

Lawrence Berkeley National Laboratory

LBL Publications

Title

Changes to virus taxonomy and the ICTV Statutes ratified by the International Committee on Taxonomy of Viruses (2024).

Permalink

<https://escholarship.org/uc/item/16d2k5kn>

Journal

Archives of Virology, 169(11)

Authors

Simmonds, Peter
Adriaenssens, Evelien
Lefkowitz, Elliot
[et al.](#)

Publication Date

2024-11-03

DOI

10.1007/s00705-024-06143-y

Peer reviewed



Changes to virus taxonomy and the ICTV Statutes ratified by the International Committee on Taxonomy of Viruses (2024)

Peter Simmonds¹ · Evelien M. Adriaenssens² · Elliot J. Lefkowitz³ · Hanna M. Oksanen⁴ · Stuart G. Siddell⁵ · Francisco Murilo Zerbini⁶ · Poliane Alfenas-Zerbini⁷ · Frank O. Aylward⁸ · Donald M. Dempsey³ · Bas E. Dutilh^{9,10} · Juliana Freitas-Astúa¹¹ · María Laura García¹² · R. Curtis Hendrickson³ · Holly R. Hughes¹³ · Sandra Junglen¹⁴ · Mart Krupovic¹⁵ · Jens H. Kuhn¹⁶ · Amy J. Lambert¹⁷ · Małgorzata Łobocka¹⁸ · Arcady R. Mushegian¹⁹ · Judit Penzes²⁰ · Alejandro Reyes Muñoz²¹ · David L. Robertson²² · Simon Roux²³ · Luisa Rubino²⁴ · Sead Sabanadzovic^{25,26} · Donald B. Smith¹ · Nobuhiro Suzuki²⁷ · Dann Turner²⁸ · Koenraad Van Doorslaer²⁹ · Anne-Mieke Vandamme^{30,31} · Arvind Varsani³²

© The Author(s) 2024

Abstract

This article reports changes to virus taxonomy and taxon nomenclature that were approved and ratified by the International Committee on Taxonomy of Viruses (ICTV) in April 2024. The entire ICTV membership was invited to vote on 203 taxonomic proposals that had been approved by the ICTV Executive Committee (EC) in July 2023 at the 55th EC meeting in Jena, Germany, or in the second EC vote in November 2023. All proposals were ratified by online vote. Taxonomic additions include one new phylum (*Ambiviricota*), one new class, nine new orders, three new suborders, 51 new families, 18 new subfamilies, 820 new genera, and 3547 new species (excluding taxa that have been abolished). Proposals to complete the process of species name replacement to the binomial (genus + species epithet) format were ratified. Currently, a total of 14,690 virus species have been established.

Introduction

The International Committee on Taxonomy of Viruses (ICTV) follows an annual cycle of taxonomy updating in which proposed changes and additions to virus taxonomy are considered and implemented. The ICTV classification of viruses provides a framework for the taxonomic placement of viruses at ranks from species to realm and furthermore regulates their taxon names and typography. The ICTV Statutes (<https://ictv.global/about/statutes>) describe the process in which taxonomic proposals are submitted to the ICTV Executive Committee (EC) and undergo review with input from the ICTV Study Groups and Subcommittees, other interested virologists, and the EC. After final approval by the EC, proposals are placed on the ICTV website (<https://ictv.global>) for evaluation by the full ICTV membership, which ratifies them by online voting.

Proposal discussion and ratification

The EC of the ICTV held a hybrid meeting in Jena, Germany, on the 2nd - 4th August, 2023. The EC reviewed a total of 202 taxonomy proposals submitted to the seven subcommittees, including streamlined proposals that had been reviewed previously by at least two EC members, and two general proposals. Requested revisions to 13 proposals were reviewed and re-voted on by the EC in November 2023. The 2023 taxonomy proposals that were accepted by the EC were then placed on the ICTV website (<https://ictv.global>) for viewing by the full ICTV membership.

All proposals [1–203] were ratified in a vote held from the 28th March to the 25th April, 2024. A total of 125 out of 180 ICTV members (69%) voted on the proposals. All proposals received either 120 or 121 votes (*i.e.*, 99.2% or 100%) in favour of ratification. A summary of the taxonomy changes enacted by the proposals is provided in Table 1. Each proposal is cited and listed in the References to acknowledge the authors' efforts and to provide links to the specific proposal on the ICTV website. These documents and those

Handling Editor: Tim Skern.

Extended author information available on the last page of the article

Table 1 Summary of ratified taxonomic changes in 2024

Rank	MSL.38 total ^a	New	Abolished	Moved	Renamed	MSL.39 total ^b	Net change
Realm	6	0	0	0	0	6	0
Subrealm	0	0	0	0	0	0	0
Kingdom	10	0	0	0	0	10	0
Subkingdom	0	0	0	0	0	0	0
Phylum	17	1	0	0	0	18	+1
Subphylum	2	0	0	0	0	2	0
Class	40	1	0	0	1	41	+1
Subclass	0	0	0	0	0	0	0
Order	72	9	0	0	3	81	+9
Suborder	8	3	0	0	0	11	+3
Family	264	51	-1	12	2	314	+50
Subfamily	182	18	0	1	1	200	+18
Genus	2818	820	-116	58	1	3522	+704
Subgenus	84	0	0	0	0	84	0
Species	11273	3547	-130	407	2884	14690	+3417

^aTotal number of taxa in the ICTV Master Species List (MSL) #38 prior to 2024 ratification

^bTotal number of taxa after the 2024 ratification vote (listed in the ICTV MSL #39)

from previous years are permanently available to provide full access to the text and listing of taxonomy changes made in each proposal (<https://ictv.global/files/proposals/approved>).

Principal changes to virus taxonomy

The 2024 round of taxonomy proposals saw the near completion of the mandated change of species names to a binomial format (i.e., genus + species epithet) [204–206]. This accounted for the vast majority of the 2884 species name re-assignments (Table 1).

There were no major reorganisations of or additions to the higher ranks of ICTV taxonomy, with retention of the six originally proposed realms and 10 kingdoms (Table 1). There was, however, the important addition of a new phylum, *Ambiviricota*, to which a large number of mobile genetic elements infecting fungi, previously introduced into the literature as “ambiviruses”, were assigned [209]. These unusual viruses with circular RNA genomes of approximately 5 kb combine features of both typical RNA viruses and viroids. On the one hand, they encode a canonical, albeit highly divergent, RNA-directed RNA polymerase that is homologous to those of other RNA viruses in the realm *Riboviria* [207, 210]. On the other hand, their genomes also possess ribozymes in various combinations in both the sense and antisense orientation, consistent with a rolling-circle mechanism for genome replication found in deltaviruses (family *Kolmioviridae* [208] classified in the realm *Riboviria*) and viroids. The proposal [160] assigns ambiviricots to four different families and 20 species.

At lower ranks, taxonomy proposals considered by subcommittees for animal DNA viruses and retroviruses, animal viruses with dsRNA and -ssRNA genomes, bacterial viruses, and fungal and protist viruses entailed a considerable expansion in the number of virus orders, families, genera, and species within a range of virus groups. This notably included viruses assigned to the *Cressdnaviricota*, a phylum of eukaryotic small DNA viruses (realm *Monodnaviria*), which nearly doubled in terms of the number of included virus families (from 12 to 23); negative-stranded RNA viruses (phylum *Negarnaviricota*); and bacterial and archaeal viruses in the class *Caudoviricetes* that were previously classified into families based on tail morphology and are now being placed into a much larger number of families and orders based on metrics of genome relatedness [211]. So far, this process has led to the establishment of 74 new families and seven orders. In addition, *Ghabrivirales*, an order for dsRNA viruses mainly infecting fungi, underwent a major revision [168].

A general proposal [202] described the organisational changes required to coordinate ICTV meeting and election cycles with those of the International Congresses of Virology (ICV) organized by the International Union of Microbiological Societies (IUMS). Elections to the ICTV EC had previously coincided with the ICV meetings, but the change to a two-year cycle of ICV meetings conflicts with the established three-year plenary sessions and election of the ICTV. Following the ratification of this general proposal, the ICTV will retain its three-year cycle; in the years when it coincides with the ICV meetings, the ICTV plenary meeting will be held in conjunction with the ICV. Otherwise, the plenary meeting will be held online after the EC annual meeting.

Implementation and access

The latest set of proposals approved by the EC was made available on the ICTV website in April 2024 as a single zip file and in a directory of individual files at <https://ictv.global/files/proposals/approved>, indexed by virus group and subcommittee.

Updated versions of the Master Species List (up to version 39), which list all of the currently approved taxa (Table 1), can be accessed on the ICTV website at <https://ictv.global/msl>. A similarly updated version 39 of the Virus Metadata Resource (VMR) is located at <https://ictv.global/vmr>. This resource provides details of exemplar virus isolates for each species including GenBank accession numbers.

