INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY

ICSP MINUTES

Sutcliffe *et al.*, *Int. J. Syst. Evol. Microbiol.* 2020;70:4416–4417
DOI 10.1099/ijsem.0.004303

MICROBIOLOGY SOCIETY

OPEN ACCESS

Minutes of the International Committee on Systematics of Prokaryotes online discussion on the proposed use of gene sequences as type for naming of prokaryotes, and outcome of vote

Iain C. Sutcliffe[1,*], Lenie Dijkshoorn[2], William B. Whitman[3] and on behalf of the ICSP Executive Board

Abstract

The International Committee on Systematics of Prokaryotes has held an electronic discussion on proposals to amend the International Code of Nomenclature of Prokaryotes in order to allow the use of gene sequence data as type. The scientific discussion is reported. Subsequently members of the International Committee on Systematics of Prokaryotes voted on these proposals, which were rejected.

In 2016, Whitman published 'modest proposals' to amend the International Code of Nomenclature of Prokaryotes (ICNP) [1] to allow the use of gene sequence data as type [2]. These proposals are described in more detail below and also included a statement of a general concept as to what can serve as type for a species and a proposal to allow valid publication of the name of a genus in the absence of a type species if the type is too ambiguous to circumscribe a species [2]. These proposals were intended to allow the establishment of a formal and stable nomenclature for uncultivated and difficult-to-culture taxa (such as endosymbionts), bringing them under the Rules of the ICNP.

Following several years of debate in various forums, these proposals were considered by the Editorial Board of the ICNP in electronic correspondence in Autumn 2019. The Editorial Board of the ICNP recognised the need to bring this matter to a timely vote of the International Committee on Systematics of Prokaryotes (ICSP). Following discussion at the ICSP Executive Board meeting of 2nd January 2020, a majority vote of the Executive Board approved the holding of an electronic discussion forum to debate these proposals prior to voting of the ICSP in March 2020, in keeping with Article 4 of the ICSP Statutes [3].

Subsequent to the proposals relating to use of sequence as type [2], additional proposals were made that, if DNA sequence was accepted as type, then *Candidatus* names published before 1 January 2020 which were otherwise in accordance with the rules of the Code would be granted priority [4]. A further proposal provided a simple nomenclature for identifying the nature of the type material by use of superscript variants on the current use of T to identify type strains. These proposals were also included for consideration in the electronic discussion forum and subsequent vote.

The electronic discussion period was begun on 5th January 2020 by email to the members of the ICSP, its Judicial Commission and the Editorial Board of the ICNP. Comments (limited to 500 words) were invited by 'reply all', and participants were encouraged to add email contacts for interested parties to extend the discussants. By the conclusion of the discussion, more than 150 participants were included in the email thread, and a substantial number of comments had been posted. In response to some procedural enquiries, the eligibility of members of the ICSP was confirmed with IUMS, which verified the voting status of 23 delegates. Collated comments summarizing the discussion were periodically circulated and also posted on the ICSP website. A moderated version of these comments are available herewith as supplementary file S1 (available in the online version of this article). Comments by some contributors have been removed at their request.

Author affiliations: [1]Northumbria University, Newcastle upon Tyne NE1 8ST, UK; [2]Department of Infectious Diseases, Leiden University Medical Center, 2300 RC Leiden, The Netherlands; [3]Department of Microbiology, University of Georgia, Athens GA 30602-2605, USA.
***Correspondence:** Iain C. Sutcliffe, iain.sutcliffe@northumbria.ac.uk
Keywords: nomenclatural type; International Code of Nomenclature of Prokaryotes; International Committee on Systematics of Prokaryotes.
Abbreviations: ICNP, International Code of Nomenclature of Prokaryotes; ICSP, International Committee on Systematics of Prokaryotes.
Supplementary material is available with the online version of this article.
004303 © 2020 The Authors

In the subsequent vote, the members of the ICSP were balloted on the following four proposals (described in detail in supplementary file S1):

- To accept or reject the Whitman (2016) proposal to amend Rules 18a and introduce the new Rule 30.3.c., to extend the nature of the type acceptable for valid publication of a species or subspecies name to allow the use of complete or partial genome sequences as type (Whitman 2016).
- To accept or reject the Whitman (2016) proposal to amend Rule 18a (3), to articulate a general concept for what can serve as type for a species.
- To accept or reject the Whitman (2016) proposal to amend Rule 20a, to allow valid publication of the name of a genus in the absence of a type species if the type is too ambiguous to circumscribe a species.
- a. If proposal 1, relating to sequence as type was passed, to accept or reject the Whitman *et al.* (2019) proposals to grant priority to names of *Candidatus* taxa published before 1 April 2020.
- b. If proposal 1, relating to sequence as type was passed, to accept or reject the Whitman *et al.* (2019) proposals to introduce the superscripts Ts and Td.

The results of the vote, which concluded on 31st March 2020, were collated by Lenie Dijkshoorn (ICSP Executive Secretary) and David R. Arahal (Chair, Judicial Commission). A total of 23 members of the ICSP voted. All of the amendments to the ICNP proposed in [2] and [4] and described above were rejected, as summarised in supplementary file S2.

Funding information
This work received no specific grant from any funding agency.

Acknowledgement
We thank all of those who contributed to the electronic discussion collated in supplementary file S1.

Conflicts of interest
I.S., L.D. and W.W. are members of the ICSP Executive Board that co-ordinated the debate and discussion described. The authors have no known conflict of interest to declare.

References
1. Parker CT, Tindall BJ, Garrity GM. International Code of Nomenclature of Prokaryotes (2008 revision). *Int J Syst Evol Microbiol* 2019;69,1A:S1–S111.
2. Whitman WB. Modest proposals to expand the type material for naming of prokaryotes. *Int J Syst Evol Microbiol* 2016;66:2108–2112.
3. Whitman WB, Bull CT, Busse H-J, Fournier P-E, Oren A *et al.* Request for revision of the statutes of the International Committee on Systematics of Prokaryotes. *Int J Syst Evol Microbiol* 2019;69:584–593.
4. Whitman WB, Sutcliffe IC, Rossello-Mora R. Proposal for changes in the International Code of Nomenclature of Prokaryotes: granting priority to *Candidatus* names. *Int J Syst Evol Microbiol* 2019;69:2174–2175.