

BACTERIAL TYPE CULTURES
OF THE
AMERICAN TYPE CULTURE COLLECTION
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SUMMARY. The first in a series of lists of the names of the type cultures of bacteria which have been deposited in the American Type Culture Collection (ATCC) is presented. The names of 78 species, 4 subspecies and 4 infrasubspecific taxa are listed in four categories: 1) type cultures (54), 2) neotype cultures (3), 3) proposed neotype cultures (11), and 4) suggested neotype cultures (18). For each entry the scientific name, the various strain designations, the name and address of the depositor, the date when the culture was received by the ATCC and pertinent literature citations are given.

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INTRODUCTION

The following is a partial listing of the names of the type cultures which have been accessioned by the American Type Culture Collection (ATCC). The list is presented here in response to the invitation of the Editorial Board of the International Committee on Bacteriological Nomenclature (1962, 10) issued to curators and directors of culture collections. In addition to the names of type cultures of species and subspecies, the names of type cultures of infrasubspecific taxa are also given (e.g. see Neisseria meningitidis Sero-groups).

The type cultures listed here are categorized as follows: 1) type cultures, 2) neotype cultures, 3) proposed neotype cultures and 4) suggested neotype cultures. According to the International Code of Nomenclature of Bacteria and

Viruses (1958, 56): "A type culture is a living culture of an organism which is a descendant of the original culture or an isolation from which the author who first described the organism made his original description, which culture has been maintained pure, and which agrees in its characters with the original description." Original descriptions of many organisms are based on studies of numerous cultures and not of a single culture; this is especially true of modern descriptions. In those cases where the type culture of an organism has not been selected by the author who first described the organism nor by a subsequent author, the type culture is selected by the culture collection. A "neotype culture" is a culture which has been accepted by international agreement to replace a type culture which is no longer extant. A culture does not become a neotype until it is so designated in an "Opinion" issued by the Judicial Commission of the International Committee on Bacteriological Nomenclature; the Opinion is reported to the International Committee and becomes official if it has not been challenged and rejected by a majority of the members of the International Committee at the meeting of the Committee next following the date on which the Opinion was published or submitted to the Committee. A "proposed neotype culture" is a culture for which an Opinion designating it as a neotype has been requested of the Judicial Commission, which Opinion and its final acceptance by the International Committee are pending. The phrase "suggested neotype culture" is used here to refer to a culture which has been stated in the literature to be a "proposed neotype" or even a "neotype" but for which a request for a Judicial Commission Opinion designating it as a neotype has not been made.

BACTERIOLOGICAL NOMENCLATURE
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TYPE CULTURES

ATCC No.

- 12879 Acetobacter alcoholophilus Kozulis and Parsons 1958
Received from R. H. Parsons (Canadian Breweries Ltd., Toronto 2, Canada) on July 31, 1957.
- 11894 Acetobacter capsulatum Shimwell 1936
Received from W. S. Greaves (Chemical Research Laboratory, Teddington, Middlesex, England) on September 17, 1954 as NCIB 4943 and NCTC 4943; Greaves received this strain from J. L. Shimwell (British Vinegars Ltd., Frome, Somerset, England) in 1946.
- 13740 Actinomyces coeruleorubidus Gause et al. 1957
Received from G. F. Gause (Institute of Antibiotics, Academy of Medical Sciences, Moscow, Russia) on February 29, 1960 as strain 12531/54.
- 13738 Actinomyces griseoruber Gause et al. 1957
Received from G. F. Gause (Institute of Antibiotics, Academy of Medical Sciences, Moscow, Russia) on February 29, 1960 as strain 6974/54.
- 13739 Actinomyces violascens Gause et al. 1957
Received from G. F. Gause (Institute of Antibiotics, Academy of Medical Sciences, Moscow, Russia) on February 29, 1960, as strain 872/54.
- 12427 Actinoplanes philippinensis Couch 1950
Type species of the genus Actinoplanes Couch 1950.
Received from J. N. Couch (Botany Department, University of North Carolina, Chapel Hill, N. C.) on January 12, 1956, as strain P-15.
- 14460 Aerobacter lipolyticus Grimes 1961
Synonym: Aerobacter liquefaciens Grimes and Hennerty 1931 (see Grimes 1961, 111).
Received from R. E. Buchanan (Iowa State University, Ames, Iowa) on September 27, 1961 as strain NCIB 9321x6; Buchanan received this strain from M. Grimes (Dairy and Food Microbiology Department, University College, Cork, Ireland).
Comment: Grimes (personal communication to R. E. Buchanan) stated: "I recommend NCIB 9321 as the 'type' culture."
Aerobacter liquefaciens Grimes and Hennerty 1931
(see Aerobacter lipolyticus Grimes).
- 11563 Aerococcus viridans Williams, Hirsch and Cowan 1953
Type species of the genus Aerococcus Williams et al. 1953.
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on July 7, 1953 as NCTC 8251. Designated as the type culture by Williams et al. (1953, 477).

