

TRAILS Town Hall

March 28, 2022



EAST TENNESSEE STATE
UNIVERSITY



New Quillen Curriculum

TRAILS

Team-based Rural Appplied Integrated Learning System



ETSU Quillen COM TRAILS Curriculum Schematic

		July				August				September				October				November				December				January				February				March				April				May				June												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52					
Year 1	Pre-clerkship Phase																																																									
	EQUAL Prof Immersion	Foundations of Medical Knowledge 13 weeks													Immuno/Heme 6 weeks						Assess	Winter Break	Cardiovascular/Pulmonary/ Renal 14 weeks														Spring Break	Cardiovascular/ Pulmonary/ Renal 14 weeks							GI/Nutrition 5 weeks					Assess	Break 9 weeks							
		Doctoring TRAILS 1																										Doctoring TRAILS 2																														
Year 2	Pre-clerkship Phase																															Clerkship Phase																										
	Break	Brain, Body, Behavior 13 weeks													Endo/ Repro 6 weeks						Assess	Winter Break	Step 1 Study 6 weeks						Trans to CC & Adv Basic Science	Core Clerkships: Family Medicine, Internal Medicine, OB/GYN Pediatrics, Psychiatry, Surgery Underserved Medicine																												
		Doctoring TRAILS 3																																																								
Year 3	Clerkship Phase																																			Electives and Selectives																						
	Core Clerkships: Family Medicine, Internal Medicine, OB/GYN Pediatrics, Psychiatry, Surgery Underserved Medicine													Winter Break	Core Clerkships														Step 2 Study 4 weeks				Selectives: (Sub-internship 4 weeks, Critical Care 2 weeks, Ambulatory 2 weeks) Electives (22 weeks)																									
Year 4	Electives and Selectives																																																									
	Selectives: (Sub-internship 4 weeks, Critical Care 2 weeks, Ambulatory 2 weeks) Electives (22 weeks)													Winter Break	Selectives: (Sub-internship 4 weeks, Critical Care 2 weeks, Ambulatory 2 weeks) Electives (22 weeks)														Keystone Course 3 wks			Break	Graduation																									

TRAILS Course Directors and Co-Directors

Course Name	Director	Co-Director
EQUAL Professional Immersion	Caroline Abercrombie, MD	Deidre Pierce, MD
Foundations of Medical Knowledge	Antonio Rusinol, PhD	Michelle Chandley, PhD
Immunology & Hematology	Russ Hayman, PhD	Bob Means, MD
Cardiovascular, Pulmonary, & Renal	Jerry Mullersman, MD	Doug Thewke, PhD
Gastrointestinal Systems & Nutrition	Bob Acuff, PhD	Russ Hayman, PhD
Endocrinology & Reproduction	Tom Ecay, PhD	TBD
Brain, Body, & Behavior	Diego Rodriguez-Gil, PhD	Regenia Campbell, PhD
Doctoring TRAILS: Walk One	Jerry Mullersman, MD	N/A
Doctoring TRAILS: Tour Two	Patti Amadio, MD	N/A
Doctoring TRAILS: Trek Three	Patti Amadio, MD	N/A
BRIDGE to Clinical Clerkship	Caroline Abercrombie, MD	Rob Schoborg, PhD

Instruction: Active Learning

TRAILS

Traditional Model

Active-learning Model



Create

Evaluate

Analyze

Apply

Understand

Remember

Students are expected to achieve these levels on their own outside of the classroom

Various formats of interaction promote discussion and application of learned material, responsive to individual levels of understanding

New information is conveyed through passive didactics

New information acquisition is self-directed, with aids



Example Schedule

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00-8:50	TBL	SDST	TBL	Human Structure: (Anatomy, Embryology, Histology) ¹ or Simulation or other course sessions	IQ Case or Doctoring: SPECTRM ²
9:00-9:50					
10:00-10:50	Interactive Large Group		Interactive Large Group		TBL
11:00-11:50	Interactive Large Group		Interactive Large Group		
12:00-12:50					
1:00-1:50	SDST	Doctoring: Clinical Preceptor Every few weeks Day of week varies among students	Learning Community Activity (~every 4-6 weeks) or SDST	Doctoring: Clinical Skills	SDST
2:00-2:50					
3:00-3:50					
4:00-4:50					

¹ Human Structure every week during Foundations; every 2-3 weeks during systems courses

² SPECTRM: System, Professional, Ethical, and Community Topics Relevant to Medicine

Assessment

- Assessment *for* learning
- Continuous, progressive, cumulative
- Small stakes leading to larger stakes
 - Daily Activities
 - [TBL grade (Quizzes, Application etc.), JiTT Clicker responses, etc.]
 - Weekly Assessments
 - Mid-Term (for longer courses)
 - Final Exam



Remediation

- M1: Remediate during the summer break
- M2: Remediate prior to beginning clerkships

Possible Approaches:

- Course director submits plan to Student Promotions Committee
 - Tailored to student based on performance
- **Reviewing current policy around failure, remediation, and re-takes**
 - More info coming soon!





