CALL FOR ABSTRACTS

POSTERS AND TECHNOLOGY DEMONSTRATIONS

2004 CLINICAL LABORATORY EDUCATORS CONFERENCE
February 26-28, 2004 Milwaukee, Wisconsin

AMERICAN SOCIETY FOR CLINICAL LABORATORY SCIENCE
EDUCATION SCIENTIFIC ASSEMBLY

This form must accompany all submitted abstracts.
Abstracts must be received by OCTOBER 1, 2003.

Abstract Title:

_____

_____

Presenting Author:

_____

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Work Phone: ( ) _____

Fax Number: ( ) _____ **ASCLS Member Number:** _____

E-mail Address: _____

Format Requested: [ ] **Poster** [ ] **Technology Demonstration**

Signature of Presenting Author: _____

E-mail this completed form, abstract, and multiple choice questions and answers by OCTOBER 1, 2003 to: joanp@ascls.org; Joan Polancic, ASCLS Director of Education and Project Planning. This form may be faxed to 303-904-8933, Attn: Joan Polancic.

2004 CLINICAL LABORATORY EDUCATORS CONFERENCE

ABSTRACT SUBMISSION INSTRUCTIONS

GENERAL

1. Abstracts must be submitted according to the instructions provided and be received no later than **OCTOBER 1, 2003**. Failure to follow format instructions will result in rejection of the abstract.
2. A nonmember may submit an abstract for presentation if an ASCLS member coauthors the abstract. All presenting authors must register for the meeting.
3. The technology demonstrations are for authors only, not retailers. Those individuals who wish to exhibit their programs for market purposes must buy an exhibit booth from CLEC.

PREPARATION OF COPY

All abstracts must be typed double-spaced on plain, white 8 + x 11-inch paper with one-inch margins. Recommended typeface is Times New Roman, 12-point type. Abstract text format is flush left. Text length (not including title and author information) must be 200 to 250 words, not to exceed 250 words. A single space return should be used to separate title, author information, and abstract.

1. **Title:** Use a concise title that reflects the abstract content. Capitalize the first letter of the first word and all other words except prepositions, conjunctions, and articles. Underline scientific genus and species names of organisms. Acronyms, abbreviations, and initialisms cannot be used in a title.
2. **Author/Institution:** Type authors' names, first name first. Asterisk (*) the name of the presenting author. Academic degrees are limited to the highest degree earned. Authors should use the NCA credential (when applicable). On the next line type the institutional affiliation of the authors. Do not include any other information (i.e. department, division, etc.). On the next line, list the city and the state of the institution.
3. **Abstract:** Begin typing the abstract on a new line and flush with the left margin. The abstract should be a one paragraph concise summary of the: 1) problem, 2) method/design/intervention used, 3) results/outcomes measurements, and 4) conclusions/applications/implications.
4. **P.A.C.E.® Credit Questions:** In order to be granted continuing education contact hours, participants attending the poster and technology demonstration sessions must submit answers to questions related to the problem, methods, and outcomes presented in the respective poster/demo sessions. For this purpose, **three multiple-choice questions with answers** must be submitted along with the abstract. Questions submitted should address information that can only be gained by viewing the poster; this is a way to reinforce the objectives or conclusions of the presentation. These questions are in addition to the 250 maximum word limit for the abstract.
5. **Submission requirements:** Submit the completed application form, the abstract, and three multiple-choice questions and answers (MS Word or WordPerfect) by email to Joan Polancic, Director of Education and Project Planning at joanp@ascls.org (you may FAX the submission form to 303-904-8933, attn: Joan Polancic). Hard copies are no longer required. All materials must be received by **October 1, 2003**.

ACCEPTANCE PROCEDURE

Appointed representatives of the ASCLS Education Scientific Assembly will review abstracts. Submitters will be notified by mail for acceptance/rejection of the abstract in December 2003. Date and time of presentation will be included in the acceptance letter. **NOTE:** Abstracts not postmarked by the deadline will be rejected without review or author notification.

