



# Certification Examination Information Bulletin

*This bulletin has been prepared using the guidelines suggested by the Institute For Credentialing Excellence (ICE), formerly NOCA.*

The certification exam in medical illustration is based on the practice of the profession of medical illustration in the United States of America and is only available in the English language. Anyone taking this exam should be fluent in English and have a working knowledge of common US copyright policies.

At the end of this document you will find a link to the complete performance section (Section III – drawing) of the written portion (Part I) of the exam. It is highly recommended that the applicant spend adequate time practicing these problem solving/drawing questions before taking the exam.

It is also recommended that the applicant read the following article from the Journal of Biomedical Communication before taking the exam. "The Art of Critique: A Technique-Based Tool for Critical Thinking" by Suk, Gokasian, Lees, and Sandone. JBC Vol 36 #3 2010. AMI members may access this article by signing in through the AMI website.

## **WHAT IS CERTIFICATION?**

Certification is a program endorsed by the Association of Medical Illustrators to encourage lifelong learning and to measure professional competency for those illustrators and clients who voluntarily desire such credentialing. Similar to specialty certification for physicians, the competency evaluation consists of a written test and a practicum. The Board of Certification of Medical Illustrators (BCMI) objectively measures and evaluates the examination results and awards certification on successful completion. One does not need to be a member of the Association of Medical Illustrators (AMI) to be certified; nor does certification include AMI membership.

## **BOARD OF CERTIFICATION OF MEDICAL ILLUSTRATORS (BCMI)**

The Board of Certification was established by the Association of Medical Illustrators (AMI) and given the charge to devise, test, and manage a certification program. According to the Standards of the National Commission for Certifying Agencies (NCCA) the BCMI is a separate administrative entity from the AMI.

The Board of Certification consists of prominent practicing medical illustrators, all of whom are Board Certified. In addition, according to NCCA guidelines, there are at least two non-medical illustrator members, a stakeholder and an educational/training professional.

## **EXAMINATION DEVELOPMENT**

The exam was first written and is updated by a large group of medical illustrators, each of whom submits questions in their areas of expertise. The BCMI and educational consultants then evaluate and rework exam questions to ensure that the exam remains valid for the profession.

## ELIGIBILITY REQUIREMENTS

An applicant for certification is considered eligible if either of the two following situations is true:

1. You are a graduate of a BCMI recognized program in medical illustration that includes a graduate level course in human gross anatomy with hands-on dissection, proven by transcript.
2. You have a minimum of five years full-time experience as a medical illustrator substantiated by letters of reference from employers and proof of a graduate level course in human gross anatomy with hands-on dissection or its equivalent.

## AMI MEMBERSHIP IS NOT REQUIRED

Certification, under Federal Trade Commission regulations, must be open to any qualified medical illustrator, whether or not they are members of the AMI or any other professional society. The eligibility criteria are listed above.

## CERTIFICATION IS NOT MANDATORY

Certification is a purely voluntary process. It is designed as a service for those who feel that they need credentialing by an outside body for their professional advancement.

## EXAMINATION CONTENT

The exam tests the core basic knowledge skill set of the successful medical illustrator. It is recommended that applicants have a general working knowledge and skills in the following areas:

### Basic science

Human gross anatomy  
Human Physiology  
Pathology  
Histology/Microanatomy

### Illustration

Anatomical drawing  
Surgical drawing  
Medical illustration techniques  
Professional ethics  
U.S. business practices and copyright law

## EXAMINATION DESIGN:

The exam has two parts.

**Part I** is a written test that is administered at the annual meeting of the AMI and other locations by prior arrangement with the Chair of the BCMI. Part I consists of three sections.

**Part 1, section I** consists of core problem-based questions covering the problem-solving aspects of the business and practice of medical illustration. The questions are all short answer essay style.

**Part 1, section II** is a series of multiple-choice questions in human anatomy and physiology as well as anatomy identification questions. Here is a sample of an anatomy multiple-choice question from Section II of Part I of the exam:

The glomerulus is

- a. A modified capillary filter.
- b. A round tumor found in the spinal cord.
- c. The smallest unit of liver function.
- d. A portion of the basal ganglia.

Part I, section III consists of non-medical drawing problems. Section III, in its entirety, is provided below for applicant practice:

**Section III** *In addition to the point criteria the scorer has discretion to add/subtract points in regard to quality of rendering.*

D1. Draw a ball, approximately 3" (7.6 cm) in diameter, sitting on a flat surface, and resting against a perpendicular wall. Light the ball from the upper left front (approximately 45 degree angle). The ball's shadow is cast on the flat surface and the wall behind the ball. Draw the ball and resulting shadows, using shading that describes the shape of the ball and the two flat planes.

*(Possible 25 points based on these criteria: The ball is round, there are two correctly drawn shadow planes, the ball has a highlight, halftone, core shadow, and reflected light.)*

D2. Using the photographs provided on next page, in the anterior view, tube C is passed into tube B only to the point where tube B exits the lateral surface of D. Tube B is hollow. Draw tube C and its rounded tip inside of tube B so that the audience can understand the relationship of C to B and D. You may draw the objects any size you wish as long as they are in proportion to one another.

