

Billed- og kildeliste

Ved illustrationer hvori der indgår royaltyfri delelementer fra eksterne bidragsydere, i original eller redigeret form, efterfølges illustrators navn af forkortelsen mbf. (med bidrag fra) og kreditering af de respektive bidragsydere. Bidrag fra Shutterstock.com er royaltyfri, med mindre andet er anført.

Illustrationer der ikke er nævnt i listen er udført af Lotte Thorup, mens kemiske strukturtegninger er udført af Hanne Wolff.

Kapitel 1

- S. 9 figur 1, Lotte Thorup mbf. Max Griboedov/Shutterstock.com (iconer).
- S. 10 figur 2, foto venligst stillet til rådighed af Niels Kaare Krabbe, fotograf: Francisco Sornoza.
- S. 12 figur 5, ARTvertize/Shutterstock.com.
- S. 13 figur 6, Oversat til dansk fra figur 1 i Dirk Steinke et al. 2017. DNA analysis of traded shark fins and mobulid gill plates reveals a high proportion of species of conservation concern. *Scientific Reports* 7. CC BY 4.0. <https://creativecommons.org/licenses/by/4.0/>.
- S. 16 figur 13b, PDB ID: 1EHZ.
- S. 17 figur 14, Claus Lunau.
- S. 26 figur 26, Dr. Kari Lounatmaa/Science Photo Library/Ritzau Scanpix.
- S. 32 figur 32, Sakurra/Shutterstock.com.
- S. 35 figur 36, Production Perig/Shutterstock.com.
- S. 36 figur 37, Claus Lunau.
- S. 36 figur 38, Shutterstock.com: a. Geza Farkas, b. Aleksey Stemmer.
- S. 37 figur 39, Shutterstock.com: a. bulinko, b. M Rose, c. Henrik Simonsen | Photography.
- S. 38 figur 40, Claus Lunau.
- S. 44 figur 46, Lotte Thorup mbf. Shutterstock.com: bsd (DNA chip), NadzeyaShanchuk (mennesker).

Kapitel 2

- S. 47 figur 48, PDB ID: a. 1bkv, b. 4INS, c. 1ppi, d. 1igt, e. 1iwo, f. 1fha.
- S. 48 figur 49, Ethan Daniels/Shutterstock.com.
- S. 48 figur 50, PDB ID: 5ZU5.
- S. 55 figur 60, a. Lotte Thorup mbf. Louis C/Shutterstock.com, b. Rattiya Thongdumhyu/ Shutterstock.com.
- S. 58 figur 65, foto venligst stillet til rådighed af Bio-Rad Laboratories, Inc.
- S. 59 figur 68, smereka/Shutterstock.com.
- S. 60 figur 70, ggw/Shutterstock.com.

- S. 62 figur 74, baseret på figur 6B i Chan *et al.* 2011. Cloning, purification, and functional characterization of Carocin S2, ribonuclease bacteriocin produced by *Pectobacterium carotovorum*. *BMC Microbiology*. CC BY 2.0. <https://creativecommons.org/licenses/by/2.0/>.
- S. 62 figur 75, baseret på figur 2 i Shi *et al.* 2013. Systematic Functional Comparative Analysis of Four Single Streanded DNA-Binding Proteins and Their Affection on Viral RNA Metabolism. *PLOS ONE*. CC BY 4.0. <https://creativecommons.org/licenses/by/4.0/>.
- S. 63 figur 76, Lotte Thorup mbf. PDB ID: 1CKD.
- S. 64 figur 79, baseret på figur 4 i Varela *et al.* 2010. New structural and functional defects in polyphosphate deficient bacteria: A cellular and proteomic study. CC BY 2.0. <https://creativecommons.org/licenses/by/2.0/>.

Kapitel 3

- S. 66 figur 80, Claus Lunau.
- S. 67 figur 81, Lotte Thorup mbf. gritsalak karalak/Shutterstock.com.
- S. 71 figur 86, Claus Lunau.
- S. 78 figur 96a, Neirfy/Shutterstock.com.
- S. 81 figur 100, Claus Lunau.
- S. 82 figur 101, Claus Lunau.
- S. 84 figur 103, Artemida-psy/Shutterstock.com.
- S. 84 figur 104, fotograf: Søren Gammelmark. Foto er venligst stillet til rådighed af De Danske Gærfabrikker A/S.

