

BIBLIOGRAPHY

MICHAEL HEIDELBERGER

1. On the nature of certain sodium-uranium compounds. F.J.Metzger and Michael Heidelberger. J.Am.Chem. Soc., 31, 1040 (1909)
2. The volumetric determination of cerium in cerite and monazite. F.J.Metzger and Michael Heidelberger. ibid., 32, 642 (1910)
3. Dissertation: Phthalones in the quinazolone series, and their derivatives. Columbia University, New York, 1911.
4. Researches on quinazolines (28" paper). On 4-quinazoline-2-phthalones and certain of their derivatives. Marston T. Bogert and Michael Heidelberger. J.Am.Chem. Soc., 34, 183 (1912)
5. Zur Kenntniss des Cyclo-octatetraens. Richard Willstätter and Michael Heidelberger. Ber. d. Deut. Chem. Ges., 46, 517 (1913)
6. Mercury derivatives of aromatic amines. I. Structure of primary and secondary aminophenylmercuric compounds. Walter A. Jacobs and Michael Heidelberger. Proc. Nat. Acad. Sci., 1, 195 (1915)
7. On a new group of bactericidal substances obtained from hexamethylenetetramine. Walter A. Jacobs and Michael Heidelberger. Proc. Nat. Acad. Sci., 1, 226 (1915)
8. Mercury derivatives of aromatic amines. I. Contribution to the structure of primary and secondary p-aminophenylmercuric compounds. W.A.Jacobs and Michael Heidelberger. J. Biol. Chem., 20, 513 (1915)
- 9-16. The quaternary salts of hexamethylenetetramine.
 - I.. Substituted benzyl halides and the hexamethylenetetraminium salts derived therefrom.
 - II. Monohalogenacetyl-benzylamines and their hexamethylenetetraminium salts.
 - III. Monohalogenacetylated aromatic amines and their hexamethylenetetraminium salts.
 - IV. Monohalogenacetylated simple amines, ureas, and urethanes, and the hexamethylenetetraminium salts derived therefrom.
 - V. Monohalogenacetyl derivatives of amino-alcohols and the hexamethylene-tetraminium salts derived therefrom.
 - VI. Halogenethyl ethers and esters and their hexamethylenetetraminium salts.
 - VII. Halogen derivatives of aliphatic-aromatic ketones and their hexamethylene-tetraminium salts.
 - VIII. Miscellaneous substances containing aliphatically bound halogen, and the hexamethylenetetraminium salts derived therefrom.Walter A. Jacobs and Michael Heidelberger. J. Biol. Chem., 20: 659, 685; 21:103, 145, 403, 439, 455, 465 (1915).
17. The bactericidal properties of the quaternary salts of hexamethylenetetramine.
 - II. The relation between constitution and bactericidal action in the substituted benzylhexamethylenetetramium salts. W. A. Jacobs, Michael Heidelberger and Harold L. Amoss. J. Exp. Med., 23:569 (1916)
18. The bactericidal properties of the quaternary salts of hexamethylenetetramine.
 - III. The relation between constitution and bactericidal action in the quaternary salts obtained from halogenacetyl compounds. W.A.Jacobs, Michael Heidelberger and Carroll G. Bull. J. Exp. Med., 23:577 (1916)

19. The ferrous sulfate and ammonia method for the reduction of nitro- to amino-compounds. W. A. Jacobs and Michael Heidelberger. J.Am.Chem. Soc., 39:1435 (1917)
20. Methods for the acetylation of aromatic amino compounds and ureas, with especial reference to chloroacetylation. W. A. Jacobs and Michael Heidelberger. Ibid., 39:1439 (1917)
21. Unsymmetrical derivatives of aromatic diamines. W. A. Jacobs and Michael Heidelberger. Ibid., 39:1447 (1917)
22. The preparation of b-chloro and b-bromopropionic acids. W. A. Jacobs and Michael Heidelberger. Ibid., 39:1465 (1917)
23. On nitro and aminophenoxyacetic acids. W. A. Jacobs and Michael Heidelberger. Ibid., 39:2188 (1917)
24. Amides, uramino compounds and ureides containing an aromatic nucleus. W. A. Jacobs and Michael Heidelberger. Ibid., 39:2418 (1917)
25. On nitro and aminoaryl arsonic acids. W. A. Jacobs, Michael Heidelberger and Ida P. Rolf. J. Am. Chem. Soc., 40:1580 (1918)
- 26-32. U. S. Patents 1,280, 119-24; 1, 280,126. Arsenical compounds. W.A.Jacobs, Wade H. Brown, Michael Heidelberger and Louise Pearce.
33. On certain aromatic amides and chloracetyl derivatives. W. A. Jacobs, Michael Heidelberger and Ida P. Rolf. J. Am. Chem. Soc., 41:458 (1919)
34. On the isomeric hydroxyphenylarsonic acids and the direct arsenation of phenol. W. A. Jacobs and Michael Heidelberger. Ibid., 41:1440 (1919)
35. Certain amino and acylamino phenol ethers. Michael Heidelberger and W. A. Jacobs. Ibid., 41:1450 (1919)
- 36-43. Aromatic arsenic compounds:
 - I. A plan of procedure for the synthesis of arsenicals for chemotherapeutic research.
 - II. The amides and alkyl amides of N-arylglycine aronic acids.
 - III. The ureides and b-substitute ureides of N-arylglycine aronic acids.
 - IV. Aromatic amides of N-arylglycine aronic acids.
 - V. N-substituted glycyalsanilic acids.
 - VI. N-(Phenyl-4-arsonic acid)-x-phenylglycine and its amides.
 - VII. Substituted benzyl, phenoxyethyl, and phenacylsanilic acids.
 - VIII. The amides of (4-arsonic acid)-phenoxyacetic acid and the isomeric phenoxyacetyl-arsanilic acids.W. A. Jacobs and Michael Heidelberger. Ibid., 41:1581, 1587, 1600, 1610, 1809, 1822, 1826, 1834 (1919)
- 44, 45. Aromatic arsenic compounds. IX. Diazoamino compounds of arsanilic acid and its derivatives. X. Azo dyes derived from arsanilic acid. W. A. Jacobs and Michael Heidelberger. Ibid., 43:1633, 1646 (1921)
- 46-49. Syntheses in the cinchona series.
 - I. The simpler cinchona alkaloids and their dihydro- derivatives.
 - III. Azo-dyes derived from hydrocupreine and hydrocupreidine.
 - V. Dihydrodesoxyquinine and dihydrodesoxyquinidine and their derivatives.
 - IX. Certain quinine and benzoyl-cinchona salts, crystalline ethyldihydrocupreine (optochin) base, and other derivatives. Michael Heidelberger and W. A. Jacobs. J. Am. Chem. Soc., 41:817, 2131 (1919); 42:1489 (1920); 44:1091, 1098 (1922)

- 50-54. Syntheses in the cinchona series.
II. Quaternary salts.
IV. Nitro and amino derivatives of the alkaloids.
VI. Aminoazo and hydroxyazo dyes derived from certain 5-amino cinchona alkaloids and their quinoline analogs.
VII. 5,8-diamino-dihydroquinine and 5,8-diamino-6-methoxyquinoline and their conversion into the corresponding aminohydroxy and dihydroxy bases.
VIII. The hydrogenation of dihydrocinchonine, cinchonine, and dihydroquinine.
W.A.Jacobs and Michael Heidelberger. *ibid.*, 41:2090 (1919); 42: 1481, 2278 (1920); 44: 1073, 1079 (1922).
55. Certain triphenylmethane dyes. W. A. Jacobs and Michael Heidelberger. *ibid.*, 44:2626 (1922).
56. Strophanthin. I. Strophanthidin. W. A. Jacobs and Michael Heidelberger. *J. Biol. Chem.*, 54: 253 (1922)
57. A method for the preparation of crystalline oxyhemoglobin. Michael Heidelberger. *J. Biol. Chem.*, 53:31 (1922)
58. Studies of gas and electrolyte equilibria in the blood. III. The alkali-binding and buffer values of oxyhemoglobin and reduced hemoglobin. D. D. VanSlyke, A. B. Hastings, Michael Heidelberger and J. M. Neill. *J. Biol. Chem.*, 54: 481 (1922)
- B6tk*
59. Book: An advanced laboratory manual of organic chemistry. Chemical Catalogue Co., New York 1923.
60. Studies of gas and electrolyte equilibria in the blood. IV. The acid properties of reduced and oxygenated hemoglobin. A. B. Hastings, D. D. VanSlyke, J. M. Neill, Michael Heidelberger and C. R. Harington. *ibid.*, 60: 89 (1924)
61. Studies of gas and electrolyte equilibria in the blood. VII. The effect of carbon monoxide on the acidity of hemoglobin. A. B. Hastings, J. Sendroy, Jr., C. D. Murray, and Michael Heidelberger. *ibid.*, 61: 317 (1924)
62. On the antigenic properties of hemoglobin. Michael Heidelberger and Karl Landsteiner. *J. Exp. Med.*, 38, 561 (1923)
63. Differentiation of oxyhemoglobins by means of mutual solubility tests. Karl Landsteiner and Michael Heidelberger. *J. Gen. Physiol.*, 6: 131 (1923)
64. The soluble specific substance of pneumococcus. Michael Heidelberger and O. T. Avery. *J. Exp. Med.*, 38: 73 (1923)
65. Immunological relationships of cell constituents of pneumococcus. O. T. Avery and Michael Heidelberger. *ibid.*, 38: 81 (1923)
66. The soluble specific substance of pneumococcus. Second paper. Michael Heidelberger and Oswald T. Avery. *ibid.*, 40: 301 (1924)
67. Immunological relationships of cell constituents of pneumococcus. Second paper. O. T. Avery and Michael Heidelberger. *ibid.*, 42:367 (1925)
68. The soluble specific substance of pneumococcus. Third paper. Michael Heidelberger, W. F. Goebel, and Oswald T. Avery. *ibid.*, 42: 727 (1925)
69. The soluble specific substance of a strain of Friedlander's bacillus. I. Michael Heidelberger, W. F. Goebel, and O. T. Avery. *ibid.*, 42: 701 (1925)

