cases the membership committee will develop its own procedures and materials in
consultation with the Section Chair. Typically the results of such a poll if any will be used to inform the selection of candidates for inclusion on the next Straw Ballot.
E. At the Section meeting at the Annual NAS meeting, topics on the agenda will include:

1. Discussion of nominees, including foreign associates, who must be carried forward to the Informal Ballot, as specified in III.B above.
2. Discussion of new nominations for regular or foreign associate status from members of the section and/or the membership committee, as well as additional suggestions that may arise among those participating.
3. Names to be nominated at the meeting of Class V for Delegates at Large for the Class Membership Committee to be held the following February.
F. Following the section meeting, the membership committee will finalize the list of nominees for the Straw Ballot and assemble nomination materials. These will be conveyed to the Chair for dissemination to the membership by May 20, with voting to be completed by June 20. While complete nominations are encouraged, nominees can be included in the Straw Ballot even if the nomination materials are in a preliminary form.
G. Those who receive at least 40 percent favorable votes from members voting on this Straw Ballot will be included in the Informal ballot. Here "favorable vote" will be defined as a rating, or the equivalent, falling above the 'neutral' midpoint of the rating scale.
H. By July 1 the Chair will inform the full section membership of all those to be included in the Informal Ballot per the conditions mentioned above. The nominators of all those to be included will be asked to make improvements in and bring up to date the 250 -word biography and 12 -item bibliographical material and have them in the hands of the Chair by September 6.

Additional candidates will also be included on the Informal Ballot if they are nominated by at least two members of the Section and an up-to-date nomination, including a 250 -word biography and a 12 -item bibliography are in the hands of the Chair by September 6. Members are encouraged, however, to provide such nominations before the Annual Meeting, so that they can be included in the Straw Ballot.

## IV. Additional Provisions

In addition to the 250-word biography and 12 -item bibliography stipulated by the NAS-wide Bylaws, nominators may add a page of material to supply fuller information to the Section; this supplement will be distributed to section members together with the Informal Ballot. On the informal ballot the section will ask the members to provide familiarity ratings along with their votes for the nominees.

Secondary members and Foreign Affiliates will be invited to attend Section meetings and nominate candidates in the Section. Secondary members will participate in the annual straw ballot. Secondary members' votes will be tabulated and reported separately. The votes of both primary and secondary members will count towards defining the $40 \%$ favorable vote to proceed onto the informal ballot. Per NAS Bylaws, only primary members may vote on the Informal and Formal Ballots.

Member's votes on any preliminary polls and on the Straw ballot may be submitted either by regular mail or by email. The Chair will mail an electronic and regular copy of the materials to each member and assure that each member votes no more than once in each election. Voting procedures for the Informal and Formal ballots will follow NAS-wide rules, which allow regular mail balloting only as of January, 2005.

Election Procedures revised October 1998; revised July 2002; February 2005.

## Section 53: Social and Political Sciences

At all stages prior to the Informal Ballot, Secondary Affiliate Members will participate in the election of new members in the same manner as Primary Affiliate Members.
I. Prior to August 1, the Section Chair shall inform the members of the Section of all Candidates who will appear on the Informal Ballot, to be distributed September 20, without further action by the members. These will include:
A. Candidates carried forward from the previous year's Ballots, as provided in II below.
B. Proposals for Candidacy, in the written form prescribed by Academy Bylaw IV.II, that the Chair has received from any member of the Academy.
II. Candidates who received at least 40 percent of the votes on the Formal Ballot, and are not elected at the next Annual Meeting, shall automatically be carried forward to the next Informal Ballot, but not more than two times in a row.
III. In the same communication, the Section Chair shall call the attention of the members to those names form the previous year's Informal and Formal Ballots that do not meet the criteria of II. A member may place any of these names on the coming Informal Ballot by written communication received by the Chair on or before September 13, indicating appropriate revisions in the prior year's proposal for Candidacy.
IV. In the same communication, the Section Chair shall call to the attention of the members,
A. Any information he or she has received from members regarding their intentions to propose old or new names, and
B. Any names suggested by members of the Academy or others, at the Annual Meeting or on other occasions.

Members are, of course, not confined to these lists.
All proposals for Candidacy received by the Chair in writing in the prescribed form (Bylaw IV.II) by September 13 will be added to the list of Candidates to appear on the Informal Ballot.

