



CANDIDATE PREPERATION INFORMATION

2018 ACVIM CARDIOLOGY SPECIALTY EXAMINATION

The information below is provided to help you prepare for the Specialty Examination in Cardiology in June 2018. Included in this document is general information regarding:

- The structure of the examination
- The examination schedule (date, time, and location)
- Examination scoring
- Use of foreign language (translational) dictionaries
- Category Study Outline (i.e., the question blueprint)
- Examination Preparation (i.e., reference/suggested reading list)

STRUCTURE OF THE EXAMINATION

The Specialty Examination in Cardiology is a six part examination taken over two (2) days. It consists of:

Multiple choice questions (20%), covering all aspects of basic and clinical sciences relevant to cardiovascular medicine.

Essay questions (16%), also covering both basic and clinical sciences related to cardiovascular medicine.

Case studies (20%), consisting of clinical patient studies including radiographs and other non-invasive and invasive examinations (ECG, echocardiography, hemodynamics, angiograms, etc.).

Cardiac Anatomy/Pathology (10%), covering gross anatomy, histology, cytology, radiographs, static angiograms, and computed tomography or magnetic resonance imaging.

Physiologic recordings (19%), consisting of electrocardiograms, EP studies, phonocardiograms, static spectral and color flow Doppler echocardiograms, hemodynamic studies, special studies, and audio-recordings (heart sounds, etc.).

Video (10%), consisting of real-time recordings of patient examinations. It may include both non-invasive (M-mode, 2 dimensional, Doppler echocardiograms, transesophageal echocardiograms, computed tomography, magnetic resonance imaging, etc.) and invasive studies (angiograms, etc.).

*Note the candidate's credentials packet score provides the remaining 5% of the final examination score.

SCHEDULE OF THE EXAMINATION

Cell phones, PDAs, cameras, or any other electronic devices will not be allowed in the examination rooms. If you do bring them in, they must be turned off and placed at a designated location away from the exam tables, as directed by the College staff and/or examination proctors. Such storage will be done at your own risk.

There are two mandatory requirements in place for candidates sitting any ACVIM Examinations in 2018:

- 1). All candidates must show a **picture ID** when signing-in at the exam.
- 2). All candidates must show **proof of payment in the form of an ACVIM receipt** when signing-in at the exam.

Please be in the exam room 15 minutes prior to the start of the exam

DAY	SECTION	ROOM/LOCATION	TIME	Time/Question
Sunday, June 10, 2018	Physiologic Recordings	Sheraton Seattle Hotel Seattle, WA Room: Grand Ballroom B	8:00 to 11:45 (3 hr 45 min)	6.25 min
	Lunch		11:45 to 12:45 (1 hr)	
	Essays	Sheraton Seattle Hotel Seattle, WA Room: Grand Ballroom B	12:45 to 3:00 (2 hr 15 min)	33.8 min
	Break		3:00 to 3:15 (15 min)	
	Videos	Sheraton Seattle Hotel Seattle, WA Room: Grand Ballroom B	3:15 to 6:00 (2 hr 45 min)	8.25 min
Monday, June 11, 2018	Case Studies	Sheraton Seattle Hotel Seattle, WA Room: Grand Ballroom B	8:00 to 12:00 (4 hr)	30 min
	Lunch		12:00 to 1:00 (1 hr)	
	Anatomy/ Pathology	Sheraton Seattle Hotel Seattle, WA Room: Grand Ballroom B	1:00 to 3:30 (2 hr 30 min)	3 min
	Break		3:30 to 3:45 (15 min)	
	Multiple Choice	Sheraton Seattle Hotel Seattle, WA Room: Grand Ballroom B	3:45 to 6:30 (2 hr 45 min)	1.65 min

NOTE: Due to the nature of this examination, each section will be administered at the posted time and place ONLY. The examination administrators will do everything possible to ensure that a candidate is taking the correct section(s) of the exam, but ultimately it is the candidate's responsibility to report to the appropriate session(s) to take this examination. No make-up examinations or examinations at other sites will be considered.



EXAMINATION SCORING

In order to pass the examination, candidates must attain a total score that equals or exceeds 70%; there is no requirement to obtain any specific score on individual sections of the examination. The examination is evaluated and rated by current Diplomates of the specialty.

USE OF FOREIGN LANGUAGE (TRANSLATIONAL) DICTIONARIES

Candidates with English as a second language are permitted to use a foreign language (translational) dictionary during the examination provided that they request this by filling out the “dictionary request form” at the time that they submit their exam registration documents (February 1). They will then be contacted by the ACVIM staff to arrange for an appropriate dictionary to be purchased for use in the examination on their behalf. The dictionary will be made available for them to use during the examination in June, and must be returned to the examination proctors at the conclusion of each test subsection. Candidates must refrain from writing in these dictionaries; hand-written notes may be considered grounds for dismissal from the remaining sections of the examination as evidence of cheating. Candidates are not allowed to bring their own dictionaries for use during the examination.

CATEGORY STUDY OUTLINE

A subject category outline is posted on the Cardiology Credentials page of the ACVIM website.

EXAMINATION PREPARATION

You are welcome to bring ECG calipers. Pencils, scratch paper, calculators, and computers will be provided.

READING LIST

This reading list is provided to aid candidates in preparation for the Cardiology Specialty Examination. It is NOT a complete listing of all texts/journals from which questions may be drawn but represents a body of knowledge that a qualified candidate should know.