70. The soluble specific substance of Friedlander's bacillus. II. Chemical and immunological relationships of pneumococcus Type II and a strain of Friedlander's bacillus. O.T. Avery, M. Heidelberger and W.F. Goebel. *ibid.*, 42: 709 (1925)
71. The soluble specific substance of pneumococcus. IV. On the nature of the specific polysaccharide of Type III pneumococcus. M. Heidelberger and W.F. Goebel. *J. Biol. Chem.*, 70: 613 (1926)
72. The soluble specific substance of pneumococcus. V. On the chemical nature of the aldobionic acid from the specific polysaccharide of Type III pneumococcus. M. Heidelberger and W.F. Goebel. *ibid.*, 74: 613 (1927)
73. The chemical nature of immune substances. *Physiol. Revs.*, 7: 107 (1927)
74. Immunologically specific polysaccharides. *Chem. Revs.*, 3: 403 (1927)
75. Immunological relationships of the typhoid bacillus. G. Shwartzman, D.J. Cohn and M. Heidelberger. *J. Biol. Chem.*, 78: 76 (1928)
76. Behavior of the substance active in pernicious anemia on dialysis of liver extracts. *J. Biol. Chem.*, 78, 76 (1928) N. Rosenthal, D.J. Cohn, J.S. Friedman, and M. Heidelberger
77. Reaction between proteins and diazotized aromatic amines in neutral solution. M. Heidelberger and F.E. Kendall. *Proc. Soc. Exp. Biol. and Med.*, 26: 482 (1929)
78. Sarmentocymarin and Sarmentogenin. W.A. Jacobs and M. Heidelberger. *J. Biol. Chem.*, 81: 705 (1929)
79. A crystalline aldobionic acid derived from gum arabic. M. Heidelberger and F.E. Kendall. *J. Biol. Chem.*, 84: 639-653 (1929)
80. A quantitative study of the precipitin reaction between Type III pneumococcus polysaccharide and purified homologous antibody. M. Heidelberger and F.E. Kendall. *J. Exp. Med.*, 50: 809-823 (1929) 547
81. Le déplacement de la toxine des mélanges neutralisées de toxine-antitoxine par la "toxoïde" ou anatoxine. *Comptes Rendus des Séances de la Société de Biologie*, 104: 37 (May 3, 1930)
The displacement of toxin from neutralized toxin-antitoxin mixtures by "toxoid" or anatoxin. M. Heidelberger and F.E. Kendall. *Science*, 71: 511 (May 16, 1930)
82. Quantitative studies on the precipitin reaction. Data on a protein-antibody system. *Science*, 72: 252 (Sept. 5, 1930) F.E. Kendall and M. Heidelberger
83. Quantitative studies on the precipitin reaction. The amount of circulating precipitin following the injection of a soluble antigen. F.E. Kendall and M. Heidelberger. *Science*, 72: 253 (Sept. 5, 1930)
84. Specific precipitation and mouse protection in Type I anti-pneumococcus sera. M. Heidelberger, F.E. Kendall and R.H.P. Sia. *J. Exp. Med.*, 52: 477 (Oct. 1930)
85. Specific and non-specific polysaccharides of Type IV pneumococcus. M. Heidelberger and F.E. Kendall. *J. Exp. Med.*, 53: 625-639 (May 1931)

86. Protein fractions of a scarlatinal strain of *Streptococcus hemolyticus*. M. Heidelberger and F.E. Kendall. J. Exp. Med., 54: 515-531 (Oct. 1931)
87. Precipitin formation in *S. viridans* subacute endocarditis. D. Seegal, E. Jost, M. Heidelberger. Proc. Soc. Exp. Biol. and Med., 29: 939-942 (1932)
88. Immunochemistry. Ann. Rev. Biochem., 1: 655-673 (1932)
89. Protein fractions of the timothy grass bacillus. A.E.O. Menzel and M. Heidelberger. Proc. Soc. Exp. Biol. and Med., 29: 512-513 (1932)
90. Specific and non-specific cell polysaccharides of the human type of tubercle bacillus, H₃₇. A.E.O. Menzel and M. Heidelberger. Proc. Soc. Exp. Biol. and Med., 29: 631-633 (1932)
91. Some physico-chemical properties of specific polysaccharides. M. Heidelberger and F.E. Kendall. J. Biol. Chem., 95: 127-144 (Feb. 1932)
92. Quantitative studies on the precipitin reaction. The determination of small amounts of a specific polysaccharide. M. Heidelberger and F.E. Kendall, J. Exp. Med., 55: 555-561 (Apr. 1932)
93. The molecular weight of specific polysaccharides. J. Biol. Chem., 96: 541-558 (May 1932) M. Heidelberger and F.E. Kendall,
94. *Streptococcus scarlatiniae*. D. Seegal and M. Heidelberger. J.A.M.A., 100: 186 (Jan. 21, 1933)
95. Studies on the precipitin reaction. Precipitating haptens; species differences in antibodies. M. Heidelberger and F.E. Kendall. J. Exp. Med., 57: 373-379 (Mar. 1933)
96. The preparation and properties of thyroglobulin. M. Heidelberger and W.W. Palmer, J. Biol. Chem., 101: 433-439 (July 1933)
97. Quantitative studies on the precipitin reaction. Antibody production in rabbits injected with an azo protein. M. Heidelberger, F.E. Kendall and C.M. SooHoo, J. Exp. Med., 58: 137-152 (Aug. 1933)
98. Contributions of chemistry to the knowledge of immune processes. M. Heidelberger. The Harvey Lectures, 1933, 28: 184-201; also in Medicine, 1933, 12: 279-295.
99. Immunochemistry. Ann. Rev. Biochem., vol. 2, 503-520, 1933.
100. Precipitins against fractions of streptococci in hemolytic streptococcus disease, glomerular nephritis, rheumatoid arthritis and *S. viridans* endocarditis. D. Seegal, E.L. Jost, J.D. Lyttle and M. Heidelberger. Proc. Soc. Exp. Biol. and Med., 30: 582-585 (1933)
101. Protein fractions of the human strain (H₃₇) of tubercle bacillus. A.E.O. Menzel and M. Heidelberger. J. Biol. Chem., 104: 655-665 (Mar. 1934)
102. Quantitative studies on the precipitin reaction. The role of multiple reactive groups in antigen-antibody union as illustrated by an instance of cross-precipitation. M. Heidelberger and F.E. Kendall. J. Exp. Med., 59: 519-528 (Apr. 1934)

103. The formation of precipitin for the Group A specific carbohydrate of *Streptococcus hemolyticus* in rabbits injected intravenously and subcutaneously. D. Seegal, E.L. Jost and M. Heidelberger. *J. Immunology*, 27: 211-214 (Aug. 1934)
104. Chemical studies in bacterial agglutination. I. A micro method for the quantitative estimation of agglutinins. E.A. Kabat and M. Heidelberger. *Proc. Soc. Exp. Biol. and Med.*, 31: 595-598 (1934)
105. Chemical studies on bacterial agglutination. I. A method. M. Heidelberger and E.A. Kabat. *J. Exp. Med.*, 60: 643-653 (Nov. 1934)
106. The molecular weight of thyroglobulin. T. Svedberg and M. Heidelberger. *Science*, 80: 2079, 414 (Nov. 2, 1934)
107. Immunochemistry. *Textbook of biochemistry*, Harrow, Sherwin. Saunders, Philadelphia 1935.
108. Immunochemistry. *Ann. Rev. Biochem.*, 4: 569-592 (1935)
109. The precipitin reaction between Type III pneumococcus polysaccharide and homologous antibody. II. Conditions for quantitative precipitation of antibody in horse sera. M. Heidelberger and F.E. Kendall. *J. Exp. Med.*, 61: 559-562 (Apr. 1935)
110. III. A quantitative study and a theory of the reaction mechanism. *ibid.*, 563-591 (1935)
111. A quantitative theory of the precipitin reaction. II. A study of an azo-protein-antibody system. M. Heidelberger and F.E. Kendall. *J. Exp. Med.*, 62: 467-483 (Oct. 1935)
112. A quantitative theory of the precipitin reaction. III. The reaction between crystalline egg albumin and α homologous antibody. M. Heidelberger and F.E. Kendall. *J. Exp. Med.*, 62: 697-720 (Nov. 1935)
113. A complex polysaccharide fraction from the cells of the human type of tubercle bacillus, H₃₇. A.E.O. Menzel and M. Heidelberger. *Proc. Soc. Exp. Biol. and Med.*, 32: 1150 (1935)
114. The molecular weight and isoelectric point of thyroglobulin. M. Heidelberger and K.O. Pedersen. *J. Gen. Physiol.*, 19: 95-108 (Sept. 20, 1935)
115. Preparative changes necessitated by a quantitative study of precipitating power of pneumococcus polysaccharides. F.E. Kendall, H.W. Scherp and M. Heidelberger. *Proc. Soc. Exp. Biol. & Med.*, 33: 188 (Oct. 1935)
116. Carbohydrate-containing proteins of the hemolytic streptococcus. M. Heidelberger and F.E. Kendall. *J. Immunol.*, 30: 267-273 (1936)
117. Chemical studies on bacterial agglutination. II. The identity of precipitin and agglutinin. M. Heidelberger and E.A. Kabat. *J. Exp. Med.*, 63: 737-746 (May 1936)
118. Quantitative studies on the precipitin reaction. Effect of salts on the reaction. M. Heidelberger, F.E. Kendall and T. Teorell. *J. Exp. Med.*, 63: 819-826 (June 1936)
119. Ultracentrifugal and electrophoretic studies on antibodies. K.O. Pedersen, A. Tiselius and M. Heidelberger. *Nature*, 138: 165 (July 1936)

