

A La cellula

Occhiello carletti76/Panoramio

Capitolo 1

Apertura Milos Luzanin/shutterstock; *Figura 1A* Eye of Science/SPL/Photo Researchers, Inc., *1B* Dennis Kunkel Microscopy, Inc., *1C* Markus Geisen/NHMPL, *1D* Frans Lanting/Minden Pictures, *1E* Glen Threlfo/Auscapse/Minden Pictures, *1F* Piotr Naskrecki/Minden Pictures, *1G* Tui De Roy/Minden Pictures; *Figura 2A* Dr. Cecil H. Fox/Photo Researchers, Inc, *2B* da R. Hooke, 1664. *Microfotografia*, *2C* Astrid & Hanns-Frieder Michler/Photo Researchers, Inc., *2D* John Durham/SPL/Photo Researchers, Inc; *Figura 4A* Bob Bennett/Jupiter Images, *4B* Frans Lanting/Minden Pictures; *Figura 5 Organismo*: Sami Sarkis/Painet Inc, *Popolazione*: LogicStock/Painet Inc, *Comunità*: Georgie Holland/AGE Fotostock, *Biosfera*: NASA; *Figura 6A* Frans Lanting/Minden Pictures, *6B* Marguerite Smits Van Oyen/Naturepl.com; *Figura 7 Acero*: Simon Colmer & Abby Rex/Alamy, *Pino*: David McIntyre, *Ninfea*: Pete Oxford/Naturepl.com, *Cetriolo*: David McIntyre, *Pianta carnivora*: Nick Garbutt/Naturepl.com; *Figura 8A* Peter Beck/CORBIS, *8B* PASQUALE SORRENTINO/SCIENCE PHOTO LIBRARY; *Figura 9A* HUMANITIES AND SOCIAL SCIENCES LIBRARY/NEW YORK PUBLIC LIBRARY/SCIENCE PHOTO LIBRARY, *9B* Charles O'Rear/CORBIS; *Scheda p.13* B. MURTON/SOUTHAMPTON OCEANOGRAPHY CENTRE/SCIENCE PHOTO LIBRARY; *Figura 10* ANDREW MCCLENAGHAN/SCIENCE PHOTO LIBRARY.

Capitolo 2

Apertura NASA/JPL/SSI/SCIENCE PHOTO LIBRARY; *Scheda p.22* da N. D. Volkow et al., 2001. *Am. J. Psychiatry* 158: 377; *Figura 12* Mitsuaki Iwago/Minden Pictures; *Figura 13* David McIntyre.

Capitolo 3

Apertura vpix/shutterstock; *Figura 7* Claudio Baldini/shutterstock; *Figura 8C sinistra*: Biophoto Associates/Photo Researchers, Inc, *centro*: Ken Wagner/Visuals Unlimited, *destra*: CNRI/SPL/Photo Researchers, Inc; *Figura 9* Cartilagine:

Robert Brons/Biological Photo Service, *Insetto*: Scott Bauer/USDA; *Figura 10* NATIONAL CANCER INSTITUTE/SCIENCE PHOTO LIBRARY; *Scheda p.50* da PDB 1IVM. T. Obita, T. Ueda, & T. Imoto, 2003. *Cell. Mol. Life Sci.* 60: 176; *Figura 24* da S. Arnott & D. W. Hukins, 1972. *Biochem. Biophys. Res. Commun.* 47(6): 1504.

