

# A Novel ESL Training Program for Animal Care Staff

---

Center for Comparative Medicine  
Massachusetts General Hospital  
Charlestown, MA

---

American Association for Laboratory Animal Science  
56th Annual Meeting, Saint Louis, MO  
Session 22, November 8, 2005

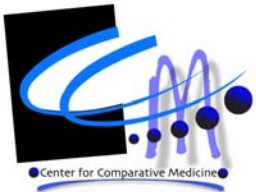


MASSACHUSETTS  
GENERAL HOSPITAL

# Massachusetts General Hospital

---

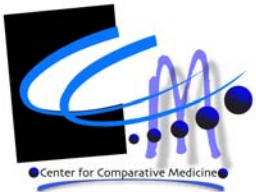
- Founded in 1811
- Ranked in top 3 U.S. hospitals
- 19,600 employees, 5 campuses
- Affiliated with Harvard Medical School
- Biomedical research program
  - Annual budget = \$470M
  - 1M square feet (25 acres) of research space



# Animals Used at MGH

---

- 785 active protocols, 324 PI's
- Species = zebrafish, amphibians, rodents, rabbits, livestock, primates
- 80,000 sq ft of animal space
- AAALAC-accredited since 1993
- CCM provides animal care (~ 100 FTE's)



# Animal Models at MGH

---

Allergy  
Alzheimer's Disease  
Anesthesiology  
Artificial Organs  
Atherosclerosis  
Behavioral Neuroscience  
Biomaterials  
Bone Marrow Transplants  
Burn Injury  
Cancer  
Congestive Heart Failure  
Crohn's Disease  
Deafness  
Diabetes Mellitus

Drug Addiction  
Gene Therapy  
Genomics  
Hepatitis  
HIV/AIDS  
Huntington's Disease  
Inflammation  
Laser Therapy  
Limb Regeneration  
Nerve Regeneration  
Obesity  
Organ Transplants  
Orthopedics  
Parkinson's Disease

Pharmacology  
Plastic Surgery  
Pneumonia  
Radiation Therapy  
Renal Failure  
Sepsis  
Shock  
Skin Grafting  
Stem Cells  
Stroke  
Trauma  
Ulcerative Colitis  
Vaccines  
Vascular Surgery



# CCM Mission Statement

---

“Our mission is to provide the highest quality laboratory animal husbandry and veterinary services to MGH investigators and to ensure that all research animals at MGH are maintained and used in accordance with pertinent laws, regulations and accreditation standards.”



# CCM Strategic Plan 2003-2005

---

- Enhance individual staff competencies and increase AALAS certifications
- Develop a closer interface between CCM staff in the animal rooms and research staff conducting the studies
- Improve productivity and standardize quality with new SOP's and operations technology



MASSACHUSETTS  
GENERAL HOSPITAL

# Problems Encountered

---

- Poor English literacy/fluency amongst staff
  - Difficulty in learning, performing new tasks
  - Limited or no advancement/career growth
- MGH ESL classes
  - Voluntary, conducted after-hours
    - attendance difficult if single parent or working two jobs
  - Vocabulary not relevant to workplace or job



# CCM Demographics 2002-2003

---

- Total # of animal care staff = **65**
- Total # of non-native English speakers = **57**
- Primary languages = **10**
- AALAS-certified = **1**



# Non-English Primary Languages

---

- Portuguese
- Spanish
- Russian
- Portuguese Creole
- Haitian Creole
- Mandarin Chinese
- Cantonese Chinese
- Italian
- English
- French



# MGH's Pre-existing ESL Program

---

- Seven levels: Literacy → Adult Basic Education
- ESL Policies
- Tips to Supervisors
- Topics:
  - Using Maps
  - PeopleSoft and the Computer
  - ATMs, photocopiers
  - Filling in applications, reading job postings
  - Personal Safety, Infection Control



# Our ESL Program

---

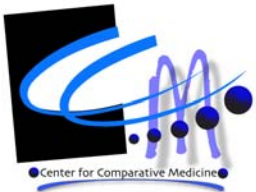
- Five Levels: Literacy → Advanced (ALAT-ready)
- Based on 320-word lab animal lexicon
  - Taken from workplace signage, forms, SOPs, Guide
- Small class sizes (9-12 people)
- Offered twice a week in 2-hr sessions
- Part of employees' regular work schedule
- Voluntary evaluation/participation
- Mandatory success to remain in department



# Our ESL Goals

---

- Develop assessment tool for pre-screening future applicants
- Implement assessment process to evaluate written & oral capabilities
- Offer all current employees up to one year of ESL training (2 sequential sessions and final exams)
- Assure vocabulary and language skills adequate to understand and participate in operations improvements
- Offer re-assignment opportunities for those who are not successful



# Our ESL Curriculum

---

- Animal Species
- Anatomy
- Verbs & Times
- Cleaning
- Physical Plant Maintenance
- Cage Detail
- Bedding
- Animal Health
- Computers and Information Technology Tools

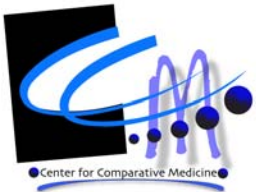


MASSACHUSETTS  
GENERAL HOSPITAL

# Initial Assessment

---

- Written test for all non-native English language speakers
- Multiple choice, 30 questions
  - Grammar: The rats are \_\_\_\_\_ the cage.
  - Vocabulary: Cages with litters will be cleaned twice a week. “Litters” mean \_\_\_\_\_?
  - Facility Procedures: What does PPE stand for?”
- Writing Test (describe your job; what do you do each day?)



