Index

Backlog, 51, 111, 200, 348 Bolsheviks, 309 Baumes laws, 81 Bonnevie, Kristine, 67, 76 Behavior Genetics Association, 291 Bose, Chandra, 67 Behavioral genetics, 311–314 Bosnia, 28 abortion and, 300 Boundary work, 346-348 allele frequency vs. phenotypes, 327–328 Bounded democratization model, 346-348, alternative splicing and, 293-294 351-353 criminal justice system and, 315-331 Bradford, C. O., 38 definition subjectivity and, 296-297 BRCA1, 18 determinism and, 289-296 Brennan, William J., 219n20 ethnic-affiliation markers and, 322–327 Breyer, Stephen, 11, 13-22, 357 eugenics and, 302–310 (see also Eugenics) Brown, Nicole, 340 historical perspective for, 302–310 Budowle, Bruce, 3–4, 340 individual differences and, 295 Bureau of Justice Statistics, 272n2 intelligence and, 290-291 Burlington Northern Santa Fe Railroad, mutations and, 290, 300-302 182–183 nonreplicating results and, 298 Bursztain, Harold J., 214 phenotype issues and, 296, 299-302 Bush, George W., 44, 143 pleitropy and, 300 California, 94–95, 115, 119, 365 population-wide database and, 328–330 Robin Hood Problem and, 297 arrestee testing and, 187 selective arrests and, 315-322 DNA dragnets and, 260 statistical misuse and, 298–299 LAPD, 130n65, 340 trait catalogs and, 287-288 Moore case and, 139 Bell, Alexander Graham, 305 usual-suspect databases and, 189 Berdat, Alice, 253 war on drugs and, 320 Berger, Margaret A., 5-6, 109-131, 358 Callmark, 387n64 Bertillon, Alphonse, 65-66, 68-69, 71 Campbell v. United States, 128n48 biased population samples and, 297–298 Canada, 45, 240, 298 Capital cases, 368–369 Bertillon Cards, 65 Bieber, Frederick R., 23–62 Cardoza School of Law, 5 Carnegie Institution, 305, 309 Billings, Paul, 76 Bing, David, 52 Carpal tunnel syndrome, 182–183 Blake, Ed, 52 Castells, Manuel, 239 Blake, Jacqueline, 387n64 Castle, W. E., 305 Blood grouping, 93 Census records, 174 Blood sampling Center for Pathology Informatics, 42 blood types, 24–25, 27 Certificate of confidentiality, 158–159 collection methods and, 157-159 Central Park jogger, 93, 118 Department of Defense and, 44, 175 Cetus Corporation, 30 military personnel and, 43-47, 140 CF, 300-302 New York and, 174-175 Charo, R. Alta, 147–171, 376 People v. Wealer, 210 Chase, Allan, 309 privacy and, 138, 140 Cheddar Man, 150 testing reliability of, 93 Chromosome 14, 16 tissue banks and, 42 Chromosomes, 25–26, 52

determinism and, 289–296 OECD and, 227-231 nonreplicating results and, 298 policies for, 190 predictivist theory and, 249-251 result interpretation and, 36 privacy and, 135-145, 173-191 (see also short tandem repeats and, 31–32 surnames and, 49-50 Privacy) trait prediction and, 36-38 reference groups and, 238-239 XYY syndrome and, 175, 183–185 relinquished DNA and, 259-260 Citizen Identification Act, 279n69 right to die, 15-16, 19 Civil liberties, 218 sample destruction and, 216 advancement of, 201–203 selective arrests and, 315–322 shed DNA and, 258-259 anonymity and, 265–267 arrests and, 185–188, 215–216, 255–258, slippery-slope argument and, 212 282n103, 283n105, 284n109, 284n111, state inadequacies and, 175-180 315-323 Steinhardt and, 198 collection methods and, 157–159 sterilization and, 182, 306, 308 common good and, 199-201 surveillance society and, 213-215 communitarian views and, 199-201 truth-to-power model and, 342-351 XYY syndrome and, 175, 183-185 Constitutional issues and, 180–181 database inclusion issues and, 247-260 Clarke, George Woody, 128n42 (see also Databases) Classical jurisprudence, 64 disease prediction and, 16-18 Clinton, Bill, 347 Cold crimes, 7, 74, 329, 369, 370, 379 ethnic issues and, 212 (see also Ethnic Cold hits, 94, 200, 206–207, 378 eugenics and, 63, 66–68, 75–78, 197–199, Cole, Simon A., 63–89 302-310 Collins, Francis, 142 exoneration and, 3, 201-203 (see also Combined DNA Index System (CODIS), 93, 350 Exoneration) First Amendment and, 204 access to, 214 forensics and, 23-33 common good and, 200 forfeiture-of-rights theory and, 248–251 economic issues and, 281n89 Fourth Amendment, 95–96, 186–187, individual rights and, 209 204–210, 226, 247, 249, 253, 255, 257, near misses and, 374 263-264, 279n72 privacy and, 173, 185, 190 individualized suspicion and, 205 profiling and, 40, 45–46 individual rights and, 185-188, 199-217, regulation and, 376 226-231, 237-239, 248-249, 254, sample destruction and, 190 380n2, 382n18 STR loci and, 256 Commission on Behavioral and Social initial-voluntariness standard and, 253-254 Sciences and Education, 183 insurance and, 17-18 Committee on Mental Defectives, 182 intrusive sampling and, 210–212 Common good, 199–201 limited-scope-of-consent standard and, Communitarianism, 199-201, 330 254-255 Computers, 24, 260, 277n61, 331 lingering suspicion and, 202–203 fingerprints and, 73–75 Miranda rights and, 254 Conduct anonymity, 266 Connecticut, 226 NBAC recommendations and, 160–170

Convicted by Juries, Exonerated by Science Crick, Francis, 338 (National Institute of Justice report), Criminal cases review commission, 368 367-368 Criminal gene, 183. See also Genetics, Coolidge, Calvin, 306 crime gene and Cotton, Ronald, 124n17 Criminality, 329 Council for Responsible Genetics, The, 182 historical perspective on, 65-67, 78, 81 Council of Europe, 230 justice system and, 294–297, 299, County of San Diego, 115 301–306, 310, 312 Court system privacy issues and, 178, 183 arbitration of justice and, 339–342 Criminal justice system, 109 arrests and, 185-188, 215-216, 255-258, arrests and, 185-188, 215-216, 255-258, 282n103, 283n105, 284n109, 284n111, 282n103, 283n105, 284n109, 284n111, 315-323 315-323 closure value and, 111, 113-114 behavioral genetics and, 287-331 (see also cold hits and, 94 Behavioral genetics) DNA reliability and, 339–342 blood types and, 24–25 evidence law and, 98 civil liberties and, 199-201 (see also Civil expert witnesses and, 41–42, 98–100, liberties) 131n68 CODIS and, 46 eyewitness identification and, 385n48 cold hit units and, 94 false testimony and, 93, 129n57, 130n58, collection methods and, 157–158 202, 387n63 common good and, 199-201 finality and, 110-122, 258, 358-362 competency of, 4–5, 366–369 floodgates argument and, 111, 114-116 DNA Identification Act, 7, 40 eugenics and, 197-199 incompetent lawyers and, 202 individual rights and, 202 exoneration and, 3-6, 50-51, 363-369 innocent convictions and, 339 (see also (see also Exoneration) expert witnesses and, 41-42, 98-100, Exoneration) novel practices and, 98 131n68, 306, 342-351 postconviction testing and, 363-369 false confessions and, 93, 129n57, 130n58 posttrial stage and, 96–97 federal funding and, 51 presumption of correctness and, 110, finality and, 5, 110-122, 258 112-113 fingerprints and, 10, 24, 63-89 (see also pretrial stage and, 93-95 Fingerprints) procedural issues and, 99, 118-119 forensics and, 23–33 (see also Forensics) result interpretation and, 35 individual rights and, 201-215 statute of limitations and, 94–96, 362, initial-voluntariness standard and, 383n29 253-254 trial stage DNA issues and, 91-101 interrogation techniques and, 93, 129n57, trier of fact and, 97, 99-100 130n58 understanding cited probability and, laboratory accuracy and, 38–40 99–100, 106n61, 125n24 lingering suspicion and, 202-203 Court TV, 91 Miranda rights and, 254 Coyle, Heather Miller, 52 narcotics checkpoints and, 257 CpG, 37 offender index and, 45 Craniometry, 65 predictivist theory and, 249–251

