

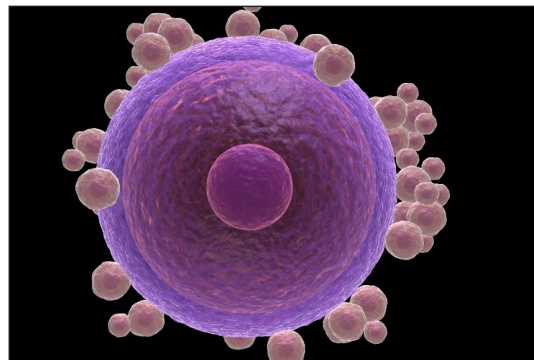
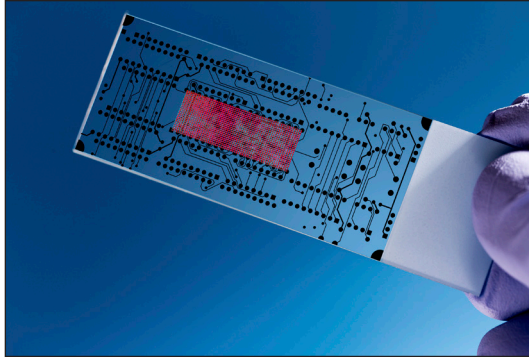


American Association of Bioanalysts

# Catalog of Print and Online Educational Resources

Covering topics related to  
**Reproductive Biology Laboratories** and  
**Traditional Clinical Laboratories**

**NEW Updated 2024 PER Chemistry, Hematology,  
Immunohematology, and Immunology Review Manuals!**



# NEW 2024 PER REVIEW MANUALS

## Chemistry – Hematology – Immunochemistry – Immunology

Comprehensive review manuals for certification or state licensing examinations or as convenient references for day-to-day laboratory work. Each manual features:

- The newest information about clinical laboratory techniques and procedures
- A broad selection of practice questions and explanations detailing the correct answers
- A sample content outline containing key topics and their relative importance to guide study for certification examinations
- Drawings, charts, and diagrams
- Clean, concise information

The PER manuals are excellent study guides for novices, students, recent graduates, and specialists no longer familiar with all laboratory disciplines and who are studying for a certification examination or considering expanding into other disciplines. The PER manuals are also convenient references for day-to-day use in the clinical laboratory.

Manual	AAB/AMS Member	Nonmember	AAB/AMS Member Savings
Chemistry	\$39.00	\$53.00	<b>SAVE \$14.00</b>
Hematology	\$45.00	\$59.00	<b>SAVE \$14.00</b>
Immunochemistry	\$29.00	\$39.00	<b>SAVE \$10.00</b>
Immunology	\$25.00	\$37.00	<b>SAVE \$12.00</b>

**Take advantage of AAB/AMS member savings. If you aren't an AAB/AMS member, join today.**

### Shipping

**Order all four manuals and receive a discount equal to the shipping and handling fee for U.S. destinations. Orders shipping to international destinations receive \$10 off international shipping charges.**

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shipping and handling fee for U.S. destinations. Orders shipping to international destinations receive \$10 off international shipping charges.

Shipping charges are based on shipping your merchandise by FedEx Express Saver or FedEx Ground/FedEx International Economy. With FedEx Express Saver, you receive your merchandise in 3 business days after it is shipped from the AAB office, with delivery to businesses by 4:30 p.m. and to residences by 7:00 p.m. AAB is not responsible for FedEx shipping delays.

International Orders - delivery by FedEx will vary by destination. Note that the recipient is responsible for any taxes, duties or customs fees.

If you prefer, use your own FedEx Account number to cover shipping charges.

## COMING SOON – MICROBIOLOGY CHAPTERS BACTERIOLOGY, MYCOLOGY, PARASITOLOGY & VIROLOGY

## 2020 PER Basic Knowledge Manual

The *PER Basic Knowledge Manual* was developed to correlate with the Basic Knowledge content outline for the AAB Board of Registry national certification examinations.

The updated *PER Basic Knowledge Manual* has been expanded to include more information on:

- General Operations Knowledge
- Ethics and Confidentiality
- Regulatory Compliance
- Administration

Edition: June 2020 – Available in English

	Regular Price	Special Discount Price
AAB/AMS Members	\$39	<b>\$31</b>
Non-Members	\$49	<b>\$42</b>

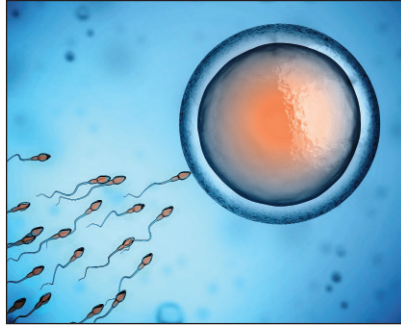
• **AAB/AMS Members SAVE \$11**

## 2020 Andrology and Embryology Online Courses

*Includes Laboratory Management*

View Anytime and Earn Up to 34.0 Contact Hours (PEER approved CE program)