- 13329 Agrobacterium gypsophilae (Brown) Starr and Weiss 1943
Received from M.P. Starr (Department of Bacteriology, University of California, Davis, California) on December 12, 1958 as strain TG 101 and Dowson 179; Starr received this strain from H.J. Conn (New York State Agricultural Experiment Station, Geneva, N.Y.) in 1946; Conn in turn received this strain from N.A. Brown.
- 13752 Arthrobacter atrocyaneus Kuhn and Starr 1960
Received from M.P. Starr (Department of Bacteriology, University of California, Davis, California) on March 23, 1960 as strain A9.2.
- 11624 Arthrobacter citreus Sacks 1954
Received from L.E. Sacks (Western Regional Research Laboratory, Albany, California) on September 28, 1953.
- 13347 Arthrobacter duodecadenis Lochhead 1958
Received from A.G. Lochhead (Science Service, Canada Department of Agriculture, Ottawa, Canada) on December 23, 1958 as strain 541.
- 13348 Arthrobacter flavescens Lochhead 1958
Received from A.G. Lochhead (Science Service, Canada Department of Agriculture, Ottawa, Canada) on December 23, 1958 as strain 401.
- 14574 Bacillus badius Batchelor 1919
Received from Ruth E. Gordon (Institute of Microbiology, Rutgers-The State University, New Brunswick, N.J.) on February 7, 1962 as NRS 663, Henry 110 and "Batchelor;" Gordon received this strain from N.R. Smith, who received it from Dr. Henry, who in turn received it from Marjorie D. Batchelor.
- 7050 Bacillus coagulans Hammer 1915
Received from N.R. Smith (Bureau of Plant Industry Station, Beltsville, Md.) on August 1, 1938 as strain NRS 609; Smith received this strain from J.R. Porter (State University of Iowa, Iowa City, Iowa) in 1937; Porter in turn received it from B.W. Hammer (Iowa Agricultural Experiment Station, Ames, Iowa).
- 14575 Bacillus firmus Werner 1933
Received from Ruth E. Gordon (Institute of Microbiology, Rutgers-The State University, New Brunswick, N.J.) on February 7, 1962 as NRS 613; Gordon received this strain from N.R. Smith (Bureau of Plant Industry Station, Beltsville, Md.), who received it from J.R. Porter (State University of Iowa, Iowa City, Iowa), who in turn received it from Bredemann as Werner's original strain.

