



ICTV Newsletter #14 (2016, 2017)

This newsletter is designed to inform all who are interested in the work of the International Committee on Taxonomy of Viruses (ICTV) about recent developments and to involve them more directly in taxonomic deliberations. The editor prepares and sends the newsletter to all those who have joined the ICTV discussion site at [ICTVonline.org](http://talk.ictvonline.org); they and others are encouraged to distribute it freely. To register, navigate to [http://talk.ictvonline.org/](http://talk.ictvonline.org) and click on “join” in the upper right-hand corner of the page, near the “search” box. Registration is automatic. Once registered, sign in using the name and password you provided. If you are already registered, **please make sure your contact information is up-to-date**. You can do this by clicking on “edit profile” in the upper right-hand corner of the page. Comments and suggestions regarding the newsletter are welcome. Previous editions are [here](#). This edition (#14) covers the year period from July 2016.

Executive Committee activities

The 48th annual Executive Committee (EC) meeting (EC48) was held on 22-24 August 2016 in Budapest, Hungary, and was hosted by Balázs Harrach, Subcommittee Chair. This was the second regular meeting of the EC elected at the ICTV plenary meeting in Montreal, Canada in August 2014. Eighteen out of the nineteen EC members attended the two-and-a-half day meeting. Also in attendance were two researchers, Donald Smith and Richard Orton, who were supported by the Wellcome Trust (WT) grant obtained for on-line publication of the ICTV Report and assisting with other ICTV activities. The agenda included processing of taxonomic proposals, detailed discussion of the classification and nomenclature of viruses identified only from genome sequencing (mostly associated with virus metagenomics; see below), EC management, continuing development of the ICTV website (presented by Data Secretary Elliot Lefkowitz), launching a fully electronic 10th ICTV Report, including the formation of the Editorial Board of the Report with Elliot Lefkowitz as Editor-in-Chief, publishing taxonomy papers in the Virology Division News (VDN) section of Archives of Virology (presented by Elected Member Jens Kuhn, VDN Editor), and the activities of the WT grant, including extraordinary meetings in Hinxton (covered in ICTV Newsletter 13) and Boston (see below) (presented by Elected Member Peter Simmonds, co-PI of the WT grant with Andrew Davison and Stuart Siddell). The next EC meeting (EC49) will be hosted by Frank Eisenhaber, Director of the Bioinformatics Institute, A*STAR, in Singapore on 14-16 July 2017, prior to the ICTV Plenary Session during the XVIIth International Congress of Virology (ICV-XVII), at which elections to the new EC will take place (see below).

Recent progress with taxonomic proposals

Ratification of previous proposals

All proposals approved by the EC need to be ratified by the entire voting membership of the ICTV for final acceptance. The ICTV membership includes the [National Representatives](#), the members of the EC Subcommittees (mostly [Study Group \(SG\) chairs](#)), and the [Life Members](#). A total of 176 taxonomic proposals (TPs) from 2016 were ratified in e-votes by the ICTV membership in [March 2017](#). The EC is pleased to note that the recently introduced changes to the processing of TPs (a fast-track approval of good-quality proposals; for details see [ICTV Newsletter #10](#)) have achieved their goals: there has been a considerable shortening of the processing time for a large number of proposals and a larger volume of proposals has been processed. An article reporting the taxonomic changes ratified in 2017 is available [here](#). The new format of VDN articles on ratification votes, which was introduced in 2015 and modified in 2016, was further refined in 2017. These improvements are aimed at acknowledging more fully the efforts of all who contribute to changes and to improving the dissemination of news about the current state of virus taxonomy.

Major taxonomic changes introduced recently

The 2016 TPs brought about an unprecedented scale of advancement in a single year (Table 1) that considerably exceeded the record established in the previous year.

Table 1. Summary of taxonomic changes submitted in 2016 and approved in March 2017

| Change/Taxa | Orders | Families | Subfamilies | Genera | Species |
|----------------------------|--------|----------|-------------|--------|---------|
| New | 1 | 12 | 8 | 128 | 743 |
| Renamed | | | | 5 | 148 |
| Abolished | | 1 | | 2 | 43 |
| Taxonomy 2017 ¹ | 8 | 122 | 35 | 735 | 4404 |

¹ Total numbers of taxa recognised and listed in the ICTV Master Species List

In addition to the above changes, modifications to the International Code of Virus Classification and Nomenclature (ICVCN) were adopted in order to enable the classification of satellite nucleic acids. The latest version of the official virus taxonomy can be downloaded as the [ICTV Master Species List 2016](#).

New taxonomic proposals

Any virologist can make proposals to the ICTV via the appropriate [Subcommittee \(SC\) Chair](#), preferably in consultation with the relevant [SG](#). The new proposals that have been recently submitted, and that will be discussed at EC49, can be examined [here](#). In total, 107 proposals were submitted on a broad range of issues from recognizing new taxa to introducing additional ranks in taxonomy to changes in the ICVCN. All TPs were prepared using considerably revised templates (prepared by Proposals Secretary Andrew King) that now include a summary table of taxonomic changes (available [here](#)). This new format is expected to simplify the preparation and processing of TPs.

