

---

# Index

- Absolutism, 97–98, 125, 187, 281  
Accountability, 14, 296–297, 318–320. *See also* Moral responsibility; Transparency  
Acetaminophen, 225  
Adverse event/adverse drug reaction (ADR), 269–271, 273–275. *See also* Side effect  
Advocates  
  animal, 53, 61, 98, 212, 241, 257, 259, 302, 304, 307  
  animal research, 14, 53, 210, 212, 218, 220–221, 228, 231n4, 240, 246, 248, 250, 253–258, 262–263, 302  
  animal rights, 14, 275, 285–287, 299, 321n7  
  animal welfare, 72, 241  
  social justice, 287  
Agency. *See* Moral agency/agents  
Agriculture  
  animals in, 23, 184, 190  
  veterinary medicine as ancillary to, 28  
Acquired Immune Deficiency Syndrome (AIDS), 36, 173, 201. *See also* Human immunodeficiency virus (HIV)  
Alcohol, 108, 110, 173, 239  
Alternatives. *See* Research, alternatives to animal models  
Altruism, 42, 133  
Alzheimer's disease, 268  
American Cancer Society, 101n11  
American Medical Association (AMA), 37, 201. *See also* *Journal of the American Medical Association (JAMA)*  
Americans for Medical Progress, 122n2  
Amphibians, 39, 131. *See also* Vertebrates  
Analgesia, 27–28, 55, 173, 205, 312, 318. *See also* Anesthesia; Pain; Suffering  
Anesthesia, 28, 55, 173, 183, 205. *See also* Analgesia; Pain; Suffering  
Animal  
  breeding (*see* Breeding, animal)  
  cognition (*see* Cognition [or impairment/deficiency of], in animals)  
  cruelty (*see* Cruelty, animal)  
  emotions (*see* Emotion/emotional states, in animals)  
  experimentation (*see* Models, animal; Pharmaceuticals; Research; Testing/trials)  
  husbandry, 28, 184, 205, 303, 323n18  
  liberation (*see* Liberation, animal)  
  models (*see* Models, animal)  
  naming and identity, 129  
  rights (*see* Rights, animal)  
  testing (*see* Models, animal; Pharmaceuticals; Research; Testing/trials)  
  welfare (*see* Welfare, animal)  
Animal Welfare Act, 239

- Anthropocentrism, 44–45, 217. *See also* Biocentrism; Dominion of humans; Superiority of humans
- Anthropomorphism, 45, 128
- Antibiotics, 203, 225, 234n23
- Antidepressants, 72
- Anxiety, 24, 209–210. *See also* Distress; Fear; Frustration; Stress
- Apes. *See* Primates
- Aristotle, 2, 24, 35, 73, 126, 130–131, 134–135, 140, 144n21
- Arras, John, 182–183, 185, 187
- Aspirin, 36, 137, 225
- Asthma, 222
- Authority figures, 131, 143n13
- Autonomy, 118, 163–165, 259, 295, 322n11
- Ayer, A. J., 21
- Bans, 102n21, 311
- Banting, Frederick, 39, 199
- Bass, Robert, 10, 230
- Bellon, Christina, 14, 322n11
- Beneficence, 2
- Benefits
  - “benefits argument” for animal research, 7, 85, 107–112, 122n2, 122n4, 245, 250–255, 256–258
  - for animals, 25, 42–43, 252
  - for humans, 6–7, 10, 14, 19, 25, 32, 38, 42–43, 45–46, 54, 69–72, 81, 84–88, 92–97, 99, 107–112, 114, 119, 121, 137, 139, 185, 189, 200, 202, 211, 219, 221, 223, 251–258, 268–269, 287
  - moral entitlement to, 153
  - possible versus actual, 93–95
  - professional, 263
  - prospective assessment of, 95, 98–99, 201–202, 205, 212
  - unearned, 282–283
  - versus costs or harms, 26, 86–87, 93–97, 101n19, 101n21, 108–111, 149, 185, 189, 205, 211, 252–255, 275–276, 300 (*see also* Cost-benefit analysis)
  - versus risks, 7, 44, 56
- Bentham, Jeremy, 72, 78, 82–84
- Bernard, Claude, 2
- Bernstein, Mark, 241
- Best, Charles, 199–200
- Bias
  - publication, 91, 101n17
  - species, 97, 205 (*see also* Speciesism)
- Bible, 120, 123n15, 231n4, 261. *See also* God; Koran; Religion
- Biocentrism, 217. *See also* Anthropocentrism
- Bioethics, 182, 262–263
- Biopharming, 181–184, 187, 190–191. *See also* Biotechnology; Genetic engineering; Transgenic animals
- Biosearch Laboratories, 129
- Biotechnology, 8, 11, 12, 181–183, 185, 187–189, 191–192, 200. *See also* Biopharming; Genetic engineering; Transgenic animals
- Birds, 3, 39, 100n3, 123n16, 239–240. *See also* Vertebrates
- Boredom, 24, 68–69, 72. *See* Stimulation
- Botting, Jack, 85, 87, 138–139
- Brain, 34, 39, 41, 108, 116, 138, 141, 159, 174, 239
- Breeding, animal, 3–4, 15n4, 131, 184, 216, 311, 314, 323n19
- British Animals Act, 59
- British Institute of Medical Ethics, 59
- British Medical Journal* (BMJ), 91
- Brody, Baruch, 9, 144n17
- Burch, Rex, 55, 170–171, 293, 321n2. *See also* Three Rs (3R approach—refinement, reduction, and replacement)
- Business, 263
- Cages. *See* Confinement/cages
- Callousness, 130–132, 134, 136, 144n16
- Canada, 3, 191, 207
- Cancer, 24, 32, 39, 41, 101n11, 109, 170, 173, 200, 221, 224–226, 233nn15, 258, 268–269