120. Quantitative studies on antibody purification. I. The dissociation of precipitates formed by pneumococcus specific polysaccharides and homologous antibodies. M. Heidelberger and F.E. Kendall. *J. Exp. Med.*, 64:161-172 (Aug. 1936)
121. The specific polysaccharides of Types I, II, and III pneumococcus. A revision of methods and data. M. Heidelberger, F.E. Kendall and H.W. Scherp. *J. Exp. Med.*, 64:559-572 (Oct. 1936)
122. The structure of natural and synthetic antigens. M. Heidelberger. *Science*, 84:2188:498 (Dec. 1936)
123. A serologically inactive polysaccharide elaborated by mucoid strains of Group A hemolytic streptococcus. F.E. Kendall, M.H. Dawson and M. Heidelberger. *J. Biol. Chem.*, 118:61-69 (March 1937)
124. Specific and non-specific cell polysaccharides of a human strain of tubercle bacillus, H₃₇. A.E.O. Menzel and M. Heidelberger. *J. Biol. Chem.*, 118:79-100 (March 1937)
125. The molecular weight of antibodies. M. Heidelberger and K.O. Pedersen. *J. Exp. Med.*, 65:393-414 (March 1937)
126. A quantitative study of the cross reaction of Types III and VIII pneumococci in horse and rabbit antisera. M. Heidelberger, E.A. Kabat, and D.L. Shrivastava. *J. Exp. Med.*, 65:487-496 (Apr. 1937)
127. A quantitative theory of the precipitin reaction. IV. The reaction of pneumococcus specific polysaccharides with homologous rabbit antisera. M. Heidelberger and F.E. Kendall. *J. Exp. Med.*, 65:647-660 (May 1937)
128. Chemical studies on bacterial agglutination. III. A reaction mechanism and a quantitative theory. M. Heidelberger and E.A. Kabat. *J. Exp. Med.*, 65:885-902 (June 1937)
129. A quantitative theory of the precipitin reaction. V. The reaction between crystalline horse serum albumin and antibody formed in the rabbit. E.A. Kabat and M. Heidelberger. *J. Exp. Med.*, 66:229-250 (Aug. 1937)
130. A quantitative theory of the precipitin reaction. VI. The reaction between mammalian thyroglobulins and antibodies to homologous and heterologous preparations. H.E. Stokinger and M. Heidelberger. *J. Exp. Med.*, 66:251-272 (1937)
131. Quantitative studies on antibody purification. II. The dissociation of antibody from pneumococcus specific precipitates and specifically agglutinated pneumococci. M. Heidelberger and E.A. Kabat. *J. Exp. Med.*, 67:181-199 (Feb. 1938)
132. 9715-P. Preparation and administration of globulin from rabbit antipneumococcus sera. J.C. Turner, M. Heidelberger and C.M. SooHoo. *Proc. Soc. Exp. Biol. & Med.*, 37:734-736 (1938)
133. The molecular composition of specific immune precipitates from rabbit sera. M. Heidelberger, *J. Am. Chem. Soc.*, 60:242 (1938)
134. Chemical studies on the tubercle bacillus and other acid-fast bacilli. "Tuberculosis and Leprosy", the mycobacterial diseases. Symposium series, Am. Assoc. for Adv. of Science, 1938, vol. 1. A.E.O. Menzel and M. Heidelberger.

135. Chemical studies on bacterial agglutination. IV. Quantitative data on pneumococcus R (Dawson S)-anti-R (S) systems. E. A. Kabat and M. Heidelberger. J. Exp. Med., 67:545-550 (April 1938)
136. Cell protein fractions of bovine and avian tubercle bacillus strains and of the timothy grass bacillus. A.E.O.Menzel and M. Heidelberger. J. Biol. Chem., 124:301-7 (June 1938)
137. Protein fractions of the human strain, H-37, of tubercle bacillus. II. A.E.O.Menzel and M. Heidelberger. J. Biol. Chem., 124:89-101 (June 1938)
138. Les aspects chimiques de la fonction antigène et leurs rapports avec les agents infectieux. M. Heidelberger. Revue d'Immunologie, 4:293-303 (Juillet 1938)
139. Relation of proteins to immunity. Chapt. XVII, The Chemistry of the Amino Acids, edited by C.L.A.Schmidt. C.C.Thomas, Springfield Ill., 1938.
140. Quantitative studies on antibody purification. III. The reaction of dissociated antibody with specific polysaccharide, and the effect of formaldehyde. Pierre Grabar and H. P. Treffers and M. Heidelberger. J. Exp. Med., 68:913-922 (Dec. 1938)
141. Protein constitution and immunological behavior. M. Heidelberger. Cold Spring Harbor Symposia on Quantitative Biology, 6:369-375 (1938)
142. Specific and non-specific cell polysaccharides of a bovine strain of tubercle bacillus. A.E.O.Menzel and M. Heidelberger. J. Biol. Chem., 127:221-236 (Jan. 1939)
143. On the structure of thyroglobulin. E. Brand and B. Kassall and M. Heidelberger. J. Biol. Chem., 128 (1939) Proc. Soc. Biol. Chemists, XI.
144. Chemical aspects of the precipitin and agglutinin reactions. M. Heidelberger. Chem. Reviews, 24:323-343 (Apr. 1939)
145. Quantitative absolute methods in the study of antigen-antibody reactions. M. Heidelberger. Bact. Reviews, 3:49-95 (June 1939)
Proteins fractions of a strain of Group "A" hemolytic streptococci. III. M. Heidelberger & H.W.Scherp.
146. A quantitative theory of the precipitin reaction. VII. The egg albumin- antibody reaction in antisera from the rabbit and horse. H.P.Treffers, J. Immuno^{H.P.Treffers} M. Mayer and M. Heidelberger. J. Exp. Med., 71:271-282 (Feb. 1940) 37:563-5
147. Chemical studies on bacterial agglutination. V. Agglutinin and precipitin content of antisera to haemophilus influenzae, Type b. H.A.Alexander and M. Heidelberger. J. Exp. Med., 71:1-11 (Jan. 1940)
148. A quantitative absolute method for the estimation of complement (Alexin). M. Heidelberger. Science, 92:2397:534-535 (Dec. 6 1940)
149. Chapter: Recent chemical trends in the study of immunity, pp. 139-156 in Chemistry and Medicine, edited by M.B.Visscher, Univ. of Minnesota Press, Minneapolis, 1940.
150. Specific and non-specific cell polysaccharides of an avian strain of tubercle bacillus. S.A.Karjala and M. Heidelberger. J. Biol. Chem., 137:189-203 (Jan. 1941)

151. Quantitative experiments with antibodies to a specific precipitate. I. H.P.Treffers and M. Heidelberger. J. Exp. Med., 73:125-140, 1941 (Jan.)
152. Quantitative experiments with antibodies to a specific precipitate. II. H. P. Treffers and M. Heidelberger. J. Exp. Med., 73:293-297, 1941 (Feb.)
153. Phosphorylated egg albumin. B. Davis, H. P. Treffers, and M. Heidelberger. J. Am. Chem. Soc., 63:498-503, (1941)
154. Quantitative chemical studies on complement or alexin. I. A method. M. Heidelberger. J. Exp. Med., 73:681-694 (June 1941)
155. Quantitative chemical studies on complement or alexin. II. The interrelation of complement with antigen-antibody compounds and with sensitized red cells. A.J.Weil, H.P.Treffers and M. Heidelberger. J. Exp. Med., 75:695-709 (June 1941)
156. Quantitative chemical studies on complement or alexin. III. Uptake of complement nitrogen under varying experimental conditions. M. Rocha e Silva, M. M. Mayer, and M. Heidelberger. J. Exp. Med., 74:359-367 (Oct. 1941)
157. Chemical studies on bacterial agglutination. VI. The agglutinin content of antisera to hemolytic streptococci. S.D.Henriksen and M. Heidelberger. J. Exp. Med., 74:105-114 (Aug. 1941)
158. Proteic fractions of a strain of Group A hemolytic streptococcus. IV. Azo dyes containing hemolytic streptococcal protein. S.D.Henriksen and M. Heidelberger. J. Immunol., 42:181-186 (Oct. 1941)
159. Fractionation of a Type I strain of Group A hemolytic streptococci. S. D. Henriksen and M. Heidelberger. J. Immunol., 42:187-198 (Oct. 1941)
160. A further study of the cross reaction between the specific polysaccharides of Types III and VIII pneumococci in horse antisera. E.A.Kabat and M. M. Mayer and M. Heidelberger, J. Exp. Med., 75:35-47 (Jan. 1942)
161. Quantitative experiments with antibodies to a specific precipitate. III. Antigenic properties of horse serum fractions isolated by electrophoresis and by ultracentrifugation. H.P.Treffers and D.H.Moore and M. Heidelberger. J. Exp. Med., 75:135-150 (Feb. 1942)
162. Quantitative chemical studies on complement or alexin. IV. Addition of human complement to specific precipitates. M.M.Mayer and M.Heidelberger. J. Exp. Med., 75:285-295, (March 1942)
163. Quantitative chemical studies on hemolysins. I. The estimation of total antibody in antisera to sheep erythrocytes and stromata. H.P.Treffers and M. Heidelberger. J. Gen. Physiol., 25:523-531. (Mar. 20, 1942)
164. Immunochemistry. Annals of The New York Academy of Sciences. Introduction, by M. Heidelberger, 43:33 (April 30, 1942)
165. Velocity of combination of antibody with specific polysaccharides of pneumococcus. M. M. Mayer and M. Heidelberger. J. Biol. Chem., 143:567-574, (May 1942).
166. The interaction of the blood proteins of the rat with dietary nitrogen. R. Schoenheimer, S. Ratner, D. Rittenberg and M. Heidelberger. J. Biol. Chem., 144:541-544 (July 1942)