EC membership and elections, 2017

Most positions at the EC will be open to election in 2017, with a number of the current Officers and Elected Members needing to be replaced in accordance with the Statutes. The EC has nominated candidates for some of the vacant positions and will consider other nominations; names and brief CVs will be available on the [website](#). Additional nominations should be submitted to Business Secretary [Mike Adams](#) in accordance with the [Statutes](#) up to 2 days before the elections. Elections will take place during the [ICTV Plenary Session](#) at [ICV-XVII](#) on 17 July 2017.

Study Groups

The SGs have a particular responsibility for keeping up-to-date with the emergence of new viruses and proposing new species or higher taxa in their families or orders. They also often initiate creation of new families. The SG Chairs are appointed for a three-year term and are responsible for assembling the SGs whose membership can be accessed [here](#). If you are an SG member, please send any changes to your contact information (e.g. e-mail address) to your SG Chair and the Data Secretary [Elliot Lefkowitz](#). After EC49, the Subcommittee Chairs will set up the SGs for 2017-2020 by appointing their chairs.

Life Members

We are sad to note the recent passing of two distinguished Life Members. Craig Pringle, a past Secretary of the ICTV and a Life Member since 1999, passed away in 2015. Hans Ackermann, who served as chair of the subcommittee responsible for prokaryotic viruses for a total of 9 years, passed away in 2017. In 2016, the ICTV elected Eric Carstens, President of ICTV from 2008 to 2014, as a Life Member.

Extraordinary meeting on utilization of metagenomic sequences in virus taxonomy

In recent years, advancement of virus taxonomy has been driven by an ever-increasing use of genome sequences and the generally diminishing availability of information on phenotypic characteristics for most newly discovered viruses. To consult with the field about this trend, an extraordinary meeting focusing exclusively on the impact of metagenomics on virus taxonomy was held in Boston, MA, USA on 9-11 June 2016. This was hosted by Subcommittee Chair Max Nibert and organised and chaired by Elected Member Peter Simmonds as part of the WT grant (see above). In total, 13 EC members and 13 external experts on virus evolution and metagenomics attended the meeting, which included 14 plenary talks as well as discussions of a range of relevant issues. A summary of the meeting is available [here](#). The conclusions were published [here](#) and were considered at EC48, at which the members endorsed the possible use of genomic sequences as the sole basis for assignments at any taxonomic level, as long as certain safeguards are applied and the results are consistent with the current rules of virus taxonomy. The positive response of the EC to these conclusions was published [here](#).

ICTV publications

ICTV 10th Report and Chapter Summaries

Since the release of the [ICTV 9th Report](#), virus taxonomy has been updated several times (see above). In December 2016, the ICTV launched the freely accessible online 10th Report, which is available [here](#). This is expected to include up-to-date articles on all virus groups by the end of 2019. Brief, freely available, citeable summaries of newly submitted chapters are published in a [dedicated section](#) of the Journal of General Virology. Both the 10th Report and the summaries are overseen by the Editorial Board appointed at EC48. The Editorial Board includes Elliot Lefkowitz (Editor-in-Chief), Mike Adams, Andrew Davison, Stuart Siddell and Peter Simmonds (Editors), Balázs Harrach, Nick Knowles, Andrew Kropinski, Max Nibert, Hélène Sanfaçon, and Stuart Siddell (Associate Editors), Donald Smith (Managing Editor) and Richard Orton (Technical Editor).

Virology Division News (VDN)

The VDN section of Archives of Virology remains an important open-access vehicle for freely communicating ICTV news to the virology community and beyond. It has been edited by Elected Member [Jens Kuhn](#) for six years, and the EC thanks him for his exemplary service. His successor will be appointed at the Virology Division meeting during ICV-XVII. Reports and articles that deal with the development of virus taxonomy should be sent to the VDN section of Archives of Virology, with a clear indication of whether the article presents changes officially recognised by the ICTV, the substance of taxonomic proposals currently being considered by the ICTV, or informal suggestions for discussion.

50th anniversary of the ICTV and a history of taxonomic changes

In 2016, we celebrated the **50th anniversary** of the founding of the International Committee for Virus Nomenclature (ICVN), the predecessor of the ICTV, during the International Congress of Microbiology in Moscow in July 1966. The EC has published a special article available [here](#) that is dedicated to this milestone. A reconstructed history of all changes to ICTV-approved taxa over the years is available [here](#).

Funding

The ICTV is very grateful to the Virology Division of [the International Union of Microbiological Societies](#), [the Microbiology Society](#), [the American Society of Virology](#), and the [Wellcome Trust](#) for generous support.

Important links

[Main Website for ICTV](#)

[ICTV virus taxonomy database: current classification and history of each taxon since 1971](#)

[Templates for taxonomic proposals](#)

[How to write the names of viruses and virus taxa](#)

Problems, comments and questions

As always, comments and suggestions are welcome. To ensure efficient distribution of this and other information, we again ask you to keep your personal information up-to-date at the ICTV website. In particular, **if you are a National Representative**, please make sure that all the appropriate information is on [the website](#), and also send a note to Business Secretary [Mike Adams](#).

Editor: Vice-President [Alexander E. Gorbalenya](#)