- Cannon, Walter, 19
- Carcinogenicity, 220, 226
- Cardiopulmonary resuscitation (CPR), 40
- Cardiovascular disease/heart disease, 32, 41, 43, 109, 258, 274
- Carruthers, Peter, 95, 102n23, 102n24, 147, 218
- Casuistry, 12, 181–192
- Categorical Imperative, 186, 296. *See also* Kant, Immanuel; Kantianism
- Cats, 3, 36, 39, 74, 116–117, 131, 144n18, 220–222, 225, 232n11, 239, 309, 314, 319, 322n12, 323n20. *See also* Mammals; Vertebrates
- Centers for Disease Control and Prevention (CDC), 109, 239
- Children  
and moral status, 75, 84, 93, 114–119, 147, 221, 234n19, 248, 315, 317, 322n12  
as deserving of equal or special consideration, 62, 83, 302, 307, 315, 317  
as lacking certain capacities, 118–119, 147, 322n12  
as potential recipients of charity, 89, 251  
as research subjects, 67–69, 110–117, 122n13, 322n12  
as vulnerable, 4, 110–117, 122n13, 308–310
- Chimeras, 12, 170, 174–175, 177. *See also* Transgenic animals; Xenotransplantation
- Chimpanzees. *See* Primates
- Clinical trials. *See* Testing/trials
- Cloning, 181, 183, 191
- Cognition (or impairment/deficiency of). *See also* Rationality  
in animals, 11, 24–25, 67, 69, 72, 75, 77–78, 97, 116, 143n7, 175, 188, 209–210, 259, 293, 316  
in humans, 9, 11, 25, 67, 69, 72, 74–75, 77–78, 97, 114, 116, 118, 151, 244, 252, 259
- Cohen, Carl, 74–75, 78, 85, 100n8, 110, 117–119, 122n4, 123n19, 144n17, 185, 187, 215, 218, 233n12, 233n13, 235n25, 248–249, 267–269, 275
- Commodity, treating life as, 176. *See also* Life, value of
- Common ground, 13–14, 217, 231n7, 241, 301–304. *See also* Consensus
- Communitarianism, 151, 321n8
- Compassion, 132, 140, 240, 248, 256, 261. *See also* Empathy; Sympathy
- Confinement/cages, 3, 25, 67–68, 72, 99, 108, 122, 128, 144n15, 184–185, 188, 233n15, 275, 296, 309. *See also* Housing/facilities
- Consciousness/conscious awareness, 28, 42, 95, 97, 102n24, 116, 218–219, 232n10, 233n15, 239, 248–249, 255, 260–261. *See also* Sentience
- Consensus, 5, 9, 25, 72, 260. *See also* Common ground
- Consent  
informed, 2, 15n3, 24–25, 72  
lack of, 6, 95, 97, 255
- Consequentialism, 83, 130–131, 134, 185–187, 189, 191, 261. *See also* Utilitarianism
- Consistency, 12–13, 79, 115, 117, 119–120, 126, 141, 143n4, 152–155, 216–217, 219, 230, 231n6, 277–283, 286, 297, 299–302, 305, 318, 322n12. *See also* Logic/logical
- Constraints  
deontological, 10, 126  
epistemic, 5, 305–306  
ethical, 23, 298, 302, 305, 323n18  
financial, 317  
institutional, 314  
legal, 23
- Consumer products, 100n4, 161, 238
- Consumer safety, 2, 100n4, 109, 137, 273
- Contract, social. *See* Contractarianism

- Contractarianism, 11, 147–165, 216, 259–260  
 authority, 149–150, 159  
 critics of, 321n8  
 equality of power condition, 148–149, 157–159  
 Hobbesian, 149–151, 155–159, 161, 259  
 hypothetical, 147, 149, 152, 158, 260  
 Kantian, 149–151, 155, 158–159, 161, 163  
 Rawlsian, 147–149, 151–158 (*see also* Rawls, John)  
 rationality condition, 148–150, 159  
 Contractualism. *See* Contractarianism  
 Cooperation, 78–79  
 Corporations, 177, 263  
 Cortisone, 225  
 Cosmetics/cosmetic testing. *See* Testing/trials, cosmetic  
 Cost-benefit analysis, 185. *See also* Benefits, versus costs or harms  
 Council of the European Communities. *See* European Community  
 Cruelty, animal, 5, 12, 23, 81, 231n4, 310, 312  
 Curfman, Gregory, 273  
 Darwin, Charles, 15n1, 24, 31, 33–34, 36, 38, 42, 45–46, 115–116, 123n14, 129–130, 132, 143n8  
 Death, 3, 7, 14, 40, 43, 69, 87, 93–95, 97, 99, 101n11, 108–111, 113, 135–136, 138, 144n15, 218–219, 221–222, 224–225, 227, 233n11, 239–240, 253, 269–270, 275, 276, 278–281, 284, 286, 320n1, 321n6, 323n21. *See also* Euthanasia/extermination; Killing; Mortality  
 Declaration of Helsinki, 44  
 Defibrillation, 40  
 DeGrazia, David, 53, 64, 65n1, 187, 204, 260, 262–263, 264n4, 301–304, 307, 321n4, 322n11  
 Deontology/deontological, 10, 126, 215, 295. *See also* Rights  
 Dependency, 296, 308–311, 316, 320. *See also* Power (in relationships); Vulnerability, social  
 Depo-provera, 225  
 Depression, 128–129, 209–210, 312  
 Deprivation, 206, 294, 301  
 Derbyshire, Stuart, 240–241  
 Descartes, Rene, 54, 65n2, 127–129, 143n7, 293, 321n3  
 Desensitization, 129, 131, 135, 142, 144n16  
 Diabetes, 32, 41, 101n11, 138, 172–173, 199–200  
 Diet/nutrition, 43, 88, 202, 251, 253, 275, 316  
 Diethylstilbesterol (DES), 222  
 Digitalis, 225  
 Dignity, 163–165  
 Dilemma, moral. *See* Moral dilemma  
 Disability/handicap, 75, 77, 97, 108, 269, 275–276, 279, 286, 299, 321n6  
 Disease, 2, 5–7, 9, 12, 24, 31–32, 34–36, 38–39, 41, 43–46, 82, 85–86, 88, 91–93, 98–99, 108–109, 112–113, 128, 134, 138, 142, 170, 172–174, 177, 184, 189–190, 198, 200–204, 206, 219, 221, 223–225, 227, 233n15, 239, 241, 250, 253, 257–258, 274–276, 279, 282, 298–299, 321n6  
 Dissection, 2, 82, 131–132, 312, 314  
 Distress, 3, 7, 13–14, 27–28, 55–56, 60, 67, 89, 99, 171–174, 177, 205–210, 212, 240, 300, 310, 312, 318, 320. *See also* Anxiety; Fear; Frustration; Stress  
 DNA, 33–34, 36, 169, 174, 176  
 Doctors. *See* Physicians  
 Dogs, 3, 24, 35, 38–40, 67, 69, 77–78, 93, 116–118, 128–129, 154, 160–161, 198–200, 220–222, 225, 231n4, 232n11, 239, 309, 313–314, 319, 322n12, 323n20. *See also* Mammals; Vertebrates  
 Dominion of humans, 197. *See also* Anthropocentrism; Superiority of humans