Acknowledgements The authors would like to thank Richard Mayne (University of Oxford) for assistance in preparing the taxonomy proposal listing, and the contributing authors. The authors also thank Anya Crane (Integrated Research Facility at Fort Detrick, National Institute of Allergy and Infectious Diseases, National Institutes of Health, Fort Detrick, Frederick, MD, USA) for critically editing the manuscript. The findings and conclusions in this report are the opinions of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

Funding F.M.Z. acknowledges financial support from Capes (Finance code 01), CNPq, and Fapemig. E.M.A. gratefully acknowledges funding by the U.K. Biotechnology and Biological Sciences Research Council (BBSRC); this research was funded in part by the BBSRC Institute Strategic Programme Microbes and Food Safety BB/X011011/1 and its constituent projects BBS/E/F/000PR13634, BBS/E/F/000PR13635, and BBS/E/F/000PR13636, as well as the BBSRC Institute Strategic Programme Food Microbiome and Health BB/X011054/1 and its constituent projects BBS/E/F/000PR13631 and BBS/E/F/000PR13633. B.E.D. is supported by the European Research Council (ERC) Consolidator grant 865694: DiversiPHI, the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy – EXC 2051 – Project-ID 390713860, European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie Actions Innovative Training Networks grant agreement no. 955974 (VIROINF), and the Alexander von Humboldt Foundation in the context of an Alexander von Humboldt-Professorship funded by the German Federal Ministry of Education and Research. This work was supported in part through Laulima Government Solutions, LLC, prime contract with the U.S. National Institute of Allergy and Infectious Diseases (NIAID) under Contract No. HHSN272201800013C. J.H.K. performed this work as an employee of Tunnell Government Services (TGS), a subcontractor of Laulima Government Solutions, LLC, under Contract No. HHSN272201800013C. A.R.M. is a Program Director at the U.S. National Science Foundation (NSF); the statements and opinions expressed herein are made in a personal capacity and do not constitute endorsement by the NSF or the government of the United States. H.M.O. was supported by the University of Helsinki and the Research Council of Finland by funding for FINStruct and Instruct Centre FI, part of Biocenter Finland and Instruct-ERIC. D.L.R. is supported by the U.K. Medical Research Council (MC_UU_00034/5). D.B.S. is supported by the Microbiology Society. S.S. acknowledges support from the Mississippi Agricultural and Forestry Experiment Station (MAFES), USDA-ARS project 58-6066-3-044, USDA-NIFA SCRI Project 1029242, and NIFA-USDA Hatch Project 7006130. E.J.L., D.M.D., and R.C.H. were supported by the National Institute of Allergy and Infectious

Diseases of the National Institutes of Health under Award Number U24AI162625. The work conducted by the U.S. Department of Energy Joint Genome Institute (<https://ror.org/04xm1d337>), a DOE Office of Science User Facility, is supported by the Office of Science of the U.S. Department of Energy operated under Contract No. DE-AC02-05CH11231 (S.R.). F.O.A. was supported by a National Institutes of Health grant (no. 1R35GM147290-01). N.S. was supported in part by Grants-in-Aid for Scientific Research (S) from the Japanese Ministry of Education, Culture, Sports, Science, and Technology (MEXT) (KAKENHI 21H05035). J.F.A. acknowledges financial support from Fapesp (2019/25078-9) and CNPq (312528/2020-5). M.L. was supported by statutory funds for the Institute of Biochemistry and Biophysics of the Polish Academy of Sciences. Except for Donald M. Dempsey, R. Curtis Hendrickson, and Donald B. Smith, the authors were members of the ICTV EC spanning the 2020–2023 and 2023–2026 terms when the proposals were submitted and ratified. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the US Department of Health and Human Services or of the institutions and companies affiliated with the authors. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of their affiliates, including the Centers for Disease Control and Prevention. For the purpose of open access, the authors have applied a Creative Commons Attribution (CC BY) licence to any author accepted manuscript version arising from this submission.

Data availability All Taxonomy Proposals and all other ICTV resources mentioned in this article are freely available at the ICTV website (<https://ictv.global/>).

Declarations

Conflict of interest The authors declare no conflicts of interest.

Ethical approval None of the work reported involved research on human participants or animals. All authors have contributed to this work and agreed to its publication.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

1. Dunay E, Rukundo J, Goldberg TL (2023) Create one new species in the genus *Cyclovirus* (Circovirales: Circoviridae). https://ictv.global/ictv/proposals/2023.001D.Circoviridae_1nsp.zip
2. Varsani A, Harrach B, Benkő M, Breitbart M, Delwart E, Franzo G, Kazlauskas D, Rosaio, K, Segalés J, Krupovic M (2023)

- Establishing 3 new species in the family *Circoviridae*. https://ictv.global/ictv/proposals/2023.002D.Circoviridae_3nsp.zip
3. Fehér E, Kaszab E, Bányai K (2023) Two new species in the genus *Circovirus* (*Cirlivirales: Circoviridae*). https://ictv.global/ictv/proposals/2023.003D.Circoviridae_2nsp.zip
 4. Fehér E, Kaszab E, Bányai K (2023) A new species in the genus *Gyrovirus* (*Anelloviridae*). https://ictv.global/ictv/proposals/2023.004D.Anelloviridae_1nsp.zip
 5. Laubscher F, Cordey S (2023) Create 16 new species and 4 new genera in the family *Anelloviridae*. https://ictv.global/ictv/proposals/2023.005D.Anelloviridae_4ngen_16nsp.zip
 6. Abbas A, Taylor LJ, Collman RG, Bushman FD (2023) Binomial species names for members of the family *Redondoviridae*. https://ictv.global/ictv/proposals/2023.006D.Redondoviridae_2ren.zip
 7. Penzes JJ, Canuti M, Francois S, Söderlund-Venermo M, Tijssen P, Tattersall P (2023) Creating 13 new species in family *Parvoviridae*. https://ictv.global/ictv/proposals/2023.007D.Parvoviridae_12nsp.zip
 8. Benkő M, Arnberg N, Heim A, Hess M, Kaján GL, Kajon A, Kuhn JH, Mittal SK, Podgorski II, Postler TS, San Martín C, Wadell G, Watanabe H, Vidovszky MZ, Harrach B (2023) Rename genus *Atadenovirus* and add seven new species; create seven new species in genus *Aviadenovirus*, five new species in genus *Mastadenovirus*, three new species in genus *Siadenovirus*; and rename 86 adenovirus species (*Rowavirales: Adenoviridae*). https://ictv.global/ictv/proposals/2023.008D.Adenoviridae_Ireng_22ns_86rensp.zip
 9. Mayer J, Hatzioannou T, Johnson W, Coffin J, Fan HY, Gifford R, Lindemann D, Stoye J, Tristem M, Tachedjian G (2023) Rename *Retroviridae* species. https://ictv.global/ictv/proposals/2023.009D.Retroviridae_68rensp.zip
 10. Varsani M, Krupovic M (2023) Establishing 59 new species in the family *Smacoviridae*. https://ictv.global/ictv/proposals/2023.011D.Smacoviridae_59nsp.zip
 11. Agah I, Chinchar V, Go J, Hick P, Huang J, Jancovich J, Kawato Y, Marschang R, Qin Q, Subramaniam K, Waltzek TB, Whittington R, Williams T, Zhang Q-Y (2023) Rename 22 species in the family *Iridoviridae*. https://ictv.global/ictv/proposals/2023.012D.Iridoviridae_22renam.zip
 12. Fehér E, Kaszab E, Bányai K (2023) A new species in the genus *Gammampolyomavirus* (*Polyomaviridae*). https://ictv.global/ictv/proposals/2023.013D.Polyomaviridae_1nsp.zip
 13. Glebe D, Drexler JF, Kramvis A, Lehmann F, Lauber C, Littlejohn M, Kann M, Sureau C (2023) (1) Rename all currently listed viral species of the family *Orthohepadnaviridae* to the binominal nomenclature (2) Introduce 7 new virus species in the genus *Orthohepadnavirus* and 2 new species in the genus *Avihepadnavirus*. https://ictv.global/ictv/proposals/2023.014D.1_Hepadnaviridae_19renam_9nsp.zip
 14. McInnes CJ, Damon IK, Smith GL, McFadden G, Isaacs SN, Roper RL, Evans DH, Damaso CR, Carulei O, Wise LM, Takatsuka J, Traktman P and Lefkowitz E (2023) Creation of a new genus within the *Entomopoxvirinae* subfamily. https://ictv.global/ictv/proposals/2023.015D.Poxviridae_ab_27sp_1g.zip
 15. McInnes CJ, Damon IK, Smith GL, McFadden G, Isaacs SN, Roper RL, Evans DH, Damaso CR, Carulei O, Wise LM, Takatsuka J, Traktman P and Lefkowitz E (2023) Creation of a new genus within the *Entomopoxvirinae* subfamily. https://ictv.global/ictv/proposals/2023.016D.Poxviridae_1ng.zip
 16. McInnes CJ, Damon IK, Smith GL, McFadden G, Isaacs SN, Roper RL, Evans DH, Damaso CR, Carulei O, Wise LM, Takatsuka J, Traktman P and Lefkowitz E (2023) Renaming of poxvirus species to the binomial format. https://ictv.global/ictv/proposals/2023.017D.Poxviridae_55renam.zip
 17. Varsani A, Hopkins A, Lund MC, Kraberger S, Krupovic M (2023) Establishing one new family, associated genera and species in the order *Mulpavirales*. https://ictv.global/ictv/proposals/2023.018D.Mulpavirales_1nf_9ng_9nsp.zip
 18. Varsani A, Hopkins A, Lund MC, Kraberger S, Krupovic M (2023) Establishing one new family, associated genera and species in the order *Cirlivirales*. https://ictv.global/ictv/proposals/2023.019D.Cirlivirales_1nf_4ng_10nsp.zip
 19. Varsani A, Kraberger S, Hopkins A, Lund MC, Krupovic M (2023) Establishing one new family, associated genera and species in the order *Geplafuvirales*. https://ictv.global/ictv/proposals/2023.020D.Geplafuvirales_1nf_18ng_30nsp.zip
 20. Varsani A, Hopkins A, Lund MC, Kraberger S, Krupovic M (2023) Establishing two families, associated genera and species in the order *Rohanvirales*. https://ictv.global/ictv/proposals/2023.021D.Rohanvirales_2nf_28ng_34nsp.zip
 21. Varsani A, Lund MC, Hopkins A, Kraberger S, Krupovic M (2023) Establishing one new order (*Ringavirales*), one new family and associated genera and species in the class *Arfiviricetes* (phylum *Cressdnaviricota*). https://ictv.global/ictv/proposals/2023.022D.Ringavirales_1no_1nf_8ng_15nsp.zip
 22. Varsani A, Lund MC, Hopkins A, Kraberger S, Krupovic M (2023) Establishing the order *Jormunvirales*, one new family (*Draupnirviridae*) and associated genera and species in the class *Arfiviricetes* (phylum *Cressdnaviricota*). https://ictv.global/ictv/proposals/2023.023D.Squillovirales_1no_1nf_42ng_67nsp.zip
 23. Varsani A, Hopkins A, Lund MC, Kraberger S, Krupovic M (2023) Establishing the order *Gredzevirales*, two new families (*Ouroboviridae* and *Gandrividae*) and associated genera and species in the class *Arfiviricetes* (phylum *Cressdnaviricota*). https://ictv.global/ictv/proposals/2023.024D.Gredzevirales_1no_2nf_38ng_58nsp.zip
 24. Krupovic M, Hopkins A, Lund MC, Kraberger S, Varsani A (2023) Establishing a new order *Saturnivirales*, two new families (*Kanoraviridae* and *Mahapunaviridae*) and associated genera and species in the class *Arfiviricetes* (phylum *Cressdnaviricota*). https://ictv.global/ictv/proposals/2023.025D.Saturnivirales_1no_2nf_35ng_120nsp.zip
 25. Walker PJ (2023) Rename one species in the genus *Almendravivirus* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.001M.Almendravivirus_1sp_rename.zip
 26. Goldberg TL, Kurath G (2023) Create two new genera and two new species for viruses from freshwater mussels (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.002M.Alpharhabdovirinae_2ngen_2nsp.zip
 27. Walker PJ, Freitas-Astúa J, Bejerman N, Blasdel K, Dietzgen RG, Fooks A, Kondo H, Ramos-González PL, Shi M, Tesh RB, Tordo N, Vasilakis N, Whitfield AE (2023) Create one new species in the genus *Ledantevirus*, one new species in the genus *Lostrhavirus*, three new species in the genus *Tupavirus*, one new species in the genus *Almendravivirus* and two new species in the genus *Sigmavirus*, in the subfamily *Alpharhabdovirinae* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.003M.Alpharhabdovirinae_8nsp.zip
 28. Bejerman N, Debat H, Dietzgen RG, Kondo H, Ramos-González P, Whitfield AE, Walker PJ, Freitas-Astúa J (2023) Create two new genera (*Alphagymnorhavirus* and *Betagymnorhavirus*) in the subfamily *Betarhabdovirinae* to include nine new species, and move one existing species from the genus *Varicosavirus* to the new genus *Alphagymnorhavirus* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.004M.Betarhabdovirinae_2ngen_9nsp_move1sp.zip
 29. Pfaff F, Eshak M, Rubbenstroth D (2023) Create one new genus and three new species in family *Bornaviridae* (*Mononegavirales*). https://ictv.global/ictv/proposals/2023.005M.Bornaviridae_1ngen_3nsp.zip
 30. Neriya Y, Morikawa T, Natsuaki T, Tomitaka Y, Di Serio F, Jonson GB, Rubino L, Sasaya T (2023) Create a new family

