

Virus Taxonomy – San Diego 1998

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The 27th Meeting of the Executive Committee of the International Committee on Taxonomy of Viruses (ICTV) was held at the Scripps Research Institute, San Diego, California, on 7th and 8th March of this year. The principle business was review of new taxonomic proposals submitted by the individual Study Groups of the ICTV. The taxonomic proposals listed below are those that were approved by the Executive Committee of the ICTV. These new proposals, subject to formal ratification by postal ballot of the national membership of the ICTV, will be included in the up-dated Universal Taxonomy of Viruses, which will be published as the 7th Report of the ICTV. The Executive Committee plans to have the 7th Report available for sale at the 11th International Congress of Virology, which will take place in Sydney, Australia, in August 1999.

The Executive Committee aims to replace vernacular names by international names throughout the Universal Taxonomy, but in certain taxa the designation "...-like viruses" remains. In some cases this is indicative of rejection by the Executive Committee of an international name proposed by a Study Group, or *vice versa*. In other cases it represents continuing indecision about the definitive criteria for designation of species.

A major change in practice was approved at the San Diego Meeting, which is illustrated in the list of new taxonomic proposals that follows. In future the names of all virus species will be italicised and the initial letter will be capitalised. The names of viruses having the status of tentative species only will not be given in italics, but will have the initial letter capitalised. Transition to italicisation will signal recognition of full species status.

The Executive Committee of the ICTV has approved the following new taxonomic proposals: Proposals that were rejected or referred back are not included in the list.

Bacterial Virus Sub-Committee Proposals

Family *Lipothrixviridae*

1. To establish *Thermoproteus virus 3* (TTV3) as an unassigned species in the family *Lipothrixviridae*.

Family *Fuselloviridae*

1. To remove *Sulfolobus virus SNDV* from the family *Fuselloviridae*.
2. To designate *Sulfolobus virus SNDV* as an unassigned genus. 

Order *Caudovirales*

1. To establish the Order *Caudovirales*, comprising the families *Myoviridae*, *Siphoviridae* and *Podoviridae*.

Fungal Virus Sub-Committee ProposalsFamily *Phycodnaviridae*

1. To delineate four genera within the family *Phycodnaviridae*.
2. To change the name of the genus *Phycodnavirus* to become the genus *Chlorovirus*.
3. To designate *Paramecium bursaria Chlorella virus 1* (PBCV-1) as the type species of the genus *Chlorovirus*.
4. To name the second genus *Prasinovirus*.
5. To designate *Micromonas pusilla virus SP1* (MpV-SP1) as the type species of the genus *Prasinovirus*.
6. To name the third genus *Prymnesiovirus*.
7. To designate *Chrysochromulina brevifilum virus PW1* (CbV-Pw1) as the type species of the genus *Prymnesiovirus*.
8. To name the fourth genus *Phaeovirus*.
9. To designate *Ectocarpus siliculosus virus 1* (EsV-1) as the type species of the genus *Phaeovirus*.

Family *Narnaviridae*

1. To create a new family to accommodate some viruses of yeasts lacking true virions, but possessing a ribonucleoprotein complex comprising a linear single-stranded RNA genome and an RNA-dependent RNA polymerase.
2. To name this family the *Narnaviridae*.
3. To create two genera within this family.
4. To name the first genus *Narnavirus*.
5. To designate *Saccharomyces cerevisiae 20S RNA narnavirus* as the type species of the genus *Narnavirus*.
6. To name the second genus *Mitovirus*.
7. To designate *Cryphonectria parasitica NB631 dsRNA virus* as the type species of this genus.

Genus *Rhizidiovirus*

1. A proposal from the Sub-committee to delete the genus *Rhizidiovirus* from the universal system of nomenclature was declined, and the genus retains the status of an unassigned genus.

The Retroelements – Ty1-copia cluster

1. To create a new family comprising LTR-retrotransposons of the Ty1-copia cluster.
2. To name that family *Pseudoviridae*.
3. To create two genera in the family.
4. To name the first the genus *Pseudovirus*.