- Draize test. *See* Testing/trials
- Drugs. *See* Pharmaceuticals
- Duties/obligations
- legal, 2–4, 25, 87, 89, 100n4, 174, 247, 317
  - moral, 24, 61–63, 65, 75, 77–78, 83, 100n6, 111, 147, 156, 174, 186–187, 212, 218, 238, 242, 248, 258, 281, 285–288, 294, 296–297, 299, 301, 304, 307–308, 310, 315–318, 320, 320n1, 321n7, 322n16
  - prima facie, 95
  - special, 61–63, 65, 77, 120, 255, 261, 308, 315–318, 322n16
- Economics, 4, 20, 28, 154, 202, 309, 316, 318, 323n21
- Education
- medical/science, 3, 20, 99, 107, 121, 123n21, 131–132, 237–238, 263, 271
  - moral, 127, 131–132
  - nutritional/lifestyle, 88 (*see also* Diet/nutrition)
  - public health, 253
- Efficiency, 177, 314, 323n21
- Egalitarianism, 83, 117, 295
- Elixir Sulfanilamide, 2
- Elliott, Carl, 262
- Emotion/emotional states
- in animals, 3, 24, 97, 116, 127–132, 143n8, 175
  - in humans, 77, 97, 116, 127–133, 141, 175, 240–244, 312
  - versus reason/rationality, 23, 221, 240–242
- Empathy, 32, 42, 45–46, 76, 125, 129. *See also* Compassion; Sympathy
- Engel Jr., Mylan, 13, 231n6, 233n14, 297–298, 300, 302, 321n5
- Epidemiology, 38, 88, 109, 204, 253
- Equality
- animal, 230
  - intuitive, 153–155, 157, 160
  - moral, 114–115, 117, 231n4, 246, 250, 295, 297, 307–308
  - of opportunity, 154
- Ethology, 95
- European Agency for the Evaluation of Medicinal Products, 228
- European Community, 57
- Euthanasia/extermination, 55, 173, 315–318, 320n1, 323n21. *See also* Death; Killing
- Evolution, biological, 9, 24, 31–33, 35–38, 41–42, 44–46, 77, 95, 116, 123n15, 128, 217, 259
- Experimentation. *See* Models; Pharmaceuticals; Research; Testing/trials
- Exploitation, 187, 216, 231n5, 276, 279, 307, 316
- Factory farming, 190, 219, 322n18
- Fairness, 78, 151–152, 155, 160, 164, 176, 261, 263
- False negatives, 87, 137–138, 222–224, 229, 230, 235n24
- False positives, 87, 137–138, 224–227, 230
- Fear, 4, 24, 99, 116, 128, 189, 209, 210, 240. *See also* Anxiety; Distress; Frustration; Stress
- Feminism/feminist theory, 14, 296, 305–320, 321n8, 322n10, 322n11, 323n22. *See also* Sexism; Women
- Fiester, Autumn, 11–12
- Fink, Charles, 256
- Fish, 33–34, 39, 123n16, 170. *See also* Vertebrates
- Flies. *See* Insects
- Fluoride, 225
- Food and Drug Administration (FDA), 63, 109, 122n6, 137, 220, 223, 226, 234n21, 234n22, 267, 269–274, 280, 299
- Foundation for Biomedical Research, 19, 38–39, 200
- Frey, R.G., 102n28, 255, 257
- Frogs. *See* Amphibians

- Frustration, 7, 24, 68–69, 72, 144n15. *See also* Anxiety; Distress; Fear; Stress
- Galen, 2, 81
- Genes/genetics, 11–12, 33–39, 41, 43, 45, 114, 120, 169–177, 184, 188, 191, 268, 323n19
- Genetic engineering, 4, 11–12, 169–177, 181–188, 192n1, 211, 309, 323n19. *See also* Biopharming; Biotechnology; Transgenic animals
- Genetic relatedness of animals and humans, 9, 31, 33–38. *See also* Homology
- GlaxoSmithKline, 268, 275
- God, 120, 123n15, 158–159, 197. *See also* Bible; Koran; Religion
- Golden Rule, 79, 248, 260
- Government regulation, 1, 55, 288
- Graham, David J., 271–272
- Grants/Funding, 3–4, 26, 44–45, 60, 88, 99, 112, 175, 197, 203, 206, 253, 263, 274, 310
- Greed, 134, 261
- Greek, Jean Swingle, 36, 38, 101n12, 122n5, 137–139, 203, 222–223, 225–226, 234n20, 235n24, 267, 274–275
- Greek, C. Ray, 36, 38, 101n12, 122n5, 137–139, 203, 222–223, 225–226, 234n20, 235n24, 267, 274–275
- Guillain-Barré syndrome, 222
- Guinea pigs. *See* Rodents
- Hackam, Daniel, 91–92, 101n18
- Hales, Stephen, 2
- Hamsters. *See* Rodents
- Harlow, Harry, 128–129, 143n9
- Harm  
 actual versus possible, 93–94  
 to animals, 3, 5–7, 10, 13, 14, 25–26, 54, 71, 82–83, 85–87, 89, 93–96, 98–99, 101n19, 101n21, 102n22, 107–108, 110, 117, 119, 121, 136, 169, 172, 197, 206, 218–219, 222, 224, 229, 231n4, 232n10, 233n11, 233n15, 238–241, 246–249, 251–255, 258–259, 261–262, 276, 281, 294–295, 297–298, 303–304, 306, 310, 312, 317, 319, 321n7, 322n9 (*see also* Anxiety; Confinement/cages; Death; Deprivation; Distress; Disability/handicap; Distress; Euthanasia/extermination; Exploitation; Fear; Frustration; Injury; Killing; Pain; Stress; Suffering)  
 to humans, 10, 82, 87, 93, 96, 107–110–111, 113–115, 117, 119, 132, 137, 144n16, 162, 222–224, 229–230, 239, 252–255, 259, 261, 268–269, 274–275, 280, 298  
 to science, 9, 26
- Harvey, William, 2
- Health/healthcare, 7, 9, 19, 32, 38, 40–41, 43, 45–46, 53, 55–56, 88, 93–94, 107–110, 170, 173, 177, 184, 190, 198, 202–203, 220, 226–227, 229, 233n17, 250, 253, 256–257, 264n5, 273, 278, 280, 284, 304, 307, 316
- Heart disease. *See* Cardiovascular disease/heart disease
- Hepatitis, 112–113, 173
- Hobbes, Thomas, 149–151, 155–159, 161, 259
- Homology, 33–35, 172. *See also* Genetic relatedness of animals and humans
- Housing/facilities, 4, 27–28, 98, 108, 191, 239–240, 314–319. *See also* Confinement/cages
- Human immunodeficiency virus (HIV), 36, 110, 201. *See also* Acquired Immune Deficiency Syndrome (AIDS); Virology/viruses
- Human subjects research. *See* Research, with human subjects
- Human rights. *See* Rights, human
- Human welfare. *See* Welfare, human
- Humaneness, 31, 45, 125, 190–191, 216, 239–240, 293–294, 304, 321n2, 322n18
- Hume, Charles, 293–294, 321n2

