Objectives

- Define compounding and be familiar with its applicable standards and laws
  - Recognize the difference between compounding and manufacturing
- Recognize compounding tools and vocabulary
- List 3 areas of concern for which compounding offers a solution above and beyond a "manufactured product"

Compounding is...?

"My secret is putting the tail in first and adding the trouble just as it comes to a boil."

How about...?

Per Alaska State Board of Pharmacy

- "Compounding means the preparation, mixing, assembling, packaging, or labeling of a drug or device (A) as the result of a practitioner's prescription drug order or initiative based on the relationship of the practitioner, patient, and pharmacist in the course of professional practice or (B) for the purpose of, or as an incident to, research, teaching, or chemical analysis and not for sale or dispensing; "compounding" also includes the preparation of drugs or devices in anticipation of prescription drug orders based on routine, regularly observed prescribing patterns"
The Triad

- Patient
- Practitioner
- Pharmacist

Compounding Standards

- USP <795>
- USP <797>
- ASHP Guidelines
- Pharmacy Compounding Accreditation Board
- State Law and Regulation for compounding
- Federal Law for manufacturing

Alaska’s Good Compounding Practices

- Compounding in an amount above the historical basis is manufacturing
- “Not commercially available”
- Distribution of inordinate amounts of compounded products without the triad is manufacturing
- Pharmacist shall maintain proficiency through awareness and training
- Maintain records of formulas and procedures
- Stock products need proper labeling

Compounding or Manufacturing?

Compounding Tools

- Mortar and pestle
- Measuring tools
- Dispensing tools

Compounding Tools...
... and more Compounding Tools

... improperly used Compounding Tools

Compounding Vocabulary
- Triturate (verb and noun)
- Levigate
- EMP
- Syringe to syringe
- Geometric proportions
- QS
- Pack stats
- CofA, MSDS

Compounding Dosage Forms
- Triturate
- Troche
- Suppository
  - Rectal Rocket
- Cream, gel, ointment
- PLO gel
- Capsule
- Animal treat
- Suspension/solution
- Powder

... and then which tool?
Now what??

PROBLEMS

SOLUTIONS

Hormone Imbalances
Bio-Identical Hormone Replacement Therapy (BHRT)
- Menopause
- Andropause
- Pre-Menstrual Syndrome
- Adrenal insufficiency
- Thyroid dysfunction

Pediatric Considerations
- Diaper rash
- Ear infection
- Nausea/vomiting
- Autism
- Psoriasis/Eczema
- Flavoring
- Inadequate dosage forms

Pain Management
- Oral vs. Topical
  - Target multiple pain receptors
- Migraine management
- Anesthetics prior to procedures
- Colitis
- Mouth pain
- Iontophoresis
- Multiple Sclerosis
- Allodynia

Endless Possibilities
- Wound Care
- Hospice
- Dental
- Scars
- Romance
- Podiatry
- Sports medicine
- Veterinary
Assessment

- Compounding or manufacturing?
  - Compounded Bi-Estrogen cream for a patient
  - Compounded pilocarpine lollipops for a dental office to be sold to their patients
- Which USP chapter pertains to non-sterile and which to sterile?
- Please identify these tools... (use projector)
  - Name a technique to which the tool can be applied
- Which of the following disease states or conditions may benefit from compounding?
  - Chronic pain
  - Bed sores/Diabetic ulcers
  - Hospice
  - Hyperthyroid feline
  - Menopausal woman/Andropause
  - Menstruating female with severe P.M.S.

The Touch of the Master’s Hand

by Myra Brooks Welch