We gratefully acknowledge the following Authors from the Originating laboratories responsible for obtaining the specimens, as well as the Submitting laboratories where the genome data were generated and shared via GISAID, on which this research is based.

All Submitters of data may be contacted directly via www.gisaid.org

Authors are sorted alphabetically,

EPI ISL 2991941, EPI ISL 2991942, EPI ISL 2991943, EPI ISL 2991944 Broad Institute

see above

Infectious Disease

Accession ID	Originating Laboratory	Submitting Laboratory	Authors
EPI_ISL_1997051, EPI_ISL_ EPI_ISL_1997664, EPI_ISL_ EPI_ISL_2040050, EPI_ISL_ EPI_ISL_2040050, EPI_ISL_ EPI_ISL_2040150, EPI_ISL_ EPI_ISL_2041131, EPI_ISL_ EPI_ISL_2042169, EPI_ISL_ EPI_ISL_2042694, EPI_ISL_ EPI_ISL_2042694, EPI_ISL_ EPI_ISL_2043469, EPI_ISL_ EPI_ISL_2125771, EPI_ISL_ EPI_ISL_2147675, EPI_ISL_ EPI_ISL_2147675, EPI_ISL_ EPI_ISL_21487354, EPI_ISL_ EPI_ISL_21487354, EPI_ISL_ EPI_ISL_21487354, EPI_ISL_ EPI_ISL_2150501, EPI_ISL_ EPI_ISL_2150501, EPI_ISL_ EPI_ISL_2125974, EPI_ISL_ EPI_ISL_2125964, EPI_ISL_ EPI_ISL_2124654, EPI_ISL_ EPI_ISL_224465, EPI_ISL_ EPI_ISL_224465, EPI_ISL_ EPI_ISL_2243664, EPI_ISL_ EPI_ISL_2243664, EPI_ISL_ EPI_ISL_2243664, EPI_ISL_ EPI_ISL_2243664, EPI_ISL_ EPI_ISL_2244664, EPI_ISL_ EPI_ISL_2243664, EPI_ISL_ EPI_ISL_2244664, EPI_ISL_ EPI_ISL_2244664, EPI_ISL_ EPI_ISL_2243664, EPI_ISL_ EPI_ISL_2244664, EPI_ISL_ EPI_ISL_2244666, EPI_ISL_ EPI_ISL_2264665, EPI_ISL_ EPI_ISL_2264665, EPI_ISL_	Laboratory 1997066, EPI ISL, 199709; 1997676, EPI ISL, 199773; 2039289, EPI ISL, 203929; 2040084, EPI ISL, 204000; 2040785, EPI ISL, 204100; 2041198, EPI ISL, 204120; 20411417, EPI ISL, 204120; 2042170, EPI ISL, 204271; 2042707, EPI ISL, 204271; 2042907, EPI ISL, 204371; 2043490, EPI ISL, 204371; 2043490, EPI ISL, 214576; 2146848, EPI ISL, 214670; 2147678, EPI ISL, 214581; 2148726, EPI ISL, 214835; 2148726, EPI ISL, 214936; 2148726, EPI ISL, 214936; 2159265, EPI ISL, 214936; 2159265, EPI ISL, 214936; 21820390, EPI ISL, 218734; 2240390, EPI ISL, 220310; 2187496, EPI ISL, 2181381; 21870390, EPI ISL, 2181381; 21870390, EPI ISL, 2181381; 21870390, EPI ISL, 2181381; 21870390, EPI ISL, 2181381; 2187139, EPI ISL, 2241315; 2244381, EPI ISL, 224315; 2244381, EPI ISL, 224437; 2244311, EPI ISL, 224437;	0. EPI_ISL_1997178, EPI_ISL_1997255, I. 0. EPI_ISL_1997792, EPI_ISL_1997795, EPI_ISL_1997795, EPI_ISL_1997795, EPI_ISL_1997795, EPI_ISL_2040174, EPI_ISL_2040174, EPI_ISL_2040174, EPI_ISL_2040194, EPI_ISL_2040194, EPI_ISL_20410947, EPI_ISL_2041207, EPI_ISL_2041204, EPI_ISL_2041204, EPI_ISL_2041275, EPI_ISL_2041275, EPI_ISL_2041275, EPI_ISL_2042735, EPI_ISL_2145965, EPI_ISL_21459676, EPI_ISL_21459670, EPI_ISL_2145961, EPI_ISL_2145961, EPI_ISL_2145961, EPI_ISL_2145961, EPI_ISL_2145964, EPI_ISL_2145964, EPI_ISL_21456108, EPI_ISL_21456109, EPI_ISL_2244575, EPI_ISL_2244513, EPI_ISL_2244513, EPI_ISL_22443802, EPI_ISL_22443802, EPI_ISL_2244303, EPI_ISL_2244003, EPI_ISL_2244003, EPI_ISL_2244004, EPI_	FPI ISL 199740, EPI ISL 199756, EPI ISL 199756, EPI ISL 199766, EPI ISL 199767, EPI ISL 199767
EPI_ISL_2283865, EPI_ISL EPI_ISL_2370221, EPI_ISL EPI_ISL_2482339, EPI_ISL	2283884, EPI_ISL_232125 2370235, EPI_ISL_237043 2482343, EPI_ISL_2482398	r, EPI ISL 2321262, EPI ISL 2321368, I r, EPI ISL 2370538, EPI ISL 2370562, I s, EPI ISL 2482399, EPI ISL 2489118, I	EPI ISL 2368289, EPI ISL 2368290, EPI ISL 2368334, EPI ISL 2368334, EPI ISL 2368337, EPI ISL 2368350, EPI ISL 2368359, EPI ISL 2370571, EPI ISL 2370571, EPI ISL 2370571, EPI ISL 2370570, EPI ISL 2370572, EPI ISL 2370573, EPI IS
EPI ISL 2599969, EPI ISL EPI ISL 2785307, EPI ISL EPI ISL 3218791, EPI ISL EPI ISL 3321847, EPI ISL	2599988, EPI ISL 259999 2785330, EPI ISL 278533 3218792, EPI ISL 321995 3321871, EPI ISL 332187 3323472, EPI ISL 332347), EPI]SL_2600012, EPI]SL_2600035, I , EPI]SL_2785514, EPI SL_2875851, I , EPI]SL_3220003, EPI]SL_3220024, I 3, EPI]SL_3321972, EPI SL_3321973, I 3, EPI]SL_3323671, EPI]SL_3323682, I	EP ISL Z600053, EP ISL Z600004, EP ISL Z600117, EP ISL Z600036, EP ISL Z600286, EP ISL Z600286, EP ISL Z686941, EP ISL Z687041, EP ISL Z687045, EP ISL Z6870475, EP ISL Z6874475, EP ISL Z687445, EP ISL Z687484, EP ISL Z705433, EP ISL Z7054860, EP ISL Z705486, EP ISL Z7054860, EP
see above	Aegis Sciences Corporation	Centers for Disease Adrian Control and Prevention Division of Viral Diseases, Pathogen Discovery	Paskey; Alec Vest; Benjamin Rambo-Martin; Christopher Gulvick; Clinton R. Paden; Cyndi Clark; Dakota Howard; Darlene Wagner; Dhwani Batra; Dillon Nall; Duncan MacCannell; Ethan Sanders; Holly Houdeshell; Jason Caravas; Kara Moser; Matthew Hardison; Matthew Schmerer; Ola Kvalvaag; Patrick Campbell; Peter W. Cook; Rob Case; Scott Sammons; Shatavia Morrison; Shaun Westlund; Vikramsinha Ghorpade; Yvette Unoarumhi

EPI_ISL_3016318, Boston Universit/National Catherine Klapperich; Jacquelyn Turcinovic; John H. Connor; Lena Landeverde; Lynn Doucette-Stamm Boston University FPI ISI 3016319 CTI Emerging Infectious Disease Laboratories EPI ISL 2991502, EPI ISL 2991503, EPI ISL 2991503, EPI ISL 2991504, EPI ISL 2991504, EPI ISL 2991505, EPI ISL 2991523, EPI ISL 2991523, EPI ISL 2991506, EPI ISL 2991517, EPI ISL 2991517, EPI ISL 2991517, EPI ISL 2991517, EPI ISL 2991527, EPI ISL 2991507, EPI IS EP ISC 2991528, EP ISC 2991529, EP ISC 2991530, EP ISC 2991530, EP ISC 2991531, EP ISC 2991531, EP ISC 2991533, EP ISC 2991534, EP ISC 2991534, EP ISC 2991534, EP ISC 2991535, EP ISC 2991536, EP ISC 2991535, EP ISC 2991536, EP ISC 2991536 EP ISL 2991576. EP ISL 2991577. EP ISL 2991578. EP ISL 2991579. EP ISL 2991578. EP ISL 2991578. EP ISL 2991579. EP ISL 2991579 EPI ISL 2991625, EPI ISL 2991626, EPI ISL 2991626, EPI ISL 2991626, EPI ISL 2991636, EPI ISL 2991636, EPI ISL 2991636, EPI ISL 2991635, EPI ISL 299164, EPI ISL 299164, EPI ISL 299163, EPI ISL 299163, EPI ISL 299163, EPI ISL 299164, EPI ISL 299164, EPI ISL 299164, EPI ISL 299164, EPI ISL 299163, EPI ISL 299164, EP EPI ISL 2991625, EPI ISL 2991625, EPI ISL 2991626, EPI ISL 299163, EPI ISL 299165, EPI ISL 299166, EPI ISL 299169, EPI ISL 299169, EPI ISL 299169, EPI ISL 299170, EPI ISL 299 EPI ISL 2991871, EPI ISL 2991872, EPI ISL 2991872, EPI ISL 2991873, EPI ISL 2991874, EPI ISL 2991887, EPI ISL 2991888, EPI ISL 2991887, EPI ISL 2991888, EPI IS EPI ISL 2991894, EPI ISL 2991895, EPI ISL 2991895, EPI ISL 2991896, EPI ISL 2991897, EPI ISL 2991997, EPI IS