- Hunters/hunting, 279
- Hursthouse, Rosalind, 130, 143n5, 143n10, 143n12
- Hypertension, 138, 173
- Hypocrisy, 14, 259, 275–288, 299
- Ibuprofen, 225
- Ideal theory. *See* Theory, ideal
- Ideology, 5, 8, 20–23, 28–29, 110, 112, 154, 241
- Impartiality, 155, 164, 261, 263, 295, 307–308. *See also* Partiality
- Informed consent. *See* Consent, informed
- Injury, 3, 7, 28, 45, 99, 108, 111, 114, 116, 121, 198, 216, 223, 233n15, 239–240, 311
- Innovation, 176
- Insects, 34–35, 39, 120, 170, 218
- Inspections, 310
- Institutional Animal Care and Use Committees (IACUCs), 12, 45, 89–93, 99, 101n16, 173, 202, 310
- Intact systems, 116, 228
- Integrity  
bodily, 7, 111, 114–115, 117, 119–121  
moral/personal, 13, 132, 238, 276  
research, 294, 320  
species-life, 186, 190
- Intelligence. *See* Cognition (or impairment/deficiency of)
- Interdependence, 311
- Interests,  
conflicts of, 273–274  
discounting of, 9, 57–58, 60–64, 73, 77–79, 97, 205, 282, 308  
equal consideration of, 57, 61–62, 64, 79, 85, 141, 231n4, 249, 282, 301–303, 306–308  
of animals, 7, 9, 11, 14, 26, 28, 54–64, 72–74, 77–79, 81, 85, 97–98, 123n15, 162–163, 186–187, 239, 241, 249–250, 282, 294–296, 302–304, 306, 308, 312, 314, 321n7, 322n10, 322n11, 322n12  
of humans, 7, 9, 11, 24, 54, 57–64, 73–74, 77–79, 84–85, 97, 118, 149–150, 161–164, 249–250, 256, 282, 295–296, 302–304, 306–308, 322n11, 322n12  
of research community, 319
- Intrinsic value, 122n1, 128, 133
- Intuition(s), 9, 28, 31–32, 58, 126, 130, 150, 152–155, 157, 160, 182, 187, 191, 209, 211, 221, 258, 260, 297–298, 301–302, 305, 321n5, 322n12
- Isuprel, 222
- Jamieson, Dale, 241
- Japan, 3
- Jonsen, Albert, 182
- Journal of the American Medical Association (JAMA)*, 91, 215. *See also* American Medical Association (AMA)
- Justice  
circumstances of, 157  
conception of, 152, 157  
as fairness, 155, 160  
principles of, 151–152, 156, 158–159  
sense of, 147, 156  
social, 151–165, 282–283, 286–287, 306, 308–310, 321n8
- Kant, Immanuel, 132, 149–151, 186, 296
- Kantianism, 127, 143n6, 149–151, 155, 157–159, 161, 163, 165, 186, 216, 261
- Kennedy, John S., 128–129
- Killing, 22, 24, 42–43, 55, 68–69, 73, 82, 93, 97, 100n3, 103n29, 112, 119, 142, 144n16, 200, 206, 216, 218–219, 223, 225, 229–230, 231n4, 232n10, 239, 251, 269, 281–282, 295–297, 307, 311, 314–317, 319, 323n21. *See also* Death; Euthanasia/extermination
- Kitchell, Ralph, 27
- Knowledge, 1–2, 5, 13, 20–21, 23–29, 34, 37–38, 43, 46, 56, 58–59, 71, 87–88, 91, 93–97,

- Knowledge (cont.)  
 99, 101n11, 102n21, 109–110,  
 113–114, 122n1, 128, 135, 139,  
 141–142, 151–152, 155, 158–160,  
 162–163, 165, 169–170, 177, 183,  
 197–204, 211–212, 220, 224, 226,  
 228, 243–244, 252–253, 259, 263,  
 264n5, 268, 270–271, 285, 296,  
 300, 306, 312, 315–316, 319–320,  
 320n1, 322n16
- Koran, 120, 123n15. *See also* Bible;  
 God; Religion
- Kouwenhoven, William B., 40
- Krugman, Saul, 112–114
- LaFollette, Hugh, 36, 101n12, 122n5,  
 137–138, 169
- Language, 24, 293
- Lavoisier, Antoine, 2
- Laws/legal system/legislation, 2–4,  
 25, 27–28, 57, 81, 84, 87, 89,  
 100n4, 174–176, 182, 192, 247,  
 305–306, 317. *See also* Duties/obli-  
 gations, legal; Rights, legal
- LD50 test. *See* Testing/trials
- Legal rights. *See* Rights, legal
- Levin, Mark, 226–227, 274
- Liberalism, 152, 154, 321n8
- Liberation, animal, 241, 286–287
- Liberty, 73, 308
- Life, value of, 6–7, 24, 32, 44, 73,  
 94, 100n7, 102n28, 111–112,  
 114–117, 119–121, 125, 131,  
 164, 174, 176, 197, 221, 232n10,  
 234n19, 278, 281–282, 284–285,  
 295–296, 301, 303, 307, 316,  
 321n7, 323n21. *See also* Commod-  
 ity, treating life as; Quality of life
- Lindemann, Hilde, 262
- Lobby, 27, 263
- Logic/logical, 13–14, 23–25, 28, 31,  
 63, 75, 110–111, 113, 115, 117–  
 119, 121, 122n1, 237, 243–250,  
 260–262, 283, 287–288, 297,  
 301–302. *See also* Consistency
- Logical positivism. *See* Positivism,  
 logical
- Machan, Tibor, 248–249
- Mammals, 12, 115–117, 120,  
 123n15, 123n16, 170, 205, 218,  
 233n17, 276, 322n12. *See also*  
 Cats; Dogs; Pigs; Primates; Rabbits;  
 Rodents; Vertebrates
- Mandatory, animal research/testing  
 as, 2, 25, 44, 63, 100n4, 138, 267,  
 288
- Marginal cases, 10, 74–77, 79
- Marginalization, 108, 131, 307
- Meat/killing animals for food, 185,  
 190, 219, 231n6, 237, 281, 303,  
 322n18. *See also* Vegetarianism
- Medawar, Sir Peter, 43, 199, 211
- Media, 1, 31, 98, 219, 271, 305
- Medical device, 1–2, 44, 289n1
- Medicine. *See also* Medical device;  
 Pharmaceuticals; Vaccines  
 advances/progress in, 5, 12–13, 24,  
 38, 43, 46, 53, 56, 71, 107–108,  
 138–139, 175, 181–182, 197–198,  
 200–204, 212, 221, 225, 302, 319,  
 320n1  
 biomedicine, 53, 169, 176, 262  
 genomic, 46  
 human clinical, 14, 28, 31, 38, 71,  
 85, 102n28, 109, 138, 174, 202,  
 204, 210, 263, 267, 269–288, 298,  
 319  
 veterinary, 28, 272
- Merck, 271–273, 289n2
- Merriam, Garret, 10
- Metabolism, 34, 88, 162, 172, 175,  
 227–229
- Methodology, 2, 44, 55, 88, 92–93,  
 101n18, 108, 110, 135, 152, 162,  
 169–170, 181–183, 187, 190–191,  
 202, 212, 224, 228, 230, 237–238,  
 250–253, 257–258, 260, 262, 269,  
 293–296, 298, 305–306, 320,  
 321n8
- Microdosing technology, 88, 228–229
- Midgley, Mary, 63–64, 316
- Mill, John Stuart, 72, 82–84
- Millennium Pharmaceuticals, 226,  
 274