AAB's online Andrology and Embryology Review Course is designed to help you:



- **Study and prepare for certification exams, including ABB's certification exams.**
- **Earn continuing education credit**
- **Update and add to your knowledge of the field**

Topics Include:

- Female Reproductive Physiology, Oogenesis and Infertility
- Fertilization and Early Embryo Development
- Ovulation Induction in ART
- Male Reproductive Function - Development of Male Genitourinary Tract & Birth Defects
- Male Reproductive Function - Spermatogenesis and Male Reproductive Tract Biology
- Male Reproductive Function - Male Infertility
- Semen Analysis
- Tests of Sperm Function
- Male Gamete Prep for ART
- Micromanipulation in ART
- Culture Techniques
- Embryo Selection for Transfer
- Contemporary Embryo Transfer Art and Science
- Cryopreservation of Reproductive Cells and Tissues
- Reproductive Genetics
- QC and QA in the ART Laboratory
- Contemporary Genetic Screening - PGT-M, PGT-SR and PGT-A
- General Laboratory Management
- Clinical Laboratory Improvement Amendments (CLIA '88)
- Occupational Safety and Health Act (OSHA)

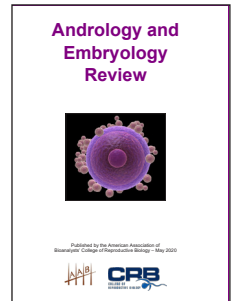
**For more information, see the enclosed flyer or visit [www.aab.org](http://www.aab.org) and click on BOOKSTORE.**

## 2020 Andrology & Embryology Review Manual

AAB's newly updated and revised *2020 Andrology & Embryology Review Manual* is a comprehensive review of andrology and embryology. It is designed to assist individuals who are new to the field, who are updating and adding to their knowledge of the field or who are preparing for certification examinations as Directors (HCLD and ELD), Technical Supervisors (TS), Embryology Laboratory Scientists (ELS) and Andrology Laboratory Scientists (ALS).

The *2020 Andrology & Embryology Review Manual* contains 787 pages and covers the following topics:

- Female Reproductive Physiology and Infertility
- Fertilization, Early Embryo Development and Implantation
- Ovarian Stimulation
- Male Reproductive Physiology
- Semen Analysis
- Sperm Function Tests
- Preparation of Gametes for Assisted Reproductive Technologies
- Culture Techniques
- Micromanipulation in Assisted Reproductive Technologies
- Embryo Grading, Selection, and Preparation for Transfer
- Optimal Embryo Transfer and Management of the Luteal Phase
- QC and QA in the ART Laboratory
- The Cryobiology of Gametes and Embryos
- Male Infertility and the New Genetics
- Preimplantation Genetic Testing (PGT)
- General Laboratory Management
- Employment and Laboratory Law
- Clinical Laboratory Improvement Amendments of 1988 (CLIA '88)
- Occupational Safety and Health Act (OSHA)
- Basic Blood Collection and Handling
- Guide to the New Globally Harmonized System of Classification and Labeling of Chemicals (GHS)



NOTE: This manual includes andrology, embryology and general knowledge for HCLDs, ELDs, ALSs and ELSs.

Edition: June 2020 - Available in English

	<b>Regular Price</b>	<b>Special Discount Price</b>
AAB/AMS Members	\$285	<b>\$228</b>
Non-Members	\$375	<b>\$299</b>

● AAB/AMS Members SAVE \$71

## AAB Online Review Courses

AAB's comprehensive *Online PER Review Courses* are a great educational option for certification examination study or as a refresher.

### **Molecular Diagnostics Online Review –**

A four-hour review by Samuel Terrence Dunn, Ph.D., HCLD(ABB), recorded in May 2019. The course provides an overview of molecular techniques commonly used in the clinical laboratory, including:

- Chemistry of Nucleic Acids
- Specimens, Nucleic Acid Extraction, Electrophoresis and Hybridization
- Amplification of Nucleic Acids
- DNA Sequencing and Other Methods

The Online Molecular Diagnostics program is also available as a package with AAB's Online **Basic Knowledge Module**, a 1.5-hour review of basic knowledge for the clinical laboratorian. Sourced from a presentation by Sierra Dowling, MT(AAB), at the AAB Educational Conference, May 17-18, 2018.

### **Other comprehensive online courses include:**

- Basic Knowledge
- Chemistry
- Hematology
- Immunohematology
- Immunology
- Microbiology

Supplement your MT/MLT certification examination study with these online courses recorded in May 2018. View anytime, and earn up to 18.5 contact hours (ABB/PEER approved CE programs). Reviews are available individually or as a package.

### **Also Available: Florida Required CE Courses.**

Florida licensure requires all licensees, including Directors, Supervisors, Technologists, and Technicians to complete continuing education courses in HIV/AIDS, Medical Errors, and Florida Laws and Rules. This module is specifically designed to meet this Florida licensure requirement.

View anytime, and earn up to 5 contact hours (ABB/PEER approved CE program).