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- 10840 Bacillus lentus Gibson 1935
Received from N. R. Smith (Bureau of Plant Industry Station, Beltsville, Md.) on January 19, 1951 as strain 670; Smith received this strain from Gibson (University of Edinburgh, Scotland). Other strain designation: Gibson 165.
- 8244 Bacillus macerans Schardinger 1905
Received from N. R. Smith (Bureau of Plant Industry Station, Beltsville, Md.) on October 3, 1941 as NRS 888; Smith received this strain from J. R. Porter (State University of Iowa, Iowa City, Iowa), who in turn received it from Schardinger.
- 14576 Bacillus pantothenicus Proom and Knight 1950
Received from Ruth E. Gordon (Institute of Microbiology, Rutgers-The State University, New Brunswick, N. J.) on February 7, 1962 as NCTC 8162, NCIB 8775, Proom CN 3028 and NRS 1321; Gordon received this strain from N. R. Smith (Bureau of Plant Industry Station, Beltsville, Md.), who received it from Proom in 1950.
- 14577 Bacillus sphaericus Neide 1904
Received from Ruth E. Gordon (Institute of Microbiology, Rutgers-The State University, New Brunswick, N. J.) on February 7, 1962 as Gibson's strain 1013; Gordon received this strain from Gibson in 1961, who in turn received it from the Král Collection, where it was deposited by Wund as Neide's strain.
- 13809 Brevibacterium leucinophagum Kinney and Werkman 1960
Received from R. W. Kinney (Iowa State University, Ames, Iowa) on May 12, 1960 as strain 14A2. Designated as the type culture by Kinney and Werkman (1960, 213).
- 6918 Chromobacterium viscosum Grimes 1927
Received from R. St. John-Brooks (National Collection of Type Cultures, Elstree, Herts, England) on June 30, 1938 as NCTC 2416. Other strain designation: NCIB 8180. Designated as the type culture by Sneath and Cowan (1958, 554).
- 8461 Comamonas percolans (Mudd and Warren) Davis and Park 1962
Type species of the genus Comamonas Davis and Park 1962. Received from R. St. John-Brooks (National Collection of Type Cultures, Elstree, Herts, England) on April 24, 1942 as NCTC 1937. Other strain designation: NCIB 8193. Designated as the type culture by Davis and Park (1962, 114).
- 14264 Corynebacterium ilicis Mandel and Guba 1959
Received from M. Mandel (Department of Bacteriology and Public Health, University of Massachusetts, Amherst, Mass.) on May 25, 1961 as strain Cr-2.
Comment: Mandel (personal communication May 10, 1961) stated: "I enclose a transfer of culture Cr-2 which I designate as the type culture of Corynebacterium ilicis Mandel and Guba..."

- 14119 Ferrobacillus sulfooxidans Kinsel 1960
Received from Norma A. Kinsel (Microbiological and Microscopy Section, Mellon Institute, Pittsburgh, Penn.) on March 7, 1961.
- 14018 Haemophilus vaginalis Gardner and Dukes 1955
Received from C. D. Dukes (Department of Microbiology, College of Medicine, Baylor University, Houston, Texas) on November 29, 1960 as strain 594.
Comment: Dukes (personal communication October 28, 1960) stated: "... I have empirically selected No. 594 as the type culture."
- 11048 Jensenia cranicruria Bisset and Moore 1950
Type species of the genus Jensenia Bisset and Moore 1950.
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on July 24, 1951 as NCTC 8036. Designated as the type culture by Sneath and Cowan (1958, 555).
- 13886 Klebsiella edwardsii Cowan, Steel, Shaw and Duguid 1960
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on July 20, 1960 as strain F1 and NCTC 5054. Designated as the type culture by Cowan et al. (1960, 609).
- 13887 Klebsiella edwardsii subsp. atlantae Cowan, Steel, Shaw and Duguid 1960
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on July 20, 1960 as NCTC 9496. Other strain designation: CDC 4610-53. Designated as the type culture by Cowan et al. (1960, 609).
- 13886 Klebsiella edwardsii subsp. edwardsii Cowan, Steel, Shaw and Duguid 1960
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on July 20, 1960 as strain F1 and NCTC 5054. Designated as the type culture of the type subspecies by Cowan et al. (1960, 609).
- 8461 Lophomonas alcaligenes Galarneault and Leifson 1956
Type species of the genus Lophomonas Galarneault and Leifson 1956.
Received from R. St. John-Brooks (National Collection of Type Cultures, Elstree, Herts, England) on April 24, 1942 as NCTC 1937. Other strain designation: NCIB 8193. Designated as the type culture by Hugh (1962, 34).
- 12478 Mycobacterium kansasii
Received from Ann Pollak (University of Kansas, Kansas City, Kansas) on February 21, 1956 as strain "Bostrom."
Comment: Ann Pollak (personal communication December 28, 1960) stated that: "... the culture I sent you marked 'Bostrom' ... should therefore be ... regarded as the type culture of Mycobacterium kansasii."

