

## OUTLINE

### Endocrine and Metabolic Problems

- Pituitary disorders
- Hypoglycemia
- Free radicals — Essential in health, deadly in disease
- Diabetic ketoacidosis
- Apoptosis
- Adrenal gland dysfunction
- Addison's disease
- Jaundice
- Implications of hormones
- Thyroid disorders - Mechanism of onset affects treatment

### Cardiovascular and Renal Problems

- Starling's Law - Normal capillary flow
- Heart failure
- Relationship between cardiac diseases and hypertension
- Unraveling hypertension
- Current concept on cardiogenic shock
- Atherosclerosis - The role of inflammation
- Anaphylaxis
- Acid-base disorders

### Respiratory Problems

- Chronic obstructive pulmonary disease exacerbations
- Obstructive lung diseases affecting the mechanics of lung ventilation
- Sudden death in asthma
- Acute lung failure/ARDS
- Arterial blood gases - Made simple

### Shock

- Common mechanisms of all types of shock
- The cardinal role of mediators in shock
- Newer therapies based on current pathophysiological understanding
- End points of resuscitation
- What type of shock is this?


### The Immune System

- Inflammation - Acute phase response
- Systemic inflammatory response
- Infection – Part of a bigger picture
- Multiple organ dysfunction syndrome
- Stress reaction
- Autoimmune diseases

## OBJECTIVES

1. Using clinical examples, explain the statement: "Virtually all human disease is 'autoimmune' in nature."
2. Outline an effective method to review options in pharmacologic therapy for any condition.
3. Identify the self-destructive spiral of progressive chronic heart failure.
4. Explain how the following drugs may abort or reverse the self-destructive spiral of heart failure: beta-blockers, angiotensin converting enzyme (ACE) blockers, angiotensin-receptor blockers (ARBs), aldosterone blockers, synthetic natriuretic proteins.
5. Describe why the statin drugs significantly reduce a person's risk of cardiovascular disease (MI and stroke), regardless of the serum cholesterol level.
6. Describe the mechanism underlying death in asthma and identify a way to prevent it.
7. Apply the "Three Question Approach" to interpretation of arterial blood gases.
8. State and understand the "common mechanism" for shock, regardless of the initial cause.

Target Audience: Nurses • Nurse Practitioners • Clinical Nurse Specialists  
Respiratory Care Practitioners • Paramedics • Physician Assistants  
Physical Therapists • Occupational Therapists




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# Understanding Pathophysiology

## Its Direct Impact on Patient Care

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# Understanding Pathophysiology

## Its Direct Impact on Patient Care

Featuring

Angelica F. Dizon, MD, BSN, MBA-HCM, RN

Nationally Recognized Speaker

### Improve your assessment skills and learn:

- Why are free radicals deadly in disease?
- What is the role of inflammation in atherosclerosis?
- Which drugs reverse heart failure?
- What is the common denominator for obstructive lung disease?

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# Understanding Pathophysiology

## Its Direct Impact on Patient Care

Just about every potentially serious condition has a “trigger point.” Once this point is reached, a fairly uniform and predictable set of events occurs – mediators are released, causing worse events to take place. The result, left untreated, is multiple organ system dysfunction, multiple organ system failure, cardiac failure, then death. The seminar will apply this straightforward model to many important medical conditions. Understanding the “whys” behind these events enables us, as health care practitioners, to best assess the patient and intervene in a timely and effective manner. By the end of the day, you’ll have a thorough understanding of these principles and will know how and when to properly apply them.

### SPEAKER

**Angelica F. Dizon, MD, BSN, MBA-HCM, RN,** is a doctor of medicine and registered nurse, with two decades of experience in clinical practice and academic teaching, predominantly in the hospital setting. Angelica has been well recognized for her past work in medical surgical roles, and has also gained experiences working in home health care and skilled nursing. More recently, she’s serving as the director of clinical services in one of the leading home healthcare agencies in Maryland.

Her diverse experiences have provided her with a unique perspective on the importance of having an in-depth understanding of pathophysiology to facilitate the highest level of disease management and patient care. Angelica excels at putting complex topics into “plain English”. This skill, combined with her vast medical and nursing experiences, ensure a highly informative and enjoyable day – for an interdisciplinary audience.

#### Speaker Disclosures:

**Financial:** Angelica F. Dizon is a faculty member for Radians College. She receives a speaking honorarium from PESI, Inc.

**Non-financial:** Angelica F. Dizon has no relevant non-financial relationships to disclose.

Few things in health care have as direct an impact on patient care as pathophysiology – the “whys” of what happens during disease and what we must do to treat it. If you know your pathophysiology, you can provide an accurate, speedy assessment and treatment for your patient.



### Have a seminar idea? A manuscript to publish?

The nation’s top speakers and authors contact PESI HealthCare first. If you are interested in becoming a speaker, or have a new topic idea, please contact Missy Cork at [mcork@pesi.com](mailto:mcork@pesi.com) or call (715) 855-6366.

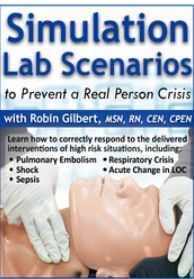
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#### Pathophysiology: A Plain English Approach, Second Edition

By Mikel A. Rothenberg, MD and Dr. Jennifer Hill, DNP, ARNP

*Pathophysiology - A Plain English Approach*, Second Edition, is an easy to use book that has been UPDATED with the latest in laboratory medicine, biochemistry, and pharmacology. This comprehensive resource includes all the pathophysiology information you really need to know to better care for your patients. Detailed illustrations bring the concepts of pathophysiology elements to life. Main principles are outlined in boxes for easier visualization and understanding.



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By Robin Gilbert, MSN, RN, CEN, CPEN

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**7:30** Registration/Morning Coffee & Tea  
**8:00** Program begins  
**11:50-1:00** Lunch (*on your own*)  
**4:00** Program ends

*10 – 15 minute mid-morning and mid-afternoon breaks*  
For locations and maps, go to [www.pesihealthcare.com](http://www.pesihealthcare.com), find your event, and click on the seminar title.

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If your profession is not listed, please contact your licensing board to determine your continuing education requirements and check for reciprocal approval. For other credit inquiries not specified below, or questions on home study credit availability, please contact [cepsi@pesi.com](mailto:cepsi@pesi.com) or 800-844-8260 before the event.

Materials that are included in this course may include interventions and modalities that are beyond the authorized practice of mental health professionals. As a licensed professional, you are responsible for reviewing the scope of practice, including activities that are defined in law as beyond the boundaries of practice in accordance with and in compliance with your professions standards.

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**PHYSICAL THERAPISTS & PHYSICAL THERAPIST ASSISTANTS:** This activity consists of 6.25 clock hours of instruction that is applicable for physical therapists. CE requirements for physical therapists vary per state/jurisdiction. Please retain the certificate of completion that you receive and use as proof of completion when required.

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### UNDERSTANDING PATHOPHYSIOLOGY

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