A.E.; Adams, G.; Anahtar, M.; B.L.; B.W.; Bauer, M.; Birren; Branda, J.; Carter, A.; Cerrato, F.; Chaluvadi, S.; Chapman; Cusick, C.; D.J.; DeRuff, K.; Flowers, K.; Gallagher, G.; Gladden-Young, A.; Gnirke, A.; Harris, J.; J.E.; K.J.; LaRocque, R.; Lagerborg, K.; Lemieux; Lin; Loreth, C.; Maclinnis; Neumann, A.; Normandin, E.; P.C.;

Clinical Research Program, Broad Institute Park; Pierce, V.; Reilly, S.; Rosenberg, E.; Rudy, M.; Ryan, E.; S.B.; Sabeti; Shaw, B.; Siddle; Slater, D.; Smole, S.; Tomkins-Tinch, C.; Turbett, S. Sequencing Platform of Harvard and MIT
EPI ISL 2016384, EPI ISL 2016385, EPI ISL 2016385, EPI ISL 2016385, EPI ISL 2016400, EPI ISL 2016407, EPI ISL 2016407, EPI ISL 2016408, EPI ISL 2016409, EPI ISL 2016409, EPI ISL 2016409, EPI ISL 2016409, EPI ISL 2016414, EPI ISL 2016429, EPI IS
EPI ISL 2016431, EPI ISL 2016432, EPI ISL 2016433, EPI ISL 2016433, EPI ISL 2016434, EPI ISL 2016435, EPI ISL 2016437, EPI IS
EPI ISL 2096243, EPI ISL 2096244, EPI ISL 2096244, EPI ISL 2096245, EPI ISL 2096246, EPI ISL 2096264, EPI ISL 2096264, EPI ISL 2096266, EPI ISL 2096267, EPI ISL 2096268,
EPI ISL 2096289, EPI ISL 2096270, EPI ISL 2096270, EPI ISL 2096272, EPI ISL 2096273, EPI ISL 2096274, EPI IS
EPI_ISL_2096295, EPI_ISL_2096296, EPI_ISL_2096296, EPI_ISL_2096297, EPI_ISL_2096297, EPI_ISL_2096307, EPI_IS
EPI_ISL_2096322, EPI_ISL_2096323, EPI_ISL_2096323, EPI_ISL_2096325, EPI_ISL_2096325, EPI_ISL_2096327, EPI_ISL_2096327, EPI_ISL_2096329, EPI_ISL_2096327, EPI_ISL_2096329, EPI_IS
EP_ISL_2096348, EP_ISL_2096349, EP_ISL_2096359, EP_ISL_2096350, EP_ISL_2096355, EP_ISL_2096355, EP_ISL_2096355, EP_ISL_2096357, EP_ISL_2096357, EP_ISL_2096367, EP_ISL_2096367, EP_ISL_2096368, EP_ISL_2096367, EP_ISL_2096377, EP_ISL_2096377
EPI ISL 2096375, EPI ISL 2096376, EPI ISL 2096377, EPI IS
EPI ISL 2096407, EPI IS
EPI ISL 2096428, EPI ISL 2096429, EPI ISL 2096430, EPI ISL 2096431, EPI ISL 2096431, EPI ISL 2096431, EPI ISL 2096431, EPI ISL 2096434, EPI ISL 2096434, EPI ISL 2096434, EPI ISL 209643, EPI
EPI ISL 2096499, EPI ISL 2096480, EPI ISL 2096480, EPI ISL 2096482, EPI ISL 2096482, EPI ISL 2096484, EPI ISL 2096484, EPI ISL 2096487, EPI ISL 2096488, EPI ISL 2096488, EPI ISL 2096488, EPI ISL 2096489, EPI ISL 2096499, EPI IS
EPI ISL 2096504, EPI ISL 2096505, EPI ISL 2096505, EPI ISL 2096505, EPI ISL 2096506, EPI ISL 2096507, EPI ISL 2096527, EPI IS
EPI ISL 2096530, EPI ISL 2096531, EPI ISL 2096531, EPI ISL 2096532, EPI ISL 2096533, EPI ISL 2096533, EPI ISL 2096549, EPI ISL 2096549, EPI ISL 2096544, EPI ISL 2096549, EPI IS
EPI ISL 2096553, EPI ISL 2096554, EPI ISL 2096555, EPI ISL 2096555, EPI ISL 2096555, EPI ISL 2096556, EPI ISL 2096556, EPI ISL 2096557, EPI ISL 2096579, EPI IS
EPI_ISL_2096581, EPI_ISL_2096582, EPI_ISL_2096582, EPI_ISL_2096583, EPI_ISL_2096583, EPI_ISL_2096584, EPI_ISL_2096597, EPI_IS
EP_ISL_2096605, EPI_ISL_2096606, EPI_ISL_2096606, EPI_ISL_2096607, EPI_ISL_209607, EPI_ISL_2096
EPI_ISL_2096629, EPI_ISL_2096630, EPI_ISL_2096631, EPI_ISL_2096631, EPI_ISL_2096631, EPI_ISL_2096644, EPI_ISL_2096644, EPI_ISL_2096644, EPI_ISL_2096644, EPI_ISL_2096644, EPI_ISL_2096647, EPI_ISL_209647, EPI_I
EPI_ISL_2096653, EPI_ISL_2096654, EPI_ISL_2096655, EPI_ISL_2096655, EPI_ISL_2096656, EPI_ISL_2096657, EPI_IS
EPI ISL 2103837, EPI ISL 2103838, EPI ISL 2103838, EPI ISL 2103848, EPI ISL 2103848, EPI ISL 2103848, EPI ISL 2103848, EPI ISL 2103857, EPI IS
EPI ISL _2103861, EPI_ISL2103862, EPI_ISL2103863, EPI_ISL2103866, EPI_ISL2103866, EPI_ISL2103866, EPI_ISL2103866, EPI_ISL2103866, EPI_ISL2103878, EPI_ISL2103873, EPI_ISL2103876, EPI_ISL2103876, EPI_ISL2103876, EPI_ISL2103886, EPI_ISL2103886, EPI_ISL2103876, EPI_ISL2103876, EPI_ISL2103876, EPI_ISL2103894, EPI_ISL2103876, EPI_ISL210
EPI ISL 2.1039098, EPI ISL 2.1039099, EPI ISL 2.1039090, EPI ISL 2.103909, EPI ISL 2
EPI ISL 2103934, EPI ISL 2103935, EPI ISL 2103935, EPI ISL 2103936, EPI ISL 2103937, EPI IS
EPI ISL 2103956, EPI ISL 2103957, EPI ISL 2103957, EPI ISL 2103959, EPI ISL 2103959, EPI ISL 2103960, EPI ISL 2103960, EPI ISL 2103960, EPI ISL 2103970, EPI ISL 2103970, EPI ISL 2103973, EPI ISL 2103973, EPI ISL 2103974, EPI ISL 2103975, EPI ISL 2103976, EPI ISL 2103976, EPI ISL 2103976, EPI ISL 2103976, EPI ISL 2103977, EPI ISL 2103979, EPI ISL 2103979, EPI ISL 2103976, EPI ISL 2103976, EPI ISL 2103976, EPI ISL 2103977, EPI ISL 2103976, EPI ISL 2103977, EPI ISL 2103976, EPI IS
EPI ISL 2103980, EPI ISL 2103980, EPI ISL 2103981, EPI ISL 2103983, EPI ISL 2103983, EPI ISL 2103984, EPI ISL 2103984, EPI ISL 2103999, EPI ISL 2103994, EPI ISL 2103994, EPI ISL 2103994, EPI ISL 2103999, EPI ISL 2103994, EPI ISL 2103995, EPI ISL 2103995, EPI ISL 2103996, EPI ISL 2103997, EPI ISL 2103996, EPI IS
EPI_ISL_2104005, EPI_ISL_2104008, EPI_ISL_2104008, EPI_ISL_2104009, EPI_ISL_2104024, EPI_ISL_2104010, EPI_ISL_2104017, EPI_ISL_2104017, EPI_ISL_2104017, EPI_ISL_2104027, EPI_ISL_2104028, EPI_IS
EP_{1}^{T} SL_{2104030}, EP_{1}^{T} SL_{2104031}, EP_{1}^{T} SL_{2104032}, EP_{1}^{T} SL_{2104033}, EP_{1}^{T} SL_{2104033}, EP_{1}^{T} SL_{2104034}, EP_{1}^{T} SL_{2104034}, EP_{1}^{T} SL_{2104043}, EP_{1}^{T} SL_{2104043}, EP_{1}^{T} SL_{2104034}, EP_{1}^{T} SL_{2104034}, EP_{1}^{T} SL_{2104043}, EP_{1}^{T} SL_{2104034}, EP_{1}^{T} SL_{2

```
EPI ISL 2104057, EPI ISL 2104057, EPI ISL 2104058, EPI ISL 2104058, EPI ISL 2104059, EPI ISL 2104066, EPI ISL 2104067, EPI ISL 2104067, EPI ISL 2104077, EPI IS
 EP ISL 2104082, EP ISL 2104083, EP ISL 2104083, EP ISL 2104084, EP ISL 2104085, EP ISL 2104085, EP ISL 2104086, EP ISL 2104086, EP ISL 2104087, EP ISL 2104087, EP ISL 210410, EP ISL 210411, EP ISL 210412, EP ISL 2104
   EPI ISL 2104131, EPI ISL 2104133, EPI ISL 2104133, EPI ISL 2104133, EPI ISL 2104134, EPI ISL 2104135, EPI ISL 2104135, EPI ISL 2104135, EPI ISL 2104137, EPI IS
 EP ISC 2104157, EP ISC 2104158, EP ISC 2104158, EP ISC 2104159, EP ISC 2104160, EP ISC 2104160, EP ISC 2104162, EP ISC 2104164, EP ISC 2104164, EP ISC 2104165, EP ISC 2104165, EP ISC 2104165, EP ISC 2104169, EP ISC 2104169, EP ISC 2104171, EP ISC 2104173, EP ISC 2104173, EP ISC 2104174, EP ISC 2104175, EP ISC 2104175, EP ISC 2104175, EP ISC 2104176, EP ISC 2104177, EP ISC 2104177, EP ISC 2104187, EP ISC 2104187
   EPI ISL 2104207, EPI ISL 2104207, EPI ISL 2104208, EPI ISL 2104208, EPI ISL 2104220, EPI ISL 2104210, EPI ISL 2104221, EPI ISL 2104225, EPI ISL 2104226, EPI ISL 2104227, EPI ISL 2104227, EPI ISL 2104227, EPI ISL 2104228, EPI ISL 2104228, EPI ISL 2104227, EPI ISL 2104217, EPI ISL 2104217, EPI ISL 2104217, EPI ISL 2104228, EPI ISL 2104217, EPI IS
 EP ISC 2104231, EP ISC 2104232, EP ISC 2104232, EP ISC 2104234, EP ISC 2104234, EP ISC 2104234, EP ISC 2104235, EP ISC 2104236, EP ISC 2104236, EP ISC 2104237, EP ISC 2104237, EP ISC 2104237, EP ISC 2104237, EP ISC 2104240, EP ISC 2104240, EP ISC 2104257, EP ISC 2104257
 EPI SL 2104281, EPI SL 2104282, EPI SL 2104282, EPI SL 2104283, EPI SL 2104284, EPI SL 2104284, EPI SL 2104285, EPI SL 2104286, EPI SL 2104286
   EPI ISL 2192639, EPI ISL 2192639, EPI ISL 2192630, EPI ISL 2192630, EPI ISL 2192631, EPI ISL 2192632, EPI ISL 2192635, EPI ISL 2192635, EPI ISL 2192635, EPI ISL 2192637, EPI IS
 EPI ISL 2192661, EPI ISL 2192662, EPI ISL 2192663, EPI ISL 2192663, EPI ISL 2192664, EPI ISL 2192664, EPI ISL 2192666, EPI ISL 2192667, EPI ISL 2192667, EPI ISL 2192688, EPI ISL 2192668, EPI ISL 2192669, EPI ISL 2192669, EPI ISL 2192669, EPI ISL 2192699, EPI IS
 EPISC 2192710, EPISC 2192712, EPISC 2192713, EPISC 2192713, EPISC 2192713, EPISC 2192714, EPISC 2192714, EPISC 2192714, EPISC 2192715, EPISC 2192723, EPISC 2192723, EPISC 2192723, EPISC 2192723, EPISC 2192724, EPISC 2192723, EPISC 2192725, EPISC 2192723, EPISC 2192725, EPISC 
   EPI ISL 2192760, EPI ISL 2192776, EPI ISL 2192761, EPI ISL 2192762, EPI ISL 2192762, EPI ISL 2192763, EPI ISL 2192763, EPI ISL 2192766, EPI ISL 2192766, EPI ISL 2192766, EPI ISL 2192760, EPI ISL 2192776, EPI ISL 2192778, EPI ISL 2192778, EPI ISL 2192783, EPI ISL 2192784, EPI ISL 2192784, EPI ISL 2192778, EPI ISL 2192778, EPI ISL 2192784, EPI IS
 EP ISC 2192785, EP ISC 2192786, EP ISC 2192786, EP ISC 2192787, EP ISC 2192788, EP ISC 2192788, EP ISC 2192799, EP ISC 2192794, EP ISC 2192807, EP ISC 2192807
                                                                                             EP ISL 2192838, EP ISL 2192839, EP ISL 2192839, EP ISL 2192839, EP ISL 2192841, EP ISL 2192844, EP ISL 2192845, EP ISL 2192845, EP ISL 2192857, EP ISL 2192848, EP ISL 2192857, EP ISL 2192857
 EP ISC 2192862, EP ISC 2192863, EP ISC 2192865, EP ISC 2192865, EP ISC 2192866, EP ISC 2192866, EP ISC 2192886, EP ISC 2192888, EP ISC 2192888, EP ISC 2192888, EP ISC 2192889, EP ISC 2192889, EP ISC 2192899, EP ISC 2192898, EP ISC 2192899, EP ISC 2192899, EP ISC 2192899, EP ISC 2192898, EP ISC 2192899, EP ISC 2192899
 EPI ISC 2192911, EPI ISC 2192912, EPI ISC 2192912, EPI ISC 2192913, EPI ISC 2192914, EPI ISC 219293, E
   EPI ISL 2192962, EPI ISL 2192963, EPI ISL 2192963, EPI ISL 2192964, EPI ISL 2192964, EPI ISL 2192966, EPI ISL 2192966, EPI ISL 2192966, EPI ISL 2192966, EPI ISL 2192968, EPI IS
 EPI ISC 2192986, EPI ISC 2192998, EPI ISC 2192999, EPI IS
 EP ISC 2193035, EP ISC 2193036, EP ISC 2193037, EP ISC 2193037, EP ISC 2193038, EP ISC 2193038, EP ISC 2193039, EP ISC 2193044, EP ISC 2193057, EP ISC 2193057, EP ISC 2193057, EP ISC 2193067, EP ISC 2193067, EP ISC 2193067, EP ISC 2193077, EP ISC 2193077