Capitolo 4

Apertura valdezrl/shutterstock; *Figura 4 in alto a sinistra*: IST Cell Bank, Genoa, *in alto a destra*: Michael W. Davidson, Florida State U., *in basso a sinistra*: Dr. Gopal Murti/SPL/Photo Researchers, Inc; *Figura 5* J. J. Cardamone Jr. & B. K. Pugashetti/Biological Photo Service; *Figura 6* Dennis Kunkel Microscopy, Inc; *Figura 7B* COLIN CUTHBERT/SCIENCE PHOTO LIBRARY; *Figura 8* *Mitocondrio*: K. Porter, D. Fawcett/Visuals Unlimited, *Citoscheletro*: Don Fawcett, John Heuser/Photo Researchers, Inc, *Nucleolo*: Richard Rodewald/Biological Photo Service, *Perossisoma*: E. H. Newcomb & S. E. Frederick/Biological Photo Service, *Parete cellulare*: Biophoto Associates/Photo Researchers, Inc, *Ribosoma*: da M. Boublik et al., 1990. *The Ribosome*, p. 177. American Society for Microbiology, *Centrioli*: Barry F. King/Biological Photo Service, *Plasmalemma*: J. David Robertson, Duke U. Medical Center, *RE ruvido*: Don Fawcett/Science Source/Photo Researchers, Inc, *RE liscio*: Don Fawcett, D. Friend/Science Source/Photo Researchers, Inc, *Cloroplasto*: W. P. Wergin, E. H. Newcomb/Biological Photo Service, *Apparato di Golgi*: L. Andrew Staehelin, U. Colorado; *Figura 9A* Dr. Ron Milligan, Scripps Research Institute, *9B* Biophoto Associates/Science Source/Photo Researchers, Inc; *Figura 10* Don Fawcett/Visuals Unlimited; *Scheda p.72* CNRI/SCIENCE PHOTO LIBRARY; *Figura 11* B. Bowers/Photo Researchers, Inc; *Figura 12* Sanders/Biological Photo Service; *Figura 13* E. H. Newcomb & S. E. Frederick/Biological Photo Service; *Figura 14* M. C. Ledbetter, Brookhaven National Laboratory; *Figura 15* K. Porter, D. Fawcett/Visuals Unlimited; *Figura 16* W. P. Wergin, E. H. Newcomb/Biological Photo Service, *riquadro*: W. P. Wergin/Biological Photo Service; *Figura 17A* John Durham/SPL/Photo

Researchers, Inc, *17B* Paul W. Johnson/Biological Photo Service; *Figura 18* Vic Small, Austrian Academy of Sciences, Salzburg, Austria; *Figura 19* Michael Abbey/Visuals Unlimited; *Figura 20* SPL/Photo Researchers, Inc, *20A-C* W. L. Dentler/Biological Photo Service; *Figura 21* Biophoto Associates/Photo Researchers, Inc; *Figura 22 a sinistra*: David Sadava, *a destra in alto*: da J. A. Buckwalter & L. Rosenberg, 1983. *Coll. Rel. Res.* 3: 489. L. Rosenberg, *a destra in basso*: J. Gross, Biozentrum/SPL/Photo Researchers, Inc; *Figura 23A* D.S. Friend, U. California, San Francisco, *23B* Darcy E. Kelly, U. Washington, *23C* C. Peracchia.

Capitolo 5

Apertura Jun Mu/shutterstock; *Figura 1* Jason Stitt/shutterstock; *Figura 2A-B* Maxim Petrichuk/shutterstock; *Figura 3A* javarman/shutterstock, *3B* Celso Pupo/shutterstock; *Figura 5A* terekhov igor/shutterstock, *5B* Stefan Redel/shutterstock; *Figura 7* Dmitrijs Mihejevs/shutterstock; *Figura 8B* Darwin Dale/Photo Researchers, Inc; *Figura 10* Mikael Damkier/shutterstock; *Figura 11* photobar/shutterstock; *Figura 14* da PDB 1A7K. H. Kim & W. G. Hol, 1998. *J. Mol. Biol.* 278: 5; *Figura 19* L. Andrew Staehelin, U. Colorado; *Figura 22* Ljupco Smokovski/shutterstock; *Figura 29* da M.M. Perry, 1979. *J. Cell Sci.* 39: 26.