## Models

- animal, 6, 11–12, 32, 34–38, 40, 45–46, 91, 109, 135, 139, 169–174, 177, 204, 210, 222–224, 227–230, 233n15, 255, 267–269, 274, 279–280, 287, 296, 298–299, 302–303, 316, 320
- biological research, 2, 5, 36–38, 294, 298, 316
- computer, 55, 88, 135, 162, 171, 228
- in silico, 228–229
- in vitro (including cell and tissue), 12, 55, 88, 135, 162, 171–172, 203, 227–229
- mathematical, 55, 88, 228
- Monkeys. *See* Primates
- Moral agency/agents, 78–79, 100n6, 147–148, 155, 218, 231n3, 284, 299
- Moral character, 83, 125, 127–128, 130, 133, 142, 299. *See also* Vices, moral; Virtues, moral; Virtue ethics/theory
- Moral community, 75, 120
- Moral dilemma, 126–127, 140, 142, 175
- Moral disagreement, 13, 90, 100n6, 139, 210, 262, 300–301, 303
- Moral duty. *See* Duties/obligations, moral
- Moral patient. *See* Patient, moral
- Moral pluralism, 13, 238, 260–261, 301, 304
- Moral principles, 10, 26, 45, 57, 64, 83, 85, 102n21, 115, 117, 121, 126, 141, 151–160, 165, 182–183, 185–187, 189, 191, 216–219, 232n10, 232n11, 233n15, 238, 254, 256–258, 260–261, 276–277, 295, 299–302, 305, 321n5. *See also* Autonomy; Beneficence; Compassion; Golden Rule; Humaneness; Justice; Respect; Utility
- Moral progress, 13–15, 238, 242–243, 261–262, 264, 295
- Moral responsibility, 73, 77–78, 118, 153–154, 248, 259, 283, 301, 310, 317. *See also* Accountability
- Moral rights. *See* Rights
- Moral status/standing, 9–12, 19, 23, 29, 53, 72–75, 77–79, 81, 111, 114, 148, 150, 153–154, 156, 185, 189, 197, 205, 218, 231n4, 246–251, 262, 294, 297, 301, 303–304, 307–308, 310, 322n11, 322n15
- Morbidity, 203
- Morrison, Adrian, 85, 87, 138–139
- Mortality, 203, 253. *See also* Death
- Motives/motivation, 4–5, 43, 81–82, 127, 133–134, 188, 320
- Mouse/mice. *See* Rodents
- Narrative, 198–201
- National Association for Biomedical Research, 122n2
- National Cancer Institute (NCI), 226
- National Institutes of Health (NIH), 44, 55–56, 175, 201, 203
- Natural selection, 31, 38, 42, 46
- Nausea, 209
- Nazi experimentation, 2, 25
- Necessity of animal research, 5–6, 232n10, 255–257, 304
- Neglect, 1, 28, 129, 312
- Nervous System, Central, 34, 116, 143n7
- Netherlands, The, 206–207, 318
- New England Journal of Medicine*, 19–20, 273
- New Zealand, 207–208
- Newton, Sir Isaac, 20–21
- Nicotine, 220. *See also* Tobacco/smoking
- NIH. *See* National Institutes of Health
- Nobel Prize, 38–39, 43, 199, 210
- Nobis, Nathan, 13, 15n2, 187, 259, 297, 300
- Non-ideal theory. *See* Theory, non-ideal
- Norcross, Alastair, 9–10, 100n6
- Nozick, Robert, 102n25, 122n11
- Nuffield Council on Bioethics, 3, 14, 82, 169, 173
- Nuremberg Code, 2, 44

