

# Subject Index

## A

Adenovirus, 46, 67–70, 73, 74, 76–79,  
131, 155  
Adjuvants, 21, 40, 53–56, 66–68, 76, 77, 79,  
94, 96, 97, 99–101, 103, 106, 107,  
110, 111, 113–116, 131, 137,  
141–151, 154, 159–166, 182, 184,  
186–188, 190–192, 194, 196,  
205–220, 231, 235, 253, 259, 261,  
266, 272  
Alphavirus, 67, 68, 71–72, 75, 77  
Animal model, 51, 73, 96, 103, 113, 152, 184,  
251–261, 277  
Antigen delivery, 123–129, 182  
Antigen presenting cells (APCs), 46, 47, 74,  
136–141, 143, 151, 157, 188,  
210–212, 232, 260

## B

Bacterial infections, 131, 257

## C

CD8 T cells, 19, 21, 46, 66, 67, 74, 76, 78,  
129, 138, 142, 144, 149, 154, 156,  
160, 162, 164, 165, 188, 233, 271  
Cellular immunity, 147, 206, 275–277  
Computer simulation, 18, 34–35  
Crystallizable fragment (Fc), 45–59, 138

## D

DEC-205, 129, 138, 152, 153  
Dendritic cells (DCs), 21, 46, 71, 73, 97,  
136–140, 143, 146, 147, 149,  
152–156, 158, 159, 164, 165, 188,

190, 206–209, 211, 212, 217, 232,  
233, 254, 258  
DNA vaccine, 66, 130, 131, 141, 154–159,  
164, 213, 217, 259

## E

Edible vaccines, 181–186, 196  
Epitope prediction, 37

## F

Fc. *See* Crystallizable fragment (Fc)  
Fc receptor (FcR), 46–49, 53,  
56, 138  
Filamentous bacteriophage, 123–131

## G

Genetic vaccines, 65–67, 78  
Genomics, 3–13, 70, 126, 158  
Glycoprotein tagging, 45–59

## H

Heterologous prime-boost, 73–74,  
77, 79  
H1N1, 28, 29, 34, 58, 105, 108,  
109, 211  
Humoral immunity, 66, 136, 164, 213,  
270, 272

## I

Immune-complexes, 20, 46, 142  
Immunity, 6, 21, 46, 66, 92, 131, 136, 182,  
206, 232, 251, 265

Immunomics, 7, 9, 11  
 Infectious disease, 4, 12, 18, 71, 75, 77–79,  
 88, 95, 109, 137, 154, 165, 193,  
 217, 219, 230, 238, 256, 266,  
 277, 280

**L**

Lentivirus, 67, 68, 72–73, 75, 112, 131  
 Liposomes, 135–166, 182, 217

**M**

Metabolomics, 3  
 Mucosal immunity, 207, 232, 233, 251, 256,  
 258–260  
 Mucosal vaccines, 79, 160, 161,  
 229–243, 259

**N**

Nanoparticles, 98, 135–166, 192, 217

**O**

Oleosomes, 195  
 Oral delivery, 161, 183, 184, 187, 231

**P**

Pathogen associated molecular pattern  
 (PAMP), 21, 74, 98  
 Pathogen recognition receptor, 138  
 Plant chimeric virus particles,  
 186, 189, 191  
 Plant heat shock proteins, 192–193  
 Plant virus like particles, 189–192  
 Poxvirus, 67, 68, 70–71, 74, 77

Prime-boost vaccination, 20, 28, 29, 33, 34,  
 40, 77, 79  
 Proteomics, 7, 9–12

**R**

Reverse vaccinology, 4–10, 12

**S**

Structural genomics, 10–12  
 Swine-origin influenza A virus (S-OIV), 29

**T**

Targeted delivery, 157  
 TLR. *See* Toll-like receptor (TLR)  
 Toll-like receptor (TLR), 76, 97, 99, 138, 139,  
 141, 142, 147–149, 151, 154, 159,  
 162, 164, 205–220  
 agonists, 97, 99, 105, 147, 162, 205–220  
 Transcriptomics, 7, 9, 10

**V**

Vaccine  
 correlates, 115, 265–280  
 delivery, 179–196, 254, 255, 258, 259, 261  
 development, 3, 4, 7, 8, 10–13, 18, 20, 46,  
 47, 66, 67, 69, 70, 78, 88, 95, 96,  
 100–102, 109, 111, 114–116, 137,  
 141–146, 149, 151, 153, 154, 157,  
 159, 160, 162–166, 181, 182, 185,  
 187, 189–192, 230, 231, 242, 243,  
 252–261, 266, 270, 272, 277–280  
 Viral-vectored vaccines, 74, 76–78  
 Virus-like particles (VLPs), 71, 87–116, 161,  
 181, 183, 189–192