**For more information, see the enclosed flyer or visit [www.aab.org](http://www.aab.org) and click on BOOKSTORE.**

## Online Molecular Diagnostics Course – Clinical Genomics: A Review of Technology and Clinical Applications

This overview of molecular diagnostics was presented by Gregory Tsongalis, Ph.D., HCLD/CC(ABB), at the annual AAB Conference & CRB Symposium on May 18, 2017, in Houston, Texas.

The online courses are an excellent opportunity to learn more about the dynamic field of molecular diagnostics from one of the subject's most well known and highly respected experts.

Select by individual course, or select the complete module for all five courses.

### **Molecular Diagnostics Module**

Maximum 7.5 contact hours. Price: Member - \$450. Nonmember - \$565, Length: 5:21:23

### **Individual Courses:**

#### **The BASE-ics**

Maximum 1.5 contact hours. Price: Member - \$112.50. Nonmember - \$135, Length: 1:02:56

#### **The Southern Blot and Polymerase Chain Reaction**

Maximum 1.0 contact hour. Price: Member - \$75. Nonmember - \$90, Length: 0:44:43

#### **FISH and DNA Sequencing**

Maximum 1.5 contact hours. Price: Member - \$112.50. Nonmember - \$135, Length: 0:52:58

#### **Precision Medicine - Hematology and Oncology**

Maximum 2.0 contact hours. Price: Member - \$150. Nonmember - \$180, Length: 1:46:35

#### **Genetics and Infectious Disease**

Maximum 1.5 contact hours. Price: Member - \$112.50. Nonmember - \$135, Length: 0:54:11

**Order Online: [www.aab.org](http://www.aab.org)**

## PER Questions & Answers Book

The *PER Questions and Answers Book* is an excellent supplement to the **PER Handbook**. Over 1,000 questions and answers. Use it to quiz yourself while preparing for examinations or just as a refresher.

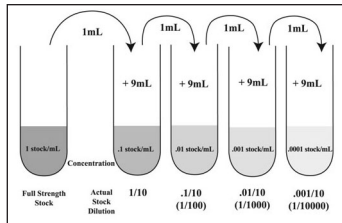
Price (2008 Edition):

AAB/AMS Members.....\$24.95  
Non-Members.....\$34.95

• **AAB/AMS Members SAVE \$10**

## 2020 General Knowledge for the Laboratory Director (HCLD and ELD)

This updated and revised manual will help individuals who are seeking a comprehensive review of regulatory, safety, quality control/quality assurance, and other administrative topics in laboratory management/supervision. Also useful in preparing for certification examinations as high-complexity, moderate-complexity or embryology laboratory directors.



Topics include:

- General Laboratory Management
- Employment and Laboratory Law
- CLIA '88
- OSHA
- Basic Blood Collection and Handling
- Guide to the New Globally Harmonized System of Classification and Labeling of Chemicals

NOTE: This information can also be found in the *2020 Andrology and Embryology Review Manual* along with andrology and embryology related topics.

Edition: June 2020 – Available in English

	Regular Price	Special Discount Price
AAB/AMS Members	\$158	<b>\$149</b>
Non-Members	\$253	<b>\$239</b>

• **AAB/AMS Members SAVE \$90**

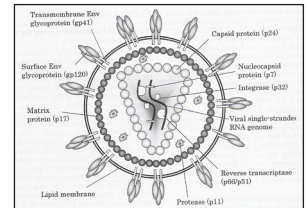
**For more information, and to order online, visit [www.aab.org](http://www.aab.org) and click on **BOOKSTORE**.**

## Review Manual for Public Health Microbiology

- A comprehensive review and reference manual written by experts in the field of public health microbiology.
- A valuable study guide developed to correlate with the content outline for the American Board of Bioanalysis (ABB) public health microbiology certification examination.

### Content:

- Bacteriology
- Environmental Microbiology
- Parasitology
- Mycology
- Virology/Molecular Microbiology
- Epidemiology in the Community
- Immunology of Infectious Diseases
- Quality Control/Quality Assurance



**Schematic representation of a mature HIV virion showing the localization of viral proteins.**

Price:

AAB/AMS Members.....	\$ 59.95
Non-Members.....	\$ 79.95

• **AAB/AMS Members SAVE \$20**



# AAB Catalog of Print and Online Educational Resources Order Form

Name \_\_\_\_\_ Member # \_\_\_\_\_  
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 Daytime Phone # \_\_\_\_\_  
 Daytime Fax # \_\_\_\_\_  
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Exp. Date \_\_\_\_\_ CVC \_\_\_\_\_  
Card verification code

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\_\_\_\_\_ Cardholder's signature

## Complete the following if you wish to apply for AAB Membership

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- \$275 Director  \$90 Manager  \$90 Supervisor  \$75 Special (Armed Forces/Faculty)  \$100 Affiliate  \$350 Supporting

Associate Member Section \$82 (non certified class)..... = \$ \_\_\_\_\_

Job Duties \_\_\_\_\_

Do you have any ownership interest in your laboratory?  YES  NO Have you ever been convicted of any crime other than a traffic violation, disciplined by a government agency or professional organization, or affiliated with a laboratory or a health related organization that has been sanctioned by a governmental agency?  YES  NO If yes, explain \_\_\_\_\_

Charges are based on shipping your merchandise by FedEx Express Saver or FedEx Ground/FedEx International Economy. With FedEx Express Saver, you will receive your merchandise in 3 business days after it is shipped from the AAB office. Guaranteed delivery to businesses by 4:30 p.m. and to residences by 7:00 p.m.