Members are requested to keep the Chair informed of their intentions so that he or she may respond to other inquiries, and to communicate directly and informally with all Members.
V. The Section will be represented on the Class Membership Committee by its Chair or by an alternate he or she appoints, as provided in Bylaw IV.15.
VI. The Section shall nominate for Foreign Associate, in accordance with Bylaw IV.12E, those candidates who receive two-thirds of the votes in a Formal Ballot, submitted at the same time as the Formal Ballot on candidates for membership, provided the number of such candidates does not exceed three. If more than three candidates so qualify, the Section shall nominate the three with the highest votes. The chair shall have the discretion to resolve tie votes, taking into account previous candidates, geographical distribution, and other considerations.

There shall be only one Ballot on Foreign Associates. No names shall be automatically carried over from previous years. The list of names on the Ballot shall include all written proposals in the form prescribed in Bylaw IV.II, received by the Chair on October 24.

Election Procedures revised December 2001.

## Section 54: Economic Sciences

I. Prior to August 1, the Section Chair shall inform the members of the Section of all candidates who will appear on the Informal Ballot, to be distributed September 20, without further action by the members. These will include:
A. Names carried forward from the previous year's Ballots, as provided in Section 2 below.
B. Proposals for Candidacy, in the written form prescribed by Academy Bylaw IV.II, that the Chair has received from any member of the Academy.
II. Candidates who receive at least 40 percent of the votes on the Formal Ballot, and are not elected at the next Annual Meeting, shall automatically be carried forward to the next Informal Ballot, but not more than two times in a row.
III. In the same communication, the Section Chair shall call the attention of the members to those names from the previous year's Informal and Formal Ballots that do not meet the criteria of Section 2. A member may place any of these names on the coming Informal Ballot by written communication received by the Chair on or before September 6, indicating appropriate revisions in the prior year's proposal for Candidacy.
IV. In the same communication, the Section Chair shall call to the attention of the members:
A. Any information he or she has received from members regarding their intentions to propose old or new names, and
B. Any names suggested by members of the Academy or others, at the Annual Meeting or on other occasions.

Members are, of course, not confined to these lists.
All proposals for Candidacy received by the Chair in writing in the prescribed form (Bylaw IV.II) by September 6 will be added to the list of Candidates to appear on the Informal Ballot.

Members are requested to keep the Chair informed of their intentions so that he or she may respond to other inquiries, and to communicate directly and informally with each other.
V. The Section will be represented on the Class membership Committee by its Chair or by an alternate he or she appoints, as provided in Bylaw IV.15.
VI. The Section shall nominate for Foreign Associate, in accordance with Bylaw IV.12E, those candidates who receive two-thirds of the votes in a Formal Ballot, submitted at the same time as the Formal Ballot on candidates for membership, provided the number of such candidates does not exceed three. If more than three candidates so qualify, the Section shall nominate the three with the highest votes. The Chair shall have the discretion to resolve tie votes, taking into account previous candidacies, geographical distribution, and other considerations.

There shall be only one Ballot on Foreign Associates. No names shall be automatically carried over from previous years. The list of names on the Ballot shall include all written proposals, in the form prescribed in Bylaw IV.II, received by the Chair by October 24.

Election Procedures revised November 1998.

## Section 61: Animal, Nutritional, and Applied Microbial Sciences

## I. Nomination Procedures

The Section chairman will appoint or reappoint a Panel chairman for each of the disciplinary grouping within the section. Each Panel chairman will select at least two members from the Section or other closely related NAS sections to advise and assist in preparing the list of potential nominees. It will be the responsibility of each Panel chairman to develop a list of the highly qualified scientists in his/her assigned area for consideration as possible nominees. The list should include at least five individuals who are considered by their peers as the most innovative, productive, and influential leaders in research in their fields. The list of potential candidates should be revised annually in consultation with fellow scientists taking into account outstanding scientists who have received for research awards and honors from their professional societies.

Each year one or more individuals should be nominated from each panel for the straw ballot. Preparation of the biographical information on each nominee will be the responsibility of the Panel chairman or other section member volunteering to do so or assigned to this task by the Panel chairman.

New nominations from individual section members can also be made at any time prior to the First Straw Ballot for consideration in any year. It will be advisable to follow the plan of submitting nominations for review by the corresponding panel before a nomination is placed on the First Straw Ballot. However, members should also be encouraged to make nominations of scientists who may not exactly fit any of the panel designations.