Kapitel 4

- S. 85 figur 105, vilax/Shutterstock.com.
- S. 86 figur 106, Sekson Thippanya/Shutterstock.com.
- S. 86 figur 107, Claus Lunau.
- S. 87 figur 108, Claus Lunau.
- S. 89 figur 111, Claus Lunau.
- S. 89 figur 112, Claus Lunau.
- S. 90 figur 113, Claus Lunau.
- S. 91 figur 114, Rattiya Thongdumhyu/Shutterstock.com.
- S. 91 figur 115, Achiiichiii/Shutterstock.com.
- S. 92 figur 116, Claus Lunau.
- S. 92 figur 117, Claus Lunau.
- S. 93 figur 118, Jose Luis Calvo/Shutterstock.com.
- S. 95 figur 120, Lotte Thorup mbf. Tefi/Shutterstock.com.
- S. 96 figur 121, Lotte Thorup mbf. Slave SPB/Shutterstock.com.
- S. 98 figur 122, SVETLANA VERBINSKAYA/Shutterstock.com.
- S. 98 figur 123, Claus Lunau.
- S. 100 figur 126, Lotte Thorup mbf. BlueRingMedia/Shutterstock.com (graviditetsteststav).

- S. 101 figur 127, Søren Weile/Ritzau Scanpix.
- S. 102 figur 128, Emre Terim/Shutterstock.com.
- S. 103 figur 129, Kateryna Kon/Shutterstock.com.
- S. 104 figur 131, Lotte Thorup mbf. Alila Medical Media/Shutterstock.com (DNA chip).
- S. 105 figur 133, kilde: Dansk Cytogenetisk Centralregister (DCCR). <http://www.auh.dk/om-auh/afdelinger/klinisk-genetisk-afdeling/til-fagfolk/dccr/pranatale-tabeller/>.

Kapitel 5

- S. 111 figur 138, Federico Rostagno/Shutterstock.com.
- S. 112 figur 140, Chris Hill/Shutterstock.com.
- S. 113 figur 141, Ikpro/Shutterstock.com.
- S. 115 figur 144, Shutterstock.com: Vaclav Sebek (isbjørn), Dolores Harvey (sæl), Valentina Photo (torsk), Choksawatdikorn (plankton), Ivan Kurmyshov (havvand).
- S. 116 figur 145, Baseret på figur 2 i Berg *et al.* 2017. Global trends in the production and use of DDT for control of malaria and other vector-borne diseases. *Malaria Journal*. CC BY 4.0. <https://creativecommons.org/licenses/by/4.0/>.
- S. 117 figur 148, Everett Historical/Shutterstock.com.
- S. 118 figur 150, foto venligst stillet til rådighed af Ole Vinther Frederiksen.
- S. 120 figur 153, kilde: Danmarks statistik.
- S. 122 figur 155, Kaponia Aliaksei/Shutterstock.com.
- S. 123 figur 156, kilde: CeHoS (Center for Hormonforstyrrende Stoffer -Rigshospitalet) <http://www.cend.dk/oversigtsfigur--kemikalier-i-danskerne.html>.
- S. 124 figur 157, Claus Lunau.
- S. 126 figur 161, glenda/Shutterstock.com.
- S. 126 figur 162, Rigshospitalets Klinik for Vækst og Reproduktion.
- S. 126 figur 163, Claus Lunau.
- S. 127 figur 164, Claus Lunau.
- S. 129 figur 167, kilde: Danckert *et al.* 2019. NORDCAN: Cancer Incidence, Mortality, Prevalence and Survival in the Nordic Countries, Version 8.2 (26.03.2019). Association of the Nordic Cancer Registries. Danish Cancer Society. Available from <http://www.ancr.nu>.
- S. 130 figur 168, LightField Studios/Shutterstock.com.
- S. 131 figur 169, Lotte Thorup mbf. Shutterstock.com: Skalapendra (skjoldbruskkirtel), Maria Averborg (bugspytkirtel).
- S. 132 figur 170, a. Marco Maggesi/Shutterstock.com.
- S. 135 figur 174, Shutterstock.com: a. Lebendkulturen.dk, b. Syarief_Rakh.

Kapitel 6

- S. 137 figur 175, Master1305/Shutterstock.com.
- S. 138 figur 176, Mohd Firdaus Othman/Shutterstock.com.
- S. 139 figur 177, Lotte Thorup mbf. Shutterstock.com: ilusmedical (hud), Designua (slimhinder), corbac40 (mavesæk).
- S. 140 figur 178, Claus Lunau.
- S. 146 figur 187, kckate16/Shutterstock.com.
- S. 146 figur 188, Claus Lunau.
- S. 147 figur 189, Juan Gaertner/Shutterstock.com.
- S. 155 figur 199, Christoph Burgstedt/Shutterstock.com.
- S. 156 figur 200, Shutterstock.com: Designua (TMV), GraphicsRF (resten).

- S. 156 figur 201, Shutterstock.com: Designua/Shutterstock.com.
- S. 157 figur 202, Kateryna Kon/Shutterstock.com.
- S. 159 figur 206, Claus Lunau.
- S. 160 figur 208, Sherry Yates Young/Shutterstock.com.
- S. 163 figur 210, foto venligst stillet til rådighed af Bodil Blem Bidstrup.
- S. 163 figur 211, Khamkhilai Thanet/Shutterstock.com.