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- 13120 Neisseria flavescens Branham 1930
Received from Sara E. Branham (National Institute of Health, Bethesda, Md.) in July of 1957 as strain NIH N155. Designated as the type culture by Branham (1958, 14).
- 14126 Photobacterium harveyi (Johnson and Shunk) Breed and Lessel 1954
Received from F.H. Johnson (Department of Biology, Princeton University, Princeton, N.J.) on March 16, 1961.
- 14048 Pseudomonas natriegens Payne, Eagon and Williams 1961
Received from W.J. Payne (Department of Bacteriology, The University of Georgia, Athens, Georgia) on February 13, 1961. Other strain designation: RH 1459.
- 14235 Pseudomonas resinovorans Delaporte, Raynaud and Daste 1961
Received from P. Daste (Université de Paris, Faculté des Sciences, Paris, France) on May 24, 1961. Other strain designation: RH 1554.
- 11879 Spirillum anulus Williams and Rittenberg 1957
Received from Marion A. Williams (Southern Illinois University, Carbondale, Ill.) on August 10, 1954. Designated as the type culture by Williams and Rittenberg (1957, 86).
- 12753 Spirillum atlanticum Williams and Rittenberg 1957
Received from Marion A. Williams (University of Southern California, Los Angeles, Calif.) on February 25, 1957. Designated as the type culture by Williams and Rittenberg (1957, 91).
- 12754 Spirillum beijerinckii Williams and Rittenberg 1957
Received from Marion A. Williams (University of Southern California, Los Angeles, Calif.) on February 25, 1957. Designated as the type culture by Williams and Rittenberg (1957, 90).
- 11338 Spirillum curvatum Williams and Rittenberg 1957
Received from S.C. Rittenberg (University of Southern California, Los Angeles, Calif.) on August 26, 1952. Designated as the type culture by Williams and Rittenberg (1957, 84).
- 11334 Spirillum giesbergeri Williams and Rittenberg 1957
Received from S.C. Rittenberg (University of Southern California, Los Angeles, Calif.) on August 26, 1952. Designated as the type culture by Williams and Rittenberg (1957, 88).
- 9785 Spirillum graniferum Williams and Rittenberg 1957
Received from O.B. Williams (University of Texas, Austin, Texas) on April 2, 1945. Designated as the type culture by Williams and Rittenberg (1957, 92).
- 11331 Spirillum iteronii subsp. vulgatum Williams and Rittenberg 1957
Received from S.C. Rittenberg (University of Southern California, Los Angeles, Calif.) on August 26, 1952. Designated as the type culture by Williams and Rittenberg (1957, 87).

- 11336 Spirillum linum Williams and Rittenberg 1957
Received from S. C. Rittenberg (University of Southern California, Los Angeles, Calif.) on August 26, 1952. Designated as the type culture by Williams and Rittenberg (1957, 82).
- 11337 Spirillum lunatum Williams and Rittenberg 1957
Received from S. C. Rittenberg (University of Southern California, Los Angeles, Calif.) on August 26, 1952. Designated as the type culture by Williams and Rittenberg (1957, 83).
- 11332 Spirillum polymorphum Williams and Rittenberg 1957
Received from S. C. Rittenberg (University of Southern California, Los Angeles, Calif.) on August 26, 1952. Designated as the type culture by Williams and Rittenberg (1957, 85).
- 11335 Spirillum serpens subsp. azotum Williams and Rittenberg 1957
Received from S. C. Rittenberg (University of Southern California, Los Angeles, Calif.) on August 26, 1952. Designated as the type culture by Williams and Rittenberg (1957, 81).
- 9786 Spirillum sinuosum Williams and Rittenberg 1957
Received from O. B. Williams (University of Texas, Austin, Texas) on April 2, 1945. Designated as the type culture by Williams and Rittenberg (1957, 94).
- 14077 Streptomyces galbus Okami and Umezawa 1959
Received from Y. Okami (National Institutes of Health, Kamisaki Chojamaru, Shinagawa-ku, Tokyo, Japan) on February 14, 1961 as strain 1616 Z3.
- 13541 Vibrio cholonicus Hayward and Stadtman 1959
Received from H. R. Hayward (Laboratory of Cellular Physiology, National Institutes of Health, Bethesda, Md.) on July 9, 1959.
- 6972 Vibrio cuneatus Gray and Thornton 1928
Received from R. St. John-Brooks (National Collection of Type Cultures, Elstree, Herts, England) on July 5, 1938 as NCTC 2583. Other strain designation: NCIB 8194.
Comment: According to the NCIB Catalogue (1954, 30), this strain was received by NCIB from P. H. Gray (Rothamsted Experiment Station, England) in 1944.
- 14635 Vibrio cyclosites Gray and Thornton 1928
Received from W. Hodgkiss (National Collection of Industrial Bacteria, Torry Research Station, Aberdeen, Scotland) on March 13, 1962 as NCIB 2581. Other strain designation: NCTC 2581.
Comment: According to the NCIB Catalogue (1954, 30), this strain was received by NCIB from H. G. Thornton (Rothamsted Experiment Station, England) in 1928.
- 14636 Vibrio neocistes Gray and Thornton 1928
Received from W. Hodgkiss (National Collection of Industrial Bacteria, Torry Research Station, Aberdeen, Scotland) on March 13, 1962 as NCIB 2528. Other strain designation: NCTC 2528.

