



The Pipette Line

Volume 34, Number 2
December, 2004

A Publication of the American Society for Clinical Laboratory Science-Georgia

PRESIDENT'S MESSAGE:

View from the Desk of Anne Rand

"Do not always follow where the path may lead. Go instead and create a better path and leave a trail." -

Ralph Waldo Emerson



The holidays and a New Year are events, which make me reflect on the paths I took this year and what paths lie ahead for me in the new year. I know it is not good for me to dwell on the events of the past, but I can learn from

them. Choosing the path to the state presidency position in February had not been on my 2004 list. I accepted the nomination and in doing so it created a new path for me. I have learned so much and made new