# Course Outline Examples

---

- Week 1

- Lexicon: Species, Anatomy, PPE
- Grammar: Verb Tenses
- Writing:Forms & Cards

- Week 4

- Lexicon: Job Details, SOPs
- Grammar: Passive/Active,
- Adverbs of Time, Nouns
- Writing:Paragraph Parts

- Week 9

- Lexicon: Animal Health
- Grammar: Listening & Text
- Writing:Writing reported speech

- Week 12

- Lexicon: Vocabulary Review
- Grammar: Tense Review
- Writing:Writing resolution analysis & proposed resolutions



# Final Assessment

---

## Written and oral final examination

- Anatomy: paw: a) human, b) animal, c) both
- Animal Classification: Which is NOT an animal species ? - a) hamster, b) pup, c) dog, d) NHP
- Animal Care Terms: Which is NOT an animal diet ? - a) canned feed, b) hay, c) Cell-Sorb, d) pelleted feed
- Clinical Definitions: match “weaning” & “process for separating young from their mother so they no longer drink her milk”
- Fill In the Blank: “When a PI \_\_\_\_\_ animals, he puts a male & \_\_\_\_\_ together in a cage.”



# Results

---



- 52% (30/57) successfully completed program in first session (~6 months)
- 74% (42/57) successfully completed program after ~16 months
- 17 AALAS certified

# After ESL Completed

---



- Launched PDA-bar code technology for cage census, animal health data capture
- Identified team leaders for training on Toyota Production Systems



# Final Points

---

- Effective communication is critical in service organizations where there is continuous interface with customers
- Staff on “the floor” must understand standardized tasks and required documentation and then recommend improvements (Toyota Production System)
- Departmental goals and resources for continuous career development and AALAS certification must be established
- Utilize human resources ESL expertise to customize a program that provides faster results

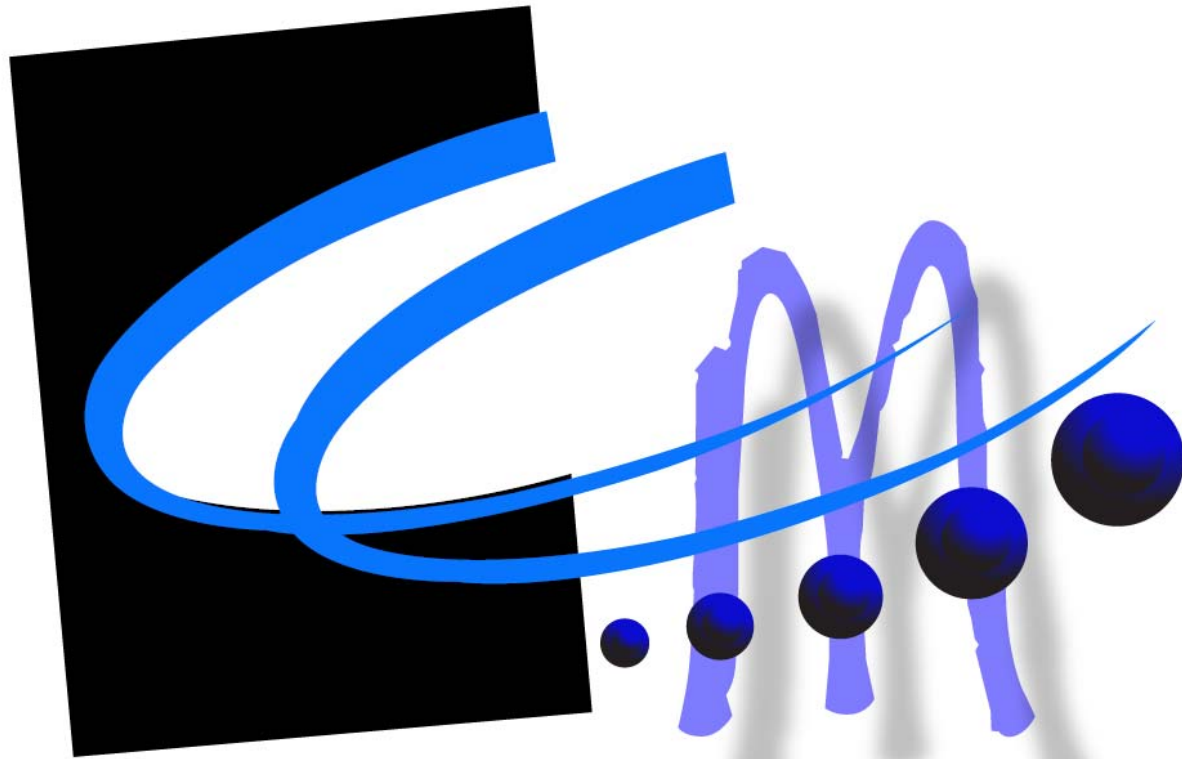


# Acknowledgements

---

- ✓ MGH Human Resources
- ✓ CCM Facility Managers
- ✓ Investigators





● Center for Comparative Medicine ●