- Konkoviroidae* including one new genus *Olpivirus* (*Bunyavirales*). https://ictv.global/ictv/proposals/2023.006M.N.v1.Bunyavirales_Infam_Ingen_1nsp.zip
31. Navarro B, Nicoloso VM, Di Serio F (2023) Create a new species in the genus *Coguvirus* (*Bunyavirales: Phenuiviridae*). https://ictv.global/ictv/proposals/2023.007M.Coguvirus_1nsp.zip
 32. Bejerman N, Debat H, Dietzgen RG, Kondo H, Ramos-González P, Whitfield AE, Walker PJ, Freitas-Astúa J (2023) Create twelve new species in the genus *Cytorhabdovirus*, subfamily *Betarhabdovirinae* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.008M.Cytorhabdovirus_12nsp.zip
 33. Ramos-González PL, Chabi-Jesus C, Bejerman N, Dietzgen RG, Kondo H, Whitfield AE, Walker PJ, Freitas-Astúa J (2023) Create a new species in the genus *Dichorhavirus*, subfamily *Betarhabdovirinae* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.009M.Dichorhavirus_1nsp.zip
 34. Walker PJ, Freitas-Astúa J, Bejerman N, Blasdel K, Dietzgen RG, Fooks A, Kondo H, Ramos-González PL, Shi M, Tesh RB, Tordo N, Vasilakis N, Whitfield AE (2023) Create one new species (*Ephemerovirus huanggang*), in the genus *Ephemerovirus* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.010M.Ephemerovirus_1nsp.zip
 35. Paraskevopoulou S, Li J-M, Ye G, Wang F (2023) Create one new genus (*Birfecvirus*), and four new species in the genera *Ganivirus*, *Copasivirus*, *Anicalvirus*, and *Birfecvirus* (*Mononegavirales: Lispiviridae*). https://ictv.global/ictv/proposals/2023.011M.Lispiviridae_Ingen_4nsp.zip
 36. Calvelage S, Müller T, Freuling CM, Höper D, Tammiranta N, Nokireki T, Gadd T (2023) Create one new species for Kotalahti bat lyssavirus in the genus *Lyssavirus* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.012M.Lyssavirus_1nsp.zip
 37. Cuypers LN, Göyü de Bellocq J (2023) Create one new species in genus *Mammarenavirus* (*Bunyavirales: Arenaviridae*). https://ictv.global/ictv/proposals/2023.013M.Mammarenavirus_1nsp.zip
 38. Cuypers LN, Gryseels S, Göyü de Bellocq J (2023) Create two new species in genus *Mammarenavirus* (*Bunyavirales: Arenaviridae*). https://ictv.global/ictv/proposals/2023.014M.Mammarenavirus_2nsp.zip
 39. Walker PJ, Freitas-Astúa J, Bejerman N, Blasdel K, Dietzgen RG, Fooks A, Kondo H, Ramos-González PL, Shi M, Tesh RB, Tordo N, Vasilakis N, Whitfield AE (2023) Create 17 new species in the subfamily *Alpharhabdovirinae* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.015M.Alpha_rhabdovirinae_17nsp.zip
 40. Jiāng D, Ayllón MA, Marzano S-YL, Kondō H, Turina M (2023) Establishment of eleven new species in genera *Penicillimonavirus*, *Plasmopamonavirus*, *Phyllomonavirus*, and *Sclerotimonavirus* in family *Mymonaviridae* (*Mononegavirales*). https://ictv.global/ictv/proposals/2023.016M.Mymonaviridae_11nsp.zip
 41. Bejerman N, Debat H, Dietzgen RG, Kondō H, Ramos-González P, Whitfield AE, Walker PJ, Freitas-Astúa J (2023) Create one new genus, *Deltanucleorhabdovirus*, with two new species, and an additional seven new species in the subfamily *Betarhabdovirinae* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.017M.Betarhabdovirinae_1ng_7nsp.zip
 42. Vanmechelen B, Balkema-Buschmann A, Drexler JF, Duprex PW, Lee B, Plemper RK, Maes P (2023) Taxonomic reorganization of the family *Paramyxoviridae*. https://ictv.global/ictv/proposals/2023.018M.Paramyxoviridae_reorg.zip
 43. Ayllón MA, Navarro B, Ruiz-Padilla A, Nicoloso VM, Di Serio F (2023) Create a new species in a new genus in the family *Phenuiviridae* and move a species into the new genus. https://ictv.global/ictv/proposals/2023.019M.Phenuiviridae_1ng_1nsp_1smp.zip
 44. Neriya Y, Tomitaka Y, Di Serio F, Jonson GB, Rubino L, Sasaya T (2023) Create one new species in genus *Mechlorovirus* and three new species in genus *Tenuivirus* (family *Phenuiviridae*, order *Bunyavirales*). https://ictv.global/ictv/proposals/2023.020M.Phenuiviridae_4nsp.zip
 45. Walker PJ (2023) Create twenty-four new species, five new genera, and one new subfamily (*Deltarhabdovirinae; Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.021M.Rhabdoviridae_24nsp_5ngen_1nsp.zip
 46. Bejerman N, Debat H, Dietzgen RG, Kondō H, Ramos-González P, Whitfield AE, Walker PJ, Freitas-Astúa J (2023) Create thirty-two new species in the genus *Varicosavirus*, subfamily *Betarhabdovirinae* (*Mononegavirales: Rhabdoviridae*). https://ictv.global/ictv/proposals/2023.022M.Varicosavirus_32nsp.zip
 47. Paraskevopoulou S, Sharpe SR, Feng G (2023) Create ten new genera and eleven new species in the family *Xinmoviridae*, order *Mononegavirales*. https://ictv.global/ictv/proposals/2023.023M.Xinmoviridae_10ng_11nsp.zip
 48. Brown KA, Shi M, Firth AE, Ergünay K, Wolf Y, Kuhn JH, Turina M (2023) Promote order *Bunyavirales* to class and split the class into two orders; add one family, three genera, and seven species; and move and rename one species. <https://ictv.global/ictv/proposals/2023.024M.Bunyaviricetes.zip>
 49. Seuberlich T, Kuhn JH, Schmidt-Posthaus H (2023) Create one new genus including one new species in family *Filoviridae* (*Mononegavirales*). https://ictv.global/ictv/proposals/2023.025M.Filoviridae_1ng_1nsp.zip
 50. Smura TP, Kuhn JH, Hepojoki JM (2023) Create three new genera and six new species in family *Kolmioviridae* (*Ribozviria*). https://ictv.global/ictv/proposals/2023.026M.Kolmioviridae_3ng_6nsp.zip
 51. Sironi M, Kuhn JH, Reuter G, de la Torre C (2023) Create six new species in genus *Mammarenavirus* (*Bunyavirales: Arenaviridae*). https://ictv.global/ictv/proposals/2023.027M.Mammarenavirus_6nsp.zip
 52. Alkhovsky SV, Avšič-Županc T, Bergeron É, Burt F, Ergünay K, Garrison AR, Kuhn JH, Marklewitz M, Mirazimi A, Papa A, Pawęska JT, Postler TS, Spengler JR, Palacios G (2023) Create one new genus and nine new species in family *Nairoviridae* (family *Bunyavirales*). https://ictv.global/ictv/proposals/2023.028M.Nairoviridae_1ng_9nsp.zip
 53. Dietzgen RG, Kuhn JH, Firth AE, Paraskevopoulou S, Vasilakis N (2023) Create 7 new species in the family *Nyamiviridae* (*Mononegavirales*). https://ictv.global/ictv/proposals/2023.029M.Nyamiviridae_7nsp.zip
 54. Kuhn JH (2023) Switch two orthophasmavirus species names (*Bunyavirales: Phasmaviridae*). https://ictv.global/ictv/proposals/2023.030M.Orthophasmavirus_2sp_name_switch.zip
 55. Hughes HR, Alkhovsky S, Beer M, Blair CD, Calisher CH, de Souza WM, Lambert AJ, Nunes MRT, Kuhn JH (2023) Create five new species in genus *Orthobunyavirus* (*Bunyavirales: Peribunyaviridae*), and create one new peribunyavirid genus, *Gryffinivirus*, including two species. https://ictv.global/ictv/proposals/2023.031M.Peribunyaviridae_1ng_7nsp.zip
 56. Kuhn JH (2023) Rename one species in the family to conform with ICTV-mandated binomial format (*Bunyavirales: Phenuiviridae*). https://ictv.global/ictv/proposals/2023.032M.Phlebovirus_1nsp_rename.zip
 57. Postler TS, Kuhn JH (2023) Rename all established species to comply with the newly ICTV-mandated binomial species format (*Reovirales: Sedoviridae*). https://ictv.global/ictv/proposals/2023.033M.Sedoreoviridae_sprenam.zip
 58. Postler TS, Kuhn JH (2023) Rename all established species to comply with the newly ICTV-mandated binomial species format (*Reovirales: Spinoviridae*). https://ictv.global/ictv/proposals/2023.034M.Spinoreoviridae_sprenam.zip