QUILLEN
COLLEGE *of* MEDICINE

EAST TENNESSEE STATE UNIVERSITY

Fall Semester Courses

EQUAL Professional Immersion

- **Experiencing**
- **Quillen,**
- **Underserved**
- **Appalachia, &**
- **Learning Communities**



GOALS

- Introduce **people and resources** available at Quillen and in the community.
- Engage with student's **Learning Community**.
- Introduce course themes as **lenses for perspective**.
- Model the **schedule and learning environments** for a typical week.
- Provide opportunity to reflect on the **identity and expectations** of a professional.
- Introduce what it means to be a **patient in Appalachia**.
- Introduce “**doctoring**” **skills** and the simulation learning environment.



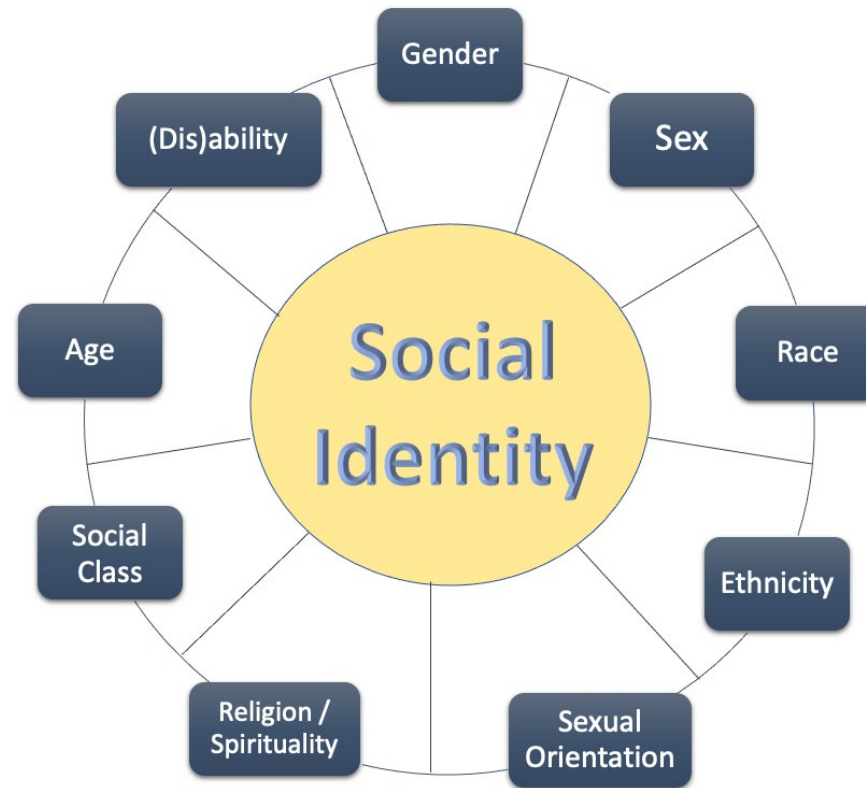
EQUAL Professional Immersion “Lenses”

Course Themes	Example Sessions
Community Health	TN Vital Signs & SDoH through the Lens of Appalachia
Patient Inclusivity	Introduction to Intersectionality
Patient Advocacy	EQUAL Patient Centered Care
Patient Safety	Naloxone Certification Training
Experiential / Active Learning Environment	BLS Training; Passport to Learning: TBL
Learning Community Identity	Meet your Trail

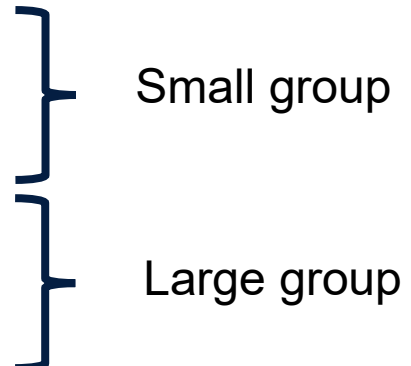


Growth & Professional Development: Personal, Social, & Professional Identities

A circular form designed for personal reflection. The outer ring contains 12 segments for different personal attributes: Birth Order, Favorite Music, One Skill you are Proud of, Favorite Movie, Favorite Book, Favorite Food, Favorite Hobby, Favorite Color, Personal Motto, Number of Siblings, and Favorite Music. The inner circle features a section for 'Three Adjectives to Describe Yourself' with three numbered lines (1., 2., 3.) and a 'Name' field at the bottom.