The same procedures should be followed for the nomination of foreign associates.

## II. First Straw Ballot for Section Nominees

All members of Section 61, including Foreign Associates and Secondary Affiliates, are eligible to vote in the First and Second Straw Ballots and to participate in the discussion of nominees. The First Straw Ballot will be submitted to the members on or before March 20. The nominees on this ballot should be ranked in one of five categories as follow:

1 = Distinctly outstanding
2 = Superior
3 = Very good
4 = Good
5 = Fair

## III. Section Meeting at the Annual Meeting in April

The Section, meeting as a group, will select at least 10 candidates from the First Straw Ballot taking into consideration balance among disciplinary groups assigned to the Section. These will be placed on the Second Straw Ballot. Every effort should be made at this stage to identify and eliminate those candidates who will not be supported by a majority of the Section.

Candidates for Intersectional and Foreign Associate nominations appearing on the First Straw Ballots should be discussed by members present at this meeting. Those agreed upon should appear on subsequent Section ballots as specified below.

## IV. Informal Ballot (October) and Formal Ballot (November)

These are conducted in accord with the following Academy Bylaws:
"Informal Ballot: The chairman of each Section shall submit to the members of the Section, not later than September 20 of each year, an Informal Ballot containing in alphabetical order, the names of all Candidates successful in preliminary ballots prescribed by Sectional Procedures. The ballot shall be marked by each
member with crosses by the names of those Candidates endorsed for nomination. The ballot thus inscribed shall be sealed in an envelope, which shall be enclosed in another bearing the printed or typed name and the signature of the sender, and transmitted to the section chairman. Ballots shall be received by the section chairman within four weeks. The result of this Informal Ballot shall be reported to the home secretary and to the members of the section.

Formal Ballot: The chairman of each Section shall then, not later than November 1 of each year, submit to the members of the Section a new ballot. This Formal Ballot shall include all candidates, ranked according to the Informal Ballot, who received 40 percent or more as specified by the Sectional Procedures, of the votes cast on the Informal Ballot or in the case of Intersectional Candidates 25 percent or more of the vote on the Informal Ballot of each of the two Sections. Each member shall be expected to return this Formal Ballot to the chairman within four weeks, marked with crosses and enclosed in double envelope as in the case of the Informal Ballot.

In order to secure an adequate number of nominations the chairman, when necessary, shall obtain by personal solicitation a fuller vote of the Section.

The chairman of each Section ... shall then certify to the home secretary prior to December 8, the names of all Candidates who have been voted for on the Formal Ballots, together with a statement of the number of votes each Candidate received and of the number of members voting. Of these, all candidates who receive the votes of two-thirds of the members voting in any one Section ... or a majority of the members voting in any two Sections on an Intersectional proposal shall be declared Nominees.

A properly edited statement of the accomplishments of each Section Nominee shall be sent by the section chairman to the home secretary along with the report on the Formal Ballot. The nomination should include a statement, in the form of a citation not to exceed fifty words identifying the primary scientific achievements of the Nominee ...

A Candidate receiving 40 percent or more but less than two-thirds of the votes on the Formal Ballot shall continue in the status of Candidate."

## V. Eligibility

A nominee who has been on the Second Straw Ballot and is not elected to NAS membership will be continued on the First Straw Ballot for two additional years provided that 15 percent of the votes cast are affirmative, plus 5 percent for each additional year that the name is listed continuously. Rankings of 1 and 2 are considered affirmative. An exception to the rule that a nominee can be on the ballot for only three continuous years without being elected is made for nominees who in the third year have appeared on the section's Formal Ballot. They remain as candidates for a fourth year. Nominees not eligible for continuation on the First Straw Ballot can be renominated after a lapse of one year.

## VI. Intersectional Nominees

First Straw Ballot. The chairman will prepare a separate listing on the First Straw Ballot for Intersectional Nominees. This ballot will list the nominations for Intersectional Nominees made by at least one member of the Section together with a member of another Section willing to consider the candidate Intersectional.

Second Straw Ballot. The Section Chairman will include on the Second Straw Ballot those Intersectional nominees who receive at least as many votes on the Intersectional portion of the First Straw Ballot as the lowest qualified nominee for the Sectional Second Straw Ballot received on the Sectional First Straw Ballot.

The Section Chairman will simultaneously contact the Chairman of the proposed cosponsoring Section to determine whether it would be more advantageous for the nominee to be a candidate of one section only.