5. To designate *Saccharomyces cerevisiae Ty1 virus* (ScTy1V) as the type species of the genus *Pseudovirus*.
6. To name the second the genus *Hemivirus*.
7. To designate *Drosophila melanogaster copia virus* (DmeCV) as the type species of the genus *Hemivirus*.

The Retroelements – Ty3 cluster

1. To create a new family comprising retrotransposons of the Ty3 cluster.
2. To name that family *Metaviridae*.
3. To create two genera in the family.
4. To name the first genus, *Metavirus*.
5. To designate *Saccharomyces cerevisiae Ty3 virus* (ScTy3V) as the type species of the genus *Metavirus*.
6. To name the second genus, *Errantivirus*.
7. To designate *Drosophila melanogaster gypsy virus* (DmdGV) as the type species of the genus *Errantivirus*.

Plant Virus Sub-Committee Proposals

Proposals from the *Caulimoviridae* Study Group

1. To create a genus of viruses in the family *Caulimoviridae* typified by petunia vein clearing virus.
2. To nominate *Petunia vein clearing virus* (PVCV) as the type species of the genus created by proposal 1.
3. To name the genus created by proposal 1 as “PVCV-like viruses”.

Proposals from the Luteovirus and Allies Study Group

1. To remove the species *Potato leaf roll virus*, *Beet western yellows virus*, *Cucurbit aphid-borne yellows virus* and *Barley yellow dwarf virus-RPV* from the genus *Luteovirus* and classify them in a new genus.
2. To nominate *Potato leaf roll virus* as the type species of the genus created in proposal 1.
3. To name the genus created in proposal 1 as *Polerovirus*.
4. To create a family to contain the genera *Luteovirus* and *Polerovirus*.
5. To name the family created in proposal 1, *Luteoviridae*.
6. To remove the species *Bean leafroll virus*, *Soybean dwarf virus*, *Barley yellow dwarf virus-SGV*, *Barley yellow dwarf virus-RMV*, *Groundnut rosette assistor virus* and *Indonesian soybean dwarf virus* from the genus *Luteovirus* and to classify them as “unassigned” within the family *Luteoviridae*.
7. To recognize *Sweet potato leaf speckling virus* and *Chickpea stunt-associated virus* as new species to be classified as “unassigned” within the family *Luteoviridae*.
8. To recognize *Beet mild yellowing virus* as a species in the genus *Polerovirus*.
9. To change the name of the species barley yellow dwarf virus-RPV (genus *Polerovirus*) to *Cereal yellow dwarf virus*.

10. To redefine the genus *Enamovirus* such that it contains as a species the genome component previously known as pea enation mosaic virus RNA-1.
11. To name the species previously known as pea enation mosaic virus RNA-1 as *Pea enation mosaic virus-1*.
12. To nominate *Pea enation mosaic virus-1* as the type species of the newly defined genus *Enamovirus*.
13. To classify the genus *Enamovirus* in the family *Luteoviridae*.

Proposals from the Umbravirus Study Group

1. To classify *Carrot mottle mimic virus* as a species in the genus *Umbravirus*.
2. To classify the smaller genome component (RNA-2) of pea enation mosaic virus as a species in the genus *Umbravirus*.
3. To name the species recognized by proposal 2 as *Pea enation mosaic virus-2* (PEMV-2).

Proposals from the Sobemovirus Study Group

1. To recognize a new species typified by the bean strain of southern bean mosaic virus.
2. To adopt the name *Southern bean mosaic virus* (SBMV) for the species constituted by the former bean strain of SBMV.
3. To adopt the name *Southern cowpea mosaic virus* (SCMV) for the species constituted by the former cowpea strain of SBMV.

Proposals from the Icosahedral Small DNA Virus Study Group

1. To create a genus to contain plant-infecting small icosahedral viruses with multiple small circular ssDNA genomes, which were formerly included in the family *Circoviridae* as unassigned viruses.
2. To classify *Banana bunchy top virus* (BBTV), *Faha bean necrotic yellows virus* (FBNYV), *Milk vetch dwarf virus* (MDV) and *Subterranean clover stunt virus* (SCSV) as species in the genus created by proposal 1.
3. To nominate *Subterranean clover stunt virus* as the type species of the genus created by proposal 1.
4. To classify Coconut foliar decay virus (CFDV) as a tentative species in the genus created by proposal 1.
5. To name the genus created in proposal 1, *Nanovirus*.