Capitolo 6

Apertura Maxim Petrichuk/shutterstock; *Figura 1* Olga Utlyakova/shutterstock; *Figura 2A* MIMOHE/shutterstock, *2B* Carmen Steiner/shutterstock; *Figura 7B* Morgan Lane Photography/shutterstock; *Figura 8B* Marie C. Fields/shutterstock; *Figura 10B* Elena Elisseeva/shutterstock; *Figura 11* Ephraim Racker.

Capitolo 7

Apertura Daniel Schoenen/shutterstock; *Figura 1* Andrew Syred/SPL/Photo Researchers, Inc; *Figura 6* MaxPhoto/shutterstock; *Figura 9* Tish1/shutterstock; *Figura 14* Lawrence Berkeley National Laboratory; *Figura 16* canismaior/shutterstock.

B L'ereditarietà e l'evoluzione

Occhiello Dave McAleavy/shutterstock

Capitolo 1

Apertura EDELMANN/SCIENCE PHOTO LIBRARY; *Figura 1A* David M. Phillips/Visuals Unlimited, *1B-C* John D. Cunningham/Visuals Unlimited; *Figura 3* John J. Cardamone Jr./Biological Photo Service; *Figura 4* LAGUNA DESIGN/SCIENCE PHOTO LIBRARY; *Figura 6* Biophoto Associates/Science Source/Photo Researchers, Inc; *Figura 7* G.F. Bahr; *Figura 8B* Conly L. Rieder/Biological Photo Service; *Figura 9* Nasser Rusan; *Figura 10A* T.E. Schroeder/Biological Photo Service, *10B* B.A. Palevitz, E.H. Newcomb/Biological Photo Service; *Figura 11A* Dr. John Cunningham/Visuals Unlimited, *11B* Garry T. Cole/Biological Photo Service; *Figura 12* a sinistra: Andrew Syred/SPL/Photo Researchers, Inc., al centro: David McIntyre, a destra: Gerry Ellis, Digital Vision/PictureQuest; *Figura 13* Dr. Thomas Ried & Dr. Evelin Schröck, NIH; *Figura 14* J. Kezer; *Figura 16* C.A. Hasenkampf/Biological Photo Service.

Capitolo 2

Apertura Boris Diakovskiy/shutterstock; *Figura 1* The Mendelianum; *Figura 10* The American Netherland Dwarf Rabbit Club; *Figura 13* Vasilij Koval/shutterstock; *Scheda p.191* vladm/shutterstock; *Figura 14* Madison, Hannah, and Walnut; *Figura 15* Peter Morenus/U. of Connecticut; *Scheda p.200* GJLP/SCIENCE PHOTO LIBRARY.

Capitolo 3

Apertura Giovanni Guarino/Alamy; *Figura 3* Biozentrum, U. Basel/SPL/Photo Researchers, Inc; *Scheda p.209* A. D OWSETT, HEALTH PROTECTION AGENCY/SCIENCE PHOTO LIBRARY; *Figura 5A* CSHL Archives/Peter Arnold, Inc; *Figura 7A* A. Barrington Brown/Photo Researchers, Inc., *7B* da S. Arnott & D.W. Hukins, 1972. *Biochem. Biophys. Res. Commun.* 47(6): 1504; *Figura 9* Niar/shutterstock; *Figura 16C* Dr. Peter Lansdorp/Visuals Unlimited.

Capitolo 4

Apertura DAVID AUBREY/SCIENCE PHOTO LIBRARY; *Scheda p.227* CNRI/SCIENCE PHOTO LIBRARY; *Figura 7* da PDB 1EHZ. H. Shi & P.B. Moore, 2000. *RNA* 6: 1091; *Figura 8* da PDB 1EUQ. L. D. Sherlin et al., 2000. *J.Mol.Biol.* 299: 431; *Figura 9* da PDB 1GIX and 1GIY. M. M. Yusupov et al., 2001. *Science* 292: 883; *Figura 14* Carolyn A. McKeone/Photo Researchers, Inc; *Figura 17* Stanley Flegler/Visuals Unlimited; *Figura 21* JOTI/SCIENCE PHOTO LIBRARY.