pretrial issues and, 93–95 privacy and, 180–181 (see also Privacy) procedural issues and, 118-119 Cytoplasm, 25–26 reference groups and, 238–239 relinquished DNA and, 259-260 DAB, 39-40, 52 result interpretation and, 34-42 shed DNA and, 258-259 Databases, 191 statute of limitations and, 94–96, 362, 383n29 360-362 AFIS, 74–75 thermal imaging and, 262-264 trial stage DNA issues and, 91-101 breadth of, 80–84 trust and, 4-11 undercover agents and, 253-254 usual-suspect databases and, 188-190 374, 376 volunteers and, 252-253 war on drugs and, 317-322 Criminals. See also Exoneration deCODE, 141-142 aliases and, 64-65 anthropological traits and, 66 arrests and, 185–188, 215–216, 255–258, 282n103, 283n105, 284n109, 284n111, 315-323 Bertillon system and, 65–66 CODIS and, 199-201 communitarian principle and, 207 custodial detention and, 157-158 databases and, 142, 191 (see also Databases) false testimony and, 202 369-370 finality and, 110-122, 358-362 fingerprints and, 63–84 Individual rights) Hudson v. Palmer, 249 individual rights and, 204-208, 211-212, 253-254 inmate rights and, 118, 216-217, 249, 380n2, 382n18 254-255 Lombroso system and, 65–66 phrenology and, 65, 315-330 postconviction testing and, 185, 360–362, 381n3 predictivist theory and, 249–251 procedural issues and, 118-119 reference groups and, 238–239 sample destruction and, 216 violent burglars and, 206-207 reference groups and, 238–239 regulation of, 375-377 XYY syndrome and, 175, 183–185

Criner, Roy Wayne, 4–5, 384n30 Cystic fibrosis, 300–302

Darwin, Charles, 24, 181, 303 access control and, 215-216, 237-238, CODIS, 40, 45–46, 93, 173, 185, 190, 200, 209, 214–215, 256, 281n89, 350, collection methods and, 157-159 common good and, 199-201 digitization and, 280n82 economic issues of, 6, 8–9 effectiveness of, 362 employers and, 214 eugenics and, 197-199 fingerprints and, 63–84 forensics and, 23-33 (see also Forensics) forfeiture-of-rights theory and, 248-251 globalization and, 239-241 human-remains identification and, 43-49 inclusion issues and, 231-241, 247-260, individual rights and, 201-215 (see also initial-voluntariness standard and, IRBs and, 140–142 limited-scope-of-consent standard and, NBAC recommendations and, 160–170 near misses and, 370–375 OECD and, 227-231, 237, 239-241 PCR typing and, 27–31 population-wide, 260-271, 328-330 predictivist theory and, 249-251 pretrial issues and, 93–95 privacy and, 138–143, 181–185, 231–233 Databases (cont.) genetics and, 16-18, 287-288, 311-312 relinquished DNA and, 259-260 health screening and, 330-331 insurance and, 17-18 searching of, 43–48 shed DNA and, 258-259 mutations and, 300-302 siblings and, 47-48 pleitropy and, 300 state inadequacies and, 175-180 prediction of, 16–18 state laws for, 372–373 tissue banks and, 42-43 statute of limitations and, 94-96, 362, DNA (deoxyribonucleic acid) 383n29 alternative splicing and, 293-294 storage length and, 236-237 biological identification and, 25-26 surnames and, 49-50 chromosomes and, 25-26, 31-32, 36-38, surveillance society and, 213-215 49–50, 52, 175, 183–185, 289–296, tissue banks and, 42-50 courtroom integration of, 3-4 (see also trust and, 6-9 United Kingdom and, 7 Court system) usual-suspect, 188–190 databases for (see Databases) value of, 6–9 durability of, 92-93 XYY syndrome and, 175, 183–185 fragment separation and, 25 Databases, universal, 373, 375–376 genetic variation and, 25-26 coverage issues and, 265, 270 junk, 173 fingerprint identification and, 72-73, 80, legal issues and, 91–101 (see also Legal trial stage DNA issues and, 95 length variation and, 31 Data quality principle, 228, 232 lingering suspicion and, 202-203 Daubert v. Merrell Inc., 98 mitochondrial, 25-26, 32-34, 36, 52, 373 Daughters of the American Revolution NBAC recommendations and, 160-170 (DAR), 72 ownership of, 139, 277n54 Davenport, Charles B., 303, 305 policymaking issues and, 337–353 Death penalty, 7, 27, 83, 121, 130, 339, privacy and, 135–145 (see also Privacy) 368–369 probes, 27 Death row, 28, 112, 118, 201, 315, 358, relinquished, 259–260 369 resources and, 6, 8 Decisional privacy, 226–227, 229 sample collection of, xi, 157-159 (see also deCODE, 141-142 Sampling) Defense Authorization Act, 44 shed, 258–259 Degeneration theory, 66–67 trace amounts of, 92 Democratization, 346–348, 351–353 truth-to-power model and, 342–351 Determinism. See also Behavioral genetics typing and, 23-33 (see also Forensics; biological research and, 289-296 Sequencing) phenotype/genotype relationship and, Watson and Crick, 338 299-302 DNA analysis for prediction of traits Devlin, B., 323, 330 amelogenin typing, 37 DNA dragnets, 209-210, 389n68 Diagnostic and Statistical Manual, 297 ethics and, 157-158 Digital storage, 74 Disease population-wide databases and, 260-271 eugenics and, 63, 66-68, 75-78 usual-suspect databases and, 188–190