Foundations of Medical Knowledge (FMK)

- 13 Weeks
 - Incorporates fundamental aspects of all basic science disciplines
 - Active Learning Sessions
 - Team Based Learning: ~50%
 - Problem Based Learning: ~10%
 - Just in Time Teaching (JiTT): ~30%
 - Traditional Lectures: <10%
- 
- The diagram consists of two vertical curly braces on the right side of the list. The top brace groups 'Team Based Learning: ~50%' and 'Problem Based Learning: ~10%', with the label 'Small group' to its right. The bottom brace groups 'Just in Time Teaching (JiTT): ~30%' and 'Traditional Lectures: <10%', with the label 'Large group' to its right.

Weekly Themes in FMK

1. Human Development
2. Building Blocks of Life
3. Genetics, Cell Division and Signaling
4. Physiological Functions
5. Foundations of Human Metabolism + Mid Term
6. **Fall Break**
7. Energy Production and Utilization
8. Cause, Origin, and Nature of Disease
9. Control of Bodily Functions
10. Foundations of Microbiology/Antimicrobials
11. Foundations of Immunity
12. Microbial Pathogenesis and Treatment
13. Final Exam Week



Content Summary

Fundamentals

Nucleic
Acids → Proteins →
Function

Signal
Transduction

Energy production
and utilization

Intermediary
Metabolism

Cell Physiology

Genetics

Cell & Tissue
Biology

Basic
Microbiology

Introductory
Pathology, and
Pharmacology

Basic Anatomy &
Embryology

Infection &
Antimicrobials

Immune Response

Inflammation

Biostatistics and
Epidemiology

Teaching Faculty

Course Director: Antonio Rusiñol

- Douglas Thewke
- David Johnson
- Paul Monaco
- Thomas Ecay
- Earl Brown
- Diego Rodriguez-Gil
- Robert Schoborg
- Jennifer Hall
- Michael Kruppa

Co-Director: Michelle Chandley

- Kelly Karpa
 - Jerald Mullersman
- Anatomy & Embryology
- Thomas Kwasigroch
 - Caroline Abercrombie
 - James Denham
 - James Sheffey
 - Tyrone Genade
 - Thomas Saddler



Immunology and Hematology

- This course will focus on the **immunologic and hematologic processes** to build a comprehensive understanding of the responses and interventions necessary **to combat infectious diseases and blood-borne disorders and malignancies.**
- The course will compare normal structure and function with dysfunction and disease.
- Students will develop the necessary skills to **critically evaluate laboratory data and patient history** to develop an **effective differential helpful in the performance of clinical course work** when immunology and hematology are relevant.



A microscopic view of numerous red blood cells, appearing as bright red, biconcave discs against a dark background. The cells are scattered across the left side of the image, with some in sharp focus and others blurred in the background.

Weekly Themes in Immuno/Heme

- Week 1: Adaptive Immunity
- Week 2: Clinical Immunology and Blood Cancers
- Week 3: Red Blood Cells
- Week 4: Anemias
- Week 5: Clotting and Bleeding
- Week 6: Other Heme Disorders/Infectious Diseases
- Week 7: Assessment Week

Teaching Faculty

- J. Russell Hayman, PhD – Course Director, Microbiology, Immunology
- Robert T. Means, Jr., MD, MACP – Course Co-Director, Hematology
- Robert Schoborg, PhD – Immunology, Microbiology
- Earl Brown, MD – Pathology, Immunology, Hematology
- Paul Monaco, PhD – Histology, Immunology, Hematology
- Kelly Karpa, PhD - Pharmacology



Doctoring TRAILS: Walk One

Course Director: Jerald Mullersman, MD, PhD

- 19 weeks (Fall Semester)
- Incorporates Five Main Components:
 - Communication Skills for Health Professionals
 - Physical Exam Skills
 - Integrated Grand Rounds
 - IPE
 - SPECTRM: System, Professional, Ethical, and Community Topics Relevant to Medicine
- Intro to Clinical Preceptorship





QUILLEN
COLLEGE *of* MEDICINE

EAST TENNESSEE STATE UNIVERSITY

Things to Know

Three-Year Track (Accelerated Progress to Practice Pathway)

- Submitted to LCME
 - Review in June
- Targeted to begin 2023
- Family Medicine (3x2),
Internal Medicine (2),
Pediatrics (1)



Most Important Things for Students to Know



Carefully planned curriculum - not experimental



Designed based on student and faculty feedback



We want students engaged!

Active participation in class

Working with faculty to continue to improve the curriculum.



Most Important Things for Students to Know

Not Changing

- Dedicated faculty
- #QuillenFamily
- Collaborative environment
- Focus on communication
- Emphasis on primary care and rural medicine
- The mountains!

Changing

- Integrated, organ-system based courses
- Learning Communities
- More active learning
- Consistent, predictable weekly schedules
- Clerkships begin sooner!