International Orders - delivery by FedEx will vary by destination. Note that the recipient is responsible for any taxes, duties or customs fees.

If you prefer, you may use your own Federal Express Account number for free.

### Reproductive Biology Lab Publications

	AAB/AMS Member Price	Non Member Price		
_____ Andrology And Embryology Review Manual, 2020 Edition, English.....@	\$ 228.00	\$ 299.00	=	\$ _____
<small>(Includes andrology, embryology and general knowledge for HCLDs and ELDs)</small>				
_____ General Knowledge For The Laboratory Director (HCLD and ELD), 2020 Edition, English.....@	\$ 149.00	\$ 239.00	=	\$ _____

### Traditional Clinical Lab Publications

#### 2024 PER Review Manuals

_____ PER Chemistry Review Manual (2024 Edition).....@	\$ 39.00	\$ 53.00	=	\$ _____
_____ PER Hematology Review Manual (2024 Edition).....@	\$ 45.00	\$ 59.00	=	\$ _____
_____ PER Immunohematology Review Manual (2024 Edition).....@	\$ 29.00	\$ 39.00	=	\$ _____
_____ PER Immunology Review Manual (2024 Edition).....@	\$ 25.00	\$ 37.00	=	\$ _____
_____				
_____ PER Basic Knowledge Manual 2020 Edition.....@	\$ 31.00	\$ 42.00	=	\$ _____
_____ PER Q&A Book, 2008 Edition.....@	\$ 24.95	\$ 34.95	=	\$ _____
_____ Review Manual for Public Health Microbiology.....@	\$ 59.95	\$ 79.95	=	\$ _____

### Online Courses:

- Andrology & Embryology Online Courses
- Molecular Diagnostics Review (recorded in May 2019)
- PER Multidisciplinary Review Courses
- MolDx: Clinical Genomics – A Comprehensive Review of Technology and Applications
- Florida Required CE Courses - HIV/AIDS, Medical Errors, FL Laws and Rules

**TOTAL ENCLOSED** \$ \_\_\_\_\_

See the enclosed inserts for complete course listings. Online courses must be ordered through AAB's Bookstore at [www.aab.org](http://www.aab.org). Click on **Bookstore** for details.

**EASY WAYS TO ORDER:** online - ordering online is easy at [www.aab.org](http://www.aab.org), phone - just call (800)457-3332 (in St. Louis, call 241-9809) and have your credit card information ready, fax - fill out the order form with your credit card information and dial our 24-hour fax number at (314)241-1449, or mail - fill out the order form and mail with applicable payment to: AAB, 906 Olive Street, Ste. 1200, St. Louis, MO 63101-1448.

## 2020 Andrology & Embryology Online Courses

**SAVE UP TO 20%\* OFF REGULAR PRICES** for subscriptions to all modules!

Enroll today to help study for certification examinations, earn contact hours to satisfy ABB/PEER or state continuing education requirements, train for an embryology or andrology laboratory position, or to update and add to your knowledge of the field. The courses were recorded live in January 2020 and represent a significant update to the popular A&E online courses from 2017. The new online courses are mobile-friendly and compatible across browsers and devices.