Proposals from the Potexvirus and Allies Study Group

1. To classify shallot virus X, Garlic viruses A, B, C, D and X in a new genus.
2. To nominate *Shallot virus X* as the type species of the genus created in proposal 1.
3. To name the genus created in proposal 1 as *Allxivirus*.
4. To establish a new genus of plant viruses with flexuous filamentous particles showing a surface pattern with cross-banding and longitudinal lines.
5. To name the genus created by proposal 4 as *Foveavirus*.
6. To designate *Apple stem pitting virus* (ASPV) as the type species of the genus *Foveavirus*.
7. To classify *Rupestris stem pitting-associated virus* as a species in the genus *Foveavirus*.
8. To classify Cherry green ring mottle virus as a tentative species in the genus *Foveavirus*.

Proposals from the *Potyviridae* Study Group

1. To establish a new genus in the family *Potyviridae* to contain the species *Maclura mosaic virus* and *Narcissus latent virus*.
2. To name the new genus *Macluravirus*.
3. To nominate *Maclura mosaic virus* as the type species of the genus *Macluravirus*.
4. To create a new genus in the family *Potyviridae* to contain viruses resembling sweet potato mild mottle virus.
5. To name the genus created by proposal 4, *Ipomovirus*.
6. To nominate *Sweet potato mild mottle virus* as the type species of the genus *Ipomovirus*.
7. To create a new genus in the family *Potyviridae* to contain wheat streak mosaic virus (WSMV) and brome streak mosaic virus (BStV).
8. To name the genus created by proposal 7, *Tritimovirus*.
9. To nominate *Wheat streak mosaic virus* as the type species of the genus *Tritimovirus*.
10. To move *Fresia mosaic virus*, *Hyacinth mosaic virus*, *Narcissus late season yellows virus*, *Nerine yellow stripe virus*, *Sweet potato latent virus* and *Tobacco vein banding mosaic virus* from the list of tentative members of the genus *Potyvirus* to the list of species in the genus.
11. To change the species name Sesame yellow mosaic virus to *Sesame mosaic virus* (SeMV).
12. To add the following to the list of tentative members of the genus *Potyvirus*: *Nerine virus Y* (NVY), *Pepper vein banding virus* (PVBV) and *Rudbekia mosaic virus*.
13. To classify *Calanthe mosaic virus* (CaLMV) as a tentative member of the genus *Potyvirus*.

Proposals from the *Tombusviridae* Study Group

1. To raise Tobacco necrosis virus strain A (TNV A) and Tobacco necrosis virus strain D (TNV D) from the rank of strains (serotypes) of TNV to the rank of species, and to rename them *Tobacco necrosis A virus* and *Tobacco necrosis D virus*.
2. To nominate *Tobacco necrosis virus A* as the type species of the genus *Necrovirus* to replace the now ambiguous “tobacco necrosis virus”.
3. To remove *Olive latent virus-1* from the genus *Sobemovirus* and to classify it as a species in the genus *Necrovirus*.
4. To classify *Leek white stripe virus* as a species in the genus *Necrovirus*.
5. To create a genus in the family *Tombusviridae* to contain viruses resembling oat chlorotic stunt virus.
6. To nominate *Oat chlorotic stunt virus* as the type species of the genus created by proposal 5.
7. To name the genus created in proposal 5, *Avenavirus*.
8. To create a genus in the family *Tombusviridae* to contain viruses resembling pothos latent virus.
9. To nominate *Pothos latent virus* (PoLV) as the type species of the genus created by proposal 8.
10. To name the genus created in proposal 8, *Aureusvirus*.
11. To remove *Cucumber leaf spot virus* from the genus *Carmovirus* and to reclassify it as a species in the genus *Aureusvirus*.