## VII. Foreign Associates

First and Second Straw Ballots. The First Foreign Associate Straw Ballot will contain the names of all nominations made by members of the section or other Academy members in the current year plus those nominated in the two years immediately preceding September 1 of the year of the current ballot and who were not elected to the Academy, providing they were supported by a majority of the section voting on the last previous ballot. Individuals failing in election for three successive years under these conditions may be renominated after a lapse of two years.

The Second Foreign Associate Straw Ballot will contain the names of all nominations receiving substantial support on the First Foreign Associate Straw Ballot and recommend by the Section at its annual meeting. Rankings of 1 and 2 by a majority of the Section members voting are evidence of substantial support.

Foreign Associate Informal Ballot. At the time of the Informal Ballot the Section Chairman will submit a separate Foreign Associate Informal Ballot to the Section members for the purpose of selecting possible nominees for Foreign Associates. The Ballot shall contain names of all nominees who received the support of a majority of the section on the Foreign Associate Second Straw Ballot. Each member shall be entitled to vote for up to three candidates on the Foreign Associate Informal Ballot. Voting shall be based on a "yes" or "no" ballot rather than a ranking in numerical order.

Formal Ballot. At the time of the Formal Ballot the Section Chairman will submit a Foreign Associate Final Ballot to the Section members for the purpose of endorsing or not endorsing the top two or three names selected on the basis of the Preliminary Ballot results.

A candidate shall not be on the Foreign Associate Ballot for more than three consecutive years.
Election Procedures revised March 2002.

## Section 62: Plant, Soil, and Microbial Sciences

## I. Nomination Procedures

The Section chairman will appoint or reappoint a Panel chairman for each of the disciplinary grouping within the section. Each Panel chairman will select at least two members from the Section or other closely related NAS sections to advise and assist in preparing the list of potential nominees. It will be the responsibility of each Panel chairman to develop a list of the highly qualified scientists in his/her assigned area for consideration as possible nominees. The list should include at least five individuals who are considered by their peers as the most innovative, productive, and influential leaders in research in their fields. The list of potential candidates should be revised annually in consultation with fellow scientists taking into account outstanding scientists who have received for research awards and honors from their professional societies.

Each year one or more individuals should be nominated from each panel for the straw ballot. Preparation of the biographical information on each nominee will be the responsibility of the Panel chairman or other section member volunteering to do so or assigned to this task by the Panel chairman.

New nominations from individual section members can also be made at any time prior to the First Straw Ballot for consideration in any year. It will be advisable to follow the plan of submitting nominations for review by the corresponding panel before a nomination is placed on the First Straw Ballot. However, members should also be encouraged to make nominations of scientists who may not exactly fit any of the panel designations.

The same procedures should be followed for the nomination of foreign associates.
Secondary Affiliates and Foreign Associates shall vote on the first and second straw ballot and their votes will be counted in the final talley.

## II. First Straw Ballot for Section Nominees

The First Straw Ballot will be submitted to the members, foreign associates, and secondary affiliates on or before March 20. The nominees on this ballot should be ranked in one of five categories as follow:

1 = Distinctly outstanding
2 = Superior
3 = Very good
4 = Good
5 = Fair

## III. Section Meeting at the Annual Meeting in April

The Section, meeting as a group, will select at least 10 candidates from the First Straw Ballot taking into consideration balance among disciplinary groups assigned to the Section. These will be placed on the Second Straw Ballot. Every effort should be made at this stage to identify and eliminate those candidates who will not be supported by a majority of the Section.

Candidates for Intersectional and Foreign Associate nominations appearing on the First Straw Ballots should be discussed by members present at this meeting. Those agreed upon should appear on subsequent Section ballots as specified below.

## IV. Informal Ballot (October) and Formal Ballot (November)

These are conducted in accord with the following Academy Bylaws:
"Informal Ballot: The chairman of each Section shall submit to the members of the Section, not later than September 20 of each year, an Informal Ballot containing in alphabetical order, the names of all Candidates successful in preliminary ballots prescribed by Sectional Procedures. The ballot shall be marked by each member with crosses by the names of those Candidates endorsed for nomination. The ballot thus inscribed shall be sealed in an envelope, which shall be enclosed in another bearing the printed or typed name and the signature of the sender, and transmitted to the section chairman. Ballots shall be received by the section chairman within four weeks. The result of this Informal Ballot shall be reported to the home secretary and to the members of the section.