Kapitel 7

- S. 167 figur 214, Iakov Filimonov/Shutterstock.com.
- S. 168 figur 215, Tatiana Shepeleva/Shutterstock.com.
- S. 168 figur 216, kilde: DANMAP 2017 – Use of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from food animals, food and humans in Denmark. ISSN 1600-2032. www.danmap.org.
- S. 169 figur 217, St Marys's Hospital Medical School/Science Photo Library/Ritzau Scanpix.
- S. 176 figur 232, foto venligst stillet til rådighed af @CABI (Helen Stewart).
- S. 176 figur 233, Crulina 98/Wiki commons. CC BY 3.0. <https://creativecommons.org/licenses/by/3.0/>.
- S. 180 figur 241, kilde: DANMAP 2017 – Use of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from food animals, food and humans in Denmark. ISSN 1600-2032. www.danmap.org.
- S. 184 figur 246, kilde: DANMAP 2017 – Use of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from food animals, food and humans in Denmark. ISSN 1600-2032. www.danmap.org.
- S. 185 figur 247, krumanop/Shutterstock.com.
- S. 185 figur 248, kilde: DANMAP 2017 – Use of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from food animals, food and humans in Denmark. ISSN 1600-2032. www.danmap.org.
- S. 185 figur 249, kilde: Danmarks Statistik.
- S. 186 figur 250, kilde: DANMAP 2017 – Use of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from food animals, food and humans in Denmark. ISSN 1600-2032. www.danmap.org.
- S. 187 figur 251, Pyty/Shutterstock.com (baggrundskort).
- S. 188 figur 252, kilde: DANMAP 2017 – Use of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from food animals, food and humans in Denmark. ISSN 1600-2032. www.danmap.org.
- S. 188 figur 253, kilde: DANMAP 2017 – Use of antimicrobial agents and occurrence of antimicrobial resistance in bacteria from food animals, food and humans in Denmark. ISSN 1600-2032. www.danmap.org.
- S. 189 figur 254, OneMashi/Shutterstock.com.
- S. 191 figur 257, kilde: Bakteriernes ømme punkt, produceret af Kunst og Videnskab, SDU til Danskernes Akademi: <https://www.sdu.dk/en/forskning/ctm/media>.
- S. 191 figur 258, PDB ID: a. 2K6O, b. 1Z6B, c. 1IJU, d. 1QX9.
- S. 193 figur 260, Sebastian Kaultizki/Shutterstock.com.
- S. 194 figur 262, Ami Images/Science Photo Library/Ritzau Scanpix.
- S. 196 figur 265, unoL/Shutterstock.com.

Kapitel 8

- S. 197 figur 266, Philip Lange/Shutterstock.com.
S. 197 figur 267, Lotte Thorup mbf. Nitr/Shutterstock.com.
S. 198 figur 268, Shutterstock.com: Kovaleva_Ka (majs og hvede), Andrew Eremín (kartofler), Boonchuay1970 (ris).
S. 198 figur 269, Larina Marina/Shutterstock.com.
S. 198 figur 270, Shutterstock.com: FEDELE FERRARA (røddalge), angellodeco (petriskål), Rattiya Thongdumhyu (agarosegel).
S. 199 figur 271, Shutterstock.com: Fahkamram (plante), Ye.Maltsev (alger), Choksawatdikorn (cyanobakterie).
S. 205 figur 282, Shutterstock.com: Ekkaratk (sukkerør), ra3rn (sukkerør), Sotnikova Vera (maltbyg), absolutimages (mælkedrikning).
S. 206 figur 283, Claus Lunau.
S. 208 figur 285, Dr. Kari Lounatmaa/Science Photo Library/Ritzau Scanpix.
S. 209 figur 286, foto: Hanne Wolff.
S. 209 figur 287, Shutterstock.com: Khomulo Anna (bomuld).
S. 210 figur 288, b. Lotte Thorup mbf. Shutterstock.com: Steven Russel Smith Ohio (blad), Rattiya Thongdumhyu (cellevægge), ghost design (Cellulosemikrofibrier).
S. 211 figur 289, Hæggröm, Mikael. 2014. Medical gallery of Mikael Hæggröm 2014. Wikijournal of Medicine 1 (2). DOI:10.15347/wjm/2014.008. ISSN 2002-4436. Public Domain.
S. 214 figur 296, Nasky/Shutterstock.com.
S. 215 figur 297, Lotte Thorup mbf. Nasky/Shutterstock.com (granum).
S. 216 figur 300, foto venligst stillet til rådighed af Dorte Ankerfelt.
S. 219 figur 304, PDB ID: 1AG6.
S. 221 figur 305, PDB ID: 1RCX.
S. 226 figur 311b, baseret på figur 1d i Cannella et al. 2016. Light-driven oxidation of polysaccharides by photosynthetic pigments and a metalloenzyme. Nature Communications. CC BY 4.0. <https://creativecommons.org/licenses/by/4.0/>.