59. Kuhn JH, Bradfute SB, Calisher CH, Klempa B, Klingström J, Laenen L, Palacios G, Schmaljohn CS, Tischler N, Maes P (2023) Reevaluate and reorganize family *Hantaviridae* (order *Bunyavirales*). https://ictv.global/ictv/proposals/2023.035M.Hantaviridae_reorg.zip
60. Katayama K, Vinje J, Esteves P, Estes MK, Green KY, White PA, Martella V, Kimura H, Suzuki Y, Knowles NJ (2023) *Caliciviridae* species name changes and merger of the species *European brown hare syndrome virus* and *Rabbit hemorrhagic disease virus* into the species *Lagovirus europaeus*. https://ictv.global/ictv/proposals/2023.001S.Caliciviridae_12sprenamed.zip
61. Brinton MB, Goldberg, TL, Dunowaka M, Faaberg KS (2023) Rename some species in the family *Arteriviridae* to comply the ICTV-mandated binomial format. https://ictv.global/ictv/proposals/2023.002S.Arteriviridae_7sprenamed.zip
62. Knowles NJ, Benschop KSM, Gorbalenya, AE, Lindberg AM, Oberste MS, Palmenberg AC, Reuter G, Simmonds P, Skern T, Tapparel C, Woo PCY, Zell R (2023) Rename all species in the family to comply the ICTV-mandated binomial format (*Picornavirales: Picornaviridae*). https://ictv.global/ictv/proposals/2023.003S.Picornaviridae_158sprenamed.zip
63. Simmonds P (2023) Rename all species in the family *Astroviridae* to comply the ICTV-mandated binomial format. https://ictv.global/ictv/proposals/2023.004S.Astroviridae_22sprenamed.zip
64. Simmonds P (2023) Rename all species in the families *Alpha-tetraviridae*, *Carmotetraviridae* and *Permutotetraviridae* to comply the ICTV-mandated binomial format. https://ictv.global/ictv/proposals/2023.005S.tetraviridae_13sprenamed.zip
65. Forrester N, Bolling B, Chen R, Coffey L, Merits A, Mukhopadhyay S, Nasar F, Powers A, Weaver SC (2023) Rename some species in the family *Togaviridae* to comply the ICTV-mandated binomial format. https://ictv.global/ictv/proposals/2023.006S.Togaviridae_32sprenamed.zip
66. Chen YP, Valles SM, Firth AE, Zell R (2023) Rename all species in the family to comply with the ICTV-mandated binomial format (*Picornavirales: Soliniviridae*). https://ictv.global/ictv/proposals/2023.007S.Soliniviridae_2sprenamed.zip
67. Chen YP, Valles SM, Firth AE, Olenchait I, Zell R (2023) Rename all species in the family to comply with the ICTV-mandated binomial format (*Picornavirales: Polycipiviridae*). https://ictv.global/ictv/proposals/2023.008S.Polycipiviridae_14sprenamed.zip
68. Junglen S, Gorbalenya AE, Hobson-Peters J, Morita K, Sawabe K, Vasilakis N, Ziebuhr J (2023) Rename all species in the family to comply the ICTV-mandated binomial format (*Nidovirales: Mesoniviridae*). https://ictv.global/ictv/proposals/2023.009S.Mesoniviridae_12sprenamed.zip
69. Simmonds P (2023) Rename all species in the family *Nodaviridae* to comply the ICTV-mandated binomial format. https://ictv.global/ictv/proposals/2023.010S.Nodaviridae_9sprenamed.zip
70. Simmonds P (2023) Rename one species in the family *Sarothoviridae* to comply the ICTV-mandated binomial format. https://ictv.global/ictv/proposals/2023.011S.Sarothoviridae_1sprenamed.zip
71. Woo PCY, de Groot RJ, Haagmans B, Lau SKP, Neuman B, Perlman S, Sola I, van der Hoek L, Wong ACP, Yeh SH (2023) Renaming 54 species with binomial names in the family *Coronaviridae*. https://ictv.global/ictv/proposals/2023.012S.Coronaviridae_54sprenamed.zip
72. Lauber C, Gorbalenya AE, Samborskiy D, Brinton M, de Groot R, Junglen S, Neuman BW, Walker P, Ziebuhr J (2023) Rename 27 species in 10 families in the order *Nidovirales* to comply with the ICTV-mandated binomial format. https://ictv.global/ictv/proposals/2023.013S.Nidovirales_27sprenamed.zip
73. Sullivan DS, Vernygora O, Nielsen O, Burek-Huntington K, Rouse N, Popov VL, Lung O (2023) Create one new species in the genus *Senecavirus* (*Picornavirales: Picornaviridae*). https://ictv.global/ictv/proposals/2023.014S.Senecavirus_1nsp.zip
74. Krupovic M, Kuhn JH, Mochizuki T, Stedman K, Dyall-Smith M, Huang L, Rhee S-K, Young MJ, Postler TS, Oksanen HM (2023) Rename 111 archaeal virus species to adhere to the Latinized binomial format. https://ictv.global/ictv/proposals/2023.001A.Archaeal_binomials.zip
75. Medvedeva S, Borrel G, Krupovic M, Gribaldo S (2023) Create 5 new families for classification of viruses infecting methanogenic archaea found in gut environment. https://ictv.global/ictv/proposals/2023.002A.Caudoviricetes_5nsp.zip
76. Muscatt G, Kuhn JH, Millard A, Bending GD, Jameson E (2023) Create 418 new genera and 1,706 new species in the class *Leviviricetes*, move and rename 375 species, and abolish 114 genera and 48 species. https://ictv.global/ictv/proposals/2023.001B.Leviviricetes_reorg.zip
77. Kurtböke I, Turner D, Moraru C, Tolstoy I, Adriaenssens EM, Kropinski AM (2023) To resolve the Actinobacteriophage database cluster FE into five (5) genera [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.002B.Actinobacteriophage_Database_Cluster_FE_1nsp_5ng.zip
78. Kurtböke I, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create twenty-five (25) new Actinobacteriophage genera [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.003B.Actinobacteriophage_singletons_25ng.zip
79. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a genus *Ahotrevirus* with a single species [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.004B.Ahotrevirus_ng.zip
80. Skorynina AV, Koposova ON, Kazantseva OA, Pilgrimova EG, Shadrin AM (2023) Assign two new species, *Andromedavirus novomoskovsk* and *Andromedavirus bolokhovo*, to the genus *Andromedavirus*, class *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.005B.Andromedavirus_new_species.zip
81. Cebeci A, Türe M, Alemdağ M, Altinok I (2023) Create a new genus (*Aquaneticvirus*) with one species in the class *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.006B.Aquaneticvirus_ng.zip
82. Shareefdeen H, Buttmer C, Denise R, Kropinski A, Turner D, Draper L-A, Ross R-P, Hill C (2023) To create a new genus, *Aquingentivirus*, in the class *Caudoviricetes* containing seven new species. https://ictv.global/ictv/proposals/2023.007B.Aquingentivirus_ng.zip
83. Serwer P, Barylski J, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create two single-species genera, *Athenavirus* and *Theosmithvirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.008B.Athenavirus_Theosmithvirus_2ng.zip
84. Kurtböke I, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a single species genus *Bauervirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.009B.Bauervirus_ng.zip
85. Erdrich S, Frunzke J, Turner D, Moraru C, Tolstoy I, Adriaenssens EM, Kropinski AM (2023) To create five new genera in the subfamily *Bradleyvirinae* [*Mesyanzhinovviridae*]. https://ictv.global/ictv/proposals/2023.010B.Bradleyvirinae_5ng.zip
86. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To add three new genera to the subfamily *Braunvirinae* [*Caudoviricetes: Drexelviridae*]. https://ictv.global/ictv/proposals/2023.011B.Braunvirinae_3ng.zip
87. Wittmann J, Adriaenssens EM, Turner D, Moraru C (2023) To create seventeen (17) new species in the genus *Schiekvirus* and eleven (11) new species in the genus *Kochikohdavirus* (Subfamily: *Brockvirinae*, Family: *Herelleviridae*). https://ictv.global/ictv/proposals/2023.012B.Brockvirinae_28ns.zip