- Obesity, 41, 101n11, 173
- Objectivity. *See also* Subjectivity  
 moral, 150, 241, 308  
 scientific, 20, 204, 241
- Obligations. *See* Duties/obligations
- Oliver, Kelly, 307, 310, 311, 322n10
- Oppression, 241, 306–307, 313
- Pain, 3, 7, 9, 12, 14, 22–24, 26–28, 45, 54–59, 61, 67–68, 72, 83–84, 86, 89, 99, 102n24, 110, 113, 116, 118–119, 122n4, 126, 128–129, 133–137, 140, 143n7, 144n15, 144n16, 171–174, 177, 184, 198, 205–210, 212, 218–221, 233n12, 234n19, 239, 247, 250, 252, 272, 285, 295, 300, 311–312, 318, 320. *See also* Analgesia; Anesthesia; Suffering
- Paradigms/paradigm cases, 12, 27, 31, 35, 38, 46, 181–183, 187, 275–276, 278, 280, 286, 299–300, 308–310, 321n6
- Partiality, 9, 64, 259, 307–308. *See also* Impartiality
- Pasteur, Louis, 2
- Patents/patenting, 12, 175–178, 263, 323n19
- Patient  
 medical, 40, 43, 113, 200, 203, 268–271, 275–276, 278, 282, 284, 286, 299, 309, 321  
 moral, 78–79, 197
- Paton, Sir William, 198
- Pavlov, Ivan, 2, 39
- Peer review, 92
- Pence, Gregory, 263
- Penicillin, 36, 39, 137, 225, 234n23
- People for the Ethical Treatment of Animals (PETA), 143n11
- Perel, Pablo, 91–93, 101n17
- Personhood/moral personality, 73, 75, 156–157, 159, 186, 209, 251–252, 259. *See also* Subjects-of-a-life
- Pets/companion animals, 32, 181, 191, 234n19, 319
- Pfizer Corporation, 273, 276
- Pharmaceuticals  
 development/discovery, 14, 200–201, 203–204, 217, 221–229, 234n21, 234n23, 235n25, 267, 272–275, 278, 280, 282–283, 298–300 (*see also* Research and development)  
 efficacy, 14, 63, 87, 170–171, 223–229, 234n21, 234n22, 252, 267–271, 287, 298–299  
 industry/market, 70, 109, 137, 141, 144n16, 219, 222–223, 267–269, 270–274, 276, 280, 284–285, 287  
 marketing, 263, 270–271  
 production, 185, 234n21, 267  
 safety, 2, 14, 63, 87, 109, 137, 222–229, 234n20, 234n21, 234n22, 235n24, 252, 267–275, 288, 298–299 (*see also* Adverse event/adverse drug reaction (ADR); Consumer safety; Side effect)
- Physicians, 2, 19, 109, 270–271, 273, 310
- Physicians Committee for Responsible Medicine (PCRM), 220, 223, 234n18, 274
- Physiology, 2, 11, 20, 34, 38, 45–46, 81, 95, 115–116, 120, 169, 208, 313
- Pigs, 2, 24, 43, 116, 131, 160, 174, 181–182, 184, 188–191, 322n18. *See also* Mammals; Vertebrates
- Pippin, John, 226–228, 234n22
- Plants, 34, 120, 293–294
- Pleasure(s), 54, 58–59, 83–84, 102n24, 119, 125, 129, 133, 140, 239, 248, 262, 279, 295
- Pluhar, Evelyn, 102n24, 289n5
- Policy, 84, 202, 205–206, 238, 300  
 institutional, 262–263  
 public, 55, 64, 110, 205–206, 269, 305
- Polio, 5, 39, 107, 138, 173. *See also* Virology/viruses
- Positivism, logical, 20–22
- Pound, Pandora, 92

- Power (in relationships), 110, 121, 148–149, 157–159, 261, 306–313, 320. *See also* Dependency; Vulnerability, social
- Prednisone, 225
- Preferences, 58–59, 61, 64, 76, 83, 85, 96, 102n28, 123n15, 161, 184, 186, 215, 231n3, 255
- Prescription drugs/medicine. *See* Pharmaceuticals
- Prevention/preventive care, 6, 38, 44, 82, 88, 91, 93, 112–113, 138, 202, 223, 225, 282, 294
- Primates, 2–3, 25, 32–33, 35–36, 39, 45, 67, 69, 75–77, 98, 115–116, 128–129, 170, 174, 189, 198, 206, 209, 222–223, 239, 308. *See also* Mammals; Vertebrates
- Private industry, 7, 176, 310, 315
- Procedures, medical/experimental, 44, 55–56, 68, 89, 99, 100n4, 108, 136, 173, 177, 201, 206, 208, 220, 239–241, 251–252, 255, 264n1, 268–269, 294, 298, 312, 318, 320
- Product testing. *See* Testing/trials
- Profit, 279, 315
- Progress, medical. *See* Medicine, advances/progress in
- Progress, moral. *See* Moral progress
- Public health, 108–109, 202–204, 253, 273
- Public opinion/debate, 7–8, 9, 15n4, 25, 31–32, 45–46, 67, 72, 92, 181, 191, 197, 201, 205–206, 233n11, 273, 303, 305, 319–320
- Quality of life, 86, 89, 184, 190, 203, 251, 317
- Rabbits, 3, 39, 69, 138, 199–200, 221–222, 225, 319, 323n20. *See also* Mammals; Vertebrates
- Rachels, James, 237, 263, 322n9
- Racism, 24, 64, 79, 97, 110–111, 117, 154, 261, 282–283, 295, 305, 307. *See also* Sexism.
- Rats. *See* Rodents
- Rationality, 10, 68, 73–74, 77–79, 147–152, 155–164, 186, 241–242, 245–246, 252, 305, 311. *See also* Cognition (or impairment/deficiency of)
- Rawls, John, 147–149, 151–160, 164, 302. *See also* Contractarianism, Rawlsian.
- Reciprocity, 73, 79, 149, 293
- Redelmeier, Donald, 91–92, 101n18
- Reflective equilibrium, 152–153, 155, 157, 217, 305, 321n5
- Regan, Tom, 9–10, 13–14, 23, 65n3, 72, 122, 122n10, 123n16, 123n18, 123n19, 123n20, 123n21, 143n2, 147, 164, 169, 185, 204–205, 215–217, 231n2, 261, 264n1, 276, 282, 289n6, 296, 299–300, 306, 321n6, 322n12
- Regeneration, 21, 138
- Relationship(s), personal/moral, 4–5, 13–14, 31, 81, 120, 186, 188, 238, 293, 296, 304, 306, 308–318, 320, 322n16, 323n18, 323n19, 323n20
- Religion, 5, 20–21, 64, 79, 120, 123n15, 123n20, 158–159, 197, 216, 231n4, 242, 259, 261. *See also* Bible; God; Koran
- Remorse, 129–130, 133
- Research  
 aggression, 141  
 alternatives to animal models, 3, 55, 88–89, 100n10, 102n21, 108, 112, 121–122, 122n4, 134–137, 162, 172, 200, 210, 227–230, 257–258, 303, 318, 320, 321n2 (*see also* Microdosing technology; Models, computer; Models, in silico; Models, in vitro (incl. cell and tissue); Models, mathematical; Research, in vitro; Three Rs [3R approach—refinement, reduction, and replacement])  
 basic, 3, 25, 201–202  
 behavioral, 11, 25, 28, 35, 39, 116, 128–129, 141, 169, 208