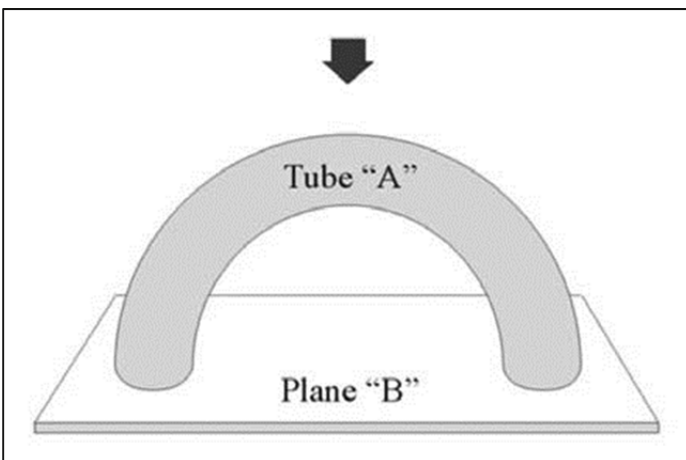
*Possible 25 points based on these criteria: The tip of tube C is round, tube B is hollow and open ended, tube C advances just to the lateral surface of D.*

D3. Using the photographs provided on next page, in the anterior view, the client explains that A and its relationship to all of the objects is the most important message to convey to the audience. Draw A, from the anterior view, as the focal point of the illustration remembering to include its relationship to all other objects in the sculpture. You may draw the objects any size you wish as long as they are in proportion to one another.

*Possible 15 points based on these criteria: Focal emphasis is correct, relationships to A are correct.*

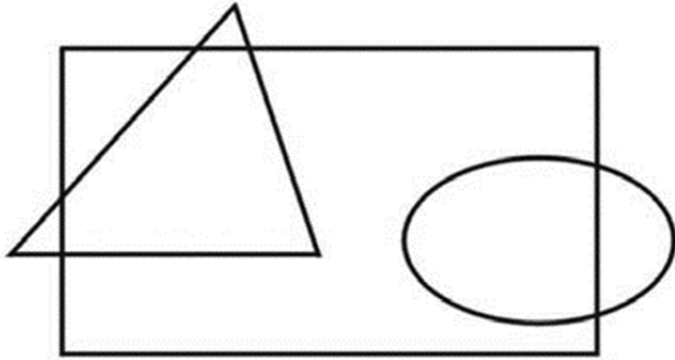
D4. Using the diagram below, draw tube A from the 'top' view, so that it appears to come toward you and then away from you. Light tube A so that light on form and any cast shadows enhance the effect of the tube coming toward and away from you. Tube A is a consistent diameter. You may draw the object any size you wish as long as the proportions are correct. You may utilize line or tone.

*Possible 25 points based on these criteria: The point of view is correct, the dimensional/spacial perspective is correct, the light on form is correct, the cast shadow is correct, the accuracy of the shape of tube A from above is correct.*

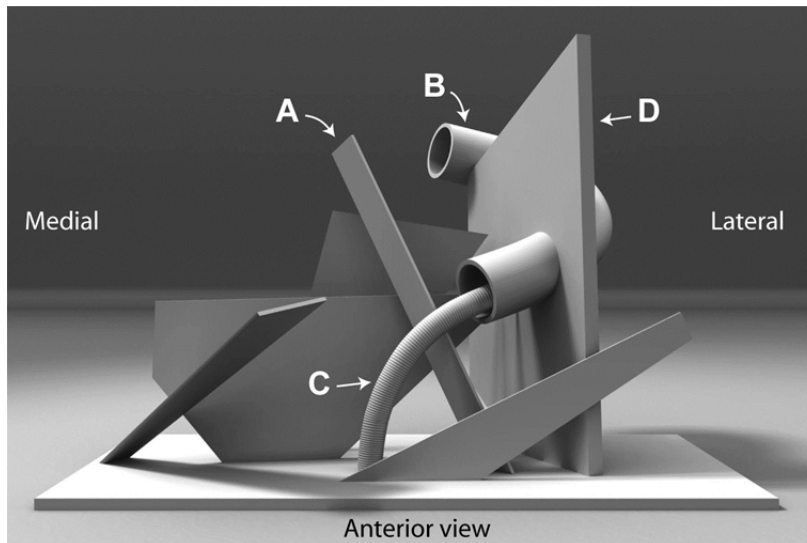
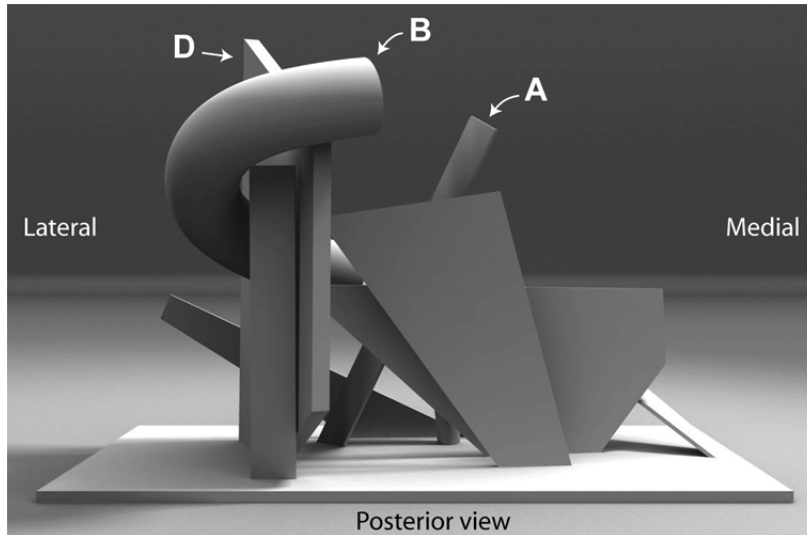