12. To remove *Panicum mosaic virus* from the genus *Sobemovirus* and to reclassify it as a species in the family *Tombusviridae*.
13. To create a genus to contain viruses resembling panicum mosaic virus.
14. To nominate *Panicum mosaic virus* as the type species of the genus created by proposal 13.
15. To name the genus created by proposal 13, *Panicovirus*.
16. To classify *Molinia streak virus* as a species in the genus created by proposal 13.

Proposals from the Plant Virus Sub-Committee

1. To create a genus to contain lettuce big-vein virus, tobacco stunt virus and freesia leaf necrosis virus.
2. To designate *Lettuce big-vein virus* as the type species of the genus created by proposal 1.
3. To name the genus created by proposal 1, *Varicosavirus*.

A Proposal from the *Sequiviridae* Study Group

1. To group the two serotypes of parsnip yellow fleck virus, previously distinguished as separate species, into a single species in the genus *Sequivirus* to be named *Parsnip yellow fleck virus*.

A Proposal from the *Tenuivirus* Study Group

1. To add *Echinochloa hoja blanca virus* (EHBV) and *Urochloa hoja blanca virus* (UHBV) to the list of species, and Iranian wheat stripe virus (IWSV) and Brazilian wheat spike virus to the list of tentative species, in the genus *Tenuivirus*.

Proposals from the *Closteroviridae* and Allies Study Group

1. To add *Little cherry virus* (LChV) as a species in the genus *Closterovirus*.
2. To add the following as tentative species in the genus *Closterovirus*: Clover yellows virus (CYV), Pineapple mealybug wilt-associated virus 1 (PMWaV-1), Pineapple mealybug wilt-associated virus 2 (PMWaV-2), Sugarcane mild mosaic virus (SMMV), Grapevine leafroll-associated virus 6 (GLRaV-6), Grapevine leafroll-associated virus 7 (GLRaV-7), and Megakepasma mosaic virus (MeMV).
3. To add the following as species in the genus *Crinivirus*: *Abutilon yellows virus* (AYV), *Cucurbit yellow stunting disorder virus* (CYSDV), *Lettuce chlorosis virus* (LCV), *Sweet potato chlorotic stunt virus* [= sweet potato sunken vein virus SPSVV] (SPSCV), *Tomato chlorosis virus* (ToCV) and *Tomato infectious chlorosis virus* (TICV).
4. To delete the species *Cucumber yellows virus* and *Muskmelon yellows virus* from the family *Closteroviridae*.
5. To add *Cherry virus A* (CVA) as a species in the genus *Capillovirus*.
6. To add *Grapevine berry inner necrosis virus* (GINV) as a species in the genus *Trichovirus*.
7. To add *Grapevine virus D* (GVD) as a species in the genus *Vitivirus*.
8. To add *Grapevine virus C* (GVC) as a tentative species in the genus *Vitivirus*.

Proposals from the *Comoviridae* Study Group

1. To add *Blackcurrant reversion associated virus* (BRAV) and *Artichoke Aegean ring-spot virus* (AARSV) as species in the genus *Nepovirus*.

2. To divide the previous species tomato black ring virus into two species to take account of sequence differences between the two major serotypes.
3. To name the two species recognized by proposal 2 as *Tobacco black ring virus* (for the German serotype) and *Beet ringspot virus* (for the Scottish serotype).
4. To add Citrus mosaic virus (CMV) [partial RNA-2 sequence D464079] and Cherry rosette virus to the list of tentative species in the genus *Nepovirus*.
5. To add *Patehouli mild mosaic virus* (PMMV) as a species in the genus *Fabavirus*.

Proposals from the *Geminiviridae* Study Group

1. To add *Bean yellow dwarf virus* as species in the genus *Mastrevirus*.
2. To add *Beet early top virus-Iran*, and *Ipomoea yellow vein virus* as species in the genus *Curtovirus*.
3. To transfer *Tomato pseudo-curly top virus* from the list of tentative species to the list of species in the genus *Curtovirus*.