DNA exclusions, 23, 41 Ethical, Legal and Social Implications DNA Identification Act, 7, 40 (ELSI) program, 139 Ethics, 147 "DNA in the Criminal Justice System" (conference), xiii, xvii accidental disclosure and, 158-159 DNA Legal Assistance Unit, 91 arbitration of justice and, 339–342 DNA on Trial (Billings), 3, 76 arrestee testing and, 185-188 DNA photofits, 380 biological material use and, 152-154 DNA Print Genomics, 37, 389n69 collection methods and, 157-159 DNA Sciences Gene Trust Project, 42–43 custodial detention and, 157-158 DNA Technology in Forensic Sciences deCODE and, 141–142 (NRC report), 198 discrimination and, 154 DNA wars, 80, 91 eugenics and, 63, 75-78, 181-183, Double jeopardy, 358, 362, 383n19 197–199 (see also Eugenics) Downs syndrome, 312 forensic collections and, 157 DQ kits, 30, 33 medical records and, 151-156 Dr. Reilly, 350 NBAC recommendations and, 160–170 Drug Enforcement Administration, 318 OECD guidelines and, 227-231 Drugs, 257 privacy and, 135–145 (see also Privacy) phenotypes and, 317–322 research value and, 148-151 Duster, Troy, 11, 379–380 sensitive information and, 158–160 behavioral genetics and, 315–334 stigmatization and, 154 fingerprints and, 78, 84 surveillance society and, 213-215 individual rights and, 208, 212 Ethnic differences markers (EDMs), 50 selective arrests and, 315-323 "Ethnic Differentiation at VNTR Loci, with Specific Reference to Forensic Economic issues, 6, 8–9 Applications" (Devlin and Risch), 323 CODIS and, 281n89 Ethnic issues, 212 affiliation markers and, 322-327 cold hit units and, 94 ethics and, 159 Air Force and, 182 laboratories and, 348 arrestee testing and, 187–188 population-wide database and, 267–268 DNA dragnets and, 260-261 postconviction testing and, 114–116, eugenics and, 63, 66–68, 75–78, 302–310 (see also Eugenics) procedural issues and, 118-119 fingerprints and, 66 incarceration rates and, 317-320 sampling and, 278n65 EDM, 49-50 Innocence Project and, 121 Einstein, Albert, 18, 20 intelligence and, 290-291, 299, 326 Embryogenesis, 290 near misses and, 374 Employers, 214 population-wide database and, 269–271, Employment discrimination, 151–154, 157, 328-330 serial killers and, 378–379 182–183 war on drugs and, 317-322 Environmental Protection Agency (EPA), 343 West case and, 71 Etzioni, Amitai, 76, 197-223, 329-330, Equal Employment Opportunity Commission (EEOC), 182–183 Eugenic criminology, 78 Erikson, Erik, 338

scientific procedure and, 99 Eugenics, 36–38, 63, 66–68 charity and, 305-306 statute of limitations and, 94–96, 362, civil liberties and, 197-199 compulsory sterilization and, 182, 306, trail stage DNA issues and, 91-101 308 Evidence storage, 51 discrimination and, 181-183 Evolution, 28, 66–67 expert witnesses for, 306 Exclusion, 23, 233, 370 high schools and, 305-306 fingerprints and, 70 justice system finality and, 113-119 historical perspective of, 302–310 immigration and, 305–306 profiling and, 25–28, 30, 33, 35–36, 41 insurance and, 76 Exclusionary result, 115–118 intelligence and, 306, 308 Exoneration, 109, 123n10, 328, 387n63 Nazis and, 197-198 assessment responsibility and, 119-120 opposition to, 308–309 cold hits and, 94 research approaches on, 75–78 DNA reliability and, 339-342 social aspects of, 75–78 economic issues and, 114-116 Steinhardt and, 198 elimination sampling and, 252–253 expert witnesses and, 41-42, 98 Eugenics Committee, 303, 306 Eugenics Record Office (ERO), 305 eyewitness identification and, 385n48 Eugenics Research Association, 306 federal funding and, 51 finality and, 110-122, 258, 358-362 European Data Protection Directive, 136 European Union, 240, 243n18 fingerprints and, 69 Evidence. See also Court system; Sampling floodgates argument and, 111, 114–116 access delays and, 361 Herrera v. Collins, 110-111 admission laws and, 98 individual rights and, 201-215 assessment responsibility and, 119-120 Innocence Project and, 3-6, 121-122, closure value and, 113-114 126n34, 202, 216 destruction of, 381n4 laboratory accuracy and, 38-40 expert witnesses and, 41, 98-100 law interpretation issues and, 129n52 false confessions and, 93, 129n57, lingering suspicion and, 202–203 130n58 paternity and, 28 finality and, 110-122, 358-362 postconviction testing and, 4–6, 96–97, forfeiture-of-rights theory and, 248-251 185, 315-316, 360-369, 381n3 fraudulent, 202 posttrial stage and, 96–97 inconclusive, 35, 96, 109 presumption of accuracy and, 112-113 inmate testing and, 118 pretrial issues and, 93-95 near misses and, 370–375 profiling and, 23–24, 27–28, 38, 50–51 police lineups and, 112 rates of, 366–367 postconviction testing and, 363–369, sample destruction and, 216 trier of fact and, 97, 99-100 381n3 predictivist theory and, 249-251 victims and, 203 Washington v. State, 255 preservation of, 121, 359 presumption of correctness and, 112–113 Expert testimony privacy and, 210–212 (see also Privacy) eugenics and, 306 reliability of, 110–111, 113, 339–342, forensics and, 41-42, 98-100, 131n68 377–378, 387n63 negotiation and, 345-346

public policymaking and, 342–346 eugenics and, 66-68, 75-78 truth-to-power model and, 342-351 exoneration and, 69 FBI and, 72–75, 93 Expungement, 178, 328 Eyewitness testimony, 112–112, 202, 365, Galton system and, 66–67, 69–70 369, 379 Henry system and, 67-68, 73 historical perspective of, 64–75 False confessions, 93, 129n57, 130n58 intrusion issues and, 211 Familial cancers, 16, 18 latent, 68–69, 73, 79–80 Faulds, Henry, 70 legal acceptance of, 70-71 FBI laboratory, 11, 30, 35, 38, 93, 98, 204. NYPD and, 74 See also Federal Bureau of Investigation privacy and, 173–174 (FBI), laboratory accuracy and recidivism and, 64, 81 FDLE, 206 as record keepers, 64–65 Federal Bureau of Investigation (FBI), 3, 7, reliability of, 79–80 234 ridge counting and, 67-68 access control and, 215 Rojas case and, 69 Budowle and, 3-4, 340 ten finger system and, 68-71, 73 CODIS and, 93, 200, 215 (see also universal identification and, 72–73 Combined DNA Index System (CODIS)) Vucetich system and, 67-68, 73 DNA Advisory Board, 39 whorl analysis and, 66-68 World War I era and, 71–72 DNA Identification Act and, 40 fingerprints and, 72–75, 93 Finger Prints (Galton), 66 laboratory accuracy and, 38-40 Fingertip ridge analysis, 24 Lewinsky case and, 93 First Amendment, 204 First-time offenders, 64 Muslims and, 188 Oklahoma City bombing and, 342 Fisher, Irving, 305 profiling and, 315, 327-328 (see also Florida, 8 DNA dragnets and, 260 Profiling) Federal Judicial Center, 321 inclusion issues and, 369 Federal Rules of Criminal Procedure, 95 initial-voluntariness standard and, 253 Federal Rules of Evidence, 98–99 violent burglars and, 206–207 Federal Rules of Evidence Advisory war on drugs and, 320 Committee, 98 Forensics Féré, Charles, 66 blood types and, 24–25 Ferrara, Paul, 200, 202, 206 cold hits and, 94, 200, 206-207, 378 Fifth Amendment, 253–254 collection methods and, 157-159 Finders of fact, 35, 41 common good and, 199-201 Fingerprint cards, 71, 74, 93 critical parameters for, 38-40 Fingerprints, 10, 24, 63, 92, 256 environmental conditions and, 28 AFIS and, 74-75 ethics and, 157 Bertillon system and, 65, 68-69, 71-72 eugenics and, 181-183 Citizen Identification Acts and, 279n69 expert witnesses and, 41–42, 98–100, computers and, 73–75 131n68 degeneration theory and, 66-67 field kits for, 52 detail similarities and, 69-70 fingerprints and, 24, 63-68 (see also dusting for, 68-69 Fingerprints)