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Comment: According to the NCIB Catalogue (1934, 30), this strain was received by NCIB from H.G. Thornton (Rothamsted Experiment Station, England) in 1928.

- 8461 Vibrio percolans Mudd and Warren 1923
Received from R. St. John-Brooks (National Collection of Type Cultures, Elstree, Herts, England) on April 24, 1942 as NCTC 1937. Other strain designation: NCIB 8193. Designated as the type culture by Hugh (1962, 34).

NEOTYPE CULTURES

- 6051 Bacillus subtilis Cohn 1872
Type species of the genus Bacillus Cohn 1872.
Received from H.J. Conn (New York State Agricultural Experiment Station, Geneva, New York) on May 11, 1937 as the "Marburg Strain." Other strain designations: NRS 744; NCTC 3610. Designated as the neotype culture by the International Committee on Bacteriological Nomenclature (1937, 245). See also St. John-Brooks and Breed (1937).
- 12472 Chromobacterium violaceum Bergonzini 1881
Type species of the genus Chromobacterium Bergonzini 1881.
Received from P.H.A. Sneath (National Institute for Medical Research, London, England) on March 14, 1956 as Strain "MK." Other strain designation: NCTC 9757. Designated as the neotype culture by the Judicial Commission (1958a, 152).
- 12600 Staphylococcus aureus Rosenbach 1884
Type species of the genus Staphylococcus Rosenbach 1884.
Received from S.T. Cowan (National Collection of Type Cultures, London, England) on July 13, 1956 as Strain NCTC 8532. Designated as the neotype culture by the Judicial Commission (1958b, 154).

PROPOSED NEOTYPE CULTURES

- 13314 Arizona arizonae (Kauffmann) ?
Received from S.T. Cowan (National Collection of Type Cultures, London, England) on November 3, 1958 as strain 1, 2-1, 2, 5 and NCTC 8297. Proposed as the neotype culture by the ASM Enterobacteriaceae Subcommittee Commission (1959, 106).
- 14266 Bacterionema matruchoitii (Mendel) Gilmour, Howell and Bibby 1961a
Type species of the genus Bacterionema Gilmour et al. 1961a.