Capitolo 5

Apertura Ppaaullee/shutterstock; *Figura 1A* Dr. Harold Fisher/Visuals Unlimited, *1B* E.O.S./Gelderblom/Photo Researchers, Inc., *1C* BSIP Agency/Index Stock Imagery/Jupiter Images; *Scheda p.247* Dept. of Microbiology, Biozentrum/SPL/Photo Researchers, Inc; *Figura 6* L. Caro & R. Curtiss; *Scheda p.253* AJ PHOTO/HOP AMERICAN/SCIENCE PHOTO LIBRARY; *Figura 9* Dennis Kunkel Microscopy, Inc./Visuals Unlimited/Corbis; *Scheda p.258* A CNRI/SCIENCE PHOTO LIBRARY, *B* Dennis Kunkel Microscopy, Inc.

Capitolo 6

Apertura Brian Chase/shutterstock; *Scheda p.266* A POWER AND SYRED/SCIENCE PHOTO LIBRARY, *B* JAMES KING-HOLMES/SCIENCE PHOTO LIBRARY, *C* PASCAL GOETGHELUCK/SCIENCE PHOTO LIBRARY, *D* DR JEREMY BURGESS/SCIENCE PHOTO LIBRARY; *Figura 9* Murray L. Barr, U. Western Ontario; *Figura 12* O.L. Miller, Jr; *Figura 15* W. Driever & C. Nüsslein-Vollhard; *Figura 16B* C. Rushlow & M. Levine, *16C* T. Karr, *16D* S. Carroll & S. Paddock; *Figura 18* F.R. Turner, Indiana U.

Capitolo 7

Apertura PASCAL GOETGHELUCK/SCIENCE PHOTO LIBRARY; *Scheda p.289* VOLKER STEGER/SCIENCE PHOTO LIBRARY; *Scheda p.290* Philippe Plailly/Photo Researchers, Inc; *Scheda p.295* Roddy Field, the Roslin Institute; *Figura 8A* MAURO FERMARIELLO/SCIENCE PHOTO LIBRARY, *8B* Josh Westrich/Corbis; *Figura 11* Macalester College; *Scheda p.306* JAMES KING-HOLMES/SCIENCE PHOTO LIBRARY.

Capitolo 8

Apertura Elena Schweitzer/shutterstock; *Figura 1* SCIENCE PHOTO LIBRARY; *Figura 2* GEORGE BERNARD/SCIENCE PHOTO LIBRARY; *Scheda p.313* A James Randklev/Corbis, *B* SCIENCE PHOTO LIBRARY, *C* DR JEREMY BURGESS/SCIENCE PHOTO LIBRARY; *Figura 3* SPL/Photo Researchers, Inc; *Figura 4A* Wellford Tiller/shutterstock, *4B* Ralf Broskvar/shutterstock, *4C* Falk Kienas/shutterstock, *4D* Vienna Report Agency/Sygma/Corbis; *Figura 5* Ballista; *Figura 6* Willyam Bradberry/shutterstock; *Figura 7* da W. Levi, 1965. *Encyclopedia of Pigeon Breeds*. T.F.H. Publications, Jersey City, NJ. (*A-B*: R.L. Kienlen/Ralston Purina Company, *C-D*: Stauber); *Scheda p.319* Rick Friedman/Corbis; *Figura 8* Thesupermat; *Figura 12B* Sebastien Burel/

shutterstock; *Figura 14* David McIntyre; *Figura 18* János Németh/shutterstock; *Figura 19A* Francois Loubser/shutterstock; *Figura 22* Doug Lemke/shutterstock; *Figura 23A* Marilyn Kazmers/Dembinsky Photo Assoc., *23B* Paul Osmond/Painet Inc.