165. Velocity of combination of antibody with specific polysaccharides of pneumococcus. M. M. Mayer and M. Heidelberger. J. Biol. Chem., 143: 567-574, (May 1942)
166. The interaction of the blood proteins of the rat with dietary nitrogen. R. Schoenheimer, S. Ratner, D. Rittenberg and M. Heidelberger. J. Biol. Chem., 144:541-544 (July 1942)
167. The interaction of antibody protein with dietary nitrogen in actively immunized animals. R. Schoenheimer, S. Ratner, D. Rittenberg and M. Heidelberger. J. Biol. Chem., 144:545-554 (July 1942)
168. Behavior of antibody protein toward dietary nitrogen in active and passive immunity. H. P. Treffers, R. Schoenheimer, S. Ratner, D. Rittenberg and M. Heidelberger. J. Biol. Chem., 144:555-562 (July 1942)
169. Oxidized cotton, an immunologically specific polysaccharide. G. L. Heidelberger and M. Heidelberger. Proc. Nat. Acad. Sci., 28:516-518 (Dec 1942)
G. L. Heidelberger
170. Newer concepts of infection and immunity, and chemistry's part in their development, I. M. Heidelberger. J. Mt. Sinai Hosp., 9:893-896 (Jan. 1943)
171. Newer concepts of infection and immunity, and chemistry's part in their development, II. M. Heidelberger. J. Mt. Sinai Hosp., 9:897-900 (Jan. 1943)
172. Quantitative micro-estimation of antibodies in the sera of man and other animals. C. F. C. MacPherson and M. Heidelberger. Science, 97: 2522:405-406 (Apr. 30, 1943)
173. Immunology as a tool in biological research. Immunochemical approaches to biological problems. M. Heidelberger. The American Naturalist, 77:193-198 (May, 1943)
174. Karl Landsteiner, An Obituary. Science, 98:233 (1943)
175. Relation of amino acids and their derivatives to immunity. M. Heidelberger. (Chapter VII in Outline of the amino acids and proteins. Melville Sahyun, editor. Reinhold Publ. Corp., New York, 1944)
176. Relation of proteins to immunity. (Chapter XVII, p. 1258-62, Addendum, 2nd edition of The Chemistry of the Amino Acids and Proteins. Carl L. A. Schmidt, editor, C. C. Thomas, Springfield, Ill., publishers, 1944)
177. The protective or curative element in Type B H influenzae rabbit serum. H. E. Alexander, M. Heidelberger and G. Leidy. The Yale J. Biol. and Med., 16:425-434 (May 1944)
178. The immune response of human beings to brief infections with pneumococcus. M. Heidelberger and D. G. Anderson. J. Clin. Investgtn., 23:607-612 (Sep. 1944)
179. Normal human stromata as antigens for complement fixation in the sera of patients with relapsing vivax malaria. M. Heidelberger and M. M. Mayer. Science, 100:2599:359-360 (Oct. 20, 1944)

180. Complement titration in human sera. I. M. Heidelberger. J. Mt. Sinai Hosp., 8:622 (1942)
181. Complement titration in human sera. II. M. Heidelberger, O. G. Bier, G. Leyton and M. M. Mayer. J. Mt. Sinai Hosp., 12:285 (May 1945)
182. A comparison of human and guinea pig complements and their component fractions. O. G. Bier, G. Leyton, M. M. Mayer and M. Heidelberger. J. Exp. Med., 81:449-468 (May 1945)
183. Denatured egg albumin. I. The preparation and purification of crystalline egg albumin denatured in various ways. C. F. C. Mac Pherson and M. Heidelberger. J. Am. Chem. Soc., 67:574, (1945)
184. Denatured egg albumin. II. Viscosities, particle weights and electrophoretic mobilities of crystalline egg albumin denatured in various ways. C. F. C. MacPherson, M. Heidelberger and D. H. Moore. J. Am. Chem. Soc., 67:578 (1945)
185. Denatured egg albumin. III. Quantitative immunochemical studies on crystalline egg albumin denatured in various ways. C. F. C. Mac Pherson and M. Heidelberger. J. Am. Chem. Soc., 67:585 (1945)
186. Prevention of pneumococcal pneumonia by immunization with specific capsular polysaccharides. C. M. MacLeod, R. G. Hodges, M. Heidelberger and W. G. Bernhard. J. Exp. Med., 82:445 (Dec. 1945)
187. Book review: The specificity of serological reactions. Revised edition. Karl Landsteiner, M.D. with a chapter on Molecular structure and intermolecular forces, by Linus Pauling, reviewed by M. Heidelberger. J. Immunol., 51:427-428, (Dec. 1945)
188. The specific polysaccharides of Types A, B, C, D and F Hemophilus Influenzae. C. F. C. MacPherson, M. Heidelberger, H. E. Alexander and G. Leidy. J. Immunol., 52:207-219 (March 1946)
189. Antibody formation in volunteers following injection of pneumococci or their type-specific polysaccharides. M. Heidelberger, C. M. Mac Leod, S. J. Kaiser, and B. Robinson. J. Exp. Med., 83:303-320 (Apr. 1946)
190. Studies in Human Malaria. I. The preparation of vaccines and suspensions containing plasmodia. M. Heidelberger, M. M. Mayer and C. R. Demarest. J. Immunol., 52:325-330 (April 1946)
191. Studies in Human Malaria. II. Attempts to influence relapsing vivax malaria by treatment of patients with vaccine (Pl. vivax). M. Heidelberger, W. A. Coates, and M. M. Mayer. J. Immunol., 53:101-107 (May 1946)
192. Studies in Human Malaria. III. An attempt at vaccination of paretics against blood-borne infection with Pl. vivax. M. Heidelberger, C. Prout, J. A. Hindle, and A. S. Rose. J. Immunol., 53:109-112 (May 1946)
193. Studies in Human Malaria. IV. An attempt at vaccination of volunteers against mosquito-borne infection with Pl. vivax. M. Heidelberger and M. M. Mayer. J. Immunol., 53:113-118 (May 1946)

183. Denatured egg albumin. I. The preparation and purification of crystalline egg albumin denatured in various ways. C.F.C.MacPherson and M. Heidelberger. J. Am. Chem. Soc., 67:574, (1945)
184. Denatured egg albumin. II. Viscosities, particle weights and electrophoretic mobilities of crystalline egg albumin denatured in various ways. C.F.C.MacPherson, M. Heidelberger and D. H. Moore. J.Am.Chem. Soc., 67:578 (1945)
185. Denatured egg albumin. III. Quantitative immunochemical studies on crystalline egg albumin denatured in various ways. C.F.C.MacPherson and M. Heidelberger. J. Am. Chem. Soc., 67:585 (1945)
186. Prevention of pneumococcal pneumonia by immunization with specific capsular polysaccharides. C.M.MacLeod, R.G.Hodges, M. Heidelberger and W.G.Bernhard. J. Exp. Med., 82:445 (Dec. 1945)
187. Book review: The specificity of serological reactions. Revised edition. Karl Landsteiner, M.D. with a chapter on Molecular structure and intermolecular forces, by Linus Pauling, reviewed by M. Heidelberger. J. Immunol., 51:427-428, (Dec. 1945)
188. The specific polysaccharides of Types A, B, C, D and F Hemophilus Influenzae. C.F.C. MacPherson, M. Heidelberger, H. E. Alexander and G. Leidy. J. Immunol., 52:207-219 (March 1946)
189. Antibody formation in volunteers following injection of pneumococci or their type-specific polysaccharides. M. Heidelberger, C.M.MacLeod, S.J.Kaiser, and B. Robinson. J. Exp. Med., 83:303-320 (April 1946)
190. Studies in Human Malaria. I. The preparation of vaccines and suspensions containing plasmodia. M. Heidelberger, M. M. Mayer and C. R. Demarest. J. Immunol., 52:325-330 (April 1946)
191. Studies in Human Malaria. II. Attempts to influence relapsing vivax malaria by treatment of patients with vaccine (Pl. vivax). M. Heidelberger, W. A. Coates, and M. M. Mayer. J. Immunol., 53:101-107 (May 1946)
192. Studies in Human Malaria. III. An attempt at vaccination of paretics against blood-borne infection with Pl. vivax. M. Heidelberger, C. Prout, J. A. Hindle, and A. S. Rose. J. Immunol., 53:109-112 (May 1946)
193. Studies in Human Malaria. IV. An attempt at vaccination of volunteers against mosquito-borne infection with Pl. vivax. M. Heidelberger and M. M. Mayer. J. Immunol., 53:113-118 (May 1946)
194. Studies in Human Malaria. V. Complement-fixation reaction. M. Heidelberger and M. M. Mayer. J. Immunol., 54:89-102 (Sept. 1946)
195. The activating effect of magnesium and other cations on the hemolytic function of complement. M. M. Mayer, A. G. Osler, O. G. Bier, and M. Heidelberger. J. Exp. Med., 84:535-548 (Dec. 1946)
196. Spectrophotometric standardization of complement for fixation tests. M. M. Mayer, B. B. Eaton and M. Heidelberger. J. Immunol., 53:31-35 (May 1946)
197. Immunochemistry. M. Heidelberger. Chapter in Currents in Biochemical Research, Interscience Publishers, Inc., pp. 453-460, New York, 1946

198. Radio talk: Resistance to infectious disease. M. Heidelberger. U. S. Rubber Co., via Columbia Broadcasting System, Sunday Oct. 27, 1946. Also, in Chapter 12, p. 271, *The Scientists Speak*, ed. by Warren Weaver, Boni & Gaer, New York, 1947.
199. Complement: Immunity intensifier, diagnostic drudge, chemical curiosity. M. Heidelberger. *American Scientist*, 34:597-610 (Oct. 1946); *Science in Progress*, 5th Series, edited by Geo. A. Baitsell, Yale Univ. Press, New Haven, 1947.
200. Physical, chemical and immunological properties of phosphorylated crystalline horse serum albumin. M. M. Mayer and M. Heidelberger. *J. Am. Chem. Soc.*, 68:18-25 (1946).
201. Immunochemistry of antigens and antibodies. Chapter 5 in *Allergy in Theory and Practice*, by Robert A. Cooke, published by W. B. Saunders Co., Philadelphia 1947, pp. 81-99.
202. Antibody formation in men following injection of four type-specific polysaccharides of pneumococcus. M. Heidelberger, C. M. MacLeod, R. C. Hodges, W. G. Bernhard, and M. M. DiLapi. *J. Exp. Med.*, 85:227-230 (Mar. 1947).
203. A study of the purification and properties of ricin. E. A. Kabat, M. Heidelberger and A. E. Bezer. *J. Biol. Chem.*, 168:629-639 (May 1947).
204. Science, Freedom and Peace (Presidential address, Amer. Assoc. Immunologists). M. Heidelberger. *Federation Proceedings*, 6:2 (1947).
205. Antiproteins in horse sera. II. Antibodies to pneumococcus nucleoprotein and their reaction with antigen. M. Heidelberger. *J. Exp. Med.*, 86:77-81 (1947).
206. Antiproteins in horse sera. III. Antibodies to rabbit serum albumin and their reaction with antigen. H. P. Treffers, M. Heidelberger and J. Freund. *J. Exp. Med.*, 86:83-94 (Aug. 1947).
207. Antiproteins in horse sera. IV. Antibodies to rabbit serum globulin and their interaction with antigen. H. P. Treffers, M. Heidelberger, and J. Freund. *J. Exp. Med.*, 86:95-106 (Aug. 1947).
208. Quantitative studies of complement fixation. M. M. Mayer, A. G. Osler, O. G. Bier, and M. Heidelberger. *Proc. Soc. Exp. Biol. & Med.*, 65:66-68 (1947).
209. Quantitative studies on complement. Chapter in *Advances in Enzymology*, vol. 8, by M. Heidelberger and M. M. Mayer, pp. 71-115. edited by F. F. Nord. Interscience Publishers, Inc., New York, 1948.
210. Address in 1946; publication in 1948: *L'Immunité*. Proceedings, Congrès des Sciences Pastoraliennes Pour le Cinquantenaire de la Mort de Louis Pasteur 18-25 Novembre 1946. p. 142, with discussion. Comité du Cinquantenaire, Union Nationale des Intellectuels, Paris.
211. Introductory note, *Experimental Immunoochemistry*, E. A. Kabat and M. M. Mayer. C.C. Thomas, Springfield, Ill., 1948.
212. Fractionation and physical-chemical studies of a commercial preparation of the specific polysaccharide of Type I pneumococcus. R. A. Alberty and M. Heidelberger. *J. Am. Chem. Soc.*, 70:211-213 (1948).