Forensics (cont.) Gahn, Norman, 52 history of, 24–25 Galton, Francis, 24, 66, 67, 69–70, 303 human-remains identification and, 43-49 "Galton's Regret" (Rabinow), 66, 76 identity testing and, 23-33, 27-28 Gametogenesis, 25 laboratory accuracy and, 38-40 Gender length variation and, 31 surnames and, 49-50 litigation issues and, 91–101 trait prediction and, 36-38 methodological choices for, 33-40, Genetic exceptionalism, 75, 78, 136 50 - 52Genetic information in the workplace, 144. minimal evidence and, 27-28 See also Genetic Information mitochondrial DNA and, 32-33 Nondiscrimination Act near misses and, 370–375 Genetic Information Nondiscrimination noncoding regions and, 26 Act, 143 PCR typing and, 27-34 Genetic loci, 26, 29–30, 39, 45 phenotype prediction and, 34–36 Genetic markers, 37, 92, 157, 173, 177, privacy and, 173–185 (see also Privacy) 311, 323, 327, 330–331 reliability of, 79-80, 339-342, 377-378 Genetic Privacy Act, 139 result interpretation and, 34-42 Genetics, 10-11 reverse dot-blot method, 30 abortion and, 300 September 11, 2001, and, 23 alternative splicing and, 293-294 short tandem repeats and, 31-34, 36, behavioral, 287-314 (see also Behavioral 45-48, 95, 222n70, 256, 326 genetics) single-nucleotide polymorphisms and, biological identification and, 25–26 30-31, 37, 326 blood types and, 24-25, 27 testing volume and, 33-34 crime gene and, 173–175 tissue banks and, 42-50 determinism and, 289-296 trait prediction and, 36-38 (see also disease and, 16-18, 287-288, 311-312 eugenics and, 63, 66-68, 75-78 (see also Eugenics) Forensic Science Service (FSS), 362, 371 Eugenics) Forfeiture-of-rights theory, 248–251 forensics and, 23–33 (see also Forensics) Forgeot, René, 66 heredity and, 25–26, 31–34, 47–50, Foucault, Michel, 64 298–299, 302–310 Frames, 345 homosexuality and, 76, 78, 298 Fourth Amendment, 95, 187, 247 Human Genome Project, 135, 139, 173, arrestee testing and, 186 287, 293, 322, 353 civil liberties and, 204-210 individual identification and, 27-28 Hudson v. Palmer, 249 legal issues and, 14 Mincey v. Arizona, 279n72 lobbying model and, 19–21 narcotics checkpoints and, 257 mitochondrial DNA and, 32-33 mutations and, 26, 290, 300-302 privacy and, 226 reasonableness clause and, 255 noncoding regions and, 26 thermal imaging and, 263-264 PCR typing and, 27–34 volunteering and, 253 pleitropy and, 300 Frames, 345 privacy and, 135–145, 181–185 Framing, 345 result interpretation and, 34-42 Fredette, Heidi Marie, 7 RFLPs and, 27

short tandem repeats and, 31–34, 36, Government, state, 91. See also specific 45-48, 95, 222n70, 256, 326 arrestees and, 185-188, 255-258 siblings and, 47–48 database laws of, 93, 372-373 single-nucleotide polymorphisms and, 30-31, 37, 326 NBAC recommendations and, 160-170 trait prediction and, 36-38 policies for, 190, 227-231 variation in, 25–26 privacy and, 135–136, 144, 175–180 XYY syndrome and, 175, 183–185 sample destruction and, 244n29 Genotypes, 276n34 sterilization and, 182 Georgia, 203 usual-suspect databases and, 188–190 Giannelli, Paul, 91 Green Party, 139 Gilchrist, Joyce, 342, 387n63 Guthrie cards, 140 Gilbert v. California, 123n12 Giuliani, Rudolph, 174–175 Habitual criminals, 64 Hamer, Dean, 298 Glantz, Leonard, 139 Glendenning, Parris, 368 Haplotypes, 32, 34, 49–50 Glueck, Sheldon and Eleanor, 297 Haque, Azizul, 67 Goffman, Erving, 345 Hardy-Weinberg equilibrium, 39 Goldman, Ron, 340 Harriman Family, 305 Hartl, Daniel L., 3 Googin, Sean, 252 Gostin, Larry, 131 Harvard Electric Policy Group, 20–21 Gould, Stephen Jay, 78 Harvard's Kennedy School of Government, Government, federal 20, 52 arrestee testing and, 185-188, Havel, Vaclav, 13 Health Insurance Portability and 255-258 database regulation and, 375-377 (see Accountability Act, 45, 214–215 also Databases) Heel-stick blood, 42 democratization and, 346-348, Hemings, Sally, 150 351-353 Henry, Edward, 67-68, 73 disclosure of nonprofile information, Hepburn, David, 66-67 Heredity, 25–26 180-181 DNA Identification Act, 7, 40 ANOVA and, 298-299 eugenics and, 197-199 eugenics and, 302-310 (see also Eugenics) funding by, 9 mitochondrial DNA and, 32-33 global database sharing and, 239-241 short tandem repeats and, 31-34 individual rights and, 201-215 siblings and, 47–48 laboratory standards and, 38-40 statistical misuse and, 298–299 NBAC recommendations and, 160–170 surnames and, 49-50 OECD and, 227-231 tissue banks and, 47-48 policies for, 190, 227–231 Herkenham, 351 privacy and, 135–145 (see also Privacy) Herrnstein, Richard, 297 sterilization and, 306, 308 HHS, 160 surveillance society and, 213–215 HIPAA rules, 160 truth-to-power model and, 342–351 HIV, 43 war on drugs and, 317-322 HIV screening, 181 XYY syndrome and, 175, 183–185 Holocaust, 76, 309

Homosexuality, 76, 78, 298
House Committee on Immigration and
Naturalization, 305, 307
Houston Police Department Criminal
Laboratory, 38, 388
Howard Safir, 282n103
Human Betterment Foundation, 305
Human Genome Project, 135, 139, 173, 287, 293, 322, 353
Human leukocyte antigen (HLA), 30, 93
Human-remains identification
kinship analysis and, 48–49
military personnel and, 43–47
Huntington's disease, 16, 78, 377