Capitolo 9

Apertura Luis Louro/shutterstock; *Figura 1A* EcoPrint/shutterstock, *1B* Nick Biemans/shutterstock; *Scheda p.339* A DK Limited/CORBIS, *B* destra: WILDLIFE PICTURES/REPORTERS/SCIENCE PHOTO LIBRARY, *B* sinistra: SINCLAIR STAMMERS/SCIENCE PHOTO LIBRARY; *Figura 6A* W. Perry Conway/CORBIS; *Figura 7* javarman/shutterstock; *Figura 8A* Newton Page/shutterstock, *8B* B. Spekart/shutterstock, *8C* brianhumek/shutterstock; *Figura 9* Boris I. Timofeev/Pensoft; *Figura 11* BONNIE WATTON/shutterstock; *Figura 12B* Fritz Geller-Grimm, *12C* Jack Dykinga; *Figura 13A* Tony Tilford/photolibrary.com, *13B* W. Peckover/VIREO; *Figura 14* Andrea Catenaro Doherty/shutterstock; *Figura 15A* Drazen Vukelic/shutterstock, *15B* Dr. Morley Read/shutterstock; *Scheda p.350* B USTIN/shutterstock.

Capitolo 10

Apertura Gideon Mendel/Corbis; *Figura 2* TONY CAMACHO/SCIENCE PHOTO LIBRARY; *Figura 3* DLILLC/Corbis; *Figura 4A* Frans Lanting/Minden Pictures, *4B* Anup Shah/Dembinsky Photo Assoc., *4C* Eric Gevaert/shutterstock, *4D* Anup Shah/Dembinsky Photo Assoc.; *Figura 6A* Brian A. Vikander/CORBIS; *Figura 7* JOHN READER/SCIENCE PHOTO LIBRARY; *Figura 8* PASCAL GOETGHELUCK/SCIENCE PHOTO LIBRARY; *Scheda p.363* VOLKER STEGER/SCIENCE PHOTO LIBRARY; *Scheda p.364* Ronald van der Beek/shutterstock; *Figura 12A* JAVIER TRUEBA/MSF/SCIENCE PHOTO LIBRARY, *12B* JOHN READER/SCIENCE PHOTO LIBRARY, *12C* MARTIN LAND/SCIENCE PHOTO LIBRARY; *Scheda p.368* WELCOME DEPT. OF COGNITIVE NEUROLOGY/SCIENCE PHOTO LIBRARY; *Figura 13A* Ali Meyer/CORBIS, *13B* Gianni Dagli Orti/CORBIS; *Figura 14* Craig Hanson/shutterstock; *Scheda p.370* Eric Gevaert/shutterstock.

Filmato 10.1 *Brachiazione e locomozione clinograda* Stefan Gottschild/shutterstock, Jon Matthew Jones/shutterstock.

C Il corpo umano

Occhiello yuris/shutterstock

Capitolo 1

Apertura vitor costa/shutterstock; *Figura 1A* Gladden Willis/Visuals Unlimited, *1B* Ed Reschke/Peter Arnold, Inc; *Figura 2* ASTRID & HANNS-FRIEDER MICHLER/SCIENCE PHOTO LIBRARY; *Figura 3* Manfred Kage/Peter Arnold, Inc; *Figura 4* Frank A. Pepe/Biological Photo Service; *Figura 5A* Innerspace Imaging/SPL/Photo Researchers, Inc., *5B* SPL/Photo Researchers, Inc; *Figura 6* STEVE GSCHMEISSNER/SCIENCE PHOTO LIBRARY; *Figura 7* Ed Reschke/Peter Arnold, Inc; *Figura 9A* James Cavallini/Photo Researchers, Inc., *9B* Innerspace Imaging/SPL/Photo Researchers, Inc; *Figura 12* niederlander/shutterstock; *Figura 15* STEVE GSCHMEISSNER/SCIENCE PHOTO LIBRARY; *Scheda p.393* Gopal Murti/Photo Researchers, Inc; *Scheda p.399* Kameel4u/shutterstock.