213. The human antibody response to simultaneous injection of six specific polysaccharides of pneumococcus. M. Heidelberger, C. M. MacLeod, and M. M. DiLapi. J. Exp. Med., 68:369-372 (Sept. 1948)
214. Quantitative studies of complement fixation. I. A method. M. M. Mayer, A. G. Osler, O. G. Bier and M. Heidelberger. J. Immunol., 59:195-206 (June 1948)
215. Quantitative studies of complement fixation. II. Fixation of complement in the reaction between Type III pneumococcus specific polysaccharide and homologous antibody. A. G. Osler, M. M. Mayer and M. Heidelberger. J. Immunol., 60: 205-212 (Oct. 1948)
216. Quantitative studies of complement fixation. III. Homologous and cross-reactions in pneumococcal Type III and Type VIII systems. A. G. Osler and M. Heidelberger. J. Immunol., 60:317-325 (Nov. 1948)
217. Quantitative studies of complement fixation. IV. Homologous and cross-reactions in chicken and duck-egg albumin systems. A.G.Osler and M. Heidelberger. J. Immunol., 60:327-337 (Nov. 1948)
218. Measurement and preservation of antibodies in human sera. M. Heidelberger and M. M. DiLapi. J. Immunol., 61:153-159 (Feb. 1949)
219. Complement and its components in human cerebrospinal fluid. M. Heidelberger and R. H. Muller. J. Clin. Investgtn., 28:282-285 (March 1949)
220. The antibody response of rabbits to a single injection of Type I pneumococci. C. M. MacLeod, M. Heidelberger, B. Robinson, M. M. DiLapi, A. W. Walter and W. D. Sutliff. J. Immunol., 61:179-183 (1949)
221. Ivory Pawn in the Ivory Tower. M. Heidelberger. (Presidential Address, Amer. Assoc. Immunologists). Federation Proceedings, 8:579-580 (June 1949)
222. Recent quantitative studies on complement. (Section of Chapter V: Antigens and Serological Reactions, pp. 225-227) volume: Experimental Cell Research, published by Albert Bonnier, Stockholm, Academic Press, Inc., New York, 1949. (Proceedings of the Sixth International Congress of Experimental Cytology, Stockholm, July 10-17, 1947)
223. Improved methods for the preparation of the specific polysaccharides of pneumococcus. M. Heidelberger, C. M. MacLeod, H. Markowitz and A. S. Roe. J. Exp. Med., 91:341-349 (April 1950)
224. Effect of the removal of lipids on specific precipitation. R. C. Krueger and M. Heidelberger. J. Exp. Med., 92:383-391 (Nov. 1950)
225. Persistence of antibodies in human subjects injected with pneumococcal polysaccharides. M. Heidelberger, M. M. DiLapi, M. Siegel and A. W. Walter. J. Immunol., 65:535-541 (Nov. 1950)
226. Symposia on nutrition of the Robert Gould Research Foundation. Vol. II: Plasma Proteins. J. H. Youmans, editor, C. C. Thomas, Springfield, Ill. publisher, 1950. Pages 334-339: Quantitative immunochemical studies of antibody-containing serum fractions obtained by salt precipitation, alcohol precipitation or delipidation. M. Heidelberger and R. C. Krueger.

227. Antigenic potency in man of the specific polysaccharides of Types I and V pneumococcus and their products of alkaline degradation. M. Heidelberger, C. M. MacLeod and M. M. DiLapi. J. Immunol., 66:145-149 (Feb. 1951)
228. National Academy of Sciences Conference on Complement. Report. M. Heidelberger. Proc. Nat. Acad. Sci., 37:185-189 (March 1951)
229. The microestimation of antibodies with one milliliter samples of antisera of low antibody content. R. C. Krueger and M. Heidelberger. J. Lab. and Clin. Med., 38:157-160 (July 1951)
230. Absence of a prosthetic group in a type-specific polysaccharide of pneumococcus. M. Heidelberger, C. M. MacLeod, H. Markowitz and M. M. DiLapi. J. Exp. Med., 94:359-362 (Nov. 1951)
231. Pig complement and its fractionation for the production of reagents containing third component. J. Jonsen, W. Manski, and M. Heidelberger. J. Immunol., 67:385-391 (Nov. 1951)
232. Attempts at a quantitative estimation of the second component of complement. M. Heidelberger, J. Jonsen, B. H. Waksman, and W. Manski. J. Immunol., 67:449-462, (Dec. 1951)
233. The deamination of crystalline egg albumin. I. Preparation and properties of various soluble and denatured derivatives. P. H. Maurer and M. Heidelberger. J. Am. Chem. Soc., 73:2070-2072 (1951)
234. The deamination of crystalline egg albumin. II. Physical and chemical properties of the soluble and denatured derivatives. P. H. Maurer, M. Heidelberger and D. H. Moore. J. Am. Chem. Soc., 73:2072-2076 (1951)
235. The deamination of crystalline egg albumin. III. Quantitative immunochemical studies on crystalline egg albumin and its denatured and deaminated derivatives. P. H. Maurer and M. Heidelberger. J. Am. Chem. Soc., 73:2076-2080 (1951)
236. Antiproteins in horse sera. VI. Salt-fractionation of antibodies to the globulin of rabbit serum. R.C.Krueger and M. Heidelberger. Arch. Biochem. and Biophys., 34:135-145 (Nov. 1951)
237. Antiproteins in horse sera. VII. Fractionation by alcohol of antibodies to the globulin of rabbit serum. M. Heidelberger, R. C. Krueger and H. F. Deutsch. Arch. Biochem. and Biophys., 34:146-150 (Nov. 1951)
238. Chapter 5: Persistence of antibodies in man after immunization, pp. 90-101. M. Heidelberger, in The Nature and Significance of the Antibody Response. Symposium held at N.Y.Acad. Med., March 21-22, 1951. A. M. Pappenheimer, Jr., editor. Columbia Univ Press, New York 1952.
239. Talk via All-India Radio, Calcutta, Jan. 6, 1952. M. Heidelberger
240. The deamination of crystalline egg albumin. IV. Side reactions. P. H. Maurer and M. Heidelberger. J. Am. Chem. Soc., 74:1089-1090 (1952)

241. Quantitative immunochemical studies with the purified factor in mouse milk connected with mammary carcinoma. M. Heidelberger, S. Graff and C. D. Haagensen. J. Exp. Med., 95: 333-340 (1952).
242. Fixation of complement with the purified factor of mouse milk connected with mammary carcinoma. M. Heidelberger, M. A. Leon, S. Graff and C. D. Haagensen. J. Mt. Sinai Hosp., 19:210-211 (May) 1952
243. Immunochemistry. M. Heidelberger. Abstract of lecture delivered at Benares Hindu Univ., Jan. 8, 1952. The Pharm. Student, 2:18-19 (Jan.) 1953
244. Serological reactivity of synthetic polyglucoses. M. Heidelberger and A. C. Aisenberg. Proc. Nat. Acad. Sci., 39:453-459 (June) 1953
245. Introduction to session on protein configuration and biological reactivity. M. Heidelberger, page 3. Symposium on Mechanism of Enzyme Action, Wm. D. McElroy and Bentley Glass, editors. The Johns Hopkins Press, Baltimore, 1954.
246. Chemical modifications of the specific polysaccharide of Type III pneumococcus and their immunological effects. H. Markowitz and M. Heidelberger. J. Am. Chem. Soc., 76:1313 (Mar. 5) 1954
247. Chemical constitution of the specific polysaccharide of Type XVII pneumococcus. M. Heidelberger and Harold Markowitz. J. Am. Chem. Soc., 76: 1317 (Mar. 5) 1954
248. Glycogen, an immunologically specific polysaccharide. M. Heidelberger, A. C. Aisenberg and W. Z. Hassid. J. Exp. Med., 99:343 (Apr.) 1954
249. Bildung, Messung und Persistenz der Antikörper nach der Immunisierung von Menschen. von Prof. Dr. M. Heidelberger, New York Deutsche Klinische Wochenschrift, v. 79:17 (Apr. 23, 1954) 659-662. (lecture given on award of the von Behring Prize, Mar. 15, 1954 at Marburg/Lahn)
- also in Angewandte Chemie, 66, Jahrgang/Nr. 13/14, 1954, Seit. 403-406.
250. From Immunology to Quantitative Immunoochemistry. M. Heidelberger. Baskerville Chemical Journal of City College of N.Y., 5:1:3-5 (May) 1954. Sixth Bicentennial Science Lecture, Apr. 15, 1954.
251. Book review: Immunochemistry. Biochemical Society Symposia No. 10. Organized and edited by R. T. Williams, Cambridge Univ. Press, New York 1953. (review reprinted in Arch. Biochem. and Biophys., 50:1: 231-233 (May) 1954)

