Histology lab
SKIN

Epidermis

Dermis

Hypodermis
Skin layers

Stratum Corneum
Stratum Lucidum (either dark or light staining, large color contrast)
Stratum Granulosum (cells appear grainy on inside)
Stratum Spinosum
LGT
Stratum Germinativum/Basale (cells along basal layer)
Meissner’s Corpuscle
Mitosis
Dermis
Epidermis
Epidermal layers
Stratum spinosum
Stratum granulosum

keratohyalin granules.
Stratum Lucidum
Stratum corneum
Types of skin

Thick skin

- 5 layers
- Prominent stratum corneum
- Well developed stratum granulosum
- Palms of the hands and soles of the feet
- Thinner dermis
- No hair and sebaceous glands

Thin skin

- 4 layers
- Less prominent stratum corneum
- Less developed stratum granulosum
- Dominant and lines most of the body surface
- Thicker dermis
- Hair and sebaceous glands
Types of Epidermal Cells

- Keratinocytes
- Pigmented basal cells
- Melanocytes
- Merkel cell/melanocyte
- Granulosa cells
- Langerhans cells
Dermis
Skin Appendages

1 Hair Follicles and hair

2 Sweat Glands
   Eccrine or merocrine sweat glands
   Apocrine sweat glands

3 Sebaceous glands

4 Nails
Hair and hair Follicles

- Dermal sheath
- Epidermal sheath
- Matrix (growth zone) in hair bulb
- Melanocyte
- Connective tissue papilla containing blood vessels
Sebaceous glands
**Sweat Glands**

**Merocrine sweat gland**
- Empty directly onto skin surface
- Location: most all over body (esp. abundant on palms & soles: ~ 500/cm²)
- Clear, watery secretion (99% H₂O; rest NaCl + some waste products)

**Apocrine sweat gland**
- Empty into hair follicle
- Location: armpits, groin, nipples
- Viscous, cloudy secretion → good nutrient source for bacteria (odor !!)
- Secretion begins at puberty and is stimulated during emotional distress
Bone
Muscle