

Langerhans Cells

- ***Very Important***
skin immune system
- Dendritic cells
- Bone marrow derived
- Antigen processing
- Emigrate from epidermis, migrate to LN, present Ag to T cells

Contact Hypersensitivity

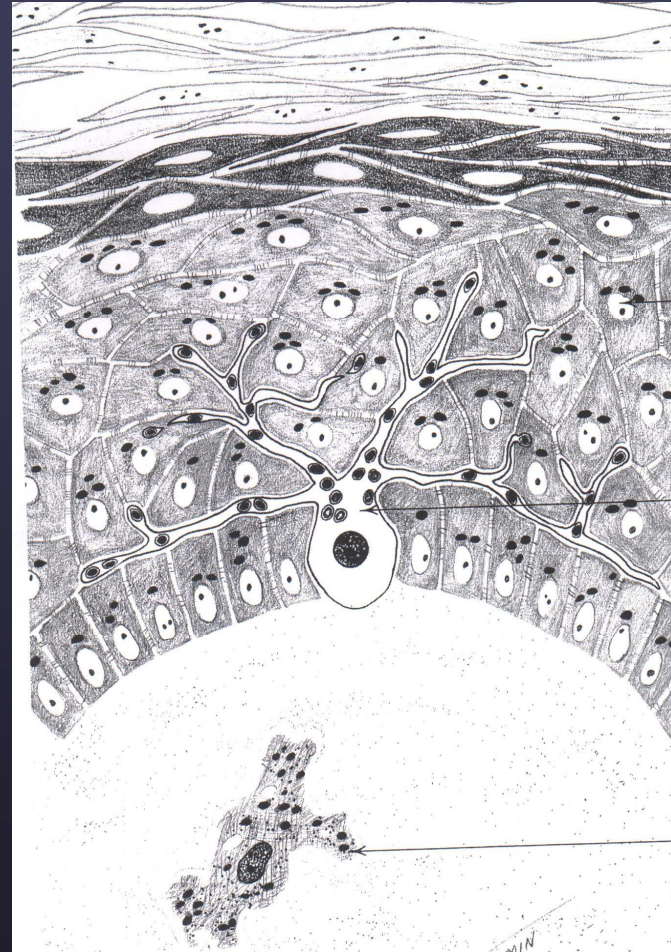


Darwin Award



Melanocytes

- Basal cell layer of epidermis, anagen hair follicles
- Transfer melanin to keratinocytes
- Epidermal melanin unit
 - One melanocyte per 10-20 keratinocytes



▶ Ackerman's Histologic Diagnosis of Inflammatory skin diseases, 1978

Melanocyte Function

- Solar protection
- “Tanning”
- Absorb UVR and scavenge free radicals
- Hyperpigmentation following injury
- Escape predators

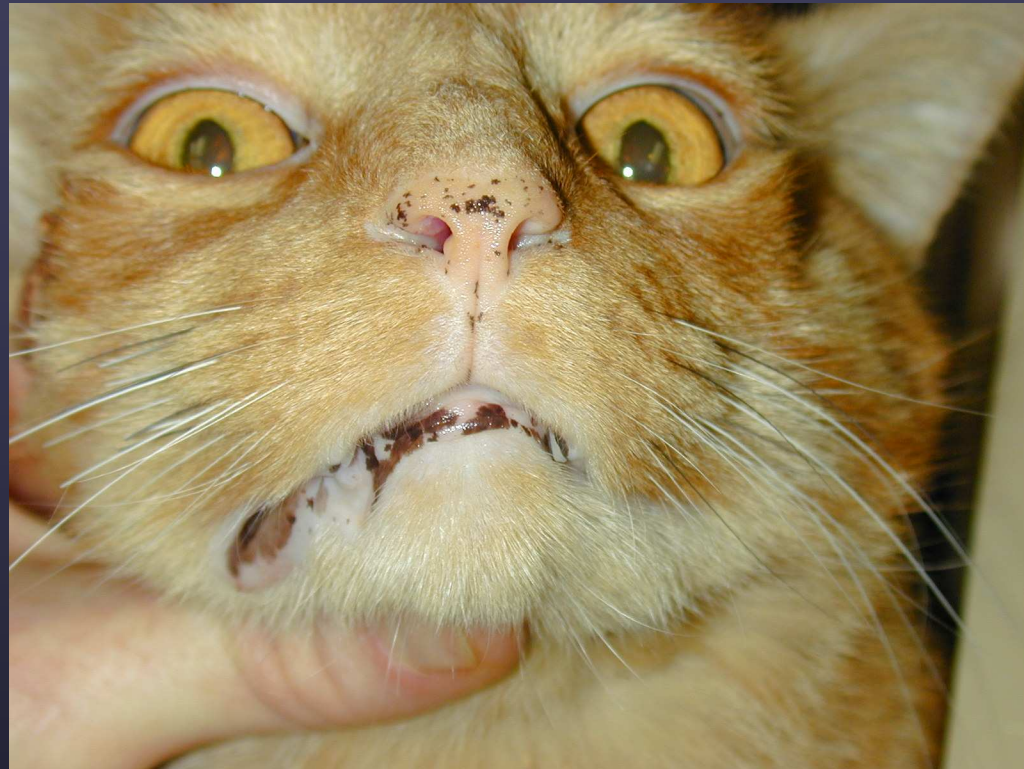


Skin disorders due to abnormal melanization

- Post-inflammatory hyperpigmentation
- Color dilution alopecia/Black hair follicular dysplasia
- Vitiligo
- Melanoma



▶ "Snow nose or Dudley nose"



- ▶ Lentigo simplex in orange cats



▶ vitiligo



▶ Black hair follicular dysplasia