Textbooks

Listed books represent current resources that may cover similar content and thus may be redundant to each other. The candidate should be familiar with the relevant concepts covered in these books. Not all books in each subject area are necessary to adequately cover all concepts as outlined in the document formally known as the GIG (GIG replacement-Certification Manual for Residents Mentors and Training Programs-CMRMT). In addition this list is not meant to exclude other resources that adequately address concepts as outlined in the GIG.

Note: When more than one edition is available then the most current edition is listed but earlier editions are often current enough with respect to core concepts.

- A Practical Guide to Cardiac Pacing 6th edition, Lippincott Williams & Wilkins, Philadelphia, 2007.
- Boon JA. Manual of Veterinary Echocardiography. 2nd edition, Williams & Wilkins, Baltimore, 2011.
- Braunwald's Heart Disease - A Textbook of Cardiovascular Medicine, 10th edition, Saunders Co., Philadelphia, 2014.
- Cardiac Electrophysiology: From Cell to Bedside 6th edition, Saunders, Philadelphia, 2013.
- Cardiology of the Horse 2nd edition, Saunders Ltd., 2011
- Drugs for the Heart 8th edition, Elsevier Saunders, Philadelphia, 2013.
- Clinical Arrhythmology and Electrophysiology; a companion to Braunwald's heart disease. 2nd edition. Elsevier and Saunders, Philadelphia, 2012
- Equine Internal Medicine. Reed SM, Bayly WM, Sellon DC (editors.), Saunders, St. Louis, 2010. *Cardiovascular Diseases*, Bonagura JD, Reef VB, Schwarzwald CC.
- Feigenbaum's Echocardiography. 7th edition, Lippincott, Williams & Wilkins, Philadelphia, 2009.
- Feline Cardiology 1st edition. Wiley-Blackwell, Ames, 2011
- Grossman and Baim's Cardiac Catheterization, Angiography, and Intervention 8th edition, Lippincott Williams & Wilkins, Philadelphia, 2013
- Miller's Anatomy of the Dog 4th edition, Elsevier and Saunders, St. Louis, 2012.
- Physiology of the Heart 5th edition. Katz AM., Lippincott Williams & Wilkins, Philadelphia, 2010. (Kindle 2011)
- Hurst's The Heart, 13th edition, McGraw-Hill, China, 2011
- Jubb, Kennedy and Palmers Pathology of Domestic Animals 6th edition, Elsevier and Saunders, St. Louis, 2015.
- Marriott's Practical Electrocardiography 12th edition, Lippincott Williams & Wilkins, Philadelphia, 2013.
- Moss and Adams' Heart Disease in Infants, Children, and Adolescents including the fetus and young adult. 8th edition, Lippincott Williams and Wilkins; 2012.



- Small Animal Cardiovascular Medicine. 2nd edition VIN online, 2005. [1st edition is also on VIN]
- Textbook of Clinical Echocardiography 5th edition, Elsevier and Saunders, St. Louis Philadelphia, 2013.
- Textbook of veterinary diagnostic radiology 6th edition, Elsevier and Saunders, St. Louis, 2013.
- Textbook of Veterinary Internal Medicine - Diseases of the Dog and Cat. 8th edition, Elsevier, St. Louis, 2017.
- The Cardiac Catheterization Handbook, 6th edition, Elsevier and Saunders, 2015.
- The Echo Manual, 3rd edition Williams & Wilkins, Baltimore, 2006.
- The Practice of Clinical Echocardiography, 4th edition Elsevier and Saunders, St. Louis, 2012.
- Veterinary Image-guided interventions 1st edition, Wiley-Blackwell 2015. (Kindle edition available)
- Veterinary Pharmacology and Therapeutics 9th edition, Wiley-Blackwell, Ames, 2009

Journals and Serial Textbooks

Veterinary cardiac literature from the last 5 years should receive the most attention (inclusive of dates up to Sept 1st of the year before the exam). In addition some relevant veterinary studies published in the human literature may be cited. Veterinary cardiac literature older than 5 years may also be referenced if more current publications have not addressed the topic.

Serial Textbooks

- Current Veterinary Therapy
- Vet Clinics of North America
- Proceedings of the Heartworm Symposium, American Heartworm Society: last 3 issues

Veterinary medical journals include:

- American Journal of Veterinary Research
- Journal of Veterinary Internal Medicine
- Journal of Veterinary Emergency & Critical Care
- Journal of the American Veterinary Medical Association
- Journal of the American Animal Hospital Association
- Veterinary Parasitology
- Veterinary Pharmacology and Therapeutics



- Veterinary Pathology
- Veterinary Radiology & Ultrasound
- Journal of Veterinary Cardiology
- Journal of Small Animal Practice

Human medical journals that maybe cited include:

- Circulation
- Journal of the American College of Cardiology
- American Heart Journal
- American Journal of Cardiology
- Journal of the American Society of Echocardiography
- British Heart Journal
- European Heart Journal
- Circulation Research
- New England Journal of Medicine

2017/2018 CARDIOLOGY EXAM COMMITTEE

- Chair: Dr. Barret Bulmer, Tufts VETS
- Co-Chair: Dr. Sara Bordelon, Chesapeake Veterinary Cardiology Associates
- Dr. Justin Carlson, Heart Health Veterinary Cardiology
- Dr. Katherine Scollan, Oregon State University
- Dr. Rebecca Stepien, University of Wisconsin
- Dr. Jordan Vitt, University of Illinois
- Dr. Jerry Woodfield, Northwest Cardiology Consultants

Please don't hesitate to contact the Chair by email (Barret.Bulmer@tufts.edu) with any questions or comments.

Good luck to all of you, and see you in June.