IBM, 42, 331 Iceland, 141 Illinois, 8, 114–115, 157–158, 178, 368, 387n63 Immigration, 23, 305-307, 309 Immigration Restriction Act, 306 Imwinkelried, Edward J., 91–107, 202, 357-358 Incorrigibles, 64 India, 67–68 Indiana, 119, 182, 262 Individual participation principle, 229, 237 Individual rights. See also Civil liberties advancement of, 201-203 arrests and, 185–188, 215–216, 255–258, 282n103, 283n105, 284n109, 284n111, 315-323 CODIS and, 209 common good and, 199-201 criminals and, 204-208, 211-212, 232 database access and, 215-216, 237-238 DNA dragnets and, 209-210 ethnic issues and, 212 (see also Ethnic issues) First Amendment and, 204 forfeiture-of-rights theory and, 248-249 Fourth Amendment and, 204-210, 226 Hudson v. Palmer, 249 individualized suspicion and, 205 inmates and, 118, 205, 216-217, 249,

380n2, 382n18

innocent and, 209–210 insurance and, 214–215 intrusion issues and, 210–212 Miranda rights and, 254 OECD and, 227-231 privacy and, 210–212 (see also Privacy) reference groups and, 238-239 right to die, 15-16, 19 sample destruction and, 216 slippery-slope argument and, 212 sterilization and, 182, 306, 308 surveillance society and, 213-215 suspects and, 207-209 victims and, 203 Industrial Workers of the World, 309 Informational privacy, 135, 241, 252 common good and, 211, OECD guidelines and, 227–231 right to, 225–227 Informed consent, 104, 156, 350 ethics and, 147 genetic privacy and, 140–143 obtaining, 162–168 Initial-voluntariness standard, 253-254 Innocence Project, 3-6, 121-122, 126n34 access delays and, 361 establishment of, 341 evidence destruction and, 216, 381n4 exoneration rates and, 366-367 eyewitness identification and, 385n48 individual rights and, 202 Innocence Protection Act, 382n17 Innocence Protection Act 2003, 127n37 Institutional Review Board (IRB), 140-142 NBAC recommendations and, 160-170 Insurance, 17–18 eugenics and, 76 Health Insurance Portability and Accountability Act, 45, 214–215 individual rights and, 214–215 privacy and, 142-143 Insurance discrimination, 154, 157 Interim Guidance, 159 Internet, 15 INTERPOL, 45

Iowa, 178 economic issues and, 348 Iris scans, 265–266 ethics and, 147–170 (see also Ethics) NBAC recommendations and, 160-170 Jaffee v. Redmond, 123n8 Norman-Bloodsaw v. Lawrence Berkeley Jailhouse snitches, 130n66 Laboratory, 138–139 Japan, 65 NYPD and, 316 Jasanoff, Sheila, 11, 337–355, 357, 369, OPRR and, 160 370 poor state of, 112-113 Jefferson, Thomas, 150 portable, 316 Jeffreys, Alec, 27, 84 privacy and, 138-143 reliability of, 38-40, 377-378, 387n63, Jennings, Herbert Spencer, 308 Jensen, Arthur, 299 387n64 Jimmerson, Norman, 6 results interpretation and, 36-38, 40-42 Johnson, Albert, 306 sensitive information and, 158-160 Johnson Act, 306 Lander, Eric S., 340 Jones Court, 210 Las Vegas Forensics Laboratory, 388n69 Jordan, David Starr, 303, 305 Laughlin, Harry Hamilton, 305–310 Journal of Forensic Science Society, 326 Law Enforcement Assistance Joyce, Jennifer, 384n30, 384n38 Administration, 106n61 Juengst, Eric, 210, 226 Lazer, David, 3–12, 357–389 Jung, Frank A., 358 Leavenworth, 71 Junk DNA, 173 Lee, Derrick Todd, xi, xiii Justice. See Criminal justice system Lee, Michelle, 52 Legal issues. See also U.S. Supreme Court Kahn, Lisa, 52 arrests and, 185–188, 215–216, 255–258, Kallikak, Martin, 303-304 282n103, 283n105, 284n109, 284n111, Kang, Jerry, 225 315-323 Kansas, 71, 95, 178 Baumes laws and, 81 Kappen, Joseph, 371 blood spot cards and, 43-47 Kaufman Commission, 368 briefs and, 14–15 Kaye, David H., 83, 97, 247-284, 329, Buck v. Bell, 182 375 Burlington Northern Santa Fe Railroad, Keating, Frank, 342 182 - 183Keel, Alan, 388n69 Citizen Identification Acts and, 279n69 City of Indianapolis v. Edmond, Kelly, Stephen, 43 Kidd, Kenneth, 298 256-258 Kimmelman, Barbara, 303 cold hits and, 94 Kincade v. United States, 46 collection methods and, 157-159 Kirby v. Illinois, 123n13 complexity of, 14 Koehler, Jonathan J., 97, 101 conduct anonymity and, 266 Kosovo, 28 Criner case and, 4–5 Kutzner v. United States, 129n52 Daubert v. Merrel Dow Pharmaceuticals, Inc., 98 Laboratories. See also Exoneration Defense Authorization Act, 44 accreditation and, 40, 378 disease prediction and, 16-18 confidentiality grants and, 159 DNA Identification Act, 7

Legal issues (cont.) proof of innocence and, 116–118 eugenics and, 63, 66-68, 75-78 Rabovsky v. Commonwealth, 157 exoneration and, 3 (see also Exoneration) relinquished DNA and, 259-260 Roe v. Wade, 226 false testimony and, 202 Ferguson v. City of Charleston, 256–258 Rojas case, 69 finality and, 110-122 Sacco and Vanzetti case, 309 fingerprints and, 63-89 Schneckloth v. Bustamonte, 253-254 forensics and, 23–33 (see also Forensics) Schwartz v. State, 99, 339 forfeiture-of-rights theory and, 248-251 science and, 13-21, 377-380 Fourth Amendment, 95–96, 186–187, shed DNA and, 258-259 204-210, 226, 247, 249, 253, 255, 257, Simpson case, 4, 91, 340, 345 263-264, 279n72 slow responses to, 14 General Electric Co. v. Joiner, 98 state inadequacies and, 175-180 Griswold v. Connecticut, 226 statute of limitations and, 94-96, 362, Health Insurance Portability and 383n29 Accountability Act, 214–215 Texas v. Fuller, 27 Herrera v. Collins, 110-111 three-strikes laws and, 81 tort action, 226 HIV and, 43 Hudson v. Palmer, 249 trial stage DNA issues and, 91-101 incompetent lawyers and, 202 true identity exception and, 256 individual rights and, 201-215 trust and, 4-11 initial-voluntariness standard and, United States v. Knights, 273n12 253-254 United States v. Miller, 259–260 inmate rights and, 118, 205, 216-217, Washington v. State, 253-255 249, 380n2, 382n18 West case, 71 Kansas v. Searles, 27 Whalen v. Roe, 180–181 Katz v. United States, 211 Leo, Richard, 129n57 Kumbo Tire Co., Ltd. v. Carmichael, 98 Levin, Ira, 75 Kyllo v. United States, 262–264 Lewinsky, Monica, 93 Lewontin, Richard, 3 limited-scope-of-consent standard and, 254-255 Limitation principle, 229 Mincey v. Arizona, 279n72 Limited-scope-of-consent standard, 254 Miranda rights, 254 Limits of Privacy, The (Etzioni), 213 Moore case, 139 Lippman, Walter, 308 NBAC recommendations and, 160-170 Litigation. See Court system Norman-Bloodsaw v. Lawrence Berkeley Lobbying model, 19–21 Laboratory, 138–139 Loci. See Genetic loci Palmer v. State, 262 Loftus, Elizabeth, 123n14 patent law and, 18-19 Lombroso, Cesare, 65-66 PCR typing and, 27 Los Angeles Times, 189 People v. Castro, 99, 339 Louisiana, 8, 95, 378–379 People v. Wealer, 210 DNA dragnets and, 260 predictivist theory and, 249–251 inclusion issues and, 369 privacy and, 135-145, 215 privacy issues and, 176 probable cause and, 284n111 Low stringency, 47–48, 343, 371–376 procedural issues and, 118–119 Lundy, Kathleen, 387n63