Capitolo 2

Apertura Joseph Hardy/shutterstock; *Scheda p.410* Brand X Pictures/Alamy; *Figura 5* Ed Reschke/Peter Arnold, Inc; *Scheda p.418* A DR GARY GAUGLER/SCIENCE PHOTO LIBRARY, *B* EYE OF SCIENCE/SCIENCE PHOTO LIBRARY; *Figura 11B* CNRI/Photo Researchers, Inc; *Scheda p.421* A Chuck Brown/Science Source/Photo Researchers, Inc., *B* Biophoto Associates/Science Source/Photo Researchers, Inc.

Capitolo 3

Apertura Lutsan Pavlo/shutterstock; *Figura 1A* SPL/Photo Researchers, Inc., *1C* P. Motta/Photo Researchers, Inc; *Figura 2* Judex/shutterstock; *Scheda p.430* AJ PHOTO/SCIENCE PHOTO LIBRARY; *Scheda p.432* jorisvo/shutterstock; *Figura 7* Berndt Fischer/Jupiter Images; *Scheda p.435* EDELMANN/SCIENCE PHOTO LIBRARY; *Scheda p.436* ZEPHYR/SCIENCE PHOTO LIBRARY.

Capitolo 4

Apertura Morgan Lane Photography/shutterstock; *Figura 1* Monkey Business Images/shutterstock; *Figura 3* Giuseppe_R/shutterstock; *Figura 6* Dennis Kunkel Microscopy, Inc; *Scheda p.448* angelo gilardelli/shutterstock; *Scheda p.452* Eye of Science/SPL/Photo Researchers, Inc; *Scheda p.460* Science VU/Jackson/Visuals Unlimited.

Capitolo 5

Apertura NASA; *Figura 3 da* R. G. Kessel & R. H. Kardon, 1979. *Tissues and Organs*. W. H. Freeman, San Francisco; *Scheda p.473* Hank Morgan/Photo Researchers, Inc.

Capitolo 6

Apertura Daniel Lainé/CORBIS; *Figura 2* Dennis Kunkel Microscopy, Inc; *Figura 4* Dr. Andrejs Liepins/SPL/Photo Researchers, Inc; *Figura 6* Dr. Gopal Murti/SPL/Photo Researchers, Inc; *Figura 9* David Phillips/Science Source/Photo Researchers, Inc; *Figura 13* Monkey Business Images/shutterstock; *Scheda p.498* A NIBSC/SCIENCE PHOTO LIBRARY, *B* EYE OF SCIENCE/SCIENCE PHOTO LIBRARY, *C* DR KARI LOUNATMAA/SCIENCE PHOTO LIBRARY, *D* PASIEKA/SCIENCE PHOTO LIBRARY.

Capitolo 7

Apertura Regien Paassen/shutterstock; *Figura 10A* Ed Reschke/Peter Arnold, Inc; *Figura 13* STEVE GSCHMEISSNER/SCIENCE PHOTO LIBRARY; *Scheda p.523* A Scott Camazine/Photo Researchers, Inc., *B* ajt/shutterstock; *Figura 17B* Gerhard Heldmaier, Philipps U; *Scheda p.527* Tiziana Fabi/AFP/Getty Images.

Capitolo 8

Apertura Heidi Brand/shutterstock; *Figura 3B* Ed Reschke/Peter Arnold, Inc; *Figura 4* P. Bagavandoss/Photo Researchers, Inc; *Figura 9* Dr. David M. Phillips/Visuals Unlimited; *Figura 12* SIU/Peter Arnold, Inc; *Figura 14 da* J. G. Mulnard, 1967. *Arch. Biol. (Liege)* 78: 107. Courtesy of J. G. Mulnard; *Figura 17A* CNRI/SPL/Photo Researchers, Inc., *17B* Dr. G. Moscoso/SPL/Photo Researchers, Inc., *17C* Tissuepix/SPL/Photo Researchers, Inc; *17D* Petit Format/Photo Researchers, Inc; *Figura 21A* S.I.U. School of Med./Photo Researchers, Inc., *21B* Francois Etienne du Plessis/shutterstock; *Scheda p.552* SATURN STILLS/SCIENCE PHOTO LIBRARY.