- Received from Marion Gilmour (Eastman Dental Dispensary, Rochester, New York) on May 24, 1961 as strain 47. Proposed as the neotype culture by Gilmour *et al.* (1961b, 163).
- 12473 Chromobacterium lividum (Eisenberg) Holland 1920
Received from P.H.A. Sneath (National Institute for Medical Research, London, England) on March 12, 1956 as strain HB. Other strain designation: NCTC 9796. Proposed as the neotype culture by Sneath (1956, 83).
- 8090 Citrobacter freundii (Braak) Werkman and Gillen 1932
Type species of the genus Citrobacter Werkman and Gillen 1932. Received from C.H. Werkman (Iowa State College, Ames, Iowa) on May 8, 1941. Other strain designation: NCTC 9750. Proposed as the neotype culture by the ASM Enterobacteriaceae Subcommittee Commission (1959, 106).
- 8461 Comamonas terrigena (Günther) Hugh 1962
Type species of the genus Comamonas Davis and Park 1962 (see Hugh 1962, 34).
Received from R. St. John-Brooks (National Collection of Type Cultures, Elstree, Herts, England) on April 24, 1942 as NCTC 1937. Other strain designation: NCIB 8193. Proposed as the neotype culture by Hugh (1962, 34).
- 11775 Escherichia coli (Migula) Castellani and Chalmers 1919
Type species of the genus Escherichia Castellani and Chalmers 1919
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on March 25, 1954 as NCTC 9001. Proposed as the neotype culture by the ASM Enterobacteriaceae Subcommittee Commission (1959, 106).
- 14201 Leptotrichia buccalis (Robin) Trevisan 1879
Type species of the genus Leptotrichia Trevisan 1879.
Received from A. Howell, Jr. (National Institute of Dental Research, National Institutes of Health, Bethesda, Md.) on May 8, 1961 as strain C-1013-b. Proposed as the neotype culture by Gilmour *et al.* (1961b, 162).
- 13315 Proteus vulgaris Hauser 1885
Type species of the genus Proteus Hauser 1885.
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on November 3, 1958 as NCTC 4175. Proposed as the neotype culture by the ASM Enterobacteriaceae Subcommittee Commission (1959, 107).
- 13312 Salmonella cholerae-suis (Smith) Weldin 1927
Type species of the genus Salmonella Lignieres 1900.
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on November 3, 1958 as NCTC 5735.
Proposed as the neotype culture by the ASM Enterobacteriaceae Subcommittee Commission (1959, 106).

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- 13311 Salmonella typhi-murium (Loeffler) Castellani and Chalmers 1919
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on November 3, 1958 as NCTC 74. Proposed as the neotype culture by the ASM Enterobacteriaceae Subcommittee Commission (1959, 106).
- 13313 Shigella dysenteriae (Shiga) Castellani and Chalmers 1919
Type species of the genus Shigella Castellani and Chalmers 1919. Received from S. T. Cowan (National Collection of Type Cultures, London, England) on November 3, 1958 as NCTC 4837. Proposed as the neotype culture by the ASM Enterobacteriaceae Subcommittee Commission (1959, 106).

SUGGESTED NEOTYPE CULTURES

- 9071 Aeromonas hydrophila (Chester) Stanier 1943
Received from W. L. Kulp (University of Connecticut, Storrs, Conn.) on March 8, 1943 as Strain "P₂-smooth." Other strain designations: CDC 360-60; RH 252; CDC-RH 36; NCMB 37; NCTC 7810. Suggested as the neotype culture by Ewing et al. (1961, 32).
- 14174 Aeromonas salmonicida (Lehmann and Neumann) Griffin 1954
Received from R. Hugh (George Washington University, Washington, D. C.) on April 13, 1961 as strain RH 866 and CDC 960-60. Other strain designation: CDC-RH 39. Suggested as the neotype culture by Ewing et al. (1961, 32).
- 13048 Enterobacter aerogenes (Kruse) Hormaeche and Edwards 1960
Received from P. R. Edwards (Communicable Disease Center, Atlanta, Georgia) on January 30, 1958 as strain 819-56. Other strain designation: NCTC 10006. Suggested as the neotype culture by Hormaeche and Edwards (1960, 73).
- 13047 Enterobacter cloacae (Joradn) Hormaeche and Edwards 1960
Type species of the genus Enterobacter Hormaeche and Edwards 1960.
Received from P. R. Edwards (Communicable Disease Center, Atlanta, Georgia) on January 30, 1958 as strain 279-56. Other strain designation: NCTC 10005. Suggested as the neotype culture by Hormaeche and Edwards (1960, 73).
- 13882 Klebsiella aerogenes (Kruse)
According to Cowan et al. (1960, 609) this binary combination "... was proposed and must be ascribed to a Subcommittee of the Society for Applied Bacteriology (Report 1956)."
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on July 20, 1960 as NCTC 8172; Cowan received this strain from E. Windle Taylor (Metropolitan Water