- Research (cont.)
- biomedical, 1–6, 12–13, 19–20, 31, 36–41, 43–44, 53, 69, 82, 85–86, 88, 97, 102n28, 107, 112, 134–138, 144n16, 161–162, 169–178, 181, 188–191, 197–211, 217–235, 250–251, 253–257, 264n5, 267–275, 289n1, 294, 304
  - data and resource sharing, 175–176
  - in vitro (*see* Models, in vitro [including cell and tissue])
  - nonconsensual, 6–7, 10, 15n3, 24–25, 72, 95, 255
  - nontherapeutic, 6–7, 10, 82, 107, 110, 121, 240, 246, 255
  - observational, 82
  - product testing (*see* Testing/trials)
  - redundancy/repetition in, 135, 141–142, 162, 318
  - stem-cell, 135, 174–175, 227–229, 263
  - with human subjects, 2, 5–8, 15n3, 25–26, 44, 56, 91, 97, 102n28, 107, 110–121, 122n1, 122n13, 135, 203–204, 224, 252, 255, 257–259, 267, 318
- Research and development, 40, 56, 85, 136, 138, 169–174, 176–177, 197, 200–202, 204, 210, 223–224, 226, 229, 254, 269, 272, 274–275, 278, 280, 282, 299–300, 318, 320, 323n19 (*see also* Pharmaceuticals, development/discovery)
- Resnik, David, 11–12, 175–177
- Respect, 26, 73, 75, 111, 119, 129, 186–187, 190, 247–248, 260, 279, 313–314
- Responsibility. *See* Moral responsibility
- Resources, 5–7, 12, 88, 98, 175, 256, 306, 312, 316
- Rights
- animal, 9–10, 14, 42, 54, 57, 73–75, 110–112, 114–121, 125–126, 129–131, 140, 143n2, 143n3, 147, 169, 174, 185, 187, 189, 197, 205, 215–216, 218, 230, 241, 244, 246–251, 260, 275–280, 285–288, 295–297, 299–301, 305, 307, 310, 321n7, 322n12, 322n15 (*see also* Advocates, animal rights)
  - human, 10, 24, 42, 73–75, 110–121, 147, 164–165, 174, 215, 231n5, 247–251, 260–261, 276, 281–282, 296, 307
  - legal, 174, 247 (*see also* Duties/obligations, legal; Laws/legal system/legislation)
- Risks, 56, 88, 107, 111, 113–114, 132, 136, 140, 164–165, 185, 189, 211, 224, 226, 228, 271, 275, 279, 282, 284, 294, 298, 321n6. *See also* Benefits, versus risks
- Rodents (including hamster, guinea pig, mouse, and rat), 1, 3, 15n2, 36, 38–39, 41, 45, 69, 74–75, 100n3, 110, 119, 138–139, 160, 170–176, 200, 211, 219–226, 233n18, 235n24, 239–240, 267, 274, 298, 303, 308–309, 319, 323n19. *See also* Mammals; Vertebrates
- Rollin, Bernard, 5, 8, 9, 20, 23, 174, 241–242, 263
- Roses, Allen, 268–269, 275
- Ross, William David, 61
- Rowan, Andrew, 12–13, 200, 209, 212n1, 298, 300, 318
- Rowlands, Mark, 11, 149, 153, 155, 162, 164
- Russell, William, 55, 170–171, 293, 321n2. *See also* Three Rs (3R approach—refinement, reduction, and replacement)
- Ryder, Richard, 123n17, 205, 289n7
- Sadism, 23, 133
- Safety. *See* Consumer safety; Testing/trials
- Sapontzis, Steve, 23, 25, 289n5
- Scarcity, 7, 88, 191
- Schiffer, Stephen P., 9, 32, 36
- Schmidtz, David, 75
- Science/scientists, 1–6, 8–9, 11, 13, 15n1, 19–29, 31–32, 36–46,

- 55–56, 79, 89–93, 95, 99,  
101n15, 102n24, 111–112, 116,  
120, 127–129, 133–142, 144n18,  
144n19, 169–178, 181, 183–185,  
188–189, 191, 197–199, 201,  
205, 208, 210–211, 217, 219,  
221–222, 227–228, 234n20,  
238–241, 251, 253, 255, 259, 261,  
263, 268, 271, 273, 293–294,  
301–302, 304–306, 309, 313,  
315, 318, 320
- Science* (magazine), 90
- Scientific American*, 101n21, 201
- Selective serotonin reuptake inhibitor  
(SSRI), 222
- Self-interest, 79, 147–148, 150, 260,  
262, 275
- Self-regulation, 3, 319
- Sentience, 25, 32, 73, 77–79, 84, 95,  
128, 132, 136, 153–154, 186, 205,  
209, 218–219, 231n4, 232n10,  
233n15, 248–249, 255, 260–261,  
295. *See also* Consciousness/con-  
scious awareness
- Separation from offspring and/or  
other members of species, 144n15,  
184
- Sexism, 24, 64, 79, 117, 154, 261,  
282–283, 295, 305, 307. *See also*  
Feminism/feminist theory; Racism;  
Women
- Shanks, Niall, 36, 101n12, 122n5,  
137–138, 169
- Side effect, 68, 87, 137, 274. *See also*  
Adverse event/adverse drug reaction  
(ADR)
- Sidgwick, Henry, 84
- Singer, Peter, 23, 25, 61, 65n4, 72,  
74, 84–86, 96–98, 100n7, 103n30,  
141, 143n1, 169, 189, 204–205,  
215–217, 230n1, 232n8, 253,  
264n5, 295, 306
- Slavery, 13, 70, 84, 216, 237, 242,  
245, 247, 261, 307
- Snow, Charles Percy, 4
- Social justice. *See* Justice, social
- Soul, 24, 32, 231n4, 293
- Species, 11, 12, 15n2, 33–38, 42–46,  
55, 58–61, 63–64, 73–77, 85, 97,  
108, 110–111, 117–119, 140–141,  
155, 157, 160, 162, 169–170, 174,  
181, 184, 186–190, 200, 205, 217,  
220–223, 225, 229–230, 231n5,  
233n17, 234n18, 252, 255, 257,  
259–260, 274, 276, 282, 295,  
314, 316, 319, 322n12, 322n17,  
323n19. *See also* Bias, species;  
Speciesism
- Speciesism, 64, 74, 76, 85, 97, 110,  
117–119, 121, 123n17, 141, 205,  
216–217, 230, 231n5, 282–283,  
289n7. *See also* Bias, species; Rac-  
ism; Sexism; Species
- Statistics, 76, 101n17, 122n6, 122n8,  
171, 223, 240, 274
- Steinbock, Bonnie, 73–74, 77–78,  
232n8
- Stem cells. *See* Research, stem-cell
- Stimulation, 3, 186, 188, 316. *See*  
Boredom
- Streptomycin, 225
- Stress, 9, 26–27, 108, 131, 233n15,  
240, 294. *See also* Anxiety; Dis-  
tress; Fear; Frustration
- Stroke, 108–109, 223, 233n15, 269,  
271, 273
- Subjectivity, 101n21, 209, 306. *See*  
*also* Objectivity
- Subjects-of-a-life, 10, 114–117, 120,  
205. *See also* Personhood/moral  
personality
- Suffering, 5, 12–14, 23, 26, 28–29, 40,  
42, 45, 54–56, 61, 69–73, 78, 81,  
83–87, 89, 93–99, 101n15, 102n21,  
102n24, 108, 110, 117–119, 127,  
129–133, 136, 142, 143n7, 164,  
171, 181, 184–186, 189, 197–198,  
203, 205–206, 208–210, 212, 218,  
220–221, 227, 232n10, 233n11,  
239, 247, 250, 252, 276, 278, 280–  
281, 294–295, 297, 304, 310–311,  
320, 322n15. *See also* Pain
- Supererogation/supererogatory,  
284–285