   EPT ISL 2193087, EPT ISL 2193088, EPT ISL 2193088, EPT ISL 2193088, EPT ISL 2193089, EPT ISL 2193090, EPT IS
 EP ISC 2193109, EP ISC 2193110, EP ISC 2311889, EP ISC 2311884, EP ISC 2311889, EP ISC 2311889, EP ISC 2311889, EP ISC 2311889, EP ISC 2311899, EP ISC 2311891, EP ISC 2311891, EP ISC 2311893, EP ISC 2311891, EP ISC 2311891, EP ISC 2311891, EP ISC 2311893, EP ISC 2311893
 EP 15, 2311096, EP 15, 2311097, EP 15, 2311097
 EP ISC 2311985, EP ISC 2311986, EP ISC 2311996, EP ISC 2311997, EP ISC 2311997, EP ISC 2311999, EP ISC 2311999, EP ISC 2311999, EP ISC 2312004, EP ISC 2312005, EP ISC 2312005, EP ISC 2312006, EP ISC 2312006, EP ISC 2312007, EP ISC 2312007
 EM SL 231200, EM
 EP ISC 2312111, EP ISC 2312113, EP ISC 2312113, EP ISC 2312114, EP ISC 2312114, EP ISC 2312115, EP ISC 2312113, EP ISC 2312116, EP ISC 2312113, EP ISC 2312113, EP ISC 2312113, EP ISC 2312114, EP ISC 2312114, EP ISC 2312124, EP ISC 2312125, EP ISC 2312135, EP ISC 2312137, EP ISC 2312137
   EPI ISL 2312160, EPI ISL 2312161, EPI ISL 2312161, EPI ISL 2312161, EPI ISL 2312162, EPI ISL 2312163, EPI ISL 2312163, EPI ISL 2312181, EPI IS
 EP ISC 2312186, EP ISC 2312187, EP ISC 2312187, EP ISC 2312188, EP ISC 2312203, EP ISC 2312204, EP ISC 2312204, EP ISC 2312205, EP ISC 2312205, EP ISC 2312205, EP ISC 2312206, EP ISC 2312206, EP ISC 2312207, EP ISC 2312217, EP ISC 2312217, EP ISC 2312221, EP ISC 2312221, EP ISC 2312221, EP ISC 2312222, EP ISC 2312222, EP ISC 2312222, EP ISC 2312223, EP ISC 2312223, EP ISC 2312223, EP ISC 2312232, EP ISC 231223, EP ISC 2312232, EP ISC 231223, EP IS
   EPĪSL_2312237, EPĪSL_2312238, EPĪSL_2312238, EPĪSL_2312239, EPĪSL_2312239, EPĪSL_2312244, EPĪSL_2312244, EPĪSL_2312244, EPĪSL_2312244, EPĪSL_2312244, EPĪSL_2312245, EPĪSL_2312245, EPĪSL_2312255, EPĪSL_2312255, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312246, EPĪSL_2312246, EPĪSL_2312246, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312247, EPĪSL_2312247, EPĪSL_2312247, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312247, EPĪSL_2312247, EPĪSL_2312247, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312247, EPĪSL_2312247, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312257, EPĪSL_2312247, EPĪSL_2312257, EPĪSL_231257, EPĪSL_2312257, EPĪSL_2
 EP ISC 2312261, EP ISC 23122262, EP ISC 23122262, EP ISC 23122263, EP ISC 23122264, EP ISC 23122266, EP ISC 23122264, EP ISC 2312266, EP ISC 23122264, EP ISC 2
EP JS. 2312230, EP JS. 2312231, EP JS. 2312331, EP JS. 2312332, EP JS. 2312332, EP JS. 2312333, EP JS. 2312334, EP JS. 23123344, EP JS. 2312334, EP JS. 2312344, EP JS. 23123444, EP JS. 2312344, EP JS. 23123444, EP JS. 23123444, EP JS. 231
   EPI ISL 3007325, EPI ISL 3007326, EPI ISL 3007326, EPI ISL 3007327, EPI ISL 3007327, EPI ISL 3007328, EPI ISL 3007328, EPI ISL 3007329, EPI ISL 3007334, EPI ISL 3007344, EPI IS
 EPI ISC 30077348, EPI ISC 30077349, EPI ISC 30077350, EPI ISC 30077350, EPI ISC 30077351, EPI ISC 30077352, EPI ISC 30077352, EPI ISC 30077354, EPI ISC 30077354, EPI ISC 30077355, EPI ISC 30077355, EPI ISC 30077355, EPI ISC 30077369, EPI ISC 30077376, EPI ISC 30077376, EPI ISC 30077377, EPI ISC 3007737, EPI ISC 30077
 EPI ISL 3007395, EPI ISL 3007395, EPI ISL 3007396, EPI ISL 3007397, EPI ISL 3007407, EPI IS
   EPI SL 3007440, EPI SL 3007441, EPI SL 3007441, EPI SL 3007441, EPI SL 3007442, EPI SL 3007455, EPI SL 3007456, EPI SL 3007456, EPI SL 3007457, EPI SL 3007458, EPI SL 3007457, EPI SL 3007457
 EP ISL 3084559, EP ISL 3084599, EP ISL 3084599, EP ISL 3084591, EP ISL 3084591, EP ISL 3084591, EP ISL 3084593, EP ISL 3084595, EP ISL 3084596, EP ISL 3084600, EP ISL 3084600, EP ISL 3084601, EP ISL 3084601, EP ISL 3084612, EP ISL 3084612, EP ISL 3084614, EP ISL 3084614, EP ISL 3084699, EP ISL 3084614, EP ISL 3084614
 EPISL 3084634, EPISL 3084635, EPISL 3084635, EPISL 3084636, EPISL 3084637, EPISL 3084638, EPISL 
                                                                                                                                         3084679, EPISL 3084680, EPISL 3084691, EPISL 3084691, EPISL 3084692, EPISL 3084692, EPISL 3084693, EPISL 3084695, EPISL 3084695, EPISL 3084696, EPISL 3084697, EPISL 3084699, EPISL 308469
 EP ISC 3084700, EP ISC 3084700, EP ISC 3084701, EP ISC 3084701, EP ISC 3084702, EP ISC 3084703, EP ISC 3084704, EP ISC 3084704, EP ISC 3084705, EP ISC 3084705, EP ISC 3084706, EP ISC 3084707, EP ISC 3084707
 EPISC 3084744, EPISC 3084745, EPISC 3084745, EPISC 3084746, EPISC 3084746, EPISC 3084746, EPISC 30847476, EPISC 30847476, EPISC 3084757, EPISC 3084757, EPISC 3084757, EPISC 3084758, EPISC 3084758, EPISC 3084758, EPISC 3084758, EPISC 3084758, EPISC 3084766, EPISC 3084766, EPISC 3084766, EPISC 3084766, EPISC 3084767, EPISC 3084768, EPISC 3084768, EPISC 3084768, EPISC 3084768, EPISC 3084768, EPISC 3084778, EPISC 3084778, EPISC 30847878, EPISC 30847878, EPISC 30847878, EPISC 30847878, EPISC 3084788, 
   EPĪSL_3084788, EPĪSL_3084789, EPĪSL_3084799, EPĪSL_3084799, EPĪSL_3084799, EPĪSL_3084791, EPĪSL_3084797, EPĪSL_
 EP ISL 3084810, EP ISL 3084810, EP ISL 3084811, EP ISL 3084812, EP ISL 3084812, EP ISL 3084814, EP ISL 3084814
   EPI SL 3084855, EPI SL 3084856, EPI SL 3084856, EPI SL 3084856, EPI SL 3084857, EPI SL 3084857, EPI SL 3084867, EPI SL 3084877, EPI SL 3084877
 EPISL 3084877, EPISL 3084877, EPISL 3084879, EPISL 3084879, EPISL 3084889, EPISL 3084889, EPISL 3084889, EPISL 3084889, EPISL 3084897, EPISL 3084897, EPISL 3084897, EPISL 3084897, EPISL 3084897, EPISL 3084997, EPISL 
 EPISC 3084921, EPISC 3084922, EPISC 3084922, EPISC 3084923, EPISC 3084924, EPISC 3084924, EPISC 3084924, EPISC 3084924, EPISC 3084926, EPISC 3084927, EPISC 3084927, EPISC 3084927, EPISC 3084927, EPISC 3084927, EPISC 3084927, EPISC 3084937, EPISC 
   EPI ISL 3084965, EPI ISL 3084966, EPI ISL 3084966, EPI ISL 3084967, EPI ISL 3084967, EPI ISL 3084970, EPI ISL 3084972, EPI ISL 3084974, EPI ISL 3084983, EPI ISL 3084984, EPI ISL 3084984, EPI ISL 3084974, EPI ISL 3084974, EPI ISL 3084977, EPI ISL 3084984, EPI ISL 3084974, EPI ISL 3084974, EPI ISL 3084977, EPI ISL 3084977, EPI ISL 3084987, EPI ISL 3084987, EPI ISL 3084987, EPI ISL 3084987, EPI ISL 3084977, EPI ISL 3084977, EPI ISL 3084987, EPI ISL 3084987, EPI ISL 3084977, EPI ISL 3084987, EPI ISL 3084977, EPI ISL 3084987, EPI ISL 3084977, EPI ISL 3084987, EPI ISL 3084987, EPI ISL 3084987, EPI ISL 3084977, EPI ISL 3084977, EPI ISL 3084977, EPI ISL 3084987, EPI ISL 3084977, EPI ISL 3084987, EPI ISL 3084987, EPI ISL 3084977, EPI ISL 3084977, EPI ISL 3084977, EPI ISL 3084977, EPI ISL 3084987, EPI ISL 308497, EP
 EP ISC 3084987, EP ISC 3084988, EP ISC 30849898, EP ISC 3084999, EP ISC 3084999, EP ISC 3084999, EP ISC 3084999, EP ISC 3084994, EP ISC 3084994, EP ISC 3085007, EP ISC 3085007, EP ISC 3085008, EP ISC 3085009, EP ISC 3085009, EP ISC 3085001, EP ISC 3085007, EP ISC 3085007, EP ISC 3085007, EP ISC 3085009, EP ISC 3085009, EP ISC 3085007, EP ISC 308500
 EP ISL 3085031, EP ISL 3085032, EP ISL 3085032, EP ISL 3085033, EP ISL 3085034, EP ISL 3085034, EP ISL 3085034, EP ISL 3085036, EP ISL 3085037, EP ISL 3085047, EP ISL 3085047
   EPĪ ISL 3085102, EPĪ ISL 3085103, EPĪ ISL 3085103, EPĪ ISL 3085104, EPĪ ISL 3127205, EPĪ ISL 3127215, EPĪ ISL 3127205, EPĪ IS
 EP ISC 3127221, EP ISC 3127222, EP ISC 3127222, EP ISC 3127222, EP ISC 3127223, EP ISC 3127224, EP ISC 3127223, EP ISC 3127224, EP ISC 312723, EP ISC 312724, EP ISC 312725, EP ISC 312724, EP ISC 312725, EP ISC 312724, EP ISC 312725, EP ISC 312724, EP ISC 312724
 Engla 312725; Fn St. 312724; Fn St. 
 EP IS. 3127331, EP IS. 3127332, EP IS. 3127332, EP IS. 3127333, EP IS. 3127334, EP IS. 3127334, EP IS. 3127334, EP IS. 3127334, EP IS. 3127344, EP IS. 3127344, EP IS. 3127344, EP IS. 3127335, EP IS. 3127344, EP IS. 3127344, EP IS. 3127344, EP IS. 3127344, EP IS. 3127356, EP IS. 3127356, EP IS. 3127356, EP IS. 3127357, EP IS. 3127357
 EP [15, 3127375, FP [15, 3127375, FP [15, 3127376, FP [15, 3127376, FP [15, 312730, FP [15, 31
 EPI SC 114437. EPI SC 114437. EPI SC 114436. EPI SC
   EPI ISL 3134381, EPI ISL 3134382, EPI ISL 3134382, EPI ISL 3134383, EPI ISL 3134389, EPI ISL 313489, EPI ISL 3134
 EP ISC 3134403, EP ISC 3134404, EP ISC 3134404, EP ISC 3134405, EP ISC 3134405, EP ISC 3134406, EP ISC 3134407, EP ISC 3134407
 EP ISC 3134447, EP ISC 3134448, EP ISC 3134449, EP ISC 3134449, EP ISC 3134449, EP ISC 3134445, EP ISC 3134445, EP ISC 3134455, EP ISC 3134457, EP ISC 3134457, EP ISC 3134457, EP ISC 3134457, EP ISC 3134477, EP ISC 3134477
   EPI ISL 3134491, EPI ISL 3134492, EPI ISL 3134492, EPI ISL 3134493, EPI ISL 3134494, EPI ISL 3134494, EPI ISL 3134496, EPI ISL 3134506, EPI ISL 3134506, EPI ISL 313496, EPI ISL 3134496, EPI ISL
 EP | SL 3134513, EP | SL 3134514, EP | SL 3134514, EP | SL 3134515, EP | SL 3134516, EP | SL 3134516, EP | SL 3134516, EP | SL 3134524, EP | SL 3134524, EP | SL 3134527, EP | SL 3134527, EP | SL 3134529, EP | SL 3152944, EP | SL 3152947, EP | S
 EPI ISL 3152962, EPI ISL 3152963, EPI ISL 3152963, EPI ISL 3152966, EPI ISL 3152966, EPI ISL 3152966, EPI ISL 3152970, EPI ISL 3152977, EPI ISL 3152997, EPI IS
   EPI ISL 3153006, EPI ISL 3153007, EPI IS
 EPISC 153008. EPISC 153009. EP
   EPI ISL 3153077, EPI ISL 3153077, EPI ISL 3153077, EPI ISL 3153074, EPI ISL 3153074, EPI ISL 3153074, EPI ISL 3153077, EPI ISL 3153099, EPI IS
 EP ISC 3153094, EP ISC 3153095, EP ISC 3153095, EP ISC 3153096, EP ISC 3153096, EP ISC 3153097, EP ISC 3153112, EP ISC 3153121, EP ISC 3153131, EP ISC 3153131
```