252. The precipitin reaction and studies of native and denatured proteins. M. Heidelberger. Chapter 2 in *Serological Approaches to Studies of Protein Structure and Metabolism*, W. H. Cole, Ed., Rutgers Univ. Press, New Brunswick, N. J., 1954.
253. Some unsolved problems in immunology. M. Heidelberger. Chapter 10 in *Perspectives and Horizons in Microbiology*, S. A. Waksman, Ed., Rutgers Univ. Press, New Brunswick, N. J., 1955.
254. The preparation and properties of fractions of pig complement. II. M. A. Leon, O. J. Plescia and M. Heidelberger. *J. Immunol.*, 74: 313-317 (Apr.) 1955.
255. Immunochemistry and the structure of lung galactan. M. Heidelberger, Z. Dische, W. B. Neely and M. L. Wolfrom. *Jour. Amer. Chem. Soc.*, 77: 3511-3514 (1955).
256. Immunological specificities involving multiple units of galactose. II. Michael Heidelberger. *Jour. Amer. Chem. Soc.*, 77: 4308-4311 (1955).
257. Lectures on immunochemistry. Michael Heidelberger. *Tokyo Jour. Med. Sciences*, 63: 143-216, October, 1955.
258. Fractions of pig complement. III. An inhibitor of active complement. Myron A. Leon, Otto J. Plescia and Michael Heidelberger. *J. Immunol.*, 76: 28-32, January, 1956.
259. The immunological specificity of Type II pneumococcus and its separation into partial specificities. Michael Heidelberger and John Adams. *J. Exp. Med.* 103: 189-197, February, 1956.
260. A kinetic method for the titration of complement. Otto J. Plescia, Kenneth Amiraian and Michael Heidelberger. *Arch. Biochem. Biophys.*, 62: 346-354, June, 1956.
261. Fractionation of gum arabic by chemical and immunological procedures. Michael Heidelberger, John Adams and Zacharias Dische. *J. Am. Chem. Soc.*, 78: 2853-2855, June 20, 1956.
262. Chemical constitution and immunological specificity. Michael Heidelberger. *Ann. Rev. Biochem.*, 25: 641-658, 1956.
263. Cross-reactions of antityphoid and antiparatyphoid B horse sera with various polysaccharides. Michael Heidelberger and Felix Cordoba. *J. Exp. Med.*, 104: 375-382, September, 1956.
- Zcek:* 264. Lectures in Immunochemistry. vii + 150 pp. Michael Heidelberger. Academic Press, New York, December, 1956.

265. Aspects of the immune hemolytic reaction. I. Dependence of the extent of hemolysis on concentrations of reactants. O. J. Plescia, K. Amiraian, and M. Heidelberger. *J. Immunol.*, 78: 147-150 (Mar.) 1957.
266. Aspects of the immune hemolytic reaction. II. Effect of composition of C' on concentration dependence in immune hemolysis. O. J. Plescia, K. Amiraian, and M. Heidelberger. *J. Immunol.*, 78: 151-155 (Mar.) 1957.
267. Aspects of the immune hemolytic reaction. III. Dependence of the extent of immune hemolysis upon temperature. G. Cavallo, O. J. Plescia, K. Amiraian, and M. Heidelberger. *Giornale di Microbiologia*, 3: 1-16, No. 1, 1957.
268. Cross reactions of polyglucoses in antipneumococcal sera. III. Reactions in horse sera. M. Heidelberger, H. Jahrmark, B. Björklund, and J. Adams. *J. Immunol.*, 78: 419-426 (June) 1957.
269. Cross reactions of polyglucoses in antipneumococcal sera. IV. Precipitation in rabbit antisera to Type IX and Type XII pneumococcus. M. Heidelberger, H. Jahrmark, and F. Cordoba. *J. Immunol.*, 78: 427-430 (June) 1957.
270. Cross reactions of polyglucoses in antipneumococcal sera. V. Precipitation by glycogens and limit dextrans. M. Heidelberger, B. Björklund, and J. Larner. *J. Immunol.*, 78: 431-434 (June) 1957.
271. The formation of antibodies in man after injection of pneumococcal polysaccharides. M. Heidelberger. *Proc. Nat. Acad. Sci.*, 43: 883-887, (Oct.) 1957. Correction: *ibid.* 44: 485, 1958.
272. Immunological specificities involving multiple units of galactose. III. M. Heidelberger, S. A. Barker, and B. Björklund. *J. Am. Chem. Soc.*, 80: 113-116 (Jan. 5) 1958.
273. Cross reactions of polyglucoses in antipneumococcal sera. VI. Precipitation of type VII and type III antisera by β -glucans. M. Heidelberger and P. A. Rebers. *J. Am. Chem. Soc.*, 30: 116-118, (Jan. 5) 1958.
274. Precipitation of the specific polysaccharide of Cryptococcus neoformans A by types II and XIV antipneumococcal sera. P. A. Rebers, S. A. Barker, M. Heidelberger, Z. Dische, and E. E. Evans. *J. Am. Chem. Soc.*, 80: 1135-1137 (Mar. 5) 1958.
275. Complex nature of the step in immune hemolysis involving third component of complement. K. Amiraian, O. J. Plescia, G. Cavallo, and M. Heidelberger. *Science*, 127: 239-240 (January 31) 1958.

276. Inactivation of complement by egg albumin-rabbit antiegg albumin.
I. Differences depending upon the species of complement. G. Cavallo,
O. J. Plescia and M. Heidelberger. *J. Immunol.*, 80: 249-253 (April)
1958.
277. Inactivation of complement by egg albumin-rabbit antiegg albumin.
II. Inhibition by serum constituents. G. Cavallo, O. J. Plescia
and M. Heidelberger. *J. Immunol.*, 80: 382-385 (May) 1958.
278. Aspects of ^{the} immune hemolytic reaction. IV. Inhibition of hemolysis
by the reaction products. O. J. Plescia, G. Cavallo, K. Amiraian
and M. Heidelberger. *J. Immunol.*, 80: 374-381 (May) 1958.
279. Immunopolysaccharides. Part X. The structure of the immunologically
specific polysaccharide of pneumococcus type XIV. S. A. Barker, M.
Heidelberger, M. Stacey, and D. J. Tipper. *J. Chem. Soc.*, 3468-3474,
(Oct.) 1958.
280. Cross-reactions of streptococcal A and V carbohydrates in Type II anti-
pneumococcal horse sera. M. Heidelberger and M. McCarty. *Proc. Nat.
Acad. Sci.*, 45: 235-238 (February) 1959.
281. The specific polysaccharide of Type VI pneumococcus. I. Preparation,
properties and reactions. P. A. Rebers and M. Heidelberger. *J. Am.
Chem. Soc.*, 81: 2415-2419 (May 20) 1959.
282. Episodes in immunochemistry. Chapter 3, pp. 42-53, in "Microbiology-
Yesterday and Today," Ed., Vernon Bryson, Inst. of Microbiology,
Rutgers, The State University (June) 1959.
283. All polysaccharides are immunologically specific. Proceedings of the
Fourth International Congress of Biochemistry, Vienna, 1958, Vol. I,
Symposium I, 52-66; I. U.B. Symposium Series, Vol. 3, Pergamon Press,
Ltd., London, New York, and Paris, 1959.
284. Aspects of the immune hemolytic reaction. V. Enhancement of guinea-
pig complement by carboxypeptidase A. K. Amiraian, O. J. Plescia
and M. Heidelberger. *Z. Immunitätsforsch.*, ~~Band~~ 118: 289-301,
Pillemer Memorial Issue, 1959.
285. The immunological specificity of Type II pneumococcus and its separation
into partial specificities. II. M. Heidelberger, *J. Exp. Med.*, 111:
33-43 (January 1) 1960.
286. Florence Rena Sabin. Philip D. McMaster and M. Heidelberger.
Biographical Memoirs, National Academy of Sciences, Vol. 34, 271-319.
Columbia Univ. Press, New York, 1960.

287. Structure and immunological specificity of polysaccharides. M. Heidelberger. Progress in the Chemistry of Organic Natural Products, 18: 503-536, 1960.
288. Immunochemistry of the pneumococcal types II, V, and VI. I. The relation of type VI to type II and other correlations between chemical constitution and precipitation in antisera to type VI. M. Heidelberger and P. A. Rebers. J. Bact., 80: 145-153 (August) 1960.
289. Introduction to session on microbial polysaccharides (p 1609); cross-reactions between pneumococci and salmonella and related microorganisms (pp. 1656-8) and other discussions. International symposium on the biochemistry of polysaccharides - structure and specificity (Gif-sur-Yvette, July 18-21, 1960. Bull. Soc. Chim. Biol. 42: (1960), No. 12, 1656-1660 publ. Apr. 1961. Also in International Symposia of the Centre National de la Recherche Scientifique, Vol. 100, 1961.
290. Complement. O. J. Plescia and M. Heidelberger. Chapter 12 in Functions of the Blood, ed. by R. G. Macfarlane and A. H. T. Robb-Smith, pp. 495-526. Academic Press, N. Y., 1961.
291. Immunochemical Approaches to Problems in Microbiology. International Symposium (Sept. 6-8, 1960) vol. ed. by M. Heidelberger, O. J. Plescia, and R. A. Day; also contains discussions by M. Heidelberger. Institute of Microbiology, Rutgers, The State University, New Brunswick, N. J., 1961.
292. Centenary Lecture: Chemical constitution and immunological specificity. M. Heidelberger. Proc. Chem. Soc., pp. 153-9 (May) 1961.
293. The specific polysaccharide of type VI pneumococcus. II. The repeating unit. P. A. Rebers and M. Heidelberger. J. Am. Chem. Soc., 83: 3056-9 (July 20) 1961.
294. Formal discussion of the papers of Drs. Witebsky, Rapport and Graf, and Rubin. M. Heidelberger. Cancer Res., 21: 1254-6 (October) 1961.
295. Immunochemistry of pneumococcal types II, V, and VI. II. Inhibition tests in the type VI precipitating system. P. A. Rebers, E. Hurwitz, and M. Heidelberger. J. Bact., 82: 920-6 (December) 1961.
296. Immunochemistry of the pneumococcal types II, V, and VI. III. Tests with derivatives of the specific polysaccharides of types II and VI. P. A. Rebers, E. Hurwitz, M. Heidelberger and S. Estrada-Parra. J. Bact., 83: 335-342 (February) 1962.
297. Aspects of the immune hemolytic reaction. VI. Effect of inhibitors from sheep serum on immune hemolysis. K. Amiraian, O. J. Plescia, G. Cavallo, and M. Heidelberger. J. Immunol., 88: 309-313 (March) 1962.