MODE OF PRESENTATION

The program committee will schedule both poster sessions and technology demonstration sessions. For poster sessions, each author is provided an approximately 4-foot-high x 8-foot-wide bulletin board on which to display a summary of the paper. For technology demonstrations, a table with electrical service will be provided for set-up. Authors are responsible for providing their own equipment and making any special arrangements for hook-up. Authors remain at their poster/demonstration site for the duration of the time specified to present and answer questions from attendees.

Continuing Education Questions

SUMMER 2003

To receive 1.5 contact hours of intermediate level P.A.C.E.®, credit for **Reliability and Validity Measure**s, insert your answers in the appropriate spots on the immediately following page; then complete and mail the form as directed.

NOTE: There may be more answer spaces on the answer sheet than needed. If so, leave them blank. Make sure the number of the answer space you fill matches the number of the question you are answering.

LEARNING OBJECTIVES

After completing this article, the reader will be able to:

1. define measurement, describing sources and types of measurement errors.
2. define reliability and validity.
3. cite numerical ranges for reliability and validity.
4. describe how reliability and validity are each calculated.
5. explain how reliability and validity relate to measurement error(s).
6. apply reliability and validity concepts to the evaluation of managed care and similar studies.
7. describe the relationship between a theoretical concept and its operationalization.
8. list and define the types of validity that apply to evaluation of managed care and similar studies, including method(s) of measurement.

Sharon M Miller is the liaison for the CLS Continuing Education section. She reviews Focus articles, assigns contact hours, and edits learning objectives and test questions. Direct all continuing education inquiries to Sharon M Miller, 7N591 Cloverfield Circle, St Charles, IL 60175. (630) 513-1986. smmiller@elnet.com

CONTINUING EDUCATION QUESTIONS

1. Reliability may be defined as:
   a. how specific an instrument is.
   b. how accurate an instrument is.
   c. how well an instrument measures the same input at varying times and under varying conditions.
   d. how complete an instrument is.

2. Reliability is a ratio or fraction of the combined score variance to observed variance.
   a. True
   b. False

3. Reliability varies between:
   a. 1 and 0
   b. 1 and 10
   c. 1 and 100
   d. none of the above

4. If a measure is perfectly reliable there is no error in measurement.
   a. True
   b. False

5. Which is not a measure for assessing reliability?
   a. Test-retest.
   b. Gher-Wong.
   c. Alternative-form.
   d. Split-half.
   e. Internal consistency.

6. Researchers agree that the reliability of an instrument should not be below:
   a. 0.50.
   b. 0.60.
   c. 0.70.
   d. 0.80.

7. Validity may be defined as:
   a. how reliable the instrument is.
   b. how complete an instrument is.
   c. how up to date an instrument is.
   d. how accurately an instrument measures what one believes is being measured.

8. The process by which a theoretical concept is measured is called the:
   a. operationalization of the concept.
   b. reliability of the concept.
   c. validity of the concept.
   d. theoretical stage.

9. A type of validity that is common is:
   a. content related.
   b. criterion-related.
   c. construct validity.
   d. all of the above.

10. Measuring how well the operationalization of the concept compares to the relevant content domain is which type of validity?
    a. Content related
    b. Criterion-related
    c. Construct validity
    d. All of the above

11. Which validity method is applicable to concepts measured by multiple items?
    a. Content related
    b. Criterion-related
    c. Construct validity
    d. All of the above

12. Which validity method is not assessed statistically?
    a. Content related.
    b. Criterion-related.
    c. Construct validity.
    d. All of the above.

13. Assessments of validity do not involve theory.
    a. True
    b. False

14. Which validity method involves computing a correlation coefficient between the measure of the target concept and the measure of the criterion concept?
    a. Content related.
    b. Criterion-related.
    c. Construct validity.
    d. All of the above.

15. The theory that any measurement has two components: the true value and the observed value, is referred to as:
    a. random error theory.
    b. classical test theory.
    c. true score theory.
    d. both b and c.

16. The two types of error are:
    a. random error.
    b. infinity error.
    c. systemic error.
    d. a and b.
    e. a and c.

Continuing Education Registration Form

To earn continuing education (P.A.C.E.®) credit, (1) complete the form below, (2) record your answers, and (3) tear out and mail this form with a check or money order (**$18 for ASCLS members, $28 for non-members for all articles**) to:

American Society for Clinical Laboratory Science
P.O. Box 79154
Baltimore, MD 21279-0154

A certificate and credit will be awarded to participants who achieve a passing grade of 70% or better. Participants should allow eight weeks for notification of scores and receipt of certificates.