EPI ISL 3153138. EPI ISL 3153139. EPI ISL 3153139. EPI ISL 3153140. EPI ISL 3153140. EPI ISL 3153141. EPI ISL 3153154. EPI ISL 3153155. EPI ISL 3153156. EPI ISL 3153157. EPI IS EP ISC 3153160, EP ISC 3153161, EP ISC 3153161, EP ISC 3153161, EP ISC 3153163, EP ISC 3153163, EP ISC 3153163, EP ISC 3153163, EP ISC 3155734, EP ISC 3155734, EP ISC 3155734, EP ISC 31557374, EP ISC 3155734, EP ISC 3155735, EP ISC 3155736, EP ISC 3155735, EP ISC 3155736, EP ISC 315573 EPI ISL 3155760, EPI ISL 3155761, EPI ISL 3155761, EPI ISL 3155762, EPI ISL 3155762, EPI ISL 3155763, EPI ISL 3155776, EPI ISL 3155777, EPI ISL 3155776, EPI IS EP ISC 3155782, EP ISC 3155783, EP ISC 3155783, EP ISC 3155784, EP ISC 3155785, EP ISC 3155785, EP ISC 3155786, EP ISC 3155786, EP ISC 3155786, EP ISC 3155787, EP ISC 3155800, EP ISC 3155800 EPI ISL 3155826, EPI ISL 3155827, EPI ISL 3155827, EPI ISL 3155827, EPI ISL 3155828, EPI ISL 3155829, EPI ISL 3155839, EPI IS FPI ISL 3155848, FPI ISL 3155860, FPI IS EPI ISL 3155870, EPI ISL 3155870, EPI ISL 3155877, EPI ISL 3155878, EPI ISL 3155878, EPI ISL 3155888, EPI ISL 315888, EPI EPI ISL 3155892, EPI ISL 3155893, EPI ISL 3155893, EPI ISL 3155894, EPI ISL 3155896, EPI ISL 3155996, EPI ISL 3155997, EPI IS EPI ISL 3155936, EPI ISL 3155937, EPI ISL 3155937, EPI ISL 3155938, EPI IS EP ISL 3155976, EP ISL 3155978, EP ISL 3155978, EP ISL 3155981, EP ISL 3155983, EP ISL 3155983, EP ISL 3155988, EP ISL 3156007, EP ISL 3156007