88. Kazantseva OA, Pilgrimova EG, Shadrin AM (2023) create one genus, *Bunatrivirus*, containing one species, *Bunatrivirus B13*, in the class *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.013B.Bunatrivirus_ng.zip
89. Anany H, Li J-Q, Tong Y, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To update the family *Chaseviridae* through creation of four new genera [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.014B.Chaseviridae_4ng.zip
90. Prichard A, Lee J, Pogliano J (2023) Create one new family (*Chimalliviridae*) in the class *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.015B.Chimalliviridae_nf.zip
91. Kurtböke I, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a new genus, *Commandariavirus* in the family *Zierdiviridae* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.016B.Commandariavirus_ng.zip
92. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create eight (8) new species in the genus *Cornellvirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.017B.Cornellvirus_8ns.zip
93. Papudeshi B, Vega AA, Souza C, Giles SK, Mallawaarachchi V, Roach MJ, An M, Jacobson N, McNair K, Mora MF, Passtrana K, Boling L, Leigh C, Harker C, Plewa WS, Grigson SR, Bouras G, Decewicz P, Luque A, Droit L, Handley SA, Wang D, Segall AM, Dinsdale EA, Edwards RA (2023) Create one new species in the genus *Kehishuvirus*, one species in the genus *Kolpuevirus*, and one new genus with one new species in the order *Crassvirales*. https://ictv.global/ictv/proposals/2023.018B.Crassvirales_1ng_3ns.zip
94. Kurtböke I, Turner D, Moraru C, Tolstoy I, Adriaenssens EM, Kropinski AM (2023) To create a new subfamily *Daemsvirinae* containing two genera (*Nanditavirus* and *Elesarvirus*) [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.019B.Daemsvirinae_nsf.zip
95. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create forty-two (42) species in the genus *Dhillonvirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.020B.Dhillonvirus_42ns.zip
96. Buttimer C, Murray E, Kropinski AM, Turner D, Draper L-A, Ross R-P, Hill C (2023) To create one genus, *Efunavirus*, containing two species in the class *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.021B.Efunavirus_ng.zip
97. Tong Y, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create seven (7) genera of *Pseudomonas* siphoviruses [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.022B.Caudoviricetes_Pseudomonas_7ng.zip
98. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create 41 new species in the genus *Epseptimavirus* [*Caudoviricetes*; Family *Demerecviridae*]. https://ictv.global/ictv/proposals/2023.023B.Epseptimavirus_41ns.zip
99. Kurtböke I, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create two new genera - *Aziravirus* and *Santhidivirus* - of *Gordonia* siphophages [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.025B.Caudoviricetes_Gordonia_2ng.zip
100. Kurtböke I, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create eleven (11) new species in the genus *Gordonvirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.026B.Gordonvirus_11ns.zip
101. Turner D, Moraru C, Tolstoy I, Adriaenssens EM, Kropinski AM (2023) To create a new subfamily *Gorskivirinae* with five genera [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.027B.Gorskivirinae_nsf.zip
102. Turner D, Moraru C, Tolstoy I, Adriaenssens EM, Kropinski AM (2023) To create a new subfamily *Guarnerosvirinae* with three genera [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.029B.Guarnerosvirinae_nsf.zip
103. Stefańczyk E, Łobocka M, Adriaenssens EM, Kropinski AM, Turner D (2023) To create seven new species within the family *Guelinviridae* (*Caudoviricetes*). https://ictv.global/ictv/proposals/2023.030B.Guelinviridae_7ns.zip
104. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) Create a new genus (*Hafyongvirus*) with a single species (*Caudoviricetes*). https://ictv.global/ictv/proposals/2023.031B.Hafyongvirus_ng.zip
105. Olsen NS, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a genus *Halfdanvirus* with a single species [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.032B.Halfdanvirus_ng.zip
106. Barylski J, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a new subfamily, *Heleneionescovirinae* with two genera – *Zhangjivirus* and *Kenyatavirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.033B.Heleneionescovirinae_nsf.zip
107. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To add five (5) new species to the genus *Hollowayvirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.034B.Hollowayvirus_5ns.zip
108. Kurtböke I, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a new genus *Ignaciovirus* with eight (8) species [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.035B.Ignaciovirus_ng.zip
109. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To reassess the classification of *Jedunavirus*, creating eight new genera in the subfamily *Jameshumphriesvirinae* [class *Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.036B.Jameshumphriesvirinae_8ng.zip
110. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create fifty-two (52) species in the genus *Jerseyvirus* and abolish one species [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.037B.Jerseyvirus_52ns_ab1sp.zip
111. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a new subfamily, *Johnpaulvirinae*, containing two genera, *Eidolonvirus* and *Kharnvirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.038B.Johnpaulvirinae_nsf.zip
112. Turner D, Moraru C, Tolstoy I, Adriaenssens EM, Kropinski AM (2023) Create a new subfamily, *Jondennisvirinae* containing three genera (*Septimatrevirus*, *Kipunavirus*, *Kilunavirus*) [class *Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.039B.Jondennisvirinae_nsf.zip
113. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create six (6) new species in the genus *Kagunavirus* [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.040B.Kagunavirus_6ns.zip
114. Zlatohurska MA, Gorb TY, Romaniuk LV, Shenderovska NA, Faidiuk YV, Kropinski AM, Kushkina AI, Tovkach FI (2023) Create one new genus (*Keyvirus*) including two new species in the family *Demerecviridae*. https://ictv.global/ictv/proposals/2023.041B.Keyvirus_ng.zip
115. Nishijima S, Nagata N (2023) Create a new family called *Konodaiviridae* including three new genera and three new species (*Caudoviricetes*). https://ictv.global/ictv/proposals/2023.042B.Konodaiviridae_nf.zip
116. Kurtböke I, Turner D, Moraru C, Tolstoy I, Adriaenssens EM, Kropinski AM (2023) To create a subfamily *Kutznervirinae* with five genera [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.043B.Kutznervirinae_nsf.zip
117. Yang M (2023) Create two new genera (*Layangavirus* and *Layangbivirus*) and two species (*Layangavirus LY1* and *Layangbivirus LY5*) in the subfamily *Gutmannvirinae*. https://ictv.global/ictv/proposals/2023.044B.Layangavirus_Layangbivirus_2ng.zip
118. Yang M (2023) Create one new genus (*Layangcivirus*) and news species (*Layangcivirus LY3*, in the subfamily *Northropvirinae*.

- https://ictv.global/ictv/proposals/2023.045B.Layangcivirus_ng.zip
119. Łobocka M, Stefańczyk E, Adriaenssens EM, Kropinski AM, Turner D (2023) To create one new family *Madridviridae* with one genus *Cepunavirus* moved from the *Salasmaviridae* [Caudoviricetes]. https://ictv.global/ictv/proposals/2023.046B.Madridviridae_nf.zip
 120. Oksanen HM (2023) Renaming: Correct the spelling of the family *Matsushitaviridae*. https://ictv.global/ictv/proposals/2023.047B.Matsushitaviridae_error_correction.zip
 121. Buttimer C, Shkoporov A, Kropinski A, Turner D, Draper L-A, Ross R-P, Hill C (2023) Create one new subfamily (*Munstervirinae*) including four new genera within the class *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.048B.Munstervirinae_nsf.zip
 122. Wittmann J, Adriaenssens EM, Turner D, Moraru C (2023) To create six (6) new genera of *Enterococcus* infecting phages (Caudoviricetes). https://ictv.global/ictv/proposals/2023.049B.Caudoviricetes_Enterococcus_6ng.zip
 123. Nada MAL, Ancla JB, Yadao NMR, De Paz VP, Manalaysay JG, Samante FLD, Bigol UG (2023) Create a new phage species in the genus *Pakpunavirus*. https://ictv.global/ictv/proposals/2023.050B.Pakpunavirus_1ns.zip
 124. Van Zyl LJ, Adriaenssens EM (2023) To assign 1 new genus and 11 new species to the family *Peduviridae*, as well as abolish one species, one genus (*Stockinghallvirus*), and to rename three species. https://ictv.global/ictv/proposals/2023.051B.Peduviridae_reorg.zip
 125. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a new genus, *Porunavirus*, with one new species [Caudoviricetes]. https://ictv.global/ictv/proposals/2023.052B.Porunavirus_ng.zip
 126. Claire K A Elek, Teagan L Brown, Thanh Le Viet, Rhiannon Evans, David J Baker, Andrea Telatin, Sumeet K Tiwari, Haider Al-Khanaq, Gaëtan Thilliez, Robert A Kingsley, Lindsay J Hall, Mark A Webber, and Evelien M Adriaenssens (2023) Create five (5) new species in the genus *Przondovirus* (Caudoviricetes). https://ictv.global/ictv/proposals/2023.053B.Przondovirus_5ns.zip
 127. Turner D, Moraru C, Tolstoy I, Thaller MC, Fraziano M, Migliore L, D'Andrea MM, Kropinski AM (2023) To expand the subfamily *Queuvirinae* and add new species to the genus *Nipunavirus* [Caudoviricetes]. https://ictv.global/ictv/proposals/2023.054B.Queuvirinae_reorg.zip
 128. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To update the subfamily *Rogunavirinae* [Caudoviricetes; Family, *Drexterviridae*]. https://ictv.global/ictv/proposals/2023.055B.Rogunavirinae_2ns_1ng.zip
 129. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) Create two genera of *Serratia* phages - *Rovertvirus* and *Bonzeevirus* [Caudoviricetes]. https://ictv.global/ictv/proposals/2023.056B.Caudoviricetes_Serratia_2ng.zip
 130. Avrani S, Schwartz DA (2023) Create one new family (*Saffermanviridae*) including one new genus, two new species, and five existing species (Caudoviricetes). https://ictv.global/ictv/proposals/2023.057B.Saffermanviridae_nf.zip
 131. Łobocka M, Stefańczyk S, Adriaenssens EM, Kropinski AM, Turner D (2023) To create one new genus and two species within family *Salasmaviridae* (Caudoviricetes). https://ictv.global/ictv/proposals/2023.058B.Salasmaviridae_ng.zip
 132. Kazantseva OA, Piligrimova EG, Shadrin AM (2023) Create a new genus, *Samaravirus* encompassing one species in the class *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.059B.Samaravirus_ng.zip
 133. Tkachev PV, Pchelin IM, Goncharov AE (2023) Create a new species in the genus *Saphexavirus* (Caudoviricetes). https://ictv.global/ictv/proposals/2023.060B.Saphexavirus_1ns.zip
 134. Buttimer C, Cortes-Martin A, Kropinski A, Turner D, Draper L-A, Ross R-P, Hill C (2023) To create one genus, *Septuagintavirus*, containing two species in the subfamily *Vequintavirinae*. https://ictv.global/ictv/proposals/2023.061B.Septuagintavirus_ng.zip
 135. Turner D, Moraru C, Tolstoy I, Adriaenssens EM, Kropinski AM (2023) To create a new subfamily *Skurskavirinae* with two genera (*Pakpunavirus* and *Baldwinivirus*). [Caudoviricetes]. https://ictv.global/ictv/proposals/2023.062B.Skurskavirinae_nsf.zip
 136. Erdrich S, Frunzke J, Ansaldi M, Ginet N, Lebrun C, Clavijo-Coppens F, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create a new subfamily, *Stanbayleyvirinae*, with two genera – *Subavirus* & *Shirevirus* [Caudoviricetes]. https://ictv.global/ictv/proposals/2023.063B.Stanbayleyvirinae_nsf.zip
 137. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create 16 new species in the genus *Sugarlandvirus* [Caudoviricetes; Family *Demereciviridae*]. https://ictv.global/ictv/proposals/2023.064B.Sugarlandvirus_16ns.zip
 138. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To add four new genera, and thirty-three (33) new species to the subfamily *Tempevirinae* [Caudoviricetes; *Drexlerviridae*]. https://ictv.global/ictv/proposals/2023.065B.Tempevirinae_4ng_33ns.zip
 139. Nada MAL, Ancla JB, Yadao NMR, De Paz VP, Manalaysay JG, Samante FLD, Bigol UG (2023) Create new phage species in the genus *Tequatrovirus*. https://ictv.global/ictv/proposals/2023.066B.Tequatrovirus_1ns.zip
 140. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create 35 new species in the genus *Tequintavirus* [Caudoviricetes; Family *Demereciviridae*]. https://ictv.global/ictv/proposals/2023.067B.Tequintavirus_35ns.zip
 141. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To create three genera of *Serratia* phages - *Seretavirus*, *Serbinivirus* and *Otakivirus* [Caudoviricetes]. https://ictv.global/ictv/proposals/2023.068B.Caudoviricetes_Serratia_3ng.zip
 142. Nishijima S, Nagata N (2023) Create a new family called *Toyamaviridae* including three new genera and three new species (Caudoviricetes). https://ictv.global/ictv/proposals/2023.069B.Toyamaviridae_nf.zip
 143. Knezevic P, Gavric D, Yang M, Kropinski AM, Lavigne R, Adriaenssens EM (2023) Create one (1. genus and eight (8) new species in the family *Inoviridae* (*Tubulavirales*). https://ictv.global/ictv/proposals/2023.070B.Inoviridae_8ns_1ng.zip
 144. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) Create ten new species in the subfamily *Tunavirinae* [Caudoviricetes]. https://ictv.global/ictv/proposals/2023.071B.Tunavirinae_10ns.zip
 145. Nishijima S, Nagata N (2023) Create a new family called *Umezonoviridae* including two new genera and 54 new species (Caudoviricetes). https://ictv.global/ictv/proposals/2023.072B.Umezonoviridae_nf.zip
 146. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) Create 28 new species in the genus *Vequintavirus* (Caudoviricetes). https://ictv.global/ictv/proposals/2023.073B.Vequintavirus_28ns.zip
 147. Pchelin IM, Tkachev PV, Goncharov AE (2023) Create new genus (*Vespunovirus*) in the class *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.074B.Vespunovirus_ng.zip
 148. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) To abolish three species (Caudoviricetes). https://ictv.global/ictv/proposals/2023.075B.Caudoviricetes_ab3sp.zip
 149. Łobocka M, Barylski J, Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) Create eleven (11) new species in the genus *Wbetavirus* (Caudoviricetes). https://ictv.global/ictv/proposals/2023.076B.Wbetavirus_11ns.zip

150. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) Create sixty-eight (68) species in the genus *Webervirus* (*Caudoviricetes*; *Drexlerviridae*). https://ictv.global/ictv/proposals/2023.077B.Webervirus_68ns.zip
151. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) Create a new genus (*Xajduovirus*) with a single species (*Caudoviricetes*). https://ictv.global/ictv/proposals/2023.078B.Xajduovirus_ng.zip
152. Turner D, Moraru C, Tolstoy I, Kropinski AM (2023) Create a new genus *Zhuquevirus* with a single species [*Caudoviricetes*]. https://ictv.global/ictv/proposals/2023.079B.Zhuquevirus_ng.zip
153. Yingwang Y, Na L, Ting W, Bin C (2023) Create a new genus (*Bglawtbvirus*) with a single species in *Caudoviricetes*. https://ictv.global/ictv/proposals/2023.080B.Bglawtbvirus_ng.zip
154. Ayllón MA, Turina M, Jiang D, Xie J, Marzano SY, Donaire L, Nerva L, Sabanadzovic S (2023) Move one species to a different genus in the family *Botourmiaviridae*. https://ictv.global/ictv/proposals/2023.001F.Botourmiaviridae_move_rename1sp.zip
155. Nibert ML, Manny AR, Hetzel CA (2023) Rename four species and create one new species in the genus *Trichomonasvirus*. https://ictv.global/ictv/proposals/2023.002F.Trichomonasvirus_Insp_spren.zip
156. Firth AE, Esteban R, Sabanadzovic S (2023) Rename all species in the family to comply with the ICTV-mandated binomial format (*Wolframvirales*: *Narnaviridae*). https://ictv.global/ictv/proposals/2023.003F.Narnaviridae_spren.zip
157. Sabanadzovic S, Abrahão J, Greub G, Colson P (2023) Create a new genus in the family *Marseilleviridae* (*Pimascovirales*) and rename species in the family. https://ictv.global/ictv/proposals/2023.004F.Marseilleviridae_1newgen_spren.zip
158. Kotta-Loizou I, Couetts RHA (2023) Converting 10 species names in family *Polymycoviridae* to a Latinized binomial (genus-species) format. https://ictv.global/ictv/proposals/2023.005F.Polymycoviridae_spren.zip
159. Vainio EJ, Turina M (2023) Rename eight species names in family *Curvulaviridae* (*Durnavirales*) to a Latinized binomial format. https://ictv.global/ictv/proposals/2023.006F.Curvulaviridae_spren.zip
160. Turina M, Lee B, Sabanadzovic S, Vainio E, Navarro B, Simmonds P, Kuhn JH, De La Pena M, Botella L, Krupovic M (2023) Create one new phylum, *Ambiviricota*, including one new class, one new order, four new families, four new genera, and 20 new species, in kingdom *Orthornavirae* (realm *Riboviria*). https://ictv.global/ictv/proposals/2023.007F.Ambiviricota_nphy.zip
161. Varsani A, Hopkins A, Lund MC, Krupovic M (2023) Establishing 11 new genera and 19 species in the families *Nenyaviridae*, *Naryaviridae* and *Vilyaviridae*. https://ictv.global/ictv/proposals/2023.008F.Arfoviricetes_11ng_19nsp.zip
162. Roux S, Yutin N, Fischer M, Schulz F (2023) Establishing formal demarcation criteria for the *Maveriviricetes* class (“virophages”), and creating or re-assigning 4 orders, 7 families, 7 genera, and 8 species within this class. https://ictv.global/ictv/proposals/2023.009F.Virophages_reorg.zip
163. Sabanadzovic S, Van Etten J, Rodrigues R, Claverie JM, Short S, Nissimov J (2023) Abolish 19 species in the family *Phycodnaviridae* (*Algavirales*) and rename 14 species to binomial format. https://ictv.global/ictv/proposals/2023.010F.Phycodnaviridae_abolish19sp_spren.zip
164. Queiroz VF, Rodrigues RAL, Abrahão JS (2023) Create 3 new families, 3 genera, and 7 new species within the order *Pimascovirales* (phylum *Nucleocytoviricota*). https://ictv.global/ictv/proposals/2023.011F.Pimascovirales_3newfam.zip
165. Sabanadzovic S, Vainio E, Nibert ML, Chiba S, Roossinck MJ, Suzuki N, Xie J, Rubino L (2023) Abolish 15 unassigned species in the family *Partitiviridae* (*Durnavirales*) and rename 45 species to binomial format. https://ictv.global/ictv/proposals/2023.012F.Partitiviridae_abolish15sp_spren.zip
166. Candresse T, Blouin A, Cao M, Cho WK, Constable F, Molloy D, Nagata T, Sabanadzovic S, Saldarelli P, Tzanetakis I, Villamor DE (2023) Rename existing species and create 1 new species (*Tymovirales*: *Deltaflexiviridae*). https://ictv.global/ictv/proposals/2023.013F.Deltaflexiviridae_1nsp_spren.zip
167. Candresse T, Blouin A, Cao M, Cho WK, Constable F, Molloy D, Nagata T, Sabanadzovic S, Saldarelli P, Tzanetakis I, Villamor DE (2023) Rename existing species (*Tymovirales*: *Gammaflexiviridae*). https://ictv.global/ictv/proposals/2023.014F.Gammaflexiviridae_spren.zip
168. Sato Y, Castón JR, Hillman BI, Kim D-H, Kondo H, Nibert ML, Lanza D, Sabanadzovic S, Stenger D, Wu M, Suzuki N (2023) Reorganize the order *Ghabrivirales* to create three new suborders, 15 new families, 12 new genera, and 176 new species. https://ictv.global/ictv/proposals/2023.015F.Ghabrivirales_reorg.zip
169. Okada R, Valverde RA, Sabanadzovic S, Khalifa M, Moriyama H, Roossinck MJ, Tuomivirta T. (2023) Rename all species to comply with newly ICTV-mandated binomial species format (*Martellivirales*: *Endornaviridae*). https://ictv.global/ictv/proposals/2023.002P.Endornaviridae_rename_sp.zip
170. Gronenborn B, Randles JW (2023) Rename the species *Coconut foliar decay virus*, genus *Cofodevirus*, family *Metaxyviridae* to comply with binomial species format. https://ictv.global/ictv/proposals/2023.003P.Metaxyviridae_rename_1sp.zip
171. Thompson JR, Canto T, Carr JP, Pallás V, Šafařová, D (2023) Rename all existing species assigned to genera in the family *Bromoviridae* (*Tolivirales*) to comply with the binomial species format. https://ictv.global/ictv/proposals/2023.004P.Bromoviridae_rename_sp.zip
172. Thompson JR, Canto T, Carr JP, Pallás V, Šafařová, D (2023) Create ten (10) new species in the genus *Illavirus* (*Martellivirales*: *Bromoviridae*). https://ictv.global/ictv/proposals/2023.005P.Bromoviridae_10nsp.zip
173. Gronenborn B, Varsani A (2023) Rename all species in subfamilies *Nanoalphasatellitinae* and *Petromalphasatellitinae* (family *Alphasatellitidae*). https://ictv.global/ictv/proposals/2023.006P.Alphasatellitidae_rename_30sp.zip
174. Kuhn JH, Bó ED, Gago-Zachert S, García ML, Hammond J, Natsuaki T, Navarro JA, Neriya Y, Pallás V, Reyes CA, Sasaya T, Tzanetakis IE, Verbeek M, Vaira AM (2023) Rename one order in class *Milneviricetes* (*Riboviria*: *Negarnaviricota*). https://ictv.global/ictv/proposals/2023.007P.Serpentovirales_1nord_rename.zip
175. Sasaya T, Neriya Y, Shimomoto Y, Takemura C, Yanagisawa H (2023) Create one new species in family *Aspiviridae* (*Serpentovirales*). https://ictv.global/ictv/proposals/2023.008P.Aspiviridae_1nsp.zip
176. Digiario M, Elbeaino T, Kubota K, Ochoa Corona FM, von Bargen S (2023) Create *Emaravirus kudzu* as a new species in the genus *Emaravirus*, family *Fimoviridae*. https://ictv.global/ictv/proposals/2023.009P.Emaravirus_1nsp.zip
177. Selda Rivarez MP, Pecman A, Bačnik K, Maksimović O, Vučurović A, Seljak G, Mehle N, Gutiérrez-Aguirre I, Ravnikar M, Kutnjak D, Digiario M, Elbeaino T, Kubota K, Ochoa Corona FM, von Bargen S (2023) Create *Emaravirus artemisiae* as a new species in the genus *Emaravirus*, family *Fimoviridae*. https://ictv.global/ictv/proposals/2023.010P.Emaravirus_1nsp.zip
178. Wenxia A, Chengyu L, Song Z, MeiChun Y, Mengji C, Caixia Y, Digiario M, Elbeaino T, Kubota K, Ochoa Corona FM, von Bargen S (2023) Create *Emaravirus ailanthi* as a new species in the genus *Emaravirus*, family *Fimoviridae*. https://ictv.global/ictv/proposals/2023.011P.Emaravirus_1nsp.zip
179. Inoue-Nagata AK, Wylie SJ, Jordan R, Kreuze JF, Li F, Lopez-Moya JJ, Makinen K, Ohshima K (2023) Create five new species