Reliability and Validity Measures carries 1.5 hours of intermediate level credit. This form can be submitted for credit for up to one year from the date of issue.

Print or type carefully.

(01) NAME _____ ASCLS membership number _____
Last First Middle

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(03) CITY_____(04) STATE/COUNTRY _____(05) ZIP/POSTAL CODE_____

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Check all that apply

- ❑ I am an ASCLS member
- ❑ I am not an ASCLS member
- ❑ I would like to receive ASCLS membership information
- ❑ I have previously participated in Focus
- ❑ I would like information on other continuing education sources

Answers

Circle correct answer (questions are on previous two pages).

1. a b c d e	8. a b c d e	15. a b c d e	22. a b c d e
2. a b c d e	9. a b c d e	16. a b c d e	23. a b c d e
3. a b c d e	10. a b c d e	17. a b c d e	24. a b c d e
4. a b c d e	11. a b c d e	18. a b c d e	25. a b c d e
5. a b c d e	12. a b c d e	19. a b c d e	26. a b c d e
6. a b c d e	13. a b c d e	20. a b c d e	27. a b c d e
7. a b c d e	14. a b c d e	21. a b c d e	28. a b c d e

Participant Information
Please circle the most appropriate answers.

1. Is this program used to meet your CE requirements for:
(a) state license (b) NCA (c) employment (d) other

2. Specialty: (a) biochemistry/urinalysis (b) microbiology (c) lab administration (d) hematology/hemostasis (e) education (f)immunology (g) immunohematology

3. Workplace: (a) hospital over 500 beds (b) hospital 200–499 beds (c) hospital 100–199 beds (d) hospital under 100 beds (e)private lab (f) community blood bank (g) group practice (h) private physician (i) clinic (j) other

4. Salary range: (a) under $10,000 (b) $10,000 to $20,000 (c) $20,000 to $30,000 (d) $30,000 to $40,000 (e) over $40,000

5. Did these articles achieve their stated objectives?
(a) yes (b) no

6. How much of these articles can you apply in practice?
(a) all (b) some (c) very little (d) none

7. Employment status: (a) full time (b) part time (c) student (d) not employed (e) retired

8. How long did it take you to complete both the reading and the quiz? _____minutes

9. What subjects would you like to see addressed in future Focus articles?

Continuing Education Questions

SUMMER 2003

To receive 3.0 contact hours of intermediate level P.A.C.E.®, credit for F**ocus: Cardiac Protocols**, insert your answers in the appropriate spots on the immediately following page; then complete and mail the form as directed.

NOTE: There may be more answer spaces on the answer sheet than needed. If so, leave them blank. Make sure the number of the answer space you fill matches the number of the question you are answering.

LEARNING OBJECTIVES

After reading the two Cardicac Protocols articles, the reader will demonstrate his/her understanding of the material by achieving the following:

1. Describe the biochemistry of the BNP and the other natriuretic peptides.
2. Describe the major physiologic responses to the elevation of BNP levels.
3. Discuss the mechanism by which the binding of BNP to the target cell results in alteration of Na^+ and water reabsorption.
4. Describe the formation of arterial plaque and the development of coronary artery disease and acute coronary syndromes (ACS).
5. Describe the physiological conditions that develop into CHF and cause the release of BNP.
6. Describe and interpret the diagnostic accuracy, sensitivity, specificity, and negative predictive values reported for rapid BNP assays.
7. Describe the trend toward "accelerated cardiac protocols," including which markers are suggested, and the suggested time-course of sequential testing.
8. Evaluate patient data and derive appropriate diagnostic conclusions.
9. Discuss the use of BNP for prognosis and screening of patients for LV dysfunction.
10. Discuss the interpretations of slightly elevated levels of troponin and C - reactive protein (CRP) as they relate to ACS and risk analysis.

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CONTINUING EDUCATION QUESTIONS

1. Which of the following statements best describes the BNP molecule?
   a. BNP is a steroid hormone similar to aldosterone.
   b. BNP is a short peptide of 8 amino acids similar to anti-diuretic hormone (ADH).
   c. BNP is a 32-amino acid peptide with a loop held in place by a disulfide bond.
   d. BNP has 2 peptide chains, which are held together by disulfide bonds, similar to insulin.