Kapitel 9

- S. 227 figur 312, WAYHOME studio/Shutterstock.com.
S. 228 figur 313, Nordroden/Shutterstock.com.
S. 228 figur 314, Shutterstock.com: a. Zagor Inna, b. sasimoto.
S. 229 figur 315, molekuel_be/Shutterstock.com.
S. 232 figur 320a, PDB ID: 2DFD.
S. 233 figur 321b, Zephyris, en.wikipedia.org. CC BY 3.0. <https://creativecommons.org/licenses/by/3.0/>.
S. 235 figur 324b, PDB ID: 1HKC.
S. 237 figur 329b, PDB ID: 3E04.
S. 238 figur 331, Claus Lunau.
S. 242 figur 335, molekuel_be/Shutterstock.com.
S. 243 figur 336b, PDB ID: 3UQD.
S. 245 figur 338a, jazz331/Shutterstock.com.
S. 245 figur 339, Charlotte Bleijenberg/Shutterstock.com.
S. 251 figur 343, Crepesoles/Shutterstock.com.
S. 253 figur 346a, PDB ID: CYCS.
S. 254 figur 347, a. Lotte Thorup mbf. David S. Goodsell and RCSB PDB, Molecule of the Month: <https://pdb101.rcsb.org/>

motm/72. CC BY 4.0. <https://creativecommons.org/licenses/by/4.0/>. b. PDB ID: 1C17 – F0 Electric motor from ATP Synthase.

- S. 259 figur 352, Lotte Thorup mbf. Shutterstock.com: snapgalleria (mitochondrie), Nasky (chloroplast).

Kapitel 10

- S. 261 figur 353, Shutterstock.com: mountain beetle (fyrværkeri), MilanB (citron), c12 (søm).
S. 262 figur 354, Yuliya Shauerma/Shutterstock.com.
S. 262 figur 355, foto: Hanne Wolff.
S. 265 figur 360b, Fun Way Illustration/Shutterstock.com.
S. 266 figur 363, Valentyn Volkov/Shutterstock.com.
S. 267 figur 364b, foto: Hanne Wolff.
S. 271 figur 370, Lotte Thorup mbf. ibreakstock (ethen), ibreakstock (ethan).
S. 276 figur 377, foto: Hanne Wolff.

Kapitel 11

- S. 289 figur 389, Lotte Thorup mbf. BlueRingMedia/Shutterstock.com.
S. 290 figur 391, Sebastian Kaulitzki/Shutterstock.com.
S. 292 figur 395, Lotte Thorup mbf. SVETLANA VERBINSKAYA/Shutterstock.com (zygote).
S. 293 figur 396, Claus Lunau.
S. 294 figur 397, Chaikom/Shutterstock.com.
S. 295 figur 398, Kyoto University Cira/EPA/Ritzau Scanpix.
S. 297 figur 401, a. Seamus Murphy/Smu00871uk/Ritzau Scanpix, b. Sam Ogden/Science Photo Library/Ritzau Scanpix.
S. 297 figur 402, Claus Lunau.
S. 298 figur 403, Jose Luis Calvo/Shutterstock.com.
S. 299 figur 404, Claus Lunau.
S. 300 figur 405, molekuel_be/Shutterstock.com.
S. 303 figur 409, gnomeandi/Shutterstock.com.
S. 306 figur 414, kilde: Danckert *et al.* 2019. NORDCAN: Cancer Incidence, Mortality, Prevalence and Survival in the Nordic Countries, Version 8.2 (26.03.2019). Association of the Nordic Cancer Registries. Danish Cancer Society. Available from <http://www.ancre.nu>.
S. 308 figur 415, kilde: Danckert *et al.* 2019. NORDCAN: Cancer Incidence, Mortality, Prevalence and Survival in the Nordic Countries, Version 8.2 (26.03.2019). Association of the Nordic Cancer Registries. Danish Cancer Society. Available from <http://www.ancre.nu>.
S. 309 figur 416, Claus Lunau.
S. 310 figur 417, fotos: Tine Schroeder Mantoni.
S. 311 figur 420, petarg/Shutterstock.com.
S. 314 figur 424, a. Lotte Thorup mbf. Designua/Shutterstock.com, b. Nci/Photo Researchers/Ritzau Scanpix.
S. 315 figur 425, Claus Lunau.

Alle PDB-figurer er tegnet med programmet Protein Workshop (J.L. Moreland, A. Gramada, O.V. Buzko, Q. Zhang, P.E. Bourne (2005) The Molecular Toolkit (MBT): a modular platform for developing molecular visualization applications. BMC Bioinformatics 6:21).