see above Broad Institute Infectious Disease Adams, G.; B.L.; B.W.; Bauer, M.; Birren; Blumenstiel, B.; Brown, C.; Carter, A.; Chaluvadi, S.; D.J.; DeFelice, M.; DeRuff, K.; Dodge, S.; Gabriel, S.; Gallagher, G.; Gladden-Young, A.; Granger, B.; J.E.; K.J.; Lagerborg, K.; Larkin, K.; Lee, M.; Lemieux; Lennon, N.; Loreth, C.; Madoff, L.; McGovern, S.; Meldrim, J.; Normandin, E.; P.C.; Park; Pearlman, L.; Reilly, S.; Rudy, M.; Sabeti; Siddle; Smole, S.; Tomkins-Tinch, C.; Vicente, G.; and MacInnis Clinical Research Program, Broad Institute Sequencing Platform of Harvard and MIT FPI ISI 2106202 DPH, Massachusetts DPH, Massachusetts State A.S.: Fink, T.: G.R.: Gallagher: Lang: S.C.: Smole EPI_ISL_2106205 State Public Health Public Health Lab FPI ISI 2106206 Lah EPI_ISL_2349549 EPI ISL 2349550 EPI ISL 2349551 EPI_ISL_2502578, DPH, Massachusetts DPH, Massachusetts State A.S.; Fink, T.; G.R. and Smole; Gallagher; Lang; S.C. EPI_ISL_2811829 State Public Health Public Health Lab

EPI ISL_2037927, EPI ISL_2038185, EPI ISL_2134551, EPI ISL_2280252, EPI ISL_3064798, EPI ISL_3212215, EPI ISL_3299970, EPI ISL_3302565, EPI ISL_3344245

Fulgent Genetics Centers for Disease Adrian Paskey; Becky Tsai; Benafsh Sapra; Benafsh Sapra; Benjamin Rambo-Martin; Christopher Gulvick; Clinton R. Paden; Dakota Howard; Darlene Wagner; Dhwani Batra; Doreen Ng; Duncan MacCannell; Harry Gao; James Xie; Jason Caravas; John Gao; Joseph Fierro; Kara Moser; Matthew Schmerer; Mickey Li; Peter W. Cook; Scot Control and Prevention Sammons; Shatavia Morrison; Yan Meng; Yvette Unoarumhi Division of Viral Diseases