McIntosh, David James, 7 McKusick, Victor, 287 MCR1, 37 MCR4, 37 McVeigh, Timothy, 342 Maryland, 368 arrestee testing and, 188 war on drugs and, 321-322 Massachusetts, 143, 185 database of, 175 Sacco and Vanzetti case and, 309 XYY syndrome and, 184–185 Massachusetts Institute of Technology (MIT), 340Mayer-Schönberger, Viktor, 225-245, 265, 376 Mayo Clinic, 43 Medical Research Council (MRC), 42 Melnikoff, Arnold, 125n24, 387n63 Mencken, H. L., 308 Mendel, Gregor, 24–25 Mendelian traits, 31, 293, 297, 302 Mendel's Laws, 24–25, 31, 39 Mens Rea, 95 Merchants' Association, 72 Meyer, Michelle N., 357-389 Michigan, 174, 189, 260 Military, 28 blood spot cards and, 43-47 intelligence collection and, 23–24 privacy and, 140 tissue banks and, 43-47 Minnesota, 339 Minnesota v. Kromah et al., 58n64 Minutiae, 69 Miranda rights, 254 Missing persons human-remains identification and, 43-49 trait prediction and, 36-38 Mississippi, 177–178 Mitochondria, 25–26, 32–34, 36, 52, 371. See also DNA, mitochondrial Model Sterilization Law, 306, 308 Monozygotic twin, 24, 41, 152, 256, 297 Montana, 125n24, 387n63 Moore, Graham, 260, 277n61

Moore, John, 139 Moore's Law, 260 Morgan, Thomas Hunt, 297, 305, 308 Morgan, Vincent, 212 Morin, Guy Paul, 368 Muller, H. J., 308 Muslims, 188 Mutations, 26, 290, 300–302 Nadal, Mireya, 52

Nadal, Mireya, 52 Nader, Ralph, 139 National Academy of Sciences, 340, 343 National Bioethics Advisory Commission (NBAC), 347–348 National Commission on the Future of DNA Evidence, 8, 96, 188, 341 National Council's Panel on DNA Technology in Forensic Science, 181 National Human Genome Institute, 151 National Institute of Justice, 113, 367–368 National Institute of Mental Health (NIMH), 159, 302, 310-312 National Institute of Standards and Technology (NIST), 39 National Institute on Alcohol Abuse and Alcoholism, 159 National Institute on Drug Abuse, 159 National Institutes of Health (NIH), 169, 353 National Research Council, 39, 70, 181, 183, 198, 340 Nazis, 197–198, 306, 308–309 Nelkin, Dorothy, 205 Neufeld, Peter, 3–5, 212, 340–341 Nevada, 177-178 New Jersey, 119, 177, 187, 368 New Republic, 308 New Scientist, 311, 325 New York, 3, 8, 94–95, 114–115

Nevada, 177–178
New Jersey, 119, 177, 187, 368
New Republic, 308
New Scientist, 311, 325
New York, 3, 8, 94–95, 114–115
Central Park jogger, 93, 118
DNA dragnets and, 260
intrusion issues and, 211
People v. Castro, 339
portable laboratories and, 316
privacy and, 174–175
statute of limitations and, 383n29

Pharmaceutical industry, 43, 312

deCODE and, 141–142

New York (cont.) privacy and, 138-143 war on drugs and, 320 Pharmacotherapy, 287–288 Washington Park, 310 Phenotypes, 34–36 New York Civil Liberties Union, 205 definition of, 290 Niezgoda, Steve, 350 determinism and, 289-296 Norm of reaction, 290 genotype relationship and, 299-302 North Carolina, 119, 176 norm of reaction, 290 North Dakota, 178 special populations and, 327–328 war on drugs and, 317-322 Oakeshott, Michael, 21 Photo lineups, 368 O'Connor, Sandra Day, 339, 341 Phrenology, 65 Offender index, 45 ethnic-affiliation markers and, 322–327 Office for Protection from Research Risks population-wide database and, 328–330 selective arrests and, 315-322 (OPRR), 160-161 Office of Technology Assessment (OTA), PHS, 159 Physical privacy, 226, 229 Office of the Inspector General, 38 Physician-assisted suicide, 15 Ofshe, Richard, 129n57 Pierce, Jeffrey, 342 Ogg, Deanna, 4–5 Pleitropy, 300 Oklahoma, 119, 387n63 Poaching, 28 Oklahoma City bombing, 342 Point estimate of the combined match Openness principle, 229 probability, 34 Operation Pipeline, 318 Points of similarity, 69 Optical scanning, 74 Police. See Criminal justice system Organization for Economic Cooperation Poll, Heinrich, 67 and Development (OECD), 237 PolyMarker, 30, 33 global data sharing and, 239-241 Polymerase chain reaction (PCR), 27 privacy guidelines of, 227-231 base-pair sequence and, 29 Orwell, George, 265 length variation and, 31 Orwellian society, 265 reverse dot-blot method and, 30 sensitivity of, 29-30 Parental rights, 144 short tandem repeats and, 31-34 Pataki, George, 328 statute of limitations and, 95 Patent law, 18–19 testing volume and, 33-34 Paternity testing trace amplification and, 29 profiling and, 23, 25-26, 50 trait prediction and, 37 short tandem repeats and, 31-34 Polymorphism, 26 Paul, Diane, 310 Poole, Bobby, 124n17 Pauli, Wolfgang, 16 Pope Pius XI, 308 Pearl, Raymond, 308 Population studies, 39 Pedophiles, 9–10 Population-wide database, 328–330 Peral, Raymond, 308 advantages of, 268-271 Perfect Day, The (Levin), 75 anonymity and, 265–267 DNA dragnets and, 260-261 Pfingst, Paul, 6