Capitolo 9

Apertura goran cakmazovic/shutterstock; *Figura 2B* DAVID BECKER/SCIENCE PHOTO LIBRARY; *Figura 3* PROFESSOR P. MOTTA & D. PALERMO/SCIENCE, PHOTO LIBRARY; *Figura 4B* C. Raines/Visuals Unlimited; *Scheda p.561* Jorma Jaemsen-zefa/Corbis; *Figura 26* Wellcome Dept. of Cognitive Neurology/SPL/Photo Researchers, Inc; *Scheda p.585* David Joel Photography, Inc.

Capitolo 10

Apertura Stubblefield Photography/shutterstock; *Figura 1A* James Gerholdt/Peter Arnold, Inc., *1B* Stephen Dalton/Photo Researchers, Inc; *Figura 7A* P. Motta/Photo Researchers, Inc; *Scheda p.599* Jonathan Barnes/shutterstock; *Figura 11* Omikron/Science Source/Photo Researchers, Inc; *Figura 14* Manfred Kage/Peter Arnold, Inc; *Figura 15* Frank A. Pepe/Biological Photo Service; *Figura 17* Tom Deerinck/Visuals Unlimited; *Figura 19* Kent Wood/Peter Arnold, Inc; *Figura 21* SPL/Photo Researchers, Inc; *Figura 23* Robert Brons/Biological Photo Service.

D L'ecologia

Occhiello Gabriel Nardelli Araujo/shutterstock

Capitolo 1

Apertura Caitlin Mirra/shutterstock; *Figura 1* Tim Fitzharris/Minden Pictures; *Scheda p.622* Myotis/shutterstock; *Scheda p.625* A Elizabeth N. Orians, B Chee-Onn Leong/shutterstock; *Tundra*, in alto: Tim Acker/Auscapes/Minden Pictures, in basso: Elizabeth N. Orians; *Foresta boreale*, in alto: Carr Clifton/Minden Pictures, in basso: Robert Harding Picture Library Ltd/Alamy; *Foresta temperata*: Paul W. Johnson/Biological Photo Service; *Prateria*, in alto: Robert & Jean Pollock/Biological Photo Service, in basso: Elizabeth N. Orians; *Deserto freddo*, in alto: Edward Ely/Biological Photo Service, in basso: Robert Harding Picture Library Ltd./photolibrary.com; *Deserto caldo*, a sinistra: Terry Donnelly/Tom Stack & Assoc, a destra: Dave Watts/Tom Stack & Assoc; *Macchia*, a sinistra: Elizabeth N. Orians, a destra: ondaeliana/flickr.com; *Foresta spinosa*: Frans Lanting/Minden Pictures; *Savana*: Nigel Dennis/AGE Fotostock; *Foresta tropicale decidua*: Donald L. Stone; *Foresta tropicale sempreverde*: Elizabeth N. Orians; *Figura 7 Riccio*: Nigel J. Dennis/Photo Researchers, Inc; *Fossa*: Frans Lanting/Minden Pictures; *Lemure*: Wendy Dennis/Dembinsky Photo Associates; *Baobab*: Pete Oxford/Naturepl.com; *Pachypodium*: Michael Leach/Oxford Scientific Films/photolibrary.com; *Figura 9A* a sinistra: Bill Lea/Dembinsky Photo Associates; *9A* a destra: Stephen J. Krasemann/Photo Researchers, Inc; *9B* a sinistra: Frans Lanting/

Minden Pictures; *9B* al centro: Kenneth W. Fink/Photo Researchers, Inc; *9B* a destra: Chris Gomersall/Naturepl.com; *Scheda p.639* E. O. Wilson; *Figura 11A* Artur Bogacki/shutterstock, *11B* Doug Lemke/shutterstock.