Formal Ballot: The chairman of each Section shall then, not later than November 1 of each year, submit to the members of the Section a new ballot. This Formal Ballot shall include all candidates, ranked according to the Informal Ballot, who received 40 percent or more as specified by the Sectional Procedures, of the votes cast on the Informal Ballot or in the case of Intersectional Candidates 25 percent or more of the vote on the Informal Ballot of each of the two Sections. Each member shall be expected to return this Formal Ballot to the chairman within four weeks, marked with crosses and enclosed in double envelope as in the case of the Informal Ballot.

In order to secure an adequate number of nominations the chairman, when necessary, shall obtain by personal solicitation a fuller vote of the Section.

The chairman of each Section ... shall then certify to the home secretary prior to December 8, the names of all Candidates who have been voted for on the Formal Ballots, together with a statement of the number of votes each Candidate received and of the number of members voting. Of these, all candidates who receive the votes of two-thirds of the members voting in any one Section ... or a majority of the members voting in any two Sections on an Intersectional proposal shall be declared Nominees.

A properly edited statement of the accomplishments of each Section Nominee shall be sent by the section chairman to the home secretary along with the report on the Formal Ballot. The nomination should include a statement, in the form of a citation not to exceed fifty words identifying the primary scientific achievements of the Nominee ...

A Candidate receiving 40 percent or more but less than two-thirds of the votes on the Formal Ballot shall continue in the status of Candidate."

## V. Eligibility

A nominee who has been on the Second Straw Ballot and is not elected to NAS membership will be continued on the First Straw Ballot for two additional years provided that 15 percent of the votes cast are affirmative, plus 5 percent for each additional year that the name is listed continuously. Rankings of 1 and 2 are considered affirmative. An exception to the rule that a nominee can be on the ballot for only three continuous years without being elected is made for nominees who in the third year have appeared on the section's Formal Ballot. They remain as candidates for a fourth year. Nominees not eligible for continuation on the First Straw Ballot can be renominated after a lapse of one year.

## VI. Intersectional Nominees

First Straw Ballot. The chairman will prepare a separate listing on the First Straw Ballot for Intersectional Nominees. This ballot will list the nominations for Intersectional Nominees made by at least one member of the Section together with a member of another Section willing to consider the candidate Intersectional.

Second Straw Ballot. The Section Chairman will include on the Second Straw Ballot those Intersectional nominees who receive at least as many votes on the Intersectional portion of the First Straw Ballot as the lowest qualified nominee for the Sectional Second Straw Ballot received on the Sectional First Straw Ballot.

The Section Chairman will simultaneously contact the Chairman of the proposed cosponsoring Section to determine whether it would be more advantageous for the nominee to be a candidate of one section only.

## VII. Foreign Associates

First and Second Straw Ballots. The First Foreign Associate Straw Ballot will contain the names of all nominations made by members of the section or other Academy members in the current year plus those nominated in the two years immediately preceding September 1 of the year of the current ballot and who were not elected to the Academy, providing they were supported by a majority of the section voting on the last previous ballot. Individuals failing in election for three successive years under these conditions may be renominated after a lapse of two years.

The Second Foreign Associate Straw Ballot will contain the names of all nominations receiving substantial support on the First Foreign Associate Straw Ballot and recommend by the Section at its annual meeting. Rankings of 1 and 2 by a majority of the Section members voting are evidence of substantial support.

Foreign Associate Informal Ballot. At the time of the Informal Ballot the Section Chairman will submit a separate Foreign Associate Informal Ballot to the Section members for the purpose of selecting possible nominees for Foreign Associates. The Ballot shall contain names of all nominees who received the support of a majority of the section on the Foreign Associate Second Straw Ballot. Each member shall be entitled to vote for up to three candidates on the Foreign Associate Informal Ballot. Voting shall be based on a "yes" or "no" ballot rather than a ranking in numerical order.

Formal Ballot. At the time of the Formal Ballot the Section Chairman will submit a Foreign Associate Final Ballot to the Section members for the purpose of endorsing or not endorsing the top two or three names selected on the basis of the Preliminary Ballot results.

A candidate shall not be on the Foreign Associate Ballot for more than three consecutive years.
Election Procedures revised November 1998.

## Section 63: Environmental Sciences and Ecology

## I. Election of the Chair:

The election of the Chair shall be done in accordance with the Bylaws of the National Academy of Sciences.