economic issues and, 267-268

efficacy and, 268–269

ethnic issues and, 269-271 limitation principle and, 229 inclusion issues and, 269-271 limited-scope-of-consent standard and, opposition to, 261–268 254–255 Orwellian society and, 265 medical records, 136–139, 154–156 public acceptance of, 261–262 Moore case and, 139 U.S. Constitution and, 262-265 multiple laws on, 135-136 Postconviction DNA, 5, 96, 341 NBAC recommendations and, 160–170 criminal justice system and, 84, 96, Norman-Bloodsaw v. Lawrence Berkeley 360-361, 364-365, 368 (see also Laboratory, 138–139 Criminal justice system) OECD and, 227–231, 237 policies for, 143–145, 227–231 profiling and, 28 sentencing finality and, 109, 111-122 population-wide databases and, 260-271 Predictivist theory, 249–251 reference groups and, 238–239 Price, Don K., 342-344, 346 relinquished DNA and, 259-260 Privacy, 191 research and, 139-143 accidental disclosure and, 158-159 Roe v. Wade, 226 sample destruction and, 190, 216 accountability principle and, 229 arrestee testing and, 185-188, 215-216 sensitive information and, 158-160 business administration and, 182 shed DNA and, 258-259 census records, 174 social security numbers, 174 state inadequacies and, 175-180 collection methods and, 157–159 databases and, 231-233 (see also surveillance society and, 213–215 Databases) thermal imaging and, 262–264 decision making and, 135, 144 tort action and, 226 types of, 225-227 deCODE and, 141-142 differing values and, 225-227 volunteering and, 252-255 disclosure of nonprofile information, Privacy Act, 215 Profiling, 10–11 180 - 181discrimination and, 181-183 access control and, 214-215 DNA vs. fingerprints, 173–174 allele frequency vs. phenotypes, 327–328 elimination sampling and, 252–253 arrests and, 185–188, 215–216, 255–258, eugenics and, 197-199 282n103, 283n105, 284n109, 284n111, European Data Protection Directive, 136 315 - 323forfeiture-of-rights theory and, 248-251 behavioral genetics and, 315-331 Fourth Amendment, 95–96, 186–187, blood spot cards and, 43-47 204–210, 226, 247, 249, 253, 255, 257, community fracture and, 330-331 263-264, 279n72 crime gene and, 173–175 function creep and, 174–175 ethnic issues and, 36-38, 328-330, 379 Griswold v. Connecticut, 226 (see also Ethnic issues) Human Genome Project, 135, 139 forensic identity testing and, 23–33 (see initial-voluntariness standard and, also Forensics) 253-254 individual identification and, 27-28 insurance and, 142–143 individualized suspicion and, 205 intrusive sampling and, 210–212 methodological choices for, 33–40 IRBs and, 140-142 minimal evidence and, 27-28 iris scans and, 265-266 mitochondrial DNA and, 32–33

Profiling (cont.) Operation Pipeline and, 318 PCR typing and, 27–34 phenotype prediction and, 34-36 population-wide database and, 328-330 predictivist theory and, 249-251 reference groups and, 238–239 relinquished DNA and, 259-260 result interpretation and, 34-38, 40-42 RFLPs and, 27 September 11, 2001, and, 23, 28, 48-49 sexual assault and, 248 siblings and, 47–48 state inadequacies and, 175-180 surnames and, 49-50 tissue banks and, 42–50 trait prediction and, 36-38, 173-185, 191, 232 (see also Eugenics) war on drugs and, 317-322 XYY syndrome and, 175, 183–185 Prosecutorial misconduct, 202 Prozac, 312 Psychiatry. See Behavioral genetics Public Health Service (PHS), 159 Purpose of specification principle, 229

Quality assurance, 40 Quality-of-life offenses, 81 Questions Concerning Biological Risk Factors for Criminal Behavior, 184

Rabinow, Paul, 66, 76
Race Betterment Foundation, 305
Rafter, Nicole, 78
Random-match probabilities, 93
Recidivists, 64, 81, 174
Reference groups, 238–239
Reformist jurisprudence, 64, 81
Relational privacy, 135
Reno, Janet, 341–342, 345, 353
Repeat offenders, 64
Researchers. See Laboratories
Restriction Fragment Length
Polymorphisms (RFLPs), 27, 91
Reverse dot-blot method, 30
Rh system, 25

Ridge counting, 67–68 Right to die, 15–16, 19 Risch, Neil, 323, 330 Risher, R. A., 298 Ritalin, 312 RNA (ribonucleic acid), 26, 293-294 Robin Hood Problem, 297 Robotics, 26 Roche, Winnie, 139 Roche Molecular Systems, 30 Rockefeller, John D., Jr., 305 Rockefeller Foundation, 309 Roe v. Pitchfork, 44 Rojas, Francesca, 69 Roscetti, Lori, 387n63 Royster, John, 74 Russia, 309 Ryan, George, 368

Sacco and Vanzetti case, 309 Safire, William, 136 Sample retention, 141, 185, 190, 197 Sampling arrests and, 185-188, 215-216, 255-258, 282n103, 283n105, 284n109, 284n111, 315-323 behavioral genetics and, 297-298 Burlington Northern Santa Fe Railroad, 182 - 183business administration and, 182 chemical cleansing and, 28 collection methods and, 157-159 destruction and, 183, 190, 234-236, 244n29 DNA dragnets and, 157-158, 188-190, 209–210, 260–271, 389n68 DNA vs. fingerprints, 173–174 economic issues and, 278n65 environmental conditions and, 28 eugenics and, 63, 66-68, 75-78 exoneration and, 252-253 forfeiture-of-rights theory and, 248-249 government disclosure and, 180–181 individual rights and, 201–215 initial-voluntariness standard and, 253-254

inmate rights and, 216-217 legal issues over, 13–21, 91, 98, 377–380 intrusive view of, 210–212 proper scientific procedure and, 99 laboratories and, 38-40, 316 public policymaking and, 342–346 limited-scope-of-consent standard and, results interpretation and, 34-38, 40-42 254-255 robotics and, 26 military personnel and, 43-47 sample destruction and, 234-236 minimal evidence and, 27–28 September 11, 2001, and, 23 NBAC recommendations and, 160–170 social impact of, 337–338 near misses and, 370–375 standards for, 121 OECD and, 227–231 surveillance society and, 213–215 thermal imaging and, 262-264 parolees and, 47 policies for, 143-144 tissue banks and, 42–50 privacy and, 135-145, 181-183, 227 trial stage DNA issues and, 91-101 reliability of, 339-342 Scientific American, 182 relinquished DNA and, 259-260 Scientific Evidence (Imwinkelried and result interpretation and, 34-38, 40-42 Giannelli), 91 reverse-dot-blot method and, 30 Scientific Working Groups on DNA secondary analysis and, 278n67 Analysis Methods (SWGDAM), 39, 52 shed DNA and, 258-259 Scieszka, John, 203 short tandem repeats and, 31-34, 36, 45, Scotland, 43 47-48, 222n70 Security SNPs and, 30-31, 37, 326 OECD and, 227–231 storage length and, 236–237 September 11, 2001, and, 23 testing volume and, 33-34 tissue banks and, 42–50 true identity exception and, 256 trust and, 6–9 truth-to-power model and, 342-351 Security safeguard principle, 229 volunteers and, 252-255 Sentencing Project, 320 XYY syndrome and, 175, 183-185 September 11, 2001, 72 Scalia, Antonin, 263 arrestee testing and, 188 Scheck, Barry, 9-10, 340-341, 368 database near misses and, 371 individual rights and, 201, 215-216 profiling and, 23, 28, 48–49 sample destruction and, 244n29 Innocence Project and, 5 (see also Innocence Project) Sequencing Schizophrenia, 78, 296 base-pair, 29 Science and technology, 10-11 DNA and, 25–26, 32–34, 36, 52, 371 critical parameters for, 38-40 genotypes and, 276n34 democratization and, 346–348 heredity and, 23, 25-26 ethics and, 147-170 (see also Ethics) mutations and, 26 eugenics and, 197-199, 302-310 noncoding regions and, 26 expert witnesses and, 41–42, 98–100, PCR typing and, 27–34 result interpretation and, 34-38, 40-42 131n68, 306, 342–351 facial-recognition technology and, 265-266 reverse dot-blot method and, 30 false testimony and, 202 robotics and, 26 short tandem repeats and, 31-34, 36, 45, forensics and, 23–33 (see also Forensics) iris scans and, 265-266 47-48, 222n70 laboratory accuracy and, 38-40 SNPs and, 30–31, 37, 326