298. Immunochemistry of pneumococcal Types II, V, and VI. IV. Cross-reactions of Type V antipneumococcal sera and their bearing on the relation between Types II and V. M. Heidelberger. *Arch. Biochem. & Biophys.*, Supp. 1: 169-173 (September) 1962.
299. Unity and heterogeneity of antibodies. M. Heidelberger. *Allergology*, Pergamon Press, Oxford, London, New York, Paris, pp. 30-39, 1962.
300. The cross-reactivity of ketha gum and pneumococcal Type I. - Short cut to a constituent of a polysaccharide. M. Heidelberger, Jean M. Tyler, and S. Mukherjee. *Immunology*, 5: 666-672 (November) 1962.
301. The specific polysaccharide of Type XVIII pneumococcus. II. S. Estrada-Parra, P. A. Rebers, and M. Heidelberger. *Biochemistry*, 1: 1175-1177 (November) 1962.
302. Immunochemical properties of the periodate-oxidized polysaccharide of Group A hemolytic streptococcus. S. Estrada-Parra, M. Heidelberger, and P. A. Rebers. *J. Biol. Chem.*, 238: 510-512 (February) 1963.
303. Immunochemical diagnosis of the linkage of D-mannose residues. M. Heidelberger and A. Jeanes. *J. BAct.*, 86: 881-882 (October) 1963.
304. Immunization of rabbits with periodate-oxidized pneumococcal type VI specific capsular polysaccharide coupled to horse antibody. P. A. Rebers, S. Estrada-Parra, and M. Heidelberger. *J. Bact.*, 86: 882-883 (October) 1963.
305. The specific polysaccharide of type XVIII pneumococcus. III S. Estrada-Parra and M. Heidelberger. *Biochem.*, 2: 1288-1294, 1963.
306. Cross-reactions of glucose-containing polysaccharides in antipneumococcal sera. VII. The precipitation of type IX antisera by isolichenin, and other reactions. M. Heidelberger. *J. Immunology*, 91: 735-739 (December) 1963.
307. Immunochemical identification of the aldobiaric acid of the slime of Sphaerotilus natans. M. Heidelberger, E. Gaudy, and R. S. Wolfe. *Proc. Nat. Acad. Sci.*, 51: 568-569 (April) 1964.
308. Immunochemical short cuts to the chemistry of carbohydrates. M. Heidelberger. *Fed. Proc.*, Vol. 23, No. 3, Part I, 627-629 (May-June) 1964.
309. The specific polysaccharide of Type XVIIIA pneumococcus. M. Heidelberger, S. Estrada-Parra, and R. Brown. *Biochemistry*, 3: 1548-1550 (October) 1964.

310. Cross-reactions of pneumococcal types. Quantitative studies with the capsular polysaccharides. M. Heidelberger and Jean M. Tyler. *J. Exp. Med.*, 120: 711-719 (November) 1964.
311. Some recent correlations of constitution and immunological specificity. M. Heidelberger. *New Perspectives in Biology*, pp. 215-224, Elsevier Publishing Company, Amsterdam, 1964. *T*
312. Contribution de l'immunochimie à l'étude des structures biologiques. M. Heidelberger. *Bull. Soc. Chim. Biol.*, 46: 1293-1298 (January) 1965. Also Introductory Chapter, *Ann. Rev. Biochem.*, 36, I, 1-12, 1967.
313. Entwicklungslinien der Immunchemie. M. Heidelberger. Opening chapter in *Immunchemie*, 15th Colloquium der Gesellschaft für physiologische Chemie, 22-25 April, 1964, Mosbach, Baden. Springer, Berlin, Heidelberg, New York, 1965.
314. The polysaccharide of Shigella dysenteriae and its cross-reactions with antisera to the pneumococcal types II and VI. M. Heidelberger, C.V.N. Rao and D.A.L. Davies, *Pathologia et Microbiologia*, 28: 691-697 (No. 4) 1965.
315. The capsular polysaccharide of pneumococcus type IX. C. V. N. Rao and M. Heidelberger, *J. Exp. Med.*, 123: 913-920 (May) 1966.
316. Immunochemical properties of haultaco gum. M. Heidelberger and C. V. N. Rao. *Immunology*, 10: 543-548 (June) 1966.
317. Cross-reactions of streptococcal group N teichoic acid in anti-pneumococcal horse sera of types VI, XIV, XVI, and XXVII. M. Heidelberger and S. Elliott. *J. Bact.*, 92: 281-283 (July) 1966.
318. Symposium, Macromolecules and Cancer; Introductory remarks, session on Immunology and Macromolecules. M. Heidelberger. *Cancer Research*, 26: 2004 (September) 1966.
319. Citation and presentation of the Academy Medal to Donald D. Van Slyke. M. Heidelberger. *Bull. N. Y. Acad. Med.*, 43: 322-324 (April) 1967.
320. Cross-reactions of the group-specific polysaccharides of streptococcal groups B and G in anti-pneumococcal sera with especial reference to type XXIII and its determinants. M. Heidelberger, J. M. Davie and R. M. Krause, *J. Immunol.*, 99: 794-796, (October) 1967.
321. The capsular polysaccharide of Type I pneumococcus. I. Purification and chemical modification. R. C. E. Guy, M. J. How, M. Stacey and M. Heidelberger. *J. Biol. Chem.*, 242: 5106-11 (November 10) 1967.
322. Scope and significance of antigenic cross-reactivity. M. Heidelberger. In *Cross-Reacting Antigens and Neoantigens*, published by The Williams & Wilkins Company, Baltimore, Maryland, U.S.A., 1967.

323. The specific capsular polysaccharide of type VII pneumococcus. Jean M. Tyler and M. Heidelberger. Biochemistry, 7:1384-1392 (April) 1968.
324. Relations between structures of three K polysaccharides of Escherichia coli and cross-reactivity in antipneumococcal sera. M. Heidelberger, K. Jann, B. Jann, F. Ørskov, I. Ørskov and O. Westphal. J. Bact., 95:2415-2417 (June) 1968.
325. Predicted and unpredicted cross-reactions of an acetylphosphogalactan of sporobolomyces yeast. M. Heidelberger and M. E. Slodki. J. Exp. Med., 128:189-196 (July) 1968.
326. Reading the helix backwards. M. Heidelberger. In Nucleic acids in Immunology, pp. 3-4; ed. O. J. Plescia and W. Braun, Springer-Verlag, New York 1968.
327. Karl Landsteiner, 1868-1943. M. Heidelberger. Biographical Memoirs, National Academy of Sciences, U.S., 40:177-210, 1969.
328. Immunochemistry of newly found substituents of polysaccharides of Rhizobium species. W. F. Dudman and M. Heidelberger, Science, 164:954-955, 23 May, 1969.
329. Immunochemical relationships of certain streptococcal group and type polysaccharides to pneumococcal capsular antigens. M. Heidelberger, J. M. N. Willers and M. F. Michel. J. Immunol., 102:1119-27 (May) 1969.
330. Immunochemistry of the capsular polysaccharide of an acinetobacter. M. Heidelberger, A. Das and E. Juni, Proc. Nat. Acad. Sci. U. S., 63:47-50 (May) 1969.
331. Inhibition by aldobicuronates in the precipitation of pneumococcal Type II and III systems. M. Heidelberger, N. Roy and C. P. J. Glaudemans. Biochemistry, 8:4822-24, 1969.
332. Immunochemical relationships of certain capsular polysaccharides of Klebsiella, pneumococci and rhizobia. M. Heidelberger, W. F. Dudman and W. Nimmich. J. Immunol., 104:1321-1328 (June) 1970.
333. Degradation of a pneumococcal type-specific polysaccharide with exposure of group-specificity. J. D. Higginbotham, M. Heidelberger, and E. C. Gotschlich. Proc. Nat. Acad. Sci., 67:138-192 (Sept.) 1970.
334. Predicted and unpredicted cross-reactions of an acetylphospho-galactan of sporobolomyces yeast. II. M. Heidelberger and M. E. Slodki, J. Exp. Med., 132:1105-1106 (December) 1970.

335. Immunochemical studies of mangle gum (*Rhizophora mangle L.*). C.V.N. Rao, M. Heidelberger, and W. P. Grosvenor. *Immunochemistry*, 8: 657-663, (July) 1971.
336. Alphonse Raymond Dochez, 1882-1964. M. Heidelberger, Y. Kneeland, Jr., and K. M. Price. *Biographical Memoirs, National Academy of Sciences U.S.*, 42:29-46, 1971.
337. Immunochemical studies on the capsular polysaccharide of pneumococcal type IX. J.D. Higginbotham, A. Das, and M. Heidelberger. *Biochem. J.*, 126:225-231, 1972.
338. Oxidation of the capsular polysaccharide of pneumococcal type IX by periodate. A. Das, J.D. Higginbotham, and M. Heidelberger. *Biochem. J.*, 126:233-236, 1972.
339. "Relations Chimiques et Immunologiques entre Polysides Bacteriens" M. Heidelberger, Chapter IV, in Immunologie, Flammarion Medecine-Sciences, ed., P. Bordet, 1972.
340. Inhibition experiments with pneumococcal C and depyruvylated type-IV polysaccharides. M. Heidelberger, E.C. Gotschlich and J.D. Higginbotham. *Carbohydr. Res.*, 22:1-4, 1972.
341. Research in immunochemistry and Immunobiology. M. Heidelberger. Vol. 1. J.B.G. Kwapinski, editor. University Park Press, Baltimore, 1972, p. 295. Book Review.
342. The specific capsular polysaccharide of *Pneumococcus* type IV. J.D. Higginbotham and M. Heidelberger. *Carbohydr. Res.*, 23:165-173, 1972.
343. Cross-reactions of polysaccharides of *Lipomyces* in antipneumococcal and other antisera. M. Heidelberger and M.E. Slodki, *Carbohydr. Res.*, 24:401-407, 1972.
344. Additional immunochemical relationships of capsular polysaccharides of *Klebsiella* and pneumococci. M. Heidelberger and W. Nimmich. *J. Immunol.*, 109:1337-1344, 1972.
345. Cross-reactions of additional extracellular polysaccharides of *Klebsiella*. M. Heidelberger and G.G.S. Dutton. *J. Immunol.*, 111: 857-859, 1973.
346. Oxidation of the Capsular polysaccharide of pneumococcal type IV by periodate. J.D. Higginbotham and M. Heidelberger. *Carbohydr. Res.*, 27:297-302, 1973.
347. Immunochemistry of Bacterial Polysaccharides, in "Research in Immunochemistry and Immunobiology." M. Heidelberger. Eds. J.B.G. Kwapinski and E.D. Day, University Park Press, Baltimore, Md., 1973.
348. Supplement to 339. Immunologie, Paris, 1974; pp. 288a to 288c