SELECT BY MODULE:	Contact Hours	Regular Member Price	Discounted Member Price	Regular Nonmember Price	Discounted Nonmember Price
<p><b>2020 A&amp;E Online Review Full Module:</b></p> <p>Includes all <b>Individual Courses</b> listed on the back of this sheet.</p> <p><b>IMPORTANT:</b> A separate module covering Embryology alone is not available because the subject of Embryology includes a significant number of Andrology topics. The combined <b>2020 A&amp;E Online Review Full Module</b> is recommended for Embryology examination study and/or review.</p>	34.0	\$1,640.00	<b>\$1,312.00</b>	\$2,320.00	<b>\$1,856.00</b>
			<p><b>Members SAVE \$1,008!</b></p> <p><i>Includes a \$680 savings off the nonmember price plus \$328 (a 20% discount) off the member price.</i></p> <p><i>Use coupon code AE2020 when ordering to receive discount.</i></p>		<p><b>Nonmembers SAVE \$464!</b></p> <p><i>Join AAB and save \$1,008 off your order!</i></p> <p><i>Use coupon code AE2020 when ordering to receive discount.</i></p>
<p><b>2020 Andrology Online Review Module:</b></p> <ul style="list-style-type: none"> <li>• Male Reproductive Function – Development of Male Genitourinary Tract and Birth Defects and Spermatogenesis and Male Reproductive Tract Biology</li> <li>• Male Reproductive Function – Male Infertility</li> <li>• Semen Analysis</li> <li>• Tests of Sperm Function</li> <li>• Male Gamete Preparation for ART</li> <li>• Cryopreservation of Reproductive Cells and Tissues</li> <li>• Reproductive Genetics; Contemporary Genetic Screening – PGT-M, PGT-SR and PGT-A</li> <li>• General Laboratory Management (Parts 1 and 2)</li> <li>• Clinical Laboratory Improvement Amendments (CLIA '88)</li> <li>• Occupational Safety and Health Act (OSHA)</li> </ul>	21.0	\$950.00	<b>\$855.00</b>	\$1,140.00	<b>\$1,026.00</b>
			<p><b>Members SAVE \$285!</b></p> <p><i>Includes a \$190 savings off the nonmember price plus \$95.00 (a 10% discount) off the member price.</i></p> <p><i>Use coupon code ONLINE2020 when ordering to receive discount.</i></p>		<p><b>Nonmembers SAVE \$114!</b></p> <p><i>Join AAB and save \$285 off your order!</i></p> <p><i>Use coupon code ONLINE2020 when ordering to receive discount.</i></p>
<p><b>2020 Laboratory Management Online Review Module:</b></p> <ul style="list-style-type: none"> <li>• General Laboratory Management Parts 1 and 2</li> <li>• Clinical Laboratory Improvement Amendments (CLIA '88)</li> <li>• Occupational Safety and Health Act (OSHA)</li> </ul>	6.50	\$455.00	<b>\$409.50</b>	\$585.00	<b>\$526.60</b>
			<p><b>Members SAVE \$175.50!</b></p> <p><i>Includes a \$130 savings off the nonmember price plus \$45.50 (a 10% discount) off the member price.</i></p> <p><i>Use coupon code ONLINE2020 when ordering to receive discount.</i></p>		<p><b>Nonmembers SAVE \$58.40!</b></p> <p><i>Join AAB and save \$175.50 off your order!</i></p> <p><i>Use coupon code ONLINE2020 when ordering to receive discount.</i></p>

**\*Because of the economic hardship brought on by the COVID-19 pandemic, A&E online course pricing will be discounted as of May 28, 2020, and will continue until further notice.**

**You may also subscribe to individual topics:**

<b>2020 A&amp;E Online Review – Individual Courses</b>	<b>Contact Hours</b>	<b>Member Price</b>	<b>Nonmember Price</b>
• Female Reproductive Physiology, Oogenesis and Infertility	2.5	\$275.00	\$387.50
• Fertilization and Early Embryo Development	1.5	\$165.00	\$232.50
• Ovulation Induction for ART	1.0	\$110.00	\$155.00
• Male Reproductive Function – Development of the Male Genitourinary Tract and Birth Defects	1.0	\$110.00	\$155.00
• Male Reproductive Function – Spermatogenesis and Male Reproductive Tract Biology	2.0	\$220.00	\$310.00
• Male Reproductive Function – Male Infertility	1.0	\$110.00	\$155.00
• Semen Analysis	2.0	\$220.00	\$310.00
• Tests of Sperm Function	1.5	\$165.00	\$232.50
• Male Gamete Preparation for ART	1.5	\$165.00	\$232.50
• Micromanipulation in ART	1.5	\$165.00	\$232.50
• Culture Techniques	2.5	\$275.00	\$387.50
• Embryo Selection for Transfer	2.0	\$165.00	\$232.50
• Contemporary Embryo Transfer Art and Science	1.0	\$110.00	\$155.00
• Cryopreservation of Reproductive Cells and Tissues	2.0	\$220.00	\$310.00
• Reproductive Genetics	2.0	\$220.00	\$310.00
• QC and QA in the ART Laboratory	1.5	\$165.00	\$232.50
• Contemporary Genetic Screening – PGT-M, PGT-SR and PGT-A	1.5	\$165.00	\$232.50
• General Laboratory Management Parts 1 and 2	3.0	\$330.00	\$465.00
• Clinical Laboratory Improvement Amendments of 1988 (CLIA '88)	2.0	\$220.00	\$310.00
• Occupational Safety and Health Act (OSHA)	1.5	\$165.00	\$232.50

**NOTE:** Individuals may purchase an online course as many times as they wish. However, continuing education credit (contact hours) will only be awarded once for any discipline/topic within a two-year recording period.

**BONUS!** Includes online quiz to supplement your study and review.

Enroll for the entire Online Andrology & Embryology Review Course and receive the hard copy 2020 *A&E Review Manual* **FREE!** Enroll for the Andrology Module or the Laboratory Management Module and receive a **FREE** hard copy of the corresponding text.

**Earn up to 34.0 contact hours**, which can be used to satisfy ABB/PEER continuing education requirements or to meet state continuing education requirements (including California, Florida, Louisiana, and Montana). **PLUS**, recording your contact hours is automatic if you are an AAB member or if you are ABB-certified. Upon successful completion of the quiz at the end of each section, your contact hours will be automatically entered into your AAB/ABB continuing education records.