Pathogen Discovery FP IS 1990576 FP IS 1990615 FP IS 1990615 FP IS 1990771 FP IS 1990777 FP IS 1990778 FP IS 199077 FP IS 19907 FP IS 19 EPI ISL 1991175, EPI ISL 19912176, EPI ISL 1991226, EPI ISL 1991227, EPI ISL 1991227, EPI ISL 1991277, EPI I EP IS. 191598. EP IS. 191598. EP IS. 191642. EP IS. 191677. EP IS. 191677. EP IS. 191704. EP IS. 191704. EP IS. 191705. EP IS. 191704. EP IS. 191706. EP IS. EPI ISL 2010580, EPI ISL 2010580, EPI ISL 2010584, EPI ISL 2010634, EPI ISL 2010636, EPI ISL 2010637, EPI ISL 2010637, EPI ISL 2010733, EPI ISL 2010734, EPI IS EP ISL 2097572, EP ISL 2097592, EP ISL 2097694, EP ISL 209764, EP ISL 2097644, EP ISL 209764, EP ISL 209764 Fig. 2, 248506, Fig. 12, 248507, Fig. 12, 248507, Fig. 12, 244507, Fig. 12 EP ISC 2160021, EP ISC 21600114, EP ISC 2160114, EP ISC 2160121, EP ISC 2160121, EP ISC 2160140, EP ISC 2160140, EP ISC 2160147, EP ISC 2160147, EP ISC 2160144, EP ISC 216014 EPI ISL 2247588, EPI ISL 2247589, EPI ISL 2247589, EPI ISL 2247589, EPI ISL 2247632, EPI IS FPI ISI 2247874 FPI ISI 2247874 FPI ISI 2247885 FPI ISI 2248134 FPI ISI 2248134 FPI ISI 2248134 FPI ISI 2269827 FPI ISI 2269828 FPI ISI 226982 EPI ISL. 2269870, EPI ISL. 2269870, EPI ISL. 2269993, EPI ISL. 2269993, EPI ISL. 2269993, EPI ISL. 2270024, EPI ISL. 2270024, EPI ISL. 2270024, EPI ISL. 2270027, EPI ISL. 227 EP IS. 2270494 EP IS. 2270494 EP IS. 2270495 EP IS. EPI ISL 2320502, EPI ISL 2320574, EPI ISL 2320574, EPI ISL 2320595, EPI ISL 2320639, EPI ISL 2320638, EPI ISL 2320639, EPI ISL 2320889, EPI ISL 2320899, EPI IS EP ISL 2321050, EP ISL 2321061, EP ISL 2321061, EP ISL 2321065, EP ISL 2440473, EP ISL 2440473, EP ISL 244063, EP ISL 244074, EP ISL 244073, EP ISL 244074, EP ISL 244074, EP ISL 259886, EP ISL 259886, EP ISL 259887, EPĪSL_2599449, EPĪSL_2599456, EPĪSL_2599456, EPĪSL_2599456, EPĪSL_2599479, EPĪSL_2599479, EPĪSL_2599478, EPĪSL_2599510, EPĪSL_

Centers for Disease Adrian Paskey; Alexandre Bolze; Ary Ascencio; Benjamin Rambo-Martin; Brad Sickler; Charlotte Rivera-Garcia; Christine Tran; Christopher Gulvick; Clinton R. Paden; Dakota Howard; Darlene Wagner; David Becker; Dhwani Batra; Duncan MacCannell; Efren Sandoval; Eileen de Feo; Elizabeth Cirulli; Eric Allen; Geraint Levan; see above Helix/Illumina Control and Prevention James Lur, Jan Antico; Jason Caravas; Jason Nguyen; Jimmy Ramirez; Jingtao Liu; Kara Moser; Kelly Schiabor Barrett; Kim Gietzen; Magnus Isaksson; Marc Laurent; Matthew Schmerer; Matthew Tolentino; Nicole L. Washington; Peter W. Cook; Phil Febbo; Ryan Cho; Scott Sammons; Shannon Wickline; Shatavia Morriso Division of Viral Diseases. Sherry Wang; Simon White; Tyler Cassens; William Lee; Yvette Unoarumhi Pathogen Discovery

EPI_SL_2335095, EPI_SL_2335096, EPI_SL_2335096, EPI_SL_2335096, EPI_SL_2335097, EPI_SL_2500327, EPI_SL_2500327 EPI ISL 2598272, EPI ISL 2789945, EPI ISL 2789946, EPI ISL 2789946, EPI ISL 2789949, EPI ISL 2801456, EPI ISL 2801456, EPI ISL 2801458, EPI ISL 3218885, EPI ISL 3218886, EPI IS

Vanderbilt Michigan, Department of University Medical Microbiology and Center Immunology EPI_ISL_2106171 Infectious Disease Infectious Disease A.E.; Adams, G.; Anahtar, M.; B.L.; B.W.; Bauer, M.; Birren; Branda, J.; Carter, A.; Cerrato, F.; Chaluvadi, S.; Chapman; Cusick, C.; D.J.; DeRuff, K.; Flowers, K.; Gallagher, G.; Gladden-Young, A.; Gnirke, A.; Harris, J.; J.E.; K.J.; LaRocque, R.; Lagerborg, K.; Lemieux; Lin; Loreth, C.; MacInnis; Neumann, A.; Normandin, E.; P.C.;

Gilbert; Valesano

Park; Pierce, V.; Reilly, S.; Rosenberg, E.; Rudy, M.; Ryan, E.; S.B.; Sabeti; Shaw, B.; Siddle; Slater, D.; Smole, S.; Tomkins-Tinch, C.; Turbett, S.

EPI ISL 2991654 and MIT

EPI ISL 2088860, EPI ISL 2089148, EPI ISL 2089259, EPI ISL 2089403, EPI ISL 2089403, EPI ISL 2089433, EPI ISL 2186329, EPI ISL 2186940, EPI ISL 2282496, EPI ISL 2283376, EPI ISL 2283575, EPI ISL 2283593, EPI ISL 2323997, EPI ISL 3299728 see above Infinity Biologix Centers for Disease Adrian Paskey; Benjamin Rambo-Martin; Chirayu Goswami; Christian Bixby; Christopher Gulvick; Clinton R. Paden; Dakota Howard; Darlene Wagner; Dhwani Batra; Duncan MacCannell; Jason Caravas; Jonathan Schultz; Kara Moser; Matthew Schmerer; Peter W. Cook; Robin Grimwood; Russ Hager; Scott Sammons; Shatavia Control and Prevention Morrison; Yihe Wang; Yvette Unoarumhi

Division of Viral Diseases. Pathogen Discovery

Lah

EPI_ISL_2599611, EPI_ISL_2599622, EPI_ISL_2599625, EPI_ISL_2599629

see above

FPI ISI 2991508.

EPI_ISL_2991560

IVY3 Central Lab.

Program, Broad

Institute of Harvard

Massachusetts

Lauring Lab. University of

Program, Broad Institute

Infectious Disease

EPI ISL 2044030, EPI ISL 2045449, EPI ISL 2045449, EPI ISL 2045750, EPI ISL 2045736, EPI ISL 2045736, EPI ISL 2045736, EPI ISL 2045737, EPI ISL 2045739, EPI ISL 2045742, EPI ISL 2045742, EPI ISL 2045745, EPI ISL 2045746, EPI ISL 2045736, EPI ISL 2045746, EPI ISL 2045746, EPI ISL 2045736, EPI ISL 2045746, EPI ISL 2045737, EPI ISL 2045742, EPI ISL 2045742, EPI ISL 2045746, EPI ISL 2045746, EPI ISL 2045746, EPI ISL 2045736, EPI ISL 2045746, EPI IS EPI SL 2045755, EPI SL 2045755, EPI SL 2045757, EPI SL 2045758, EPI SL 2045766, EPI SL 2045766, EPI SL 2045766, EPI SL 2045766, EPI SL 2045867, EPI SL 2045867, EPI SL 2045766, EPI SL 2045766 EPI ISL 2045875, EPI ISL 2045877, EPI ISL 2045877, EPI ISL 2045877, EPI ISL 2045878, EPI ISL 2045879, EPI IS FPI ISI 2182254. FPI ISI 2182256. FPI ISI 2182256. FPI ISI 2182259. FPI ISI 2182259. FPI ISI 2182357. FPI ISI 2182557. FPI ISI 218257. FPI ISI 2182557. FPI ISI EPI ISL. 2182658, EPI ISL. 2182658, EPI ISL. 2182669, EPI ISL. 2182606, EPI ISL. 2182807, EPI ISL. 218 EPI ISL 2306656, EPI ISL 2306657, EPI ISL 2306657, EPI ISL 2306664, EPI ISL 23066664, EPI ISL 23066667, EPI ISL 2306667, EPI ISL 2306673, EPI ISL 2306677, EPI ISL 2306770, EPI ISL 2306677, EPI ISL 2306777, EPI ISL 2306677, EPI ISL 2306677, EPI ISL 2306677, EPI ISL 2306677, EPI ISL 2306777, EPI ISL 2306777, EPI ISL 2306677, EPI ISL 2306777, EPI ISL 2306677, EPI ISL 2306777, EPI ISL 2306677, EPI ISL 2306677, EPI ISL 2306677, EPI ISL 2306777, EPI ISL 2306777, EPI ISL 2306777, EPI ISL 2306777, EPI ISL 2306677, EPI ISL 2306777, EPI ISL 2306677, EPI ISL 2306677, EPI ISL 2306777, EPI ISL 2306677, EPI ISL 2306677, EPI ISL 2306777, EPI ISL 2306677, EPI ISL 230677, EPI ISL 2306677, EPI ISL 230677, EP EPI ISL 2306866, EPI ISL 2306867, EPI ISL 2306967, EPI ISL 2306908, EPI ISL 2306909, EPI ISL 2306919, EPI ISL 2306919, EPI ISL 230699, EPI ISL 2306909, EPI ISL 2306 EPI ISL 2399057, EPI ISL 2399058, EPI ISL 2399058, EPI ISL 2399068, EPI ISL 2399068, EPI ISL 2399068, EPI ISL 2399364, EPI ISL 2399365, EPI ISL 2399365, EPI ISL 2399366, EPI ISL 2399367, EPI IS EP ISL 2399367, EP ISL 2399369, EP ISL 2399370, EP ISL 2399370, EP ISL 2399370, EP ISL 2480470, EP ISL 2480470, EP ISL 2480470, EP ISL 2480470, EP ISL 2480571, EP ISL 2480571 EPĪSL_3328837, EPĪSL_3328857, EPĪSL_3330502, EPĪSL_3330504, EPĪSL_3330504, EPĪSL_3330505, EPĪSL_3330505, EPĪSL_3330505, EPĪSL_3330505, EPĪSL_3330505, EPĪSL_3330505, EPĪSL_3330505, EPĪSL_3330506, EPĪSL_

