TABLE 11.1 Classification Schemes of Skeletal Muscle Fiber Types

| Characteristic | Fiber Type | | |
|---|--------------------------|---------------|------------------------|
| Electrical activity pattern | Phasic High frequency | | Tonic Low frequency |
| Morphology | FTb | FTa | ST |
| Color | White | White/red | Red |
| Fiber diameter | Large | Intermediate | Small |
| Capillaries/mm ² | Low | Intermediate | High |
| Mitochondrial volume | Low | Intermediate | High |
| | IIB | IIA | I |
| Histochemistry & biochemistry | FG | FOG | SO |
| Myosin ATPase | High | High | Low |
| Calcium-handling capacity | High | Medium/high | Low |
| Glycolytic capacity | High | High | Low |
| Oxidative capacity | Low | Medium/high | High |
| <u>-</u> · | F F | FR | S |
| Function & contractility | FT | FT | ST |
| | Fast | Fast | Slow |
| Speed of contraction Speed of relaxation | Fast | Fast | Slow |
| | High | Moderate/high | Low |
| Fatigability Contraction strength | High | Intermediate | Low |

Abbreviations: FT, fast-twitch; ST, slow-twitch; FG, fast, glycolytic; FOG, fast, oxidative, glycolytic; SO, slow, oxidative; FF, fast-contracting, fast-fatigue; FR, fast-contracting, fatigue-resistant; S, slowly contracting.