 To add *Abutilon mosaic virus* (AbMV), *Acalpha yellow mosaic virus* (AYMV), *African cassava mosaic virus* (ACMV), *Ageratum yellow vein virus* (AYVV), *Althea rosea enation virus* (AREV), *Asystasia golden mosaic virus* (AGMV), *Bean calico mosaic virus* (BCMuv), *Bean dwarf mosaic virus* (BDMV), *Bean golden mosaic virus-Brazil* (BGMV-BR), *Bean golden mosaic virus-Puerto-Rico* (BGMV-PR), *Bhendi yellow vein mosaic virus* (BYVMV), *Chino del tomate virus* (CdTV), [*Tomato leaf crumple virus*, TLCrV], *Cotton leaf crumple virus* (CLCrV), *Cotton leaf curl virus-Pakistan I* (CLCuV-PK1), *Cotton leaf curl virus-Pakistan 2* (CLCuV-PK2), [*Pakistani cotton leaf curl virus*, PCLCuV], *Cowpea golden mosaic virus* (CPGMV), *Croton yellow vein mosaic virus* (CYVMV), *Dolichos yellow mosaic virus* (DoYMV), *East African cassava mosaic virus* (EACMV), *Eclipta yellow vein virus* (EYVV), *Euphorbia mosaic virus* (EuMV), *Hollyhock leaf curl virus* (HLCV), *Honeysuckle yellow vein mosaic virus* (HYVMV), *Horsegram yellow mosaic virus* (HgYMV), *Indian cassava mosaic virus* (ICMV), *Indian tomato leaf curl virus* (IToLCV), *Jatropha mosaic virus* (JMV), *Leonurus mosaic virus* (LMV), *Limabean golden mosaic virus* (LGMV), *Macroptilium golden mosaic virus* (MGMV), *Macrotyloma mosaic virus* (MaMV), *Malvaceous chlorosis virus* (MCV), *Melon leaf curl virus* (MLCV), *Mungbean yellow mosaic virus* (MYMV), *Okra leaf curl virus* (OLCV), *Papaya leaf curl virus* (PaLCV), *Pepper huasteco virus* (PHV), *Pepper leaf curl virus* (PepLCV), *Pepper mild tigre virus* (PepMTV), *Potato yellow mosaic virus* (PYMV), *Pseuderanthemum yellow vein virus* (PYVV), *Rynchosia mosaic virus* (RhMV), *Serrano golden mosaic virus* (SGMV), [*Texas pepper virus*, TPV], *Sida golden mosaic virus* (SiGMV), *Sinaloa tomato leaf curl virus* (STLCV), *Solanum tomato leaf curl virus* (SToLCV), *Solanum yellow leaf curl virus* (SYLCV), *South African cassava mosaic virus* (SACMV), *Squash leaf curl virus* (SLCV), *Squash leaf curl virus-China* (SLCV-Ch), *Taino tomato mottle virus* (TtoMoV), *Tobacco leaf curl virus* (TLCV), *Tomato yellow dwarf virus* (ToYDV), *Tomato golden mosaic virus* (TGMV), *Tomato leaf curl virus-Australia* (ToLCV-AU), *Tomato leaf curl virus-Bangalore I* (ToLCV-BanI), *Tomato leaf curl virus-Bangalore II* (ToLCV-BanII), *Tomato leaf curl virus-Senegal* (ToLCV-SN), *Tomato leaf curl virus-Taiwan* (ToLCV-TW), *Tomato leaf curl virus-Tanzania* (ToLCV-TZ), *Tomato mottle virus* (ToMoV), *Tomato severe leaf curl virus* (ToSLCV), *Tomato yellow dwarf virus* (ToYDV), *Tomato yellow leaf curl virus-China* (TYLCV-Ch), *Tomato yellow leaf curl virus-Israel* (TYLCV-Is), *Tomato yellow leaf*

curl virus-Nigeria (TYLCV-NG), *Tomato yellow leaf curl virus-Sardinia* (TYLCV-Sar), *Tomato yellow leaf curl virus-South Saudi Arabia* (TYLCV-SSA), *Tomato yellow leaf curl virus-Tanzania* (TYLCV-TZ), *Tomato yellow leaf curl virus-Thailand* (TYLCV-TH), *Tomato yellow leaf curl virus-Yemen* (TYLCV-YE), *Tomato yellow mosaic virus* (ToYMV), *Tomato yellow mottle virus* (ToYMoV), *Tomato yellow vein streak virus* (ToYVSV), *Watermelon chlorotic stunt virus* (WmCSV), *Watermelon curly mottle virus* (WmCMV), *Wissadula golden mosaic virus* (WGMV), and *Zinnia leaf curl virus* (ZLCV) as species in the genus *Begomovirus*.

