

# Human Anatomy & Physiology

TWELFTH GLOBAL EDITION

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- 28.2** Embryonic development begins as the zygote undergoes cleavage and forms a blastocyst en route to the uterus 1131
- 28.3** Implantation occurs when the embryo burrows into the uterine wall, triggering placenta formation 1132
- 28.4** Embryonic events include gastrula formation and tissue differentiation, which are followed by rapid growth of the fetus 1136
- FOCUS FIGURE 28.2** Fetal and Newborn Circulation 1142
- 28.5** During pregnancy, the mother undergoes anatomical, physiological, and metabolic changes 1146
- 28.6** The three stages of labor are the dilation, expulsion, and placental stages 1148
- 28.7** An infant's extrauterine adjustments include taking the first breath and closure of vascular shunts 1150

- 28.8** Lactation is milk secretion by the mammary glands in response to prolactin 1150

**A CLOSER LOOK** Contraception 1152

- 28.9** Assisted reproductive technology may help an infertile couple have offspring 1153

## 29 Heredity

### 1158

- 29.1** Genes are the vocabulary of genetics 1159
- 29.2** Genetic variation results from independent assortment, crossing over, and random fertilization 1160
- 29.3** Several patterns of inheritance have long been known 1162
- 29.4** Environmental factors may influence or override gene expression 1165
- 29.5** Factors other than nuclear DNA sequence can determine inheritance 1165
- 29.6** Genetic screening is used to detect genetic disorders 1167

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