2. Which combination of renal responses do elevated levels of BNP promote?
   a. BNP causes increased excretion of Na^+ and decreased excretion of H_2O.
   b. BNP inhibits the renal excretion of both Na^+ and H_2O.
   c. BNP promotes the renal excretion of both Na^+ and H_2O.
   d. BNP blocks binding of aldosterone to renal cells, thus antagonizing the effects of mineralosteroids.

3. Binding of BNP to the cell surface leads to an increase in which 'second messenger' system in the target cell?
   a. BNP binding to the cell surface receptor leads to an increase in cAMP.
   b. BNP binding to the cell surface receptor leads to an increase in cGMP.
   c. BNP binding to the cell surface receptor causes autophosphorylation of tyrosine kinase.
   d. BNP binds to a nuclear receptor and directly promotes transcription.

4. Identify the correct series of events involved with development of arterial plaque and leading to rupture and thrombosis.
   a. Oxidized foam cells engulf LDLs, form plaques, fatty streaks develop, followed by rupture, and thrombosis.
   b. Macrophages engulf oxidized LDLs, become foam cells, form fatty streaks, plaques rupture, and cause thrombosis.
   c. Oxidized HDLs are engulfed by foam cells to form fatty streaks and plaques, which may rupture to cause thrombosis.
   d. Macrophages engulf oxidized LDLs, become fatty streaks, form plaques, and cause thrombosis when foam cells rupture.

5. Which of the following combinations of physiological conditions leads to ventricular release of BNP?
   a. Hypertension and hypernatremia
   b. Hypoxia and dyspnea
   c. Hypervolemia and hypoxia
   d. Hypervolemia and hypertension

6. Accelerated cardiac protocols for MI diagnosis and rule-out include the following cardiac markers and frequency of sequential testing:
   a. myoglobin, CK-MB, troponin, LDH drawn at 6 to 8 hour intervals.
   b. total CK, CK-MB, troponin drawn at 4 to 6 hour intervals.
   c. myoglobin, troponin, CK-MB drawn at 30 minute to 2 hour intervals.
   d. BNP, troponin, CK-MB drawn at 30 minute to 2 hour intervals.

7. The reported diagnostic sensitivity and specificity of BNP assays (with a cutoff of 80 pg/mL) for diagnosis of CHF are approximately:
   a. sensitivity of 65% and specificity of 75%.
   b. sensitivity of 98% and specificity of 92%.
   c. sensitivity of 95% and specificity of 82%.
   d. sensitivity of 82% and specificity of 84%.

8. A 53-year old male patient with dyspnea and chest pain has the following values for cardiac markers two hours after admission: troponin 0.3 ng/mL (reference <0.1 ng/mL), BNP 248 pg/mL (reference <80 pg/mL), myoglobin 77 ng/mL (reference 20 to 90 ng/mL), and CK-MB 2.5 ng/mL (reference 0.3 to 4.0 ng/mL).
   a. He is having an acute myocardial infarction.
   b. He is experiencing an episode of stable angina.
   c. He is experiencing an episode of congestive heart failure.
   d. He is experiencing an episode of unstable angina.

9. A 48-year old female patient with dyspnea and chest pain has the following values for cardiac markers at admission: troponin 0.5 ng/mL (reference <0.1 ng/mL), BNP 321 pg/mL (reference <80 pg/mL), myoglobin 457 ng/mL (reference 20 to 90 ng/mL), and CK-MB 5.6 ng/mL (reference 0.3 to 4.0 ng/mL).
   a. She is having an acute myocardial infarction.
   b. She is experiencing an episode of stable angina.
   c. She is experiencing an episode of congestive heart failure.
   d. She is experiencing an episode of unstable angina.

10. A 35-year old male patient with elevated baseline levels of CRP has which of the following:
    a. increased risk of development of CHF.
    b. decreased risk of development of ACS.
    c. increased risk of development of ACS.
    d. decreased risk of development of CHF.

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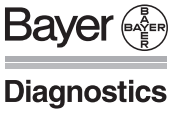

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