Laboratory Centers for Disease Adrian Paskey; Amanda Douglas; Amanda Suchanek; Andrea Throop; Ayla Burms; Benjamin Rambo-Martin; Bobbi Croy; Brian Krueger; Brian Norvell; Christopher Gulvick; Christos Petropoulos; Clinton R. Paden; Craig Lukasik; Dakota Howard; Darlene Wagner; Debbie Boles; Dhwani Batra; Duncan MacCannell; Evad Almasri; see above Goran Stevoyic: Howard Engler: Hrushikesh Deshmukh: lake Humphrey: Jana Schroth: Jason Caravas: Joe Voshell: John Pruitt: Jonathan Meltzer: Jonathan Williams: Kara Moser: Kimberly Wagner: Lax Iver: Lisa Pfefferle: Lyndon Tilson: Manoi Jain: Marcia Eisenberg: Mary Ann Cristobal: Mary Williamson: Matthew Robinson: Corporation of Control and Prevention Division of Viral Diseases. Matthew Schmerer; Michael Levandoski; Mike Sapeta; Mindy Nye; Minoo Agarwal; Mohan Kolli; Nuthawin Charoensri; Oren Cohen; Peter W. Cook; Prashant Gupta; Qian Zeng; Rama Ghatti; Scott Parker; Scott Ryan; Scott Sammons; Shatavia Morrison; Stanley Letovsky; Steven Ragan; Suresh Babu Selvaraju; Susan America Pathogen Discovery Countryman; Susan Hicks; Suzanne Dale; Thomas Urban; Tim Kuphal; Tricia Zwiefelhofer; Vincent Drouillon; Yvette Unoarumhi

EPI ISL 2018220, EPI ISL 2018221, EPI ISL 2018222, EPI ISL 2018223, EPI ISL 2018223, EPI ISL 2018226, EPI ISL 2018227, EPI ISL 2451813, EPI ISL 2451815, EPI ISL 2451816, EPI ISL 2451818, EPI ISL 2451820, EPI ISL 2451821, EPI ISL 2451827, EPI ISL 2451829, EPI ISL 2451829 see above MA State Public Centers for Disease Alex Burgin; Alison Laufer Halpin; Ben L. Rambo-Martin; Ben Rambo-Martin; Clinton Paden; Clinton R. Paden; Dakota Howard; Darlene Wagner; Dave Wentworth; Dhwani Batra; Jasmine Padilla; Justin Lee; Katie Dillon; Krista Queen; Kristine Lacek; Mark Burroughs; Matthew Schmerer; Meghan Bentz; Mili

Control and Prevention Sheth; Peter Cook; Sam Shepard; Sarah Nobles; Shoshona Le; Suxiang Tong; Vivien Dugan; Yvette Unoarumhi Health Laboratory Division of Viral Diseases, Pathogen Discovery

EPI_SL_2016440, EPI_SL_2016441, EPI_SL_2016441, EPI_SL_2016442, EPI_SL_2016443, EPI_SL_2016443, EPI_SL_2016444, EPI_SL_2016444, EPI_SL_2016444, EPI_SL_2016444, EPI_SL_2016444, EPI_SL_2016444, EPI_SL_2016444, EPI_SL_2016447, EPI_SL_201647, EPI_SL EPT ISL 2016446, EPT ISL 2016447, EPT ISL 2016466, EPT ISL 2016466, EPT ISL 2016477, EPT ISL 2016477, EPT ISL 2016477, EPT ISL 2016482, EPT ISL 2016484, EPT ISL 2016477, EPT ISL 2016477, EPT ISL 2016477, EPT ISL 2016487, EPT ISL 2016484, EPT ISL 2016477, EPT IS EPI ISL 2362355, EPI ISL 2362356, EPI ISL 2362356, EPI ISL 2362357, EPI ISL 2362357, EPI ISL 2362359, EPI ISL 2362359, EPI ISL 2362371, EPI ISL 2362373, EPI ISL 2362373, EPI ISL 2362373, EPI ISL 2362373, EPI ISL 2362364, EPI ISL 2362374, EPI ISL 2362374, EPI ISL 2362375, EPI ISL 2362375, EPI ISL 2362367, EPI ISL 2362374, EPI ISL 2362375, EPI ISL 2362374, EPI ISL 2362375, EPI ISL 2362375, EPI ISL 2362375, EPI ISL 2362374, EPI ISL 2362375, EPI IS

A.E.; Adams, G.; Anahtar, M.; B.L.; B.W.; Bauer, M.; Birren; Branda, J.; Carter, A.; Cerrato, F.; Chaluvadi, S.; Chapman; Cusick, C.; D.J.; DeRuff, K.; E. and Sabeti; Flowers, K.; Gallagher, G.; Gladden-Young, A.; Gnirke, A.; Harris, J.; J.E.; K.J.; LaRocque, R.; Lagerborg, K.; Lemieux; Lin; Loreth, C.; MacInnis; Neumann, A. Normandin, E.; P.C.; Park; Pierce, V.; Reilly, S.; Rosenberg; Rudy, M.; Ryan, E.; S.B.; Shaw, B.; Siddle; Slater, D.; Smole, S.; Tomkins-Tinch, C.; Turbett, S. Program, Broad Institute General Hospital of Harvard and MIT

EPI ISL 2008117, EPI ISL 2008118, EPI ISL 2008118, EPI ISL 2008119, EPI ISL 2008121, EPI ISL 2008121, EPI ISL 2008137, EPI ISL 2008138, EPI ISL 2008137, EPI IS EPI ISL 2008142, EPI ISL 2008144, EPI ISL 2008144, EPI ISL 2008146, EPI ISL 2008146, EPI ISL 2008153, EPI ISL 2008154, EPI ISL 2008155, EPI ISL 2008154, EPI IS EPI_SL_2008170, EPI_SL_2008172, EPI_SL_2008172, EPI_SL_2008173, EPI_SL_2008174, EPI_SL_2008174, EPI_SL_2008184, EPI_SL_2008184, EPI_SL_2008184, EPI_SL_2008185, EPI_SL_2008186, EPI_SL_2008187, EPI_SL_2008187

EPI ISL 2008198. EPI ISL 2008199. EPI ISL 2008199. EPI ISL 2008202. EPI ISL 2008203. EPI ISL 2008203. EPI ISL 2008204. EPI ISL 2008205. EPI ISL 2008207. EPI IS EPI ISL 2008222, EPI ISL 2008223, EPI ISL 2008223, EPI ISL 2008224, EPI ISL 2008225, EPI ISL 2008225, EPI ISL 2008226, EPI ISL 2008226, EPI ISL 2008227, EPI ISL 2008228, EPI ISL 2008227, EPI ISL 2008228, EPI ISL 200828, E EPI ISL 2008267, EPI ISL 2008268, EPI ISL 2008268, EPI ISL 2008268, EPI ISL 2008276, EPI ISL 2008277, EPI ISL 200827, EP ISL 2008294, EP ISL 2008295, EP ISL 2008295, EP ISL 2008296, EP ISL 2008297, EP ISL 2008307, EP ISL 2008307 EPI ISL 2008344, EPI ISL 2008345, EPI ISL 2008345, EPI ISL 2008346, EPI ISL 2008346, EPI ISL 2008347, EPI ISL 2008347, EPI ISL 2008386, EPI ISL 2008387, EPI IS EP ISC 2008391, EP ISC 2008392, EP ISC 2008393, EP ISC 2008393, EP ISC 2008394, EP ISC 2229493, EP ISC 2229493, EP ISC 2229494, EP ISC 2229494, EP ISC 2229494, EP ISC 2229494, EP ISC 2229495, EP ISC 2229495, EP ISC 2229497, EP ISC 2229497, EP ISC 2229499, EP ISC 2229499, EP ISC 2229506, EP ISC 2229507, EP ISC 2229507 EPI ISL 2229526, EPI ISL 2229527, EPI ISL 2229527, EPI ISL 2229528, EPI ISL 2229529, EPI ISL 2229530, EPI ISL 2229531, EPI ISL 2229531, EPI ISL 2229531, EPI ISL 222973, EPI I EPI ISL 2229812, EPI ISL 2229813, EPI ISL 2229813, EPI ISL 2483783, EPI ISL 2483783, EPI ISL 2483784, EPI ISL 2483785, EPI ISL 2483786, EPI ISL 2483788, EPI IS EP JISL 248393, EP JISL 2483930, EP JISL