**Get started today!** Visit [www.aab.org](http://www.aab.org) and click on **BOOKSTORE**.



# AAB Online Review Courses

**Designed to help you study and prepare for certification examinations, earn continuing education credit, and update and add to your knowledge of the field.**

## **NEW 2020 Andrology & Embryology Online Courses (recorded January 2020)**

- Female Reproductive Physiology, Oogenesis and Infertility
- Fertilization and Early Embryo Development
- Ovulation Induction in ART
- Male Reproductive Function - Development of Male Genitourinary Tract & Birth Defects
- Male Reproductive Function - Spermatogenesis and Male Reproductive Tract Biology
- Male Reproductive Function - Male Infertility
- Semen Analysis
- Tests of Sperm Function
- Male Gamete Prep for ART
- Micromanipulation in ART
- Culture Techniques
- Embryo Selection for Transfer
- Contemporary Embryo Transfer Art and Science
- Cryopreservation of Reproductive Cells and Tissues
- Reproductive Genetics
- QC and QA in the ART Laboratory
- Contemporary Genetic Screening - PGT-M, PGT-SR and PGT-A
- General Laboratory Management
- Clinical Laboratory Improvement Amendments (CLIA '88)
- Occupational Safety and Health Act (OSHA)

## **Molecular Diagnostics Online Review Course (recorded May 2019)**

- Chemistry of Nucleic Acids
- Specimens, Nucleic Acid Extraction, Electrophoresis and Hybridization
- Amplification of Nucleic Acids
- DNA Sequencing and Other Methods

## **PER Multidisciplinary Online Review Courses (recorded May 2018)**

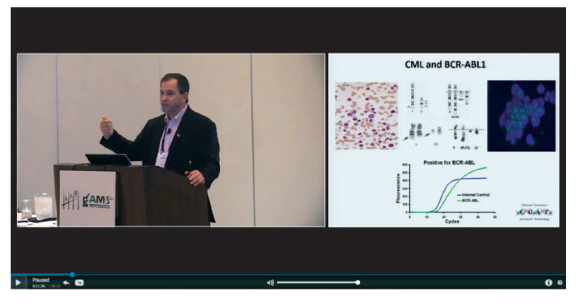
- Basic Knowledge
- Chemistry
- Hematology
- Immunohematology
- Immunology
- Microbiology

## **Molecular Diagnostics Online Course – Clinical Genomics: A Review of Technology and Clinical Applications (recorded May 2017)**

- The BASE-ics
- The Southern Blot & Polymerase Chain Reaction
- FISH and DNA Sequencing
- Precision Medicine – Hematology & Oncology
- Genetics and Infectious Diseases

### **SPECIAL FEATURES**

- View the speaker alone or with slides.
- View the slides alone or with the speaker.
- Adjust the size of the speaker and slides
- “Fast forward” or “go back” easily and quickly.
- Stop action to study the slides.



Get started today! For more information and to purchase, go to [www.aab.org](http://www.aab.org) and click on Bookstore.

## Online Molecular Diagnostics Courses: A Review of Technology and Clinical Applications

**Earn up to 7.5 Contact Hours of ABB/PEER-approved Continuing Education!**

**Clinical Genomics: A Review of Technology and Clinical Applications**, a collection of Molecular Diagnostics courses, is available online from the American Association of Bioanalysts (AAB). Presented by **Gregory J. Tsongalis, Ph.D., HCLD/CC(ABB)**, a well-known and highly respected molecular biologist, the courses provide an excellent opportunity to learn more about the dynamic field of molecular diagnostics. The five courses were sourced from an educational program taught by Dr. Tsongalis at the 2017 AAB Educational Conference, May 18, 2017, in Houston, Texas.

Select the entire module (five courses) or select by individual course. Each individual course is followed by a ten-question quiz to supplement your study and review.

**Earn up to 7.5 contact hours**, which can be used to satisfy the American Board of Bioanalysis (ABB) PEER CE requirements or to meet state CE requirements (including California, Florida, Louisiana, and Montana). **PLUS**, recording your continuing education credit is automatic if you are an AAB or AAB Associate Member Section (AMS) member or if you are ABB-certified. Upon successful completion of the quiz at the end of each course, your contact hours will be automatically entered into your AAB, AMS, or ABB CE record.

**Enroll today** to aid in study for certification examinations, to earn continuing education credit to satisfy ABB/PEER or state CE requirements, and to update and add to your knowledge of molecular diagnostics, a technology that is rapidly replacing traditional clinical testing techniques.

The online courses are mobile-friendly and compatible across multiple browsers and devices. For details, visit [www.aab.org](http://www.aab.org) and click on Bookstore.