- in the genus *Potyvirus* (*Patatavirales: Potyviridae*). https://ictv.global/ictv/proposals/2023.012P.Potyviriidae_5ns.zip
180. Inoue-Nagata AK, Wylie SJ, Jordan R, Kreuze JF, Li F, Lopez-Moya JJ, Makinen K, Ohshima K (2023) Rename all existing species to comply with the binomial species format (*Patatavirales: Potyviridae*). https://ictv.global/ictv/proposals/2023.013P.Potyviriidae_rename_sp.zip
 181. Bejerman N, Debat H (2023) Create a new genus *Welwivirus* in the family *Geminiviridae*, in the order *Geplafuvirales*, including two species, *Welwivirus welwitschiae* and *Welwivirus mirabilis*. https://ictv.global/ictv/proposals/2023.014P.Geminiviriidae_Ing_2nsp.zip
 182. Roumagnac P, Ascencio-Ibanez J, Lett JM, López-Lambertini PM, Martin DP, Navas-Castillo J, Ribeiro S, Urbino S, Varsani A, Zerbini FM (2023) Rename 520 species (*Geplafuvirales: Geminiviridae*). https://ictv.global/ictv/proposals/2023.015P.Geminiviriidae_rename_sp.zip
 183. Bragard C, Adkins S, Ali A, Gilmer D, Li D, Macfarlane S, Melcher U, Ratti C, Ryu KH, Wong SM (2023) Rename all existing species in families *Benyviridae* and *Virgaviridae* to comply with the binomial species format. https://ictv.global/ictv/proposals/2023.016P.Virgaviriidae_and_Benyviridae_rename.zip
 184. Teycheney PY, Umber M (2023) Create two new species in the genus *Badnavirus* (*Ortervirales: Caulimoviridae*), one new species in the genus *Caulimovirus* (*Ortervirales: Caulimoviridae*), one new species in the genus *Rosadnavirus* (*Ortervirales: Caulimoviridae*), two new species in the genus *Soymovirus* (*Ortervirales: Caulimoviridae*) and change exemplar isolate of species *Caulimovirus tesselodahliae*. https://ictv.global/ictv/proposals/2023.017P.Caulimoviriidae_6ns.zip
 185. Fuchs M, Hily J-M, Petrzik K, Sanfaçon H, Thompson J, van der Vlugt R, Wetzel T (2023) Create 16 new species in the family *Secoviridae* (*Picornavirales*). https://ictv.global/ictv/proposals/2023.018P.Secoviriidae_16nsp.zip
 186. Sömera M, Sarmiento C, Hebrard E, Fargette D (2023) Rename all existing species assigned to genera in the family *Solemoviridae* (*Sobelivirales*) to comply with the binomial species format, and abolish or classify the unclassified member species. https://ictv.global/ictv/proposals/2023.019P.Solemoviriidae_rename.zip
 187. Sömera M (2023) Create ten species in the genus *Enamovirus* (*Sobelivirales: Solemoviridae*). https://ictv.global/ictv/proposals/2023.020P.Enamovirus_10nsp.zip
 188. Sömera M, Sarmiento C, Hebrard E, Fargette D (2023) Create five species in the genus *Sobemovirus* (*Sobelivirales: Solemoviridae*). https://ictv.global/ictv/proposals/2023.021P.Sobemovirus_5nsp.zip
 189. Sömera M (2023) Create forty-seven species in the genus *Polerovirus* (*Sobelivirales: Solemoviridae*). https://ictv.global/ictv/proposals/2023.022P.Polerovirus_47nsp.zip
 190. Heydarnejad J, Gronenborn B, Varsani A (2023) Establish a new species in the genus *Nanovirus* (family *Nanoviridae*). https://ictv.global/ictv/proposals/2023.023P.Nanovirus_1nsp.zip
 191. Gronenborn B, Varsani A (2023) Rename all species in family *Nanoviridae* to comply with binomial species format. https://ictv.global/ictv/proposals/2023.024P.Nanoviriidae_rename_sp.zip
 192. Kreuze JF, Candresse T, Hammond J, Menzel W, Ryu KH, Vaira AM, Zavriev S, Rubino L (2023) Rename all existing species in the family *Alphaflexiviridae* to comply with the binomial species format. https://ictv.global/ictv/proposals/2023.025P.Alphaflexiviriidae_rename_sp.zip
 193. Candresse T, Blouin A, Cao M, Cho WK, Constable F, Molloy D, Nagata T, Sabanadzovic S, Saldarelli P, Tzanetakis I, Villamor DE (2023) Rename all existing species in family *Betaflexiviridae* to comply with the binomial species format. https://ictv.global/ictv/proposals/2023.027P.Betaflexiviriidae_rename.zip
 194. Candresse T, Blouin A, Cao M, Cho WK, Constable F, Molloy D, Nagata T, Sabanadzovic S, Saldarelli P, Tzanetakis I, Villamor DE (2023) Create 13 new species (*Tymovirales: Betaflexiviridae*). https://ictv.global/ictv/proposals/2023.028P.Betaflexiviriidae_13nsp.zip
 195. Sömera M, Sarmiento C, Fargette D (2023) Create the new genus *Hubsclerovirus* in the family *Solemoviridae* (*Sobelivirales*) and the new species *Hubsclerovirus* HUSRV in the proposed genus. https://ictv.global/ictv/proposals/2023.029P.Hubsclerovirus_1ng_1nsp.zip
 196. Sabanadzovic S, Bar-Joseph M, Candresse T, Maree HJ, Melzer MJ, Menzel W, Minafra A, Molloy D, Tzanetakis IE, Rubino L (2023) Rename species in the family *Closteroviridae* (*Martellivirales*) to binomial format. https://ictv.global/ictv/proposals/2023.030P.Closteroviriidae_rename_sp.zip
 197. Chiumenti M, Navarro B, Di Serio F (2023) Create a new species in the genus *Apscaviroid* (*Pospiviroidae*). https://ictv.global/ictv/proposals/2023.031P.Pospiviroid_1nsp.zip
 198. Di Serio F, Li S, Pallás V, Randles JW, Sano T, Vidalakis G, Owens RA (2023) Rename all existing species to comply with the binomial species format (*Viroids: Pospiviroidae*). https://ictv.global/ictv/proposals/2023.032P.Avsunviroidae_and_Pospiviroidae_rename_sp.zip
 199. Rubino L, Prigigallo MI, Sabanadzovic S, Kuhn JH (2023) Rename all existing species in the families *Pseudoviridae* and *Metaviridae* to comply with the binomial species format, and abolish one floating species in the family *Pseudoviridae*. https://ictv.global/ictv/proposals/2023.033P.Pseudoviriidae_Metaviriidae_rename_sp.zip
 200. Urbino C, Lett JM, Roumagnac P, Navas-Castillo J, Zerbini FM (2023) Rename all 131 species in family *Tolecusatellitidae*. https://ictv.global/ictv/proposals/2023.035P.Tolecusatellitidae_rename.zip
 201. Navas-Castillo J, Zerbini FM (2023) Rename all 55 species in subfamily *Geminialphasatellitinae* (*Alphasatellitidae*). https://ictv.global/ictv/proposals/2023.036P.Geminialphasatellitinae_rename.zip
 202. Zerbini FM, Siddell S, Mushegian A, Lefkowitz EJ, (2023) Modification of Article 5.1 (2023) of the ICTV Statutes. https://ictv.global/ictv/proposals/2023.001G.Statute_Update.docx
 203. Zerbini FM, Kuhn J (2023) Establish a formal procedure for taxonomic proposal (TaxoProp) withdrawal, and a location to store rejected and withdrawn TaxoProps. https://ictv.global/ictv/proposals/2023.002G.Proposal_withdrawal.zip
 204. Adriaenssens EM, Dutilh BE, Harrach B, Junglen S, Kropinski AM, Krupovic M, Kuhn JH, Mushegian A, Postler TS, Rubino L, Sabanadzovic S, Simmonds P, Varsani A, Zerbini M (2018) Modify the International Code of Virus Classification and Nomenclature (ICVCN) to prospectively mandate a uniform genus-species type virus species naming format https://ictv.global/ictv/proposals/2018.001G.R.binomial_species.pdf
 205. Siddell SG, Walker PJ, Lefkowitz EJ, Mushegian AR, Dutilh BE, Harrach B, Harrison RL, Junglen S, Knowles NJ, Kropinski AM, Krupovic M, Kuhn JH, Nibert ML, Rubino L, Sabanadzovic S, Simmonds P, Varsani A, Zerbini FM, Davison AJ (2020) Binomial nomenclature for virus species: a consultation. *Arch Virol* 165:519–525
 206. Walker PJ, Siddell SG, Lefkowitz EJ, Mushegian AR, Adriaenssens EM, Alfenas-Zerbini P, Davison AJ, Dempsey DM, Dutilh BE, García ML, Harrach B, Harrison RL, Hendrickson RC, Junglen S, Knowles NJ, Krupovic M, Kuhn JH, Lambert AJ, Łobocka M, Nibert ML, Oksanen HM, Orton RH, Robertson DL, Rubino L, Sabanadzovic S, Simmonds P, Smith DB, Suzuki N, Van Dooerslaer K, Vandamme AM, Varsani A, Zerbini FM (2021) Changes to virus taxonomy and to the International Code of Virus Classification and Nomenclature ratified by the