## II. Duties of the Chair:

A. To preside at the Annual Meeting of the Section.
B. To transmit the Sectional minutes of the Annual Meeting to the Home Secretary.
C. To conduct all Sectional balloting.
D. To make certain that a completed nomination statement accompanies the Straw Ballot for each nominee and to review biographical supporting material for scientific accuracy and content; the Chair also is responsible for appointing and overseeing a nominating committee for "fine-tuning" of the biographical data to be sent to the Home Secretary.
E. To appoint a committee to identify and promote appropriate women and minority candidates for nomination.
F. To represent the Section at Class Meetings, or if the Chair is not able to attend, to appoint a representative and so inform the Home Secretary; it is the duty of the Chair to brief the representative about the nominees for membership and other important matters that may come before the Class Meeting.
G. To transmit to Sectional members communications requiring their action or important suggestions sent to the Chair by other members of the Section.
H. To maintain records of balloting and other important records of the Section and to pass these records along to the next Chair of the Section.
I. To assist in the preparation of memoirs of deceased members by recommending authors and reviewing drafts of memoirs.

## III. Sectional Procedures for Submitting Candidates for Nomination for Membership to the National Academy of Sciences:

A. Any member of the Section may submit the name of a nominee to the Chair of the Section for consideration.

Such nomination must be accompanied by a completed, formal nomination statement, including a summary, not to exceed 250 words, of the person's scientific accomplishments, a selected bibliography of not more than 12 publications, and a citation, not to exceed 50 words, identifying the primary scientific achievements of the nominee. The nomination statement must be signed by at least one member of Section 63.
B. Candidates receiving greater than 25 percent of the vote on the Straw Ballot shall be placed on the Informal Ballot in alphabetical order in accordance with the Bylaws.

Secondary affiliates and foreign associates may vote in the straw ballot for the election of members and foreign associates. Their votes will not count toward advancement to the Informal Ballot and will be listed separately in reports to Section members.
C. Candidates receiving 40 percent or more of the votes on the Informal Ballot shall be placed on the Formal Ballot; in the Formal Ballot the names of the candidates shall be listed in rank-order according to the votes received on the Informal Ballot, and the number of votes received shall be shown.
D. A candidate who received 40 percent or more of the Sectional votes on the Formal Ballot, but is not elected to the National Academy of Sciences, shall be carried forward to the Sectional Informal Ballot for the next year.
E. Nominees receiving less than 25 percent of the vote on the Straw Ballot for three consecutive years shall be dropped from the ballot in the succeeding year.
F. All straw ballot candidates whose nomination forms have not been updated for two years shall be removed from consideration. The nominators of such candidates must be notified so that they can update their nomination.

## IV. Intersectional Nominations:

Anyone may be suggested as a candidate provided that:
A. Bibliographic data are supplied, as for Sectional nominees.
B. The other Section designated will place the name of the Intersectional candidate on their ballot.
C. If a candidate receives at least 25 percent of the votes cast on the Informal Ballot in each of the two Sections, then the candidate shall be added to the Formal Ballot; the Chair of the Section must notify the Chair of the other cooperating Section as to whether or not the candidate is viable after the Informal Ballot.
D. Other procedures leading to election are set forth in Article IV, Section 12.B of the Bylaws.

## V. Foreign Associates:

Any name submitted as a candidate for Foreign Associate must be accompanied by a nomination statement as set forth for Sectional nominees above. The details of the election procedures for Foreign Associates are set forth in Article IV, Section 12.E of the Bylaws. Names of the Foreign Associates will be placed on the Straw Ballot if possible, and must be placed on the Informal Ballot.

Election Procedures revised July 2002.

## Section 64: Human Environmental Sciences

## I. Nomination Procedures

The Section Chair formally solicits first round nominations for the year vote in question by January 15. Nomination materials are due to the Chair by March 15. The Chair collates the materials (new nominations and those nominated over the past two years) and sends them electronically to the Section membership in preparation for discussion at the annual Business Meeting of the Section. New nominations made at the Business Meeting must be submitted to the Chair by May 15 in order to make the first Straw Ballot. Additional nominations may be made through August 1 for subsequent straw balloting.

As needed, the Section may be divided into several groups (determined by the Chair in consultation with the membership), each with designated responsibilities in regard to identifying nominees (e.g., by subject or disciplinary origins) and recommending to the Section as a whole the designated group's ranking of these nominees. This information is distributed with each of the Straw Ballots.

