AQUIFER SCIENCES

PHASE ONE NOW AVAILABLE - PHASE TWO IN PROGRESS

In collaboration with the International Association of Medical Science Educators

A **NEW WAY OF THINKING** ABOUT MEDICAL EDUCATION AND THE BASIC SCIENCES

IAMSE
International Association of Medical Science Educators

The Aquifer Sciences Initiative is a partnership between Aquifer and the International Association of Medical Science Educators (IAMSE) to nationally develop and disseminate teaching and learning tools for health professions education that **effectively integrate the basic and clinical sciences,** and that **promote collaborative teaching and student excellence** in clinical decision making and safe patient care.

WHO IS INVOLVED

A nationally representative and multi-institutional team of over **100 leading science and clinical educators** representing **11 core basic science disciplines** and **nine major clinical disciplines,** working together to discover and design novel curricular strategies to solve the existing challenges to improved integration of the basic sciences into the clinical years.

FULL PROJECT SCOPE & SCHEDULE

Available Now: Curriculum Database
Phase One is now complete! Four years in development, the Aquifer Sciences curriculum is the first nationally-developed and publicly available curriculum that comprehensively outlines the core basic sciences concepts that must be understood and mastered by health professions learners in order to provide safe, routine patient care.

Beta Testing in 2019: Virtual Patient Cases and Integrated Illness Scripts
Phase Two is underway with 12 teams of faculty and medical students working together to create self-directed virtual patient case scenarios and integrated illness scripts for over 300 core conditions. Virtual patients allow students to self-assess and grow their foundational understanding through safe practice in making routine clinical decisions that place patient care quality, value and safety at a premium.

Available in 2020: Classroom Resources
In 2020, Phase Three will use a similar development method to create and disseminate classroom resources to support active learning and collaborative faculty facilitation by basic and clinical science faculty, aimed primarily for the pre-clinical phase of health professions education.

"Finally, we have a means by which to bridge the gap between basic sciences and clinical medicine!"

Amy Wilson-Delfosse, PhD
Professor of Pharmacology
Associate Dean for Curriculum
Case Western Reserve University School of Medicine

"I would have much appreciated learning from this curriculum during my transition from the classroom to the wards."

Fourth-Year Medical Student

AQUIFER SCIENCES OPEN CURRICULUM DATABASE

NOW AVAILABLE AT AQUIFERSCIENCES. ORG

The Aquifer Sciences Initiative has recently launched the first version of the searchable curriculum database.

INCLUDES:

- **15 Systems**
- **11 Basic science disciplines**
- **9 Clinical disciplines**
- **105+ Core concepts**
- **780+ Learning objectives**
- **5 Clinical decisions**
- **350+ Common conditions**

CUSTOMIZABLE SEARCH & FILTER

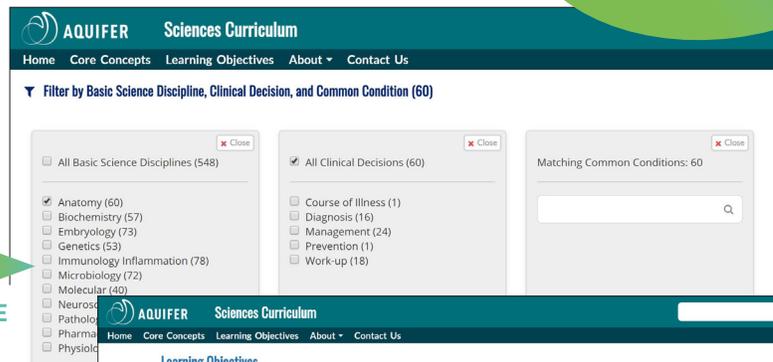## BASIC SCIENCE CORE DISCIPLINES

- Anatomy
- Biochemistry
- Embryology
- Genetics
- Immunology & Inflammation
- Microbiology
- Molecular Biology
- Neuroscience
- Pathology
- Pharmacology
- Physiology

SORTABLE SEARCH RESULTS

LEARNING OBJECTIVE DETAILS Including Common Conditions, Teaching Point, Harm Statement, & More
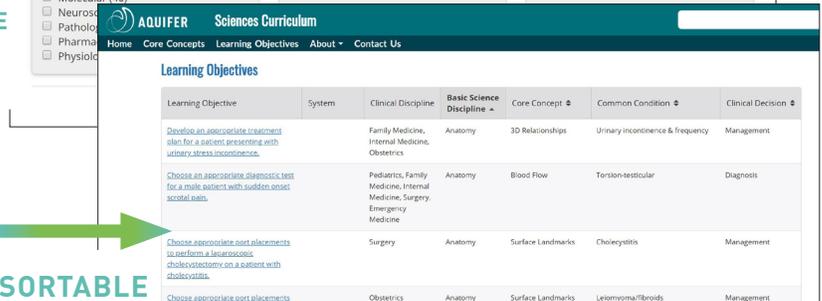
ABOUT THE CURRICULUM

Integration of basic and clinical science knowledge is increasingly being recognized as important for practice in the health professions. The concept of 'cognitive integration' places emphasis on the value of basic science in providing critical connections to clinical signs and symptoms while accounting for the fact that clinicians may not spontaneously articulate their use of basic science knowledge in clinical reasoning.

Learners need to integrate their basic science and clinical science understanding to make and justify a better decision about the next most important steps in a patient's work-up that places high value, cost-conscious care, and patient safety at a premium.
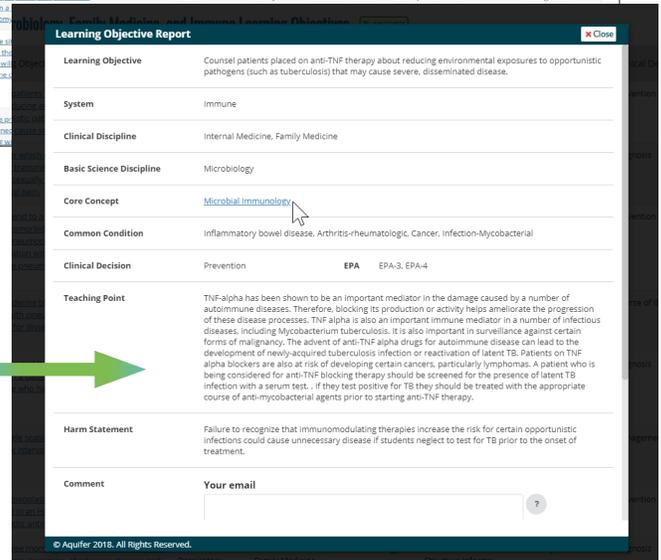
LEARN MORE

Contact us to learn more: **Sciences@aquifer.org.**

For more information on Aquifer Sciences, visit **Aquifer.org.**