- Board, London, England) in April of 1950 as strain C-37.
Suggested as the neotype culture by Cowan *et al.* (1960, 609).
- 13883 *Klebsiella pneumoniae* (Schroeter) Trevisan 1887
Type species of the genus *Klebsiella* Trevisan 1885.
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on July 20, 1960 as NCTC 9633. Other strain designation: CDC 298/53. Suggested as the neotype culture by Cowan *et al.* (1960, 609).
- 13884 *Klebsiella rhinoscleromatis* Trevisan 1887
Received from S. T. Cowan (National Collection of Type Cultures, London, England) on July 20, 1960 as strain R 70 and NCTC 5046.
Suggested as the neotype culture by Cowan *et al.* (1960, 609).
- 398 *Micrococcus luteus* (Schroeter) Cohn 1872
Type species of the genus *Micrococcus* Cohn 1872.
Received from G. J. Hucker (New York State Agricultural Experiment Station, Geneva, New York) on May 7, 1925 as strain 426. Other strain designation: NCTC 8512. Suggested as the neotype culture by Breed (1952, 88).
- 13077 *Neisseria meningitidis* (Albrecht and Ghon) Holland 1920
Received from Sara E. Branham (National Institutes of Health, Bethesda, Md.) in July of 1957 as strain NIH M1027. Suggested as the neotype culture by Branham (1958, 8).
- 13077 *Neisseria meningitidis* (Serogroup A) (Albrecht and Ghon) Holland 1920
Received from Sara E. Branham (National Institutes of Health, Bethesda, Md.) in July of 1957 as strain NIH M1027. Suggested as the neotype culture of Serogroup A by Branham (1958, 8).
- 13090 *Neisseria meningitidis* (Serogroup B) (Albrecht and Ghon) Holland 1920
Received from Sara E. Branham (National Institutes of Health, Bethesda, Md.) in July of 1957 as strain NIH M2092. Suggested as the neotype culture of Serogroup B by Branham (1958, 10).
- 13102 *Neisseria meningitidis* (Serogroup C) (Albrecht and Ghon) Holland 1920
Received from Sara E. Branham (National Institutes of Health, Bethesda, Md.) in July of 1957 as strain NIH M1628. Suggested as the neotype culture of Serogroup C by Branham (1958, 12).
- 13113 *Neisseria meningitidis* (Serogroup D) (Albrecht and Ghon) Holland 1920
Received from Sara E. Branham (National Institutes of Health, Bethesda, Md.) in July of 1957 as strain NIH M158. Suggested as the neotype culture of Serogroup D by Branham (1958, 13).
- 10145 *Pseudomonas aeruginosa* (Schroeter) Migula 1900
Type species of the genus *Pseudomonas* Migula 1894.
Received from F. Kavanagh (New York Botanical Gardens, New

- York, N.Y.) on November 21, 1946; Kavanagh obtained this strain from Merck and Co. Other strain designations: CCEB 481; NCIB 8295; RH 815. Suggested as the neotype culture by Lysenko (1961, 398).
- 13525 Pseudomonas fluorescens Migula 1895
Received from S.R. Cowan (National Collection of Type Cultures, London, England) on June 15, 1959 as strain 28/5 and NCTC 10038. Suggested as the neotype culture by Rhodes (1959, 259).
- 13880 Serratia marcescens Bizio 1823
Type species of the genus Serratia Bizio 1823.
Received from M. Kocur (Department of Microbiology, Faculty of Natural Sciences, Brno, Czechoslovakia) on July 14, 1960 as strain BX 303. Suggested as the neotype culture by Martinec and Kocur (1961, 11).
- 13813 Streptococcus agalactiae Lehmann and Neumann 1896
Received from S.T. Cowan (National Collection of Type Cultures, London, England) on May 25, 1960 as NCTC 8181; Cowan received this strain from A.W. Stableforth (Veterinary Laboratory, New Haw, Weybridge, England) as strain G 19. Suggested as the neotype culture by the Subcommittee on Streptococci and Pneumococci (1961, 21).
- 3004 Streptomyces albus (Rossi-Doria) Waksman and Henrici 1943
Type species of the genus Streptomyces Waksman and Henrici 1943.
Received from S.A. Waksman (Agricultural Experiment Station, New Brunswick, New Jersey) in 1923; replacement received in 1944. Suggested as the neotype culture by Lyons and Pridham (1962, 371).

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