- Superiority of humans, 10, 25, 73–75, 77–79, 231n5. *See also* Anthropocentrism; Dominion of humans
- Surgery, 19, 27–28, 38, 56, 107, 138, 200–201, 241, 282
- Switzerland, 207
- Sympathy, 45, 77, 261. *See also* Compassion; Empathy
- Technology  
 general, 253–254  
 medical, 136, 199–200, 228  
 transfer of, 170, 175, 177
- Teratogenicity, 220–222, 224–225, 234n20
- Testing/trials  
 clinical, 87, 91–93, 184, 189, 219–220, 224, 226–229, 263, 267–268, 272, 274, 298, 304  
 cosmetic, 56, 121, 140, 143n14, 144n16, 163, 217  
 Draize test, 141  
 LD50 test, 141, 206, 220–221, 233–234n18  
 phase 0, 228  
 product (household), 2–3, 14, 100n4, 107, 121, 136–137, 141, 144n16, 161–162, 199, 202, 217, 232n9, 237–238, 310, 322n16 (*see also* Consumer products; Consumer safety; Testing/trials, cosmetic)  
 toxicological, 2–3, 11, 81–82, 100n4, 169, 207, 220
- Thalidomide, 137, 162, 221–222, 234n20, 298
- Theory  
 ideal, 14, 94, 158, 260, 295–296, 305–306  
 non-ideal, 14, 296, 305–306, 321n8
- Three Rs (3R approach—refinement, reduction, and replacement), 3, 12, 55–56, 58–60, 170–174, 200, 260, 306, 321n2
- Tobacco/smoking, 101n11, 108–110, 220, 239, 253. *See also* Nicotine
- Torture, 125, 216, 248, 250, 286
- Toulmin, Stephen, 182
- Toxicity, 25, 87–88, 122n6, 173, 211, 220, 226–229, 298
- Toxicology/toxicological testing. *See* Testing/trials
- Transgenic animals, 12, 169–178, 181, 183–188, 190–191. *See also* Biopharming; Biotechnology; Chimeras; Genetic engineering
- Transparency, 14, 296–297, 306, 310–311, 318–320
- Transplantation, organ, 38–39, 174, 188–189, 200. *See also* Xenotransplantation
- Treatment. *See* Medicine; Pharmaceuticals; Procedures, medical/experimental; Surgery
- Trials. *See* Testing/trials
- Tuskegee syphilis experiments, 25, 122n9
- Uniqueness, 33, 36–37, 114–116
- United Kingdom, 3, 59, 81–82, 203, 205, 207–208, 211, 222
- United States of America, 2–3, 8, 19, 23–25, 26–27, 31, 41, 55–57, 82, 89, 100n3, 109, 122n6, 131, 138, 176, 177, 203, 205–208, 211, 238–239, 247, 267, 269–273, 299, 318, 322n18
- United States Department of Agriculture (USDA), 89, 208, 239
- Utilitarianism, 10, 26, 69–72, 77, 81–103, 125–127, 130–131, 140–141, 143n3, 143n6, 144n20, 144n21, 185, 189, 205, 212, 216, 230n1, 259, 295, 299–300. *See also* Consequentialism; Utility  
 act versus rule, 97–99, 103n29  
 aggregative, 83–84  
 egalitarian, 83  
 maximizing, 10, 83, 96–97, 100n6, 126, 134, 141–142, 185, 231n3, 299, 305  
 preference, 215, 231n3  
 universalism, 83–84
- Utility, 2, 4, 10, 71, 96–98, 125, 129–131, 133, 141, 144n20, 185,

- 299, 301, 305. *See also* Utilitarianism
- Vaccines, 5, 39, 107, 136, 138, 200–201, 206
- Validity, scientific, 32, 34, 36, 46, 55–56, 100n10, 112, 122n4, 171, 228
- Vance, Richard, 215, 231n4, 262
- Vegetarianism, 219, 231n6. *See also* Meat/killing animals for food
- Vertebrates, 3, 15n2, 32–33, 55, 123n16, 203, 205. *See also* Amphibians; Birds; Cats; Dogs; Mammals; Pigs; Primates; Rabbits; Rodents
- Vices, moral, 125, 130, 134, 136, 144n16. *See also* Moral character; Virtues, moral; Virtue ethics/theory
- Vick, Michael, 15n4, 232n11
- Vioxx, 223, 271–274, 289n2
- Virology/viruses, 39, 110, 112–113, 136, 189, 200–201. *See also* Human immunodeficiency virus (HIV); Polio; Yellow fever
- Virtue ethics/theory, 10, 126–127, 129–136, 140–142, 143n6, 261. *See also* Vices, moral; Virtues, moral; Virtue ethics/theory
- Virtues, moral, 127, 130, 132, 134, 136, 141–142, 143n6, 144n16, 261. *See also* Moral character; Vices, moral; Virtue ethics/theory
- Vivisection, animal. *See* Models, animal; Pharmaceuticals; Research; Testing/trials
- Vivisection, human. *See* Research, with human subjects
- Vulnerability  
disease, 34, 36, 38  
social, 4, 238, 252, 255, 258, 261, 296, 304, 306, 308–314, 316, 320 (*see also* Dependency; Power [in relationships])
- Waal, Frans de, 248
- Warren, Mary Anne, 73–74, 77–78, 143n2
- Welfare, 81, 83–84, 88, 93, 96–97, 312  
animal, 3–4, 8, 123n15, 132, 170–174, 177, 184, 191, 205, 208, 239–241, 294–295, 303–304, 309–310, 316, 318  
human, 4, 7, 13, 19, 85, 94, 169, 220, 229, 253, 256, 303–304, 319
- Well-being. *See* Welfare
- White, Alan, 75
- Willowbrook hepatitis experiments, 112–117, 119–120, 122n13
- Wittgenstein, Ludwig, 21–22
- Women, 24, 76, 117, 221–222, 237, 242–245, 261, 283, 307, 322n10, 323n22. *See also* Feminism/feminist theory; Sexism
- Worms, 33–34, 38–39, 218
- Xenotransplantation, 139, 174, 181, 184, 188–191. *See also* Chimeras; Transplantation, organ
- Yeast, 34
- Yellow fever, 39. *See also* Virology/viruses
- Zimeldine, 222
- Zoology, 139, 316
- Zoos, 303