- International Committee on Taxonomy of Viruses (2021). Arch Virol 166:2633–2648
207. Forgia M, Navarro B, Daghino S, Cervera A, Gisel A, Perotto S, Aghayeva DN, Akinyuwa MF, Gobbi E, Zheludev IN, Edgar RC, Chikhi R, Turina M, Babaian A, Di Serio F, de la Peña M (2023) Hybrids of RNA viruses and viroid-like elements replicate in fungi. Nat Commun 14:2591
208. Kuhn JH, Babaian A, Bergner LM, Dény P, Glebe D, Horie M, Koonin EV, Krupovic M, Paraskevopoulou S, de la Peña M, Smura T, Hepojoki J (2024) ICTV Virus Taxonomy Profile: Kolmioviridae 2024. J Gen Virol 105
209. Kuhn JH, Botella L, de la Peña M, Vainio EJ, Krupovic M, Lee BD, Navarro B, Sabanadzovic S, Simmonds P, Turina M (2024) Ambiviricota, a novel ribovirion phylum for viruses with viroid-like properties. J Virol 98:e0083124
210. Lee BD, Neri U, Roux S, Wolf YI, Camargo AP, Krupovic M, Simmonds P, Kyrpides N, Gophna U, Dolja VV, Koonin EV (2023) Mining metatranscriptomes reveals a vast world of viroid-like circular RNAs. Cell 186:646–661.e644
211. Turner D, Shkoporov AN, Lood C, Millard AD, Dutilh BE, Alfenas-Zerbini P, van Zyl LJ, Aziz RK, Oksanen HM, Poranen MM, Kropinski AM, Barylski J, Brister JR, Chanisvili N, Edwards RA, Enault F, Gillis A, Knezevic P, Krupovic M, Kurtböke I, Kushkina A, Lavigne R, Lehman S, Lobočka M, Moraru C, Moreno Switt A, Morozova V, Nakavuma J, Reyes Muñoz A, Rümnieks J, Sarkar BL, Sullivan MB, Uchiyama J, Wittmann J, Yigang T, Adriaenssens EM (2023) Abolishment of morphology-based taxa and change to binomial species names: 2022 taxonomy update of the ICTV bacterial viruses subcommittee. Arch Virol 168:74

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Authors and Affiliations

Peter Simmonds¹ · Evelien M. Adriaenssens² · Elliot J. Lefkowitz³ · Hanna M. Oksanen⁴ · Stuart G. Siddell⁵ · Francisco Murilo Zerbini⁶ · Poliane Alfenas-Zerbini⁷ · Frank O. Aylward⁸ · Donald M. Dempsey³ · Bas E. Dutilh^{9,10} · Juliana Freitas-Astúa¹¹ · María Laura García¹² · R. Curtis Hendrickson³ · Holly R. Hughes¹³ · Sandra Junglen¹⁴ · Mart Krupovic¹⁵ · Jens H. Kuhn¹⁶ · Amy J. Lambert¹⁷ · Małgorzata Łobočka¹⁸ · Arcady R. Mushegian¹⁹ · Judit Penzes²⁰ · Alejandro Reyes Muñoz²¹ · David L. Robertson²² · Simon Roux²³ · Luisa Rubino²⁴ · Sead Sabanadzovic^{25,26} · Donald B. Smith¹ · Nobuhiro Suzuki²⁷ · Dann Turner²⁸ · Koenraad Van Doorslaer²⁹ · Anne-Mieke Vandamme^{30,31} · Arvind Varsani³²

✉ Peter Simmonds
Peter.Simmonds@ndm.ox.ac.uk

¹ Nuffield Department of Medicine, University of Oxford, Peter Medawar Building, South Parks Road, Oxford OX1 3SY, UK

² Quadram Institute Bioscience, Norwich Research Park, Norwich NR4 7UQ, UK

³ Department of Microbiology, University of Alabama at Birmingham, MBBR 276, 845 19th St South, Birmingham, AL 35294-2170, USA

⁴ Molecular and Integrative Biosciences Research Programme, Faculty of Biological and Environmental Sciences, University of Helsinki, Viikinkaari 9, 00014 Helsinki, Finland

⁵ School of Cellular and Molecular Medicine, Faculty of Life Sciences, University of Bristol, University Walk, Bristol BS8 1TD, UK

⁶ Departamento de Fitopatologia/BIOAGRO, Universidade Federal de Viçosa, Viçosa, MG 36570-900, Brazil

⁷ Departamento de Microbiologia, Universidade Federal de Viçosa, Viçosa, MG 36570-900, Brazil

⁸ Department of Biological Sciences, Virginia Tech, Blacksburg, VA, USA

⁹ Institute of Biodiversity, Faculty of Biological Sciences, Cluster of Excellence Balance of the Microverse, Friedrich Schiller University, Fürstengraben 1, 07743 Jena, Germany

¹⁰ Theoretical Biology and Bioinformatics, Department of Biology, Utrecht University, Padualaan 8, 3584 CH Utrecht, The Netherlands

¹¹ Embrapa Cassava and Fruits, Brazilian Agricultural Research Corporation, Cruz das Almas, BA 44380-000, Brazil

¹² Instituto de Biotecnología y Biología Molecular, CCT-La Plata, CONICET-UNLP, Calles 47 y 115 (1900), La Plata, Buenos Aires, Argentina

¹³ Centers for Disease Control and Prevention, Fort Collins, Colorado, USA

¹⁴ Institute of Virology, Charité-Universitätsmedizin, Corporate Member of Free University Berlin, Humboldt-University Berlin, and Berlin Institute of Health, Berlin, Germany

¹⁵ Archaeal Virology Unit, Institut Pasteur, Université Paris Cité, CNRS UMR6047, 25 rue du Dr Roux, 75015 Paris, France

¹⁶ Integrated Research Facility at Fort Detrick, Division of Clinical Research, National Institute of Allergy and Infectious Diseases, National Institutes of Health, B-8200 Research Plaza, Fort Detrick, Frederick, MD 21702, USA

¹⁷ Division of Vector-Borne Diseases, Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Diseases, Fort Collins, CO 80521, USA

¹⁸ Institute of Biochemistry and Biophysics of the Polish Academy of Sciences, 02-106 Warsaw, Poland

- ¹⁹ Division of Molecular and Cellular Biosciences, National Science Foundation, 2415 Eisenhower Avenue, Alexandria, VA 22314, USA
- ²⁰ Institute for Quantitative Biomedicine, Rutgers University, Piscataway, New Jersey, USA
- ²¹ Departamento de Ciencias Biológicas, Universidad de los Andes, Bogotá, Colombia
- ²² MRC-University of Glasgow Centre for Virus Research, Sir Michael Stoker Building, 464 Bearsden Road, Glasgow G61 1QH, UK
- ²³ DOE Joint Genome Institute, Lawrence Berkeley National Laboratory, Berkeley, California, USA
- ²⁴ Consiglio Nazionale delle Ricerche, Istituto per la Protezione Sostenibile delle Piante, Sede Secondaria di Bari, Via Amendola 165/A, 70126 Bari, Italy
- ²⁵ Department of Agricultural Science and Plant Protection, Mississippi State University, Mississippi State, MS 39762, USA
- ²⁶ Institute for Genomics, Biocomputing and Biotechnology, Mississippi State University, Mississippi State, MS 39762, USA
- ²⁷ Institute of Plant Science and Resources, Okayama University, Kurashiki, Okayama 710-0046, Japan
- ²⁸ School of Applied Sciences, Faculty of Health, Science and Society, University of the West of England, Bristol, UK
- ²⁹ Department of Immunobiology, School of Animal and Comparative Biomedical Sciences, BIO5 Institute, University of Arizona Cancer Center, Tucson, AZ 85721, USA
- ³⁰ Department of Microbiology, Immunology and Transplantation, Clinical and Epidemiological Virology, Rega Institute for Medical Research, KU Leuven, 3000 Leuven, Belgium
- ³¹ Center for Global Health and Tropical Medicine, Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa, Rua da Junqueira, 100, 1349-008 Lisbon, Portugal
- ³² The Biodesign Center for Fundamental and Applied Microbiomics, School of Life Sciences, Center for Evolution and Medicine, Arizona State University, Tempe, AZ 85287-4701, USA