surveillance society and, 213-215, 265 Serological typing, 24–25, 27 Serotonin, 299 technology and, 337-338 Serum proteins, 25 truth-to-power model and, 342–351 Sexual assault, 28, 46, 51 war on drugs and, 317-322 Central Park jogger, 93 Social Security numbers, 174 cold hits and, 200 Somatotyping, 65 condoms and, 220n24 South Dakota, 178 elimination sampling and, 252–253 Spatial anonymity. See Anonymity lingering suspicion and, 202-203 Special needs exception, 186–187 PCR typing and, 27 Spencer, Timothy, 27 profiling and, 248 Staggers, Kermit, 381n3 recidivism and, 174 Statistics, 298-299, 339 violent burglars and, 206-207 Statute of limitations, 94–96, 362, 383n29 Steinhardt, Barry, 75-76, 173-196, 198, Shelton, Blair, 189 Short tandem repeats (STRs), 31–34, 36, 45 212 arrestee testing and, 256 Sterilization, 182, 306, 308 Stewart, Potter, 275n29 profiling and, 326 sample size and, 222n70 Stith, Denvir, 358 siblings and, 47–48 Stovall v. Demo, 123n12, 123n13 statute of limitations and, 95 Strohman, Richard, 293 Shriver, Mark, 389n69 Surnames, 49–50 Siblings, 47–48 Surname Searching EDM, 49–50 Simpson, O. J., 4, 91, 340, 345 Suspect elimination databases, 188–190 Single-nucleotide polymorphisms (SNPs), Suspects, 207–209, 252–253 30–31, 37, 326 Skinner, 193n21, 194n49, 210 Taylorism, 310 Slippery-slope argument, 212 Tay-Sachs, 16 Technical Working Group on DNA Slocum ship fire, 72 Smith, Brian, 52 Analysis Methods (TWGDAM), 40 Smith, Damon, 46 Temporal anonymity. See Anonymity Smith, Debbie, 6 Terrorism, 23, 72, 342 Smith, Michael E., 83, 247-284, 329, 375 arrestee testing and, 188 Sniper case, 75 Oklahoma City bombing, 342 Sobel, Richard, 214 September 11, 2001, 23, 28, 48–49, 72, Social Darwinism, 181 188, 244n29, 371 Social issues. See also Behavioral genetics; TWA Flight 800, 72 Civil liberties Texas, 5, 38, 384n30, 384n39, 387n64 common good and, 199-201 Thermal imaging, 262–264 community fracture and, 330-331 Thirteen loci, 36, 173, 204, 207, 326, 377 degeneration theory and, 66-67 Thompson, Jennifer, 124n17 Three-strikes laws, 81 democratization and, 346–348, 351–353 eugenics and, 63, 66-68, 75-78, 302-310 Tissue banks, 42 fingerprints and, 63-84 collection methods and, 156-158 individual rights and, 201–215 current practice and, 43 reference groups and, 238-239 DNA dragnets and, 157–158 human-remains identification and, 48-49 science and, 377–380

military personnel and, 43–47 U.S. Constitution, 14–15, 180–181 NBAC recommendations and, 160-170 anonymity and, 266 privacy and, 138-143 arrestee testing and, 186-187, 255-258 relinquished DNA and, 259-260 civil liberties and, 204-210 searching of, 43–48 Fifth Amendment, 253–254 siblings and, 47-48 First Amendment, 204 surnames and, 49–50 Fourth Amendment, 95–96, 186–187, Tobin, William, 388n68 204–210, 226, 247, 249, 253, 255, 257, 263-264, 279n72 Townsend, Jerry, 129n57 Tracy, Paul E., 212 Hudson v. Palmer, 249 Traditional lobbying model. See Lobbying population-wide database and, 262-265 predictivist theory and, 249-250 Trials. See Court system thermal imaging and, 263-264 Trier of fact, 97, 99-100 U.S. Department of Defense, 44, 175 Trust U.S. Department of Justice, 38, 202, 341 databases and, 6-9 U.S. Supreme Court, 219n20, 339 arrestee testing and, 186 exoneration and, 4 security and, 6-9 Buck v. Bell, 182 Simpson case and, 4 City of Indianapolis v. Edmond, 256-258 Truth-to-power model democratization and, 346-348 cold hits and, 94 public policymaking and, 342–346 constitutional issues and, 180-181 TTAGGG, 37 DNA dragnets and, 158 TWA Flight 800, 72 evidence law and, 98 Typing. See Sampling; Sequencing Ferguson v. City of Charleston, 256-258 Griswold v. Connecticut, 226 Herrera v. Collins, 110-111 UK Biobank, 42 UNESCO, 243n18, 333n24 Hudson v. Palmer, 249 United Kingdom, 7, 45, 273n3, 311, Kyllo v. United States, 262–264 lobbying model and, 19-21 383n19 exoneration and, 368 patent law and, 18-19 Forensic Science Service and, 362, 371 police lineups and, 112 inclusion issues and, 369 privacy and, 180-181 phenotypes and, 379 Roe v. Wade, 226 United States Schneckloth v. Bustamonte, 253-254 individual rights and, 201-215 science and, 13-21 lagging database of, 7 United States v. Knights, 273n12 OECD and, 227-231, 237, 239-241 United States v. Miller, 259-260 privacy and, 135-145 Whalen v. Roe, 180-181 war on drugs and, 317-322 Usual-suspect databases, 188–190 United States v. Ash, 123n13 Utah, 95 United States v. Wade, 123n12, 219n20 Universal Fingerprinting Act, 279n69 Validation studies, 39 Universal identification, 72–73 Variable number of tandem repeats Unknown soldiers, 24, 28 (VNTRs), 31, 323, 326

Venter, Craig, 142

U.S. Air Force, 182

Victims exoneration of, 203 fear and, 113 finality and, 110-122 guilt and, 113 individual rights and, 203 (see also Individual rights) proof of innocence and, 116-118 psychological health of, 113–114 Virginia, 8, 94 CODIS and, 199-201 inclusion issues and, 369 inmate rights and, 205 sampling and, 200 violent burglars and, 206 war on drugs and, 321 Volunteers, 252–255 Vucetich, Juan, 67-68, 73

Waller, John Douglas, 384n39 War crimes, 28 Ward, Henry, 308 Washington, Anthony, 253 Watson, James, 338 Watson-Crick base-pair repeats, 31 Weinberg, Alvin, 354n19 Weinstein, Jack, 101 West, Will, 71 West Virginia, 387n63 Whipple, Inez, 67 Whitney, Glayde, 291 Whorls, 66–68 Wilder, Harris, 67 Will West Case, 71 Wilson, James Q., 297 Wisconsin, 95, 119, 203, 348 Wolff, Michael, 358 Working Group on Postconviction Issues, 96, 128n43 World Trade Center, 48-49, 72, 278n65, 371 World War I, 77 World War II, 174, 308-309

XYY syndrome, 175, 183–185

Youngblood, Larry, 216 Y chromosome, 31–32, 36, 52 Y-STR, 32, 34, 36 Yugoslavia, 48–49

Zain, Fred, 387n63