Western University of Health Sciences

• Founded in 1977
• Post-baccalaureate medical education
• 9 colleges
  – College of Osteopathic Medicine
  – College of Allied Health Professions
  – College of Pharmacy
  – College of Graduate Nursing
  – College of Veterinary Medicine
  – College of Optometry
  – College of Podiatric Medicine
  – Graduate College of Biomedical Sciences
Veterinary Medical Schools

• 35 North American Colleges
  – ~12,800 students

• WesternU
  – 1998 Established
  – 2007 First Graduating class
  – 2010 Full Accreditation
  – 416 Students currently enrolled
Teaching Philosophy

• Problem-Based Learning
  – Life-long learning
    • Identifying gaps
    • Finding resources
    • Ownership of knowledge
  – Problem solving
    • Whole animal
    • Common ailments
  – Working with peers
    • Small groups
    • Diverse practices
CVM Academics By Year

CVM Curriculum

Years 1 & 2
- VBS
- Clinical Skills
- Vet Issues
- MCB

Year 3
- Small Animal
- Large Animal
- Mixed Practices
- On Campus

Year 4
- Core Internal Med
- Core Surgery
- Selectives
CVM Years 1&2

Years 1 & 2

- Veterinary Basic Sciences (16 credit)
- Molecular and Cellular Biology (1 credit)
- Veterinary Issues (2 credit)
- Veterinary Clinical Skills (2 credit)
Years 1 & 2: The VBS Years

- Basic Science Lab
- Anatomy/Histology Lab
- The Weekly VBS case
- Grand Rounds
- Q&A
# VBS Cases: Body Systems

## Fall Semester

<table>
<thead>
<tr>
<th>Block 1</th>
<th>Block 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musculoskeletal 4 cases</td>
<td>Special Systems 4 cases</td>
</tr>
<tr>
<td></td>
<td>Gastrointestinal 5-4 cases</td>
</tr>
<tr>
<td></td>
<td>Endocrine 3-4 cases</td>
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</tbody>
</table>

## Spring Semester

<table>
<thead>
<tr>
<th>Block 3</th>
<th>Block 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurology 4 cases</td>
<td>Renal/Urinary 4 cases</td>
</tr>
<tr>
<td></td>
<td>Cardiopulmonary 5 cases</td>
</tr>
<tr>
<td></td>
<td>Reproduction 3 cases</td>
</tr>
</tbody>
</table>
Didactic Equivalency

• **Body Systems**
  - Musculoskeletal  8 credits
  - Special Systems  8 credits
  - Gastrointestinal  9 credits
  - Endocrine  7 credits
  - Neurology  8 credits
  - Urinary/Renal  8 credits
  - Cardiopulmonary  10 credits
  - Reproduction  6 credits
VBS Disciplines

12 Basic Sciences

- Anatomy
- Behavior
- Epidemiology
- Genetics
- Immunology
- Microbiology
- Nutrition
- Parasitology
- Pathology
- Pharmacology
- Physiology
- Toxicology
Year 1 & 2: Complete

- **Veterinary Clinical Science and Skills**
  - Hands-on multi-practice experiences
- **Veterinary Issues**
  - Forum to discuss challenges in profession
- **Molecular and Cellular Biology**
  - 1° Literature review related to case
- **Inter-Professional Education**
  - Cross-University course
Year 3

Small Animal Block
- 4 Small Animal Courses

Large Animal Block
- 2 Equine Courses
- 2 Livestock Mixed practices

Mix Practices Block
- Zoo Medicine
- Lab Animal
- Pathology
- Surgery

On Campus Block
- Global Health
- Population Health
- Veterinary Public Health
- Food and Feed Safety
Year 3 Partnerships

• 11 Off-Campus Courses
  – General small animal (x2)
  – Small Animal Emergency
  – Beef and livestock
  – Dairy
  – Equine hospital
  – Equine ambulatory
  – Zoo
  – Lab Animal
  – Small animal surgery
  – Clinical pathology
Year 3: Day in the Life on Rotation

- **8am – 12pm**: In the clinic
- **1pm – 5pm**: Study basic sciences of clinical cases
- **Homework**: SOAPs
# Year 3 Student Experiences

- **Small Animal Courses**

<table>
<thead>
<tr>
<th>Procedure Name</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform physical exam.</td>
<td>12475</td>
</tr>
<tr>
<td>Safely handle and restrain patient.</td>
<td>3906</td>
</tr>
<tr>
<td>Communicate with client.</td>
<td>3423</td>
</tr>
<tr>
<td>Interpret radiographs.</td>
<td>3382</td>
</tr>
<tr>
<td>Perform venipuncture.</td>
<td>3137</td>
</tr>
<tr>
<td>Administer intravenous injection.</td>
<td>2946</td>
</tr>
<tr>
<td>Administer subcutaneous injection.</td>
<td>2208</td>
</tr>
<tr>
<td>Interpret complete blood count results.</td>
<td>2163</td>
</tr>
<tr>
<td>Take patient history.</td>
<td>2110</td>
</tr>
</tbody>
</table>
Year 4

Core Medicine
- Small Animal
- Equine
- Food Animal

Core Surgery
- Small Animal
- Equine

6 Selective Courses
Year 4 Selectives

- 6 Courses
- 4 Weeks
- 4 Credits each
- Rotation Sites
  - Selected by students
  - Approved by faculty
  - Oversight by attending clinicians at sites and faculty rotation administrators
WesternU Outcomes

• >95% passing on National Board exam
• ~95% of DVM2016 found employment
• The intangible:
  – Life-long learner
  – Problem-solver
  – Communicator/collaborator
Getting In

Application
• First cut
  – GPA
• Second cut
  – Experience
    • Animal/vet
    • Letters
    • Extracurricular
  – Scores
    • Prerequisites
    • GRE
  – Personal statement

Interview
• Know the program
• Own your nervousness
• Answer the questions
• Express your concerns
Sample case: Presentation

- Adult male Labrador retriever presented to clinic after being hit by a car. The patient was non-weight bearing of the right hind limb, with notable bruising and mild swelling of the limb above the knee, and minor degloving on the injured limb.
What is the foundational knowledge you need to understand what is going on in this animal?
Basic Science Knowledge Learning Issues

• What is the hind limb anatomy of a dog?
• What causes a bruise?
• What causes swelling?
• What is pain?
• What is the role of skin?
• What are the physiological changes in response to trauma?