D5. Using the diagram below, redraw the diagram at exactly 200%. You may measure using only the tools you have been given to take this exam.

Possible 10 points based on these criteria: The height is 200%, the width is 200%.



D2 and D3 reference images:



Five hours are allowed to take Part I of the exam. A minimum score of 70 points per section, out of 100 maximum points per section, is required to pass each of the three sections of Part I of the exam. Upon successful completion of Part I of the exam, instructions for Part II of the exam (the portfolio) are mailed or emailed to the certification candidate.

**Part II** consists of an objectively measured portfolio review with some specific requirements in technique and subject matter. Eight illustrations are required for review along with a description of the objectives, references used, and other pertinent information for each piece. Each portfolio piece will be scored on a 100-point scale and a minimum score of 70 is needed for each piece to pass. You will have two years to submit your portfolio for Part II of the exam after successful completion of Part I.

### SCORING, NOTIFICATION, AND APPEALS

Members of the Board of Certification and a committee appointed by the Board score the examination. Part I, the written portion, is scored against the validated results of the prototype exam. Part II, the portfolio review, is objectively measured by a BCMI appointed committee of reviewers, all of whom are successfully practicing board certified medical illustrators.

You will be informed of the results of each part of the examination within six months of the date you wrote Part I and/or submitted your portfolio for Part II. A failure in any of the three sections of Part I may be retaken by individual section after a minimum 90 day waiting period and at the convenience of the BCMI. If you fail Part I of the exam you may ask to receive a brief report summarizing your scores so you may see which areas were problematic for you. An appeals process is also available.

### **PERIOD OF CERTIFICATION**

Certification is currently for a five-year period.

### **CERTIFICATION DESIGNATION**

You will be entitled to use the designation CMI (Certified Medical Illustrator), as in Jane Doe, CMI, only after successful completion of both Parts I and II of the exam. The CMI designation will be revoked after your five-year term of certification if requirements for renewal are not met.

### **CURRENT REQUIREMENTS FOR CMI RENEWAL**

Certification renewal presently requires a minimum of 35 contact hours (3.5 CEUs) of approved continuing education during each five-year certification term. The current CEU requirement for CMI renewal stipulates at least 1.4 CEUs in art/illustration activities and at least 1.4 CEUs in biomedical science activities. All CEU activities must receive prior approval as well as be verified upon completion. Details for this can be found at the Continuing Education link at AMI.ORG. The CMI exam, in its entirety, may be taken again to regain CMI status if the appropriate number of CEUs is not earned during your five-year term of certification. This process is highly discouraged, expensive, and will result in a temporary loss of CMI status.

### **EXAM APPLICATION INFORMATION**

Applications for part I of the exam should be received 30 days before the posted exam date. The exam date will be published in the online newsletter of the AMI, the AMI News. The online exam application may be found at [www.AMI.ORG](http://www.AMI.ORG). A Notarization Form, found at the same link, must be downloaded, completed, and brought with you to the exam site the day of your examination. Payment for the exam must be by check (US funds) and made before your exam by being sent to the address on the application.

### **EXAMINATION FEES AS OF 8/1/2012 (SUBJECT TO CHANGE)**

Examination fee (AMI members)	\$150.00
Examination fee (non-AMI members)	\$275.00
CMI renewal by CEU completion	\$150.00
CMI renewal by exam (AMI member)	\$300.00
CMI renewal by exam (non-AMI member)	\$400.00

Offsite exam is subject to an additional \$50.00 shipping charge.

### **CONFIDENTIALITY**

A method has been developed to ensure confidentiality, both in terms of integrity of the test instrument and the confidentiality protection of the certification applicants. The identity of applicants who fail the exam is known only by the one BCMI member who have access to the identification key. All test scoring is anonymous.

### **IMPORTANT NOTICES**

Questions about the certification exam may be directed to:

Michael Jensen  
Chair, Board of Certification of Medical Illustrators  
(706) 721-3266, mjensen@augusta.edu

If you are interested in applying to take the exam at a location other than the AMI annual meeting, you must obtain permission and make arrangements in advance with the BCMI Chair. Additional fees apply.

Exam fees, paid by check or money order only, should be sent to:

The Board of Certification of Medical Illustrators (BCMI)  
c/o Sara Zach  
201 E. Main Street, Ste. 1405  
Lexington, KY 40507  
866-393-4AMI (866-393-4264), hq@ami.org