Capitolo 2

Apertura Jenny Matthews/Alamy; *Scheda p.647* A Flip Nicklin/Minden Pictures, B PhotoStockFile/Alamy, C Robert McGouey/Alamy; *Figura 3A* Olga Lipatova/shutterstock, *3B* VasikO/shutterstock; *Figura 4* Larry Jon Friesen; *Figura 7A* Jason Vandehey/shutterstock, *7B* Yuriy Mykhaylov/shutterstock; *Figura 9* Ed Reschke/Peter Arnold, Inc; *Figura 15* Alan & Sandy Carey/Photo Researchers, Inc; *Figura 16* Lawrence E. Gilbert/Biological Photo Service; *Figura 18* Mitsuaki Iwago/Minden Pictures; *Figura 19A* Kim Taylor/Naturepl.com, *19B* Perennou Nuridsany/Photo Researchers, Inc; *Figura 20D* William W. Dunmire/National Park Service; *Figura 21* Jim Zipp/Photo Researchers, Inc.

Capitolo 3

Apertura Stephen Meese/shutterstock; *Figura 4* William Attard McCarthy/shutterstock; *Scheda p.677* Thomas Heinze/shutterstock; *Figura 10* Karol Kozlowski/shutterstock; *Figura 14* Michael Long/NHMPL; *Figura 15A* Christian Koerner - U. Basel, *15B* Mark Moffett/Minden Pictures; *Figura 16B* Mark Godfrey/The Nature Conservancy; *Figura 19* Dave Watts/Naturepl.

com; *Figura 20A* Terry Whittaker/Alamy, *20B* Paul Johnson/Naturepl.com; *Figura 21* Michael & Patricia Fogden/Minden Pictures; *Scheda p.689* A da R.B. Aronson et al., 2000. *Nature* 405: 36, B Fred Bavendam/Minden Pictures; *Figura 24B* Jim Brandenburg/Minden Pictures, *24C* Jesse Achtenberg/U.S. Fish and Wildlife Service; *Figura 25A* Eric Gevaert/shutterstock, *25B* Melinda Fawver/shutterstock; *Figura 26* Antoni Margalida.

Capitolo 4

Apertura Associated Sports Photography/Alamy; *Figura 1* Mark Gibson/Jupiter Images; *Figura 2* Frans de Waal, Emory U.; *Figura 4* da J. R. Brown et al., 1996. *Cell* 86: 297-309; *Figura 6A* Nina Leen/Time Life Pictures/Getty Images, *6B* Frans Lanting/Minden Pictures; *Figura 9A* Anup Shah/Naturepl.com, *9B* Mitsuaki Iwago/Minden Pictures, *9C* Konrad Wothe/Minden Pictures; *Figura 12B* Tui De Roy/Minden Pictures; *Figura 15* Steve & Dave Maslowski/Photo Researchers, Inc; *Figura 16* John Alcock, Arizona State U.; *Figura 17* José Fuste Raga/AGE Fotostock.

Filmato 1.2 *Gli animali migratori* Francois Arseneault/shutterstock, Jubal Harshaw/shutterstock.

Filmato 4.1 *L'imprinting* Filmmaker/shutterstock, kickie/shutterstock; **Filmato 4.5** *Volare con l'aquila* BRITISH TECHNICAL FILMS/SCIENCE PHOTO LIBRARY; **Filmato 4.7** *La danza delle api* PETER MATULAVICH/SCIENCE PHOTO LIBRARY.

I viventi e la loro storia

Occhiello Schalke fotografie|Melissa Schalke/shutterstock

Capitolo 1

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Capitolo 2

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Capitolo 4

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Capitolo 5

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Capitolo 6

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Capitolo 7

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