Massachusetts State Massachusetts State Andrew Lang: Glen Gallagher: Sandra Smole: Timelia Fink see above

Public Health Public Health Laboratory Laboratory EPI ISL 3236361, New England Biolabs New England Biolabs Bradley William Langhorst EPI ISL 3236585 FPI IST 1990410, FPI IST 1990410, FPI IST 1990417, FPI IST 1990413, FPI IST 1990413, FPI IST 1990413, FPI IST 1990430, FPI IST 1990446, FPI IST 1990430, FPI IST 1990446, FPI IST 1990430, FPI IST 1990430, FPI IST 1990430, FPI IST 1990430, FPI IST 1990446, FPI IST 1990446, FPI IST 1990430, FPI IST 1990430, FPI IST 1990447, FPI IST 1990449, FPI IS EP ISL 1990410, EP ISL 1990412, EP ISL 1990463, EP ISL 199047, EP EPI ISL 2034796, EPI ISL 2034799, EPI ISL 2034799, EPI ISL 2034804, EPI IS EP ISL 2090476, EP ISL 2090487, EP ISL 2090533, EP ISL 2090533, EP ISL 2090535, EP ISL 2090535, EP ISL 2090557, EP ISL 2090557, EP ISL 2090588, EP ISL 2090589, EP ISL 2090839, EP ISL 2090839 EPI SS_2132629. EPI SS_2132629. EPI SS_2142907. EPI SS_2142907 EPI ISL 21432213, EPI ISL 2143223, EPI ISL 2143232, EPI ISL 2143233, EPI ISL 2143333, EPI I EP ISC 2143337, EP ISC 2143336, EP ISC 2143336, EP ISC 2143336, EP ISC 2143336, EP ISC 2143337, EP ISC 2143337 EP 15. 2.17994. EP 15. 2.17994. EP 15. 2.17990. EP 15. 2.17990 EP ISL 2269128, EP ISL 2269135, EP ISL 2269135, EP ISL 2269135, EP ISL 2269147, EP ISL 2269167, EP ISL 2269167 EPI ISL 2368061, EPI ISL 23693130, EPI ISL 23693130, EPI ISL 23693152, EPI ISL 23693152, EPI ISL 2369317, EPI ISL 2369317, EPI ISL 2369317, EPI ISL 2369317, EPI ISL 2371733, EPI ISL 23717349, EPI EPI ISL 2371776, EPI ISL 2371779, EPI ISL 2371779, EPI ISL 2371795, EPI ISL 2371794, EPI ISL 2371894, EPI ISL 2371894, EPI ISL 2371891, EPI ISL 2371897, EPI ISL 2371979, EPI ISL 2372155, EPI ISL 2372155, EPI ISL 2372239, EPI ISL 237237, EPI ISL 2372239, EPI ISL 237239, EPI ISL 2372239, EPI ISL EPI ISC 2372259, EPI ISC 2372259, EPI ISC 2372261, EPI ISC 2372264, EPI ISC 2372421, EPI ISC 2372421, EPI ISC 2372421, EPI ISC 2372943, EPI ISC 2372943, EPI ISC 2372943, EPI ISC 2372945, EPI ISC 2372946, EPI ISC 2372946, EPI ISC 2372946, EPI ISC 2372950, EPI IS EPI ISL 2397573, EPI ISL 2397575, EPI ISL 2397596, EPI IS EPI ISL 239763, EPI ISL 239764, EPI ISL 239764, EPI ISL 239766, EPI ISL 239767, EPI ISL 239776, EPI ISL 239767, EPI ISL 239767 EPI SL 2440735, EPI SL 2440735, EPI SL 2440738, EPI SL 2440739, EPI SL 2440881, EPI SL 2440884, EPI SL 2440885, EPI SL 2440885, EPI SL 2440885, EPI SL 2440886, EPI SL 2440888, EPI SL 2451333, EPI SL 2451333 EPI JSL 2440861, EPI JSL 24400863, EPI JSL 24400865, EPI JSL 24400866, EPI JSL 24410866, EPI JSL 2451346, EPI JSL 2451346, EPI JSL 2451355, EPI JSL 2451355, EPI JSL 2451355, EPI JSL 2451356, EPI JSL 245136, EPI JSL 24 EP ISL 2529254, EP ISL 2529258, EP ISL 2529258, EP ISL 2529276, EP ISL 2534550, EP ISL 2534550, EP ISL 2534555, EP ISL 2534556, EP ISL 25345537, EP ISL 2534556, EP ISL 2534556, EP ISL 2534556, EP ISL 2534566, EP ISL 25345666, EP ISL 2534566, EP ISL 25345666, EP ISL 2534566, EP ISL 25345666, EP ISL 2534

Division of Viral Diseases Pathogen Discovery

A. Gerasimova; A. Perez; Adrian Paskey; B. Anderson; Benjamin Rambo-Martin; Christopher Gulvick; Clinton R. Paden; Dakota Howard; Darlene Wagner; Dhwani Batra; Duncan MacCannell; F. Lacbawan; I. A. Shlyakhter; Jason Caravas; K.E. Livingston; Kara Moser; L.E. Bernstein; M. Hua; Matthew Schmerer; P. Tanpaiboon;

Peter W. Cook: R. M. Kagan: R. Owen: R. V. Rolando: S. H. Rosenthal: Scott Sammons: Shatavia Morrison: Y. Liu: Yvette Ungarumbi

EPI ISL 2253143, EPI ISL 2253150, EPI ISL 2253150, EPI ISL 2253157, EPI ISL 2254303, EPI ISL 2254303, EPI ISL 2254373, EPI ISL 2091920, EPI ISL 3091920, EPI ISL 3091940, EPI ISL 3091983

EPI ISL 3114565, EPI ISL 3114566, EPI ISL 3114566, EPI ISL 3212704, EPI ISL 3212704, EPI ISL 3212704, EPI ISL 3212704, EPI ISL 3331068, EPI ISL 3331068, EPI ISL 33305165, EPI ISL 33305175, EPI ISL 33305175, EPI ISL 3330754, EPI ISL 3330928, EPI ISL 3330928, EPI ISL 3331068, EPI ISL 3331168

see above

Quest Diagnostics

Incorporated

Prevention

Centers for Disease

Control and Prevention

Prevention

Anderson, B.; Batra, D.; Bernstein, L.; C.R.; Campbell, P.; Caravas, J.; Case, R.; Clark, C.; Cook; Gerasimova, A.; Ghorpade, V.; Gulvick, C.; Hardison, M.; Houdeshell, H.; Howard, D.; Hua, M.; I.A.; Kagan; Kvalvaag, O.; Lacbawan, F.; Liu, Y.; Livingston, K.; MacCannell, D.; Morrison, S.; Moser, K.; Nall, D.; Owen, R.; P.W.; Paden Respiratory Viruses Respiratory Viruses see above Branch, Centers for Branch Centers for Paskey, A.: Perez, A.: R.M.: R.V.: Rambo-Martin, B.: Rolando: Rosenthal: S.H.: Sammons, S.: Sanders, E.: Schmerer, M.: Shlyakhter: Tanpaiboon, P.: Ungarumhi, Y.: Vest, A.: Wagner, D.: Westlund, S. Disease Control and Disease Control and

EPISL_2283890, EPISL_2283891, EPISL_2283891, EPISL_2283892, EPISL_2283893, EPISL_2283893, EPISL_2283893, EPISL_2283893, EPISL_2283994, EPISL_ EPI ISL 2284016, EPI ISL 2284017, EPI ISL 2284017, EPI ISL 2284031, EPI ISL 2284031, EPI ISL 2284031, EPI ISL 2284031, EPI ISL 228403, EPI ISL EPI ISL 2284042, EPI ISL 2284043, EPI ISL 2284043, EPI ISL 2284044, EPI ISL 2284066, EPI ISL 2284067, EPI IS

see above VA Connecticut Yale Center for Genomic Brooke Sullivan; Curt Scharfe; Irina Tikhonova; Kaya Bilguvar; Shrikant Mane Healthcare System Analysis Yale Clinical Virology EPI ISL 3370239 Grubaugh Lab - Yale Anderson Brito: Annie Watkins: Change Kalinich: Change Ka Lab School of Public Health

EPI ISL 2159045 Yale Clinical Virology Yale Center for Genomic Brooke Sullivan; Curt Scharfe; Irina Tikhonova; Kaya Bilguvar; Shrikant Mane Lab Analysis