5. To list Eggplant yellow mosaic virus (EYMV), Eupatorium yellow vein virus (EpYVV), Lupin leaf curl virus (LLCV), Sida yellow vein virus (SiYVV), Solanum apical leaf curl virus (SALCV), and Soybean crinkle leaf virus (SCLV) as tentative species in the genus *Begomovirus*.

Proposals from the Tymovirus Study Group

1. To add *Chayote mosaic virus* to the list of species in the genus *Tymovirus*.
2. To add *Melon rugose mosaic virus* to the list of species in the genus *Tymovirus*.
3. To add *Calapogonium yellow vein virus* to the list of species in the genus *Tymovirus*.

Proposals from the Viroid Study Group

1. To remove the species *Peach latent mosaic viroid* and *Chrysanthemum chlorotic mottle viroid* from the genus *Asunviroid*.
2. To form a genus to contain the species *Peach latent mosaic viroid* and *Chrysanthemum chlorotic mottle viroid*.
3. To name the genus created in proposal 2 as *Pelamoviroid*.
4. To nominate *Peach latent mosaic viroid* as the type species of the genus created by proposal 2.
5. To create a family to contain the genus *Asunviroid* and the genus *Pelamoviroid*.
6. To name the family created by proposal 5, *Asunviroidae*.
7. To create a family to contain the genera *Pospiviroid*, *Hostuviroid*, *Cocadviroid*, *Coleuviroid* and *Apscaviroid*.
8. To name the family created by proposal 7, *Pospiviroidae*.
9. To classify *Chrysanthemum stunt viroid* (CSVd) and *Mexican papita viroid* (MPVd) as species in the genus *Pospiviroid*.

A Proposal from the Tobamovirus and Tobravirus Study Group

1. To add Oilseed rape mosaic virus (ORMV), Turnip vein clearing virus (TVCV) and Crucifer-infecting tobacco mosaic virus (crTMV) to the list of tentative species of the genus *Tobamovirus*.

New Proposals for Unassigned Genera

1. To establish a new genus typified by citrus psorosis virus.
2. To nominate *Citrus psorosis virus* as the type species of the genus created in proposal 1.
3. To name the genus created in proposal 1, *Ophiovirus*.
4. To classify Ranunculus white mottle virus and Tulip mild mottle mosaic virus as tentative species in the genus *Ophiovirus*.

5. To create a new genus typified by Ourmia melon virus.
6. To nominate *Ourmia melon virus* as the type species of the genus created by proposal 5.
7. To name the genus created by proposal 5, *Ourmiavirus*.
8. To classify *Epirus cherry virus* as a species, and Cassava virus C as a tentative species, in the genus *Ourmiavirus*.

Invertebrate Virus Sub-Committee Proposals

Proposals from the Ascovirus Study Group

1. To establish the family *Ascoviridae*, a new family of invertebrate viruses that attack insects.
2. To establish a genus within the family, the genus *Ascovirus*.
3. To nominate *Spodoptera frugiperda ascovirus* as the type species of the genus *Ascovirus*.
4. To designate *Trichoplusia ni ascovirus* as a species in the genus *Ascovirus*.
5. To designate *Autographa precationis ascovirus* as a species in the genus *Ascovirus*.
6. To designate *Diadromus pulchellus ascovirus* as a species in the genus *Ascovirus*.

Proposals from the Picornavirus Study Group of the Invertebrate Virus Sub-Committee

1. To create a new unassigned genus comprising all viruses previously listed as unassigned invertebrate picornaviruses.
2. To name this genus "Cricket paralysis-like viruses".