All balloting and related discussions up to the Informal Ballot will be conducted electronically, save for those members preferring to use fax. No regular or postal mail services will be used for this purpose.

Foreign Associates are permitted to vote in all phases of the electoral process prior to the Informal Ballot, and their ballots are treated the same as those of Regular Members.

## II. First Straw Ballot for Section Nominees

The First Straw Ballot will be submitted to the members on or before May 20. The ballot is accompanied with a note from the Chair about specialty group rankings. The ballots must be returned to the Chair by June 15, and the results of this ballot are distributed by the Chair to the membership by the June 20.

A separate First Straw Ballot is distributed to the Section's Secondary Affiliates following the procedures above, the results of which are used to inform the Section.

## III. Second Straw Ballot for Section Nominees

The second Straw Ballot will be submitted by the Chair to the Section members on or before August 15. This ballot includes all nominees receiving $25 \%$ of the vote on the first straw ballot and any new nominations received subsequent to that ballot. The second ballot is accompanied with a note from the Chair about specialty group rankings, with any changes from the first Straw Ballot emphasized. The ballots must be returned to the Chair by September 5, and the results of this ballot are distributed by the Chair to the membership by September 10.

A separate Second Straw Ballot is distributed to the Section's Secondary Affiliates following the procedures above, the results of which are used to inform the Section.

## IV. Informal Ballot (October) and Formal Ballot (November)

These are conducted in accord with the following Academy Bylaws:
"Informal Ballot: The chairman of each Section shall submit to the members of the Section, not later than September 20 of each year, an Informal Ballot containing in alphabetical order, the names of all Candidates successful in preliminary ballots prescribed by Sectional Procedures. The ballot shall be marked by each member with crosses by the names of those Candidates endorsed for nomination. The ballot thus inscribed shall be sealed in an envelope, which shall be enclosed in another bearing the printed or typed name and the signature of the sender, and transmitted to the section chairman. Ballots shall be received by the section chairman within four weeks. The result of this Informal Ballot shall be reported to the home secretary and to the members of the section.

Formal Ballot: The chairman of each Section shall then, not later than November 1 of each year, submit to the members of the Section a new ballot. This Formal Ballot shall include all candidates, ranked according to the Informal Ballot, who received 40 percent or more as specified by the Sectional Procedures, of the votes cast on the Informal Ballot or in the case of Intersectional Candidates 25 percent or more of the vote on the Informal Ballot of each of the two Sections. Each member shall be expected to return this Formal Ballot to the chairman within four weeks, marked with crosses and enclosed in double envelope as in the case of the Informal Ballot.

In order to secure an adequate number of nominations the chairman, when necessary, shall obtain by personal solicitation a fuller vote of the Section. The chairman of each Section ... shall then certify to the home secretary prior to December 8, the names of all Candidates who have been voted for on the Formal Ballots, together with a statement of the number of votes each Candidate received and the number of members voting. Of these, all candidates who receive the votes of two-thirds of the members voting in any one Section ... or a majority of the members voting in any two Sections on an Intersectional proposal shall be declared Nominees.

A properly edited statement of the accomplishments of each Section Nominee shall be sent by the section chairman to the home secretary along with the report on the Formal Ballot. The nomination should include a statement, in the form of a citation not to exceed fifty words identifying the primary scientific achievements of the Nominee ...

A Candidate receiving 40 percent or more but less than two-thirds of the votes on the Formal Ballot shall continue in the status of Candidate."

## V. Eligibility

All nominees not elected to the NAS will remain on straw ballots for not more than three consecutive years unless [1] they receive $50 \%$ of the vote on the second straw ballot of last year in question or [2] are renominated with the sponsorship of at least three members of the Section.

## VI. Intersectional Nominees

First and Second Straw Ballots. The chairman will prepare a separate listing on the First and Second Straw Ballots for Intersectional Nominees. This ballot will list the nominations for Intersectional Nominees made by at least one member
of the Section together with a member of another Section willing to consider the candidate Intersectional.
The Section Chairman will simultaneously contact the Chairman of the proposed cosponsoring Section to determine whether it would be more advantageous for the nominee to be a candidate of one section only.

## VII. Foreign Associates

Nominees for Foreign Associates will be treated the same as a nominee for regular membership.
Election Procedures established August 2001; revised October 2003.