349. Cross-reactivity of the membrane teichoic acid of Streptococcus faecalis N.C.I.B. 8191 in antipneumococcal type XII and type XVI sera. M. Heidelberger and J. Baddiley. Carbohydrate Research, 37:5-7, 1974.
350. First Selman A. Waksman Memorial Lecture. M. Heidelberger. The Sero-logical Museum, Bulletin No. 50, November 1974, p. 1-4.
351. Glycoproteins secreted by sublingual glands of the echidna (Tachyglossus aculeatus). J.Y. Lew, M. Heidelberger and M. Griffiths, Int. J. Peptide Protein Res., 7:289-293, 1975.
352. Cross-reactions of Klebsiella. Immunochemical relationships indicated by cross-reactions in antipneumococcal sera and tested in anti-Klebsiella sera. M. Heidelberger, W. Nimmich, J. Eriksen, G.G.S. Dutton, S. Stirm and C.T. Fang, Acta path. microbiol. Scand. Sect. C., 83:397-405, 1975.
353. Immunochemical relationships between bacteria belonging to two separate families: pneumococci and Klebsiella. M. Heidelberger and W. Nimmich. Immunochemistry, 13:67-80, 1976.
354. Identification of D-galacturonic acid in the specific capsular polysaccharide of pneumococcal type XXV. A. Das and M. Heidelberger. Carbohydrate Research, 48:304-305, 1976.
355. Linkage of pyruvyl groups in the specific capsular polysaccharide of Pneumococcus type IV. J.Y. Lew and M. Heidelberger. Carbohydrate Research, 52:255-258, 1976.
356. Réactions-Croisées supplémentaires entre les polyosides capsulaires de Klebsiella et les sérums antipneumococciques, M. Heidelberger and W. Nimmich. Ann. Immunol. (Inst. Pasteur), 128c:225-227, 1977.
357. A "Pure" Organic Chemist's Downward Path. Michael Heidelberger. Ann. Rev. Microbiol. 1977, 31:1-12.
358. Fifty years ago: Michael Heidelberger reviews his reviews. M. Heidelberger. Trends in Biochem. Sci. 2:116, May 1977.
359. Fragen an die Immunologie: Behring-Preisträger antworten Studenten. Round-Table-Gespräch anlässlich der 450-Jahrfeier der Philipps-Universität Marburg. M. Heidelberger, Behring Inst. Mitt., No. 61, 70-71, 1977.
360. Introduction to nos. 2-3 honoring Pierre Grabar on his 80th birthday. Annales d'Immunologie, 129c:141-142. (Feb.-Mar. 1978). (In French).

361. Homologous and cross-reactive precipitins in antipneumococcal sera raised in mules. P.Z. Alien, M. Heidelberger, I.A. Rappaport, and G.M. Ward. *Immunology*, 35:105-113 (July 1978).
362. More on cross-reactions between pneumococci and Klebsiella. M. Heidelberger, W. Nimmich, J. Eriksen, and S. Stirm. *Acta Path. Microbiol. Scand. B*. 86:313-20, 1978 (Dec.).
363. Fifty years ago: The beginnings of quantitative immunochemistry. M. Heidelberger and F.E. Kendall. *Trends in Biochemical Sciences*, 4:168, July 1979.
364. A "Pure" Organic Chemist's Downward Path. Chapter 2. The Years at P and S. M. Heidelberger. *Ann. Rev. Biochem.* 48:1-21, 1979.
365. Immunology: from ideas and guesses to a science. In *Molecular Mechanisms of Biological Recognition*, Miriam Balaban, Ed. Elsevier/North-Holland Biomed. Press, Amsterdam & N.Y., pp. 13-20, 1979.
366. Immunochemical determination of the configuration of a haptenic substituent. M. Heidelberger, I. Kvarnström, J. Eriksen, W. Nimmich, and W.F. Dudman. *Proc. Natl. Acad. Sci. U.S.A.*, 77:4244-4246, 1980.
367. A "Pure" Organic Chemist's Downward Path: Chapter 3 - "Retirement." M. Heidelberger. *Perspectives in Biol. and Med.*, pp. 619-636, 1981.
368. Additional Cross-Reactions of Plant Polysaccharides in Antipneumococcal and Other Antisera. M. Heidelberger. In *Papers Dedicated to Professor Johannes Moustgaard On the Occasion of His Seventieth Birthday The 26th of September 1981*. E. Brummerstedt, Ed., The Royal Danish Agricultural Society, Copenhagen, pp. 51-56, 1981
369. Additional correlations of chemical structure and immunological specificity among cross-reactions of pneumococci and Klebsiella. M. Heidelberger, G.G.S. Dutton, J. Eriksen, W. Nimmich, and S. Stirm. *Acta Path. Microbiol. Immunol. Scand., Sect. C*, 90: 87-90, 1982.
370. Pneumococcal polysaccharides and their significance. M. Heidelberger, *Trends. Biochem. Sciences*, 7: 261-263, July 1982.
371. Cross-reactions of plant polysaccharides in antipneumococcal and other antisera: An Update. M. Heidelberger. (Same as ref. 369). In: *Progress in the Chemistry of Organic Natural Products*. #42, Springer-Verlag, New York, 1982, pp. 287-296.
372. Professor Elvin A. Kabat. M. Heidelberger. *Carbohydrate Res.*, 120: 1-2, 1983. *!Introduction to 120 No. 1 in his honor.*
373. Precipitating cross-reactions among pneumococcal types. M. Heidelberger, *Infect. & Immun.* 41: 1234-1244, Sept. 1983.

374. HEIDELBERGER, M.: RECOGNITION OF ANTIBODIES AS LABELED GLOBULINS. ANN. N.Y. ACAD. SCI., 420: 1-4, 1984.
375. HEIDELBERGER, M. AND BERNHEIMER, A.W.: CROSS-REACTIONS OF POLYSACCHARIDES OF FUNGI, MOLDS, AND YEASTS IN ANTI-PNEUMOCOCCAL AND OTHER ANTISERA. PROC.NATL.ACAD.SCI., USA, 81: 5247-5249, AUGUST 1984.
376. HEIDELBERGER, M.: CROSS-REACTIONS OF POLYSACCHARIDES OF STAPHYLOCOCCI AND STREPTOCOCCI ~~AND~~ ANTIPNEUMOCOCCAL AND OTHER ANTISERA. MOLECULAR IMMUNOL. 21: 1011-1013, 1984.
377. HEIDELBERGER, M.: REMINISCENCES: PART 1. A "PURE" ORGANIC CHEMIST'S DOWNWARD PATH. IMMUNOL. REV. 81: 9-19, 1984.
378. HEIDELBERGER, M.: REMINISCENCES: PART 2. THE YEARS AT P. AND S. IMMUNOL. REV. 82: 7-27, DECEMBER 1984.
379. HEIDELBERGER, M.: REMINISCENCES: PART 3. "RETIREMENT", IMMUNOL. REV. 83: 5-23, APRIL 1985.
(REISSUE OF #357, #364, #367 WITH SOME ADDITIONS. #357, #364, #367 WERE TRANSLATED INTO JAPANESE BY AKIHIKO YANO AND PUBLISHED IN INFECTION, INFLAMMATION AND IMMUNITY, DECEMBER 1983; FEB., JUNE, 1984.)
380. HEIDELBERGER, M., JANN, K. AND JANN, B.: CROSSREACTIONS OF ESCHERICHIA COLI K AND O POLYSACCHARIDES IN ANTI-PNEUMOCOCCAL AND ANTI-SALMONELLA SERA. J. EXP. MED., 162: 1350-1358, OCTOBER 1985.
381. HEIDELBERGER, M.: HISTORICAL IMMUNOCHEMICAL SURVEY OF PNEUMOCOCCAL POLYSACCHARIDES. CHAPTER 1. IN: IMMUNOLOGY OF THE BACTERIAL CELL ENVELOPE. (EDITED BY D.E.S. STEWART-TULL AND M. DAVIES), JOHN WILEY & SONS, LTD., 1985.
382. HEIDELBERGER, M.: DISCUSSION OF DEREK HORTON'S PAPER, 317-19; DISCUSSION OF HAROLD JENNINGS' PAPER, 345-346, IN: NEW DEVELOPMENTS IN INDUSTRIAL POLYSACCHARIDES. (ED., I.C.M. DEA), GORDON AND BREACH, INC., NY 1985.
383. HEIDELBERGER, M., HORTON, D. AND HASKELL, T.H.: CROSS-REACTIONS OF LIPOPOLYSACCHARIDES OF PSEUDOMONAS AERUGINOSA IN ANTIPNEUMOCOCCAL AND OTHER ANTISERA. INFECTION AND IMMUNITY, 54: 928-930, DECEMBER 1986.

384. Heidelberger, M. Chapter ,ⁱⁿThe Precipitin Reaction, Microbial Agglutination, Complement Fixation, and Relations Between Chemical Structure and Antigen-Antibody Interaction in The Immunological Revolution: Facts and Witnesses. Ed. by A. Szentivanyi and H. Friedman (in press).