Vertebrate Virus Sub-Committee Proposals

Proposals from the *Caliciviridae* Study Group

1. To create a new genus, *Vesivirus*, within the family *Caliciviridae*.
2. To designate *Swine vesicular exanthema virus* as the type species of the genus *Vesivirus*.
3. To create a new genus, *Lagovirus*, within the family *Caliciviridae*.
4. To designate *Rabbit haemorrhagic disease virus* as the type species of the genus *Lagovirus*.
5. To create a new genus, "Norwalk-like viruses", within the family *Caliciviridae*.
6. To designate *Norwalk virus* as the type species of the genus "Norwalk-like viruses".
7. To create a second new genus, "Sapporo-like viruses", within the family *Caliciviridae*.
8. To designate *Sapporo virus* as the type species of the "Sapporo-like viruses".
9. To remove *Hepatitis E virus* from the family *Caliciviridae* and to designate the "Hepatitis E-like viruses" as an unassigned genus.

Proposals from the Filovirus Study Group

1. To create two genera within the family *Filoviridae*.
2. To name one of the genera created in proposal 1, "Marburg-like viruses".
3. To designate *Marburg virus* as the type species of the genus "Marburg-like viruses".

4. To name the second genus created in proposal 1, “Ebola-like viruses”.
5. To designate *Ebola virus* as the type species of the genus “Ebola-like viruses”.
6. To designate Ebola virus Cote d’Ivoire, Ebola virus Reston, Ebola virus Sudan and Ebola virus Zaire, as tentative species in the genus “Ebola-like viruses”.

Proposals from the *Paramyxoviridae* Study Group

1. To create a new genus within the subfamily *Pneumovirinae*.
2. To designate *Turkey rhinotracheitis virus* as the type species of the genus created in proposal 1.
3. To name the genus created in proposal 1, *Metapneumovirus*.
4. To change the name of the genus *Paramyxovirus*.
5. To rename this genus as the genus *Respirovirus*.

Proposals from the African swine fever Study Group

1. To create a new family *Asfarviridae*, comprising a single genus of which African swine fever virus is the sole member.
2. To name the genus created in proposal, *Asfivirus*.
3. To designate *African swine fever virus* as the type species of the genus *Asfivirus*.

Proposals from the Herpesvirus Study Group

1. To include *Ictalurid herpesvirus 1* in an unassigned genus within the family *Herpesviridae*.
2. To designate the genus created in proposal 1, “Ictalurid herpes-like viruses”.
3. To designate a new genus within the subfamily *Alphaherpesvirinae* of the family *Herpesviridae* to accommodate the Marek’s disease viruses (*Gallid herpes viruses 2* and *3*) and the herpesvirus of turkeys (*Meleagrid herpesvirus 1*).
4. To name the genus created in proposal 3, “Marek’s disease-like viruses”.
5. To designate a new genus in the subfamily *Alphaherpesvirinae* to accommodate infectious laryngotracheitis virus [ILTV] (*Gallid herpesvirus 1*).
6. To name the genus created in proposal 5, “ILTV-like viruses”.
7. To retain the Salmonid herpesviruses 1 and 2 as unassigned viruses within the family *Herpesviridae*.

A Proposal from the *Parvoviridae* Study Group

1. To change the name of the genus *Contravirus* (subfamily *Densovirinae*) to become the genus *Brevidensovirus*.

Proposals from the *Retroviridae* Study Group

1. To rename the genera within the family *Retroviridae* that were previously grouped under the term Oncoviruses, and to name a new genus comprised of recently described fish viruses.
2. To rename the genus “Avian type C retroviruses” as the genus *Alpharetrovirus*.
3. To consolidate two genera, the “Mammalian type B retroviruses” and the “type D retroviruses”, into a single genus that will be named *Betaretrovirus*.
4. To rename the genus “mammalian type C retroviruses” as the genus *Gammaretrovirus*.

5. To change the name of the genus that includes bovine leukaemia virus and the primate T-lymphotropic viruses from “BLV-HTLV retroviruses” to become the genus *Delta-retrovirus*.
6. To establish a new genus, *Epsilonretrovirus*, that includes the fish retroviruses, walleye dermal sarcoma virus (WDSV), walleye epidermal hyperplasia virus type 1 (WEHV-1) and walleye epidermal hyperplasia virus type 2 (WEHV-2).
7. To designate *Walleye dermal sarcoma virus* as the type species of the new genus created by proposal 6.
8. To designate *Walleye epidermal hyperplasia virus type 1* and *Walleye epidermal hyperplasia virus type 2* as species in the genus created in proposal 6.
9. To retain the genus name, *Lentivirus*.
10. To retain the genus name, *Spumavirus*.