**Order Online: [www.aab.org](http://www.aab.org)**

### Instructor



**Gregory J. Tsongalis, Ph.D., HCLD/CC(ABB)**, is director of the Clinical Genomics and Advanced Technology, Pathology and Laboratory Medicine Department Dartmouth-Hitchcock Medical Center. Dr. Tsongalis is a well-known and highly respected molecular biologist, instructor and author. His most recent book, co-edited with William B. Coleman and released in early 2017, is *Diagnostic Molecular Pathology: A Guide to Applied Molecular Testing*.

**Note: Individuals may purchase an online course as many times as they wish. However, continuing education credit will only be awarded once for any discipline/topic within a two-year recording period.**

COMPLETE MOLECULAR DIAGNOSTICS MODULE	Contact Hours	Member Price	Nonmember Price
<b>Molecular Diagnostics Module</b> contains all of the courses listed under <b>Individual Courses</b> below.	7.5	\$450.00	\$565.00
INDIVIDUAL COURSES			
• The BASE-ics	1.5	\$112.50	\$135.00
• The Southern Blot and Polymerase Chain Reaction	1.0	\$75.00	\$90.00
• FISH and DNA Sequencing	1.5	\$112.50	\$135.00
• Precision Medicine – Hematology and Oncology	2.0	\$150.00	\$180.00
• Genetics and Infectious Disease	1.5	\$112.50	\$135.00



# AAB PER Online Courses



Excellent for clinical laboratory personnel who are preparing for certification examinations, seeking continuing education opportunities or looking for a general review.

## AAB PER REVIEW COURSE ONLINE

### BASIC KNOWLEDGE

- General Operations Knowledge
- Technology/Instrumentation
- Weights and Measures
- Quality Control/Quality Assurance
- Patient Test Management
- Personnel Policies and Practices
- Laboratory Equipment
- Qualifications of Testing Personnel
- Complaints/Communication
- General Safety
- Regulatory Compliance

### CHEMISTRY

- Proteins/Nonprotein Nitrogen
- Carbohydrates and Lipids
- Analytical Methods
- Enzymes and Quality Control
- Minerals and Electrolytes
- Urinalysis and Body Fluids
- Hormones and Blood Gases

### HEMATOLOGY

- Coagulation
- Hematopoiesis
- Laboratory Methods
- Special Hematology Procedures
- Red Blood Cells
- White Blood Cells
- Platelets
- Quality Control/Quality Assurance

### IMMUNOHEMATOLOGY

- Donor Requirements
- Collection/Processing Donor Blood
- Blood Component Therapy
- Overview of Blood Group Systems
- Routine Transfusion Procedures

### IMMUNOLOGY

- Theory and Principles
- Practices/Lab Methods
- Immune Disorders
- Infectious Disease Immunology
- Tumor Immunology
- Transplant Immunology

### MICROBIOLOGY

- Bacteriology
- Parasitology
- Mycology
- Virology

View a complete list of courses and order online at [www.aab.org](http://www.aab.org), click on **Bookstore** and **AAB Online Courses**.

## NEW Online Molecular Diagnostics Review Now Available

Earn up to 6 Contact Hours of ABB/PEER-approved Continuing Education!

The **PER Molecular Diagnostics Online Course** is presented by **S. Terence Dunn, Ph.D., HCLD(ABB)**, Director, Public Health Laboratory, Oklahoma State Department of Health, and Adjunct Professor, Department of Pathology, University of Oklahoma Health Sciences Center. The online course was sourced from an educational program taught by Dr. Dunn at the 2019 AAB Conference/CRB Symposium on May 16-17, 2019, in New Orleans, Louisiana.

The course provides an overview of molecular techniques commonly used in the clinical laboratory and covers:

- Chemistry of Nucleic Acids
- Specimens, Nucleic Acid Extraction, Electrophoresis and Hybridization
- Amplification of Nucleic Acids
- DNA Sequencing and Other Methods

The Online Molecular Diagnostics program is also available as a package with **AAB's Online Basic Knowledge Module**. Basic Knowledge is a 1.5-hour review of General Operations Knowledge, Technology and Instrumentation, Weights and Measures, QC/QA, Patient Test Management, Personnel Policies and Practices, Laboratory Equipment, Qualifications of Testing Personnel, Complaints and Communication, General Safety and Regulatory Compliance. The Basic Knowledge Module was sourced from a presentation by Sierra Dowling, MT(AAB), at the AAB Educational Conference, May 17-18, 2018.

## FUNCTIONALITY

AAB's online courses allow you to:

- View the slides alone or with the speaker.
- Adjust the size of the speaker and slides.
- Jump to a specific slide in the presentation.
- Speed up or slow down presentation speed.
- Stop action to study the slides.



### Antigen-Antibody Reactions In Vitro

- Reactions in laboratory testing are detected by visible agglutination or evidence of hemolysis
- The first stage of in vitro antibody-antigen binding is usually not visible
- The first stage is influenced by cell-to-serum ratio, temperature, incubation time, pH, and ionic strength

## PER Florida Licensure Module Also Available

The PER Florida Licensure Module is designed to help Florida licensed technologists and technicians meet continuing education requirements needed to renew Florida licenses.