Proposals from the *Rhabdoviridae* Study Group

1. To establish a new genus to include infectious haematopoietic necrosis virus and related rhabdoviruses from fish.
2. To designate *Infectious haematopoietic necrosis virus* (IHNV) as the type species in the genus created by proposal 1.
3. To name the new genus, *Novirhabdovirus*.

Proposals from the *Reoviridae* Study Group

1. To convert the Kemerovo serogroup within the genus *Orbivirus*, currently containing four distinct antigenic complexes, to three distinct virus species *Great Island virus*, *Wad Medani virus* and *Chenuda virus*.
2. To create a new species *Chobar Gorge virus* within the genus *Orbivirus*.
3. To create a new species *Ieri virus* within the genus *Orbivirus*.
4. To recognize four distinct species within the genus *Orthoreovirus*, designated *Mammalian reovirus*, *Avian reovirus*, *Nelson Bay virus* and *Baboon reovirus*.

Proposals from the *Picornaviridae* Study Group

1. To designate *Human parechovirus type 1* (formerly human echovirus type 22) as the type species of the genus *Parechovirus*.
2. To classify equine rhinovirus type 1 as a species within the genus *Aphthovirus*.
3. To rename equine rhinovirus type 1 as *Equine rhinitis A virus*.

Confirmation of ratification of these new taxonomic proposals by the full membership of the ICTV will be published in a future issue of *Virology Division News* and also via the ICTV web-site (<http://www.ncbi.nlm.nih.gov/ICTV/>).

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Obituary

In Memoriam Dr. Chu Chi-Ming (1917–1998)



Dr. Chu Chi-Ming, Professor, Institute of Virology, Chinese Academy of Preventive Medicine, died on January 6, 1998 of cancer. His ashes were spread on a mountain west of Beijing. Dr. Chu was born on September 12, 1917 and obtained a medical degree from Shanghai National Medical College in 1939. He moved to Cambridge University and received a Ph.D. in 1948. He served as a Fellow at the National Institute for Medical Research in London from 1948 to 1950, where he worked with Sir Christopher Andrewes. While in London he was instrumental in establishing the WHO World Influenza Center and laying the foundation for the present global influenza surveillance network.

He returned to China in 1951 and despite very difficult conditions, inadequate facilities and insufficient resources in Beijing, he initiated a research program on viruses of public health importance and published widely. This productive phase of his career ended abruptly in the mid-1960s with the Chinese Cultural Revolution. Institutes of research and higher learning were closed and Dr. Chu and other intellectuals were removed from their posts, and forced to perform manual labor. In the early 1970s, social order was restored and Dr. Chu returned to the Institute of Virology of the Chinese Academy of Medical Sciences as Deputy Director. There, he began the process of rebuilding. The nation was faced with a major gap in scientific technology and the loss of a generation of students. Dr. Chu began a research program despite the virtual absence of modern texts, equipment, supplies and laboratory facilities. In 1975 he published the initial results of this research, his first publication after an absence of 10 years.

In 1981 Dr. Chu became Director of the Institute of Virology and upon his retirement in 1984 was appointed Professor in the Chinese Academy of Preventive Medicine. He was greatly admired as an outstanding virologist and a teacher of high moral character. Nationally, he was recognized also for his perseverance, courage and unwavering dedication to bringing modern virology to China. He was elected president of the Chinese Society of Microbiology, was appointed editor of the Chinese Journal of Virology and editor of several other major publications in China.

In 1996 he was elected an Honorary Fellow of the American Society for Microbiology.

It was a great privilege to know Dr. Chu and to share in his wisdom. He leaves his colleagues, students and many friends around the world a legacy of deep intellectual inquiry, coupled with a sense of excitement in the research work at hand. He was a role-model for all who would investigate and understand human virology. We will miss him greatly.

Walter R. Dowdle, Brian W. J. Mahy