Earn Up To 5 Contact Hours. Topics Include:  
HIV/AIDS • Florida Rules & Regulations • Medical Errors

<b>AAB/PER ONLINE COURSES</b>	<b>Course Availability From Date of Purchase</b>	<b>Contact Hours (Maximum Available)</b>	<b>AAB Member Price</b>	<b>Nonmember Price</b>
<b>NEW Molecular Diagnostics Online Review Course</b> <i>[recorded May 2019]</i>				
<b>2019 AAB/PER Molecular Diagnostics Online Course Module</b> Provides an overview of molecular techniques commonly used in the clinical laboratory	90 days	6.0	\$210.00	\$300.00
<b>2019 Molecular Diagnostics/2018 Basic Knowledge Package</b> Includes the new Molecular Diagnostics Online Course and the 2018 AAB/PER Basic Knowledge Online Course	120 days	7.5	\$260.00	\$375.00
<b>MODULES</b> <i>[recorded May 2018]</i>				
<b>Complete PER Review Course Module</b> (Includes Basic Knowledge, Chemistry, Hematology, Immunohematology, Immunology and Microbiology and <i>2018 Basic Knowledge Manual</i> .)	180 days	18.5	\$525.00	\$750.00
<b>Florida Licensure Module</b> (Includes HIV/AIDS, Florida Rules and Regulations, and Medical Errors)	180 days	5	\$75.00	\$100.00
<b>PACKAGES</b> <i>[recorded May 2018]</i>				
<b>Chemistry and Basic Knowledge Online Package</b> (Includes Chemistry and Basic Knowledge and <i>2018 Basic Knowledge Manual</i> )	120 days	5	\$175.00	\$245.00
<b>Hematology and Basic Knowledge Online Package</b> (Includes Hematology and Basic Knowledge and <i>2018 Basic Knowledge Manual</i> )	120 days	5	\$175.00	\$245.00
<b>Immunohematology and Basic Knowledge Online Package</b> (Includes Immunohematology and Basic Knowledge and <i>2018 Basic Knowledge Manual</i> )	120 days	5	\$175.00	\$245.00
<b>Immunology and Basic Knowledge Online Package</b> (Includes Immunology and Basic Knowledge and <i>2018 Basic Knowledge Manual</i> )	120 days	5	\$175.00	\$245.00
<b>Microbiology and Basic Knowledge Online Package</b> (Includes Microbiology and Basic Knowledge and <i>2018 Basic Knowledge Manual</i> )	120 days	4.5	\$160.00	\$225.00
<b>INDIVIDUAL COURSES</b> <i>[recorded May 2018]</i>				
<b>Basic Knowledge Online Review</b>	90 days	1.5	\$52.50	\$75.00
<b>Chemistry Online Review</b>	90 days	3.5	\$122.50	\$175.00
<b>Hematology Online Review</b>	90 days	3.5	\$122.50	\$175.00
<b>Immunohematology Online Review</b>	90 days	3.5	\$122.50	\$175.00
<b>Immunology Online Review</b>	90 days	3.5	\$122.50	\$175.00
<b>Microbiology Online Review</b>	90 days	3	\$105.00	\$150.00
<b>HIV/AIDS Online Review</b>	90 days	1.5	\$30.00	\$45.00
<b>Florida Rules and Regulations Online Review</b>	90 days	1.5	\$30.00	\$45.00
<b>Medical Errors Online Review</b>	90 days	2	\$40.00	\$60.00
<b>ADDITIONAL COURSES</b>				
<b>MODULES</b>				
<b>Clinical Genomics: A Review of Technology and Clinical Applications MoDx Module</b> (Includes The BASE-ics, The Southern Blot/Polymerase Chain Reaction, FISH and DNA Sequencing, Precision Medicine, and Genetics and Infectious Disease) <i>[Recorded May 2017]</i>	180 days	7.5	\$450.00	\$565.00
<b>INDIVIDUAL COURSES</b>				
<b>MoDx – The BASE-ics</b> <i>[Recorded May 2017]</i>	90 days	1.5	\$112.50	\$135.00
<b>MoDx – The Southern Blot and Polymerase Chain Reaction</b> <i>[Recorded May 2017]</i>	90 days	1	\$75.00	\$90.00
<b>MoDx – FISH and DNA Sequencing</b> <i>[Recorded May 2017]</i>	90 days	1.5	\$112.50	\$135.00
<b>MoDx – Precision Medicine: Hematology and Oncology</b> <i>[Recorded May 2017]</i>	90 days	2	\$150.00	\$180.00
<b>MoDx – Genetics and Infectious Disease</b> <i>[Recorded May 2017]</i>	90 days	1.5	\$112.50	\$135.00

If applicable, manuals that are ordered with the online courses are shipped **FREE** within the United States. For orders outside the United States, contact the AAB office by telephone 314-241-1445 or email at [aab@aab.org](mailto:aab@aab.org) for the shipping/handling cost.

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**Get Started Today!** Visit [www.aab.org](http://www.aab.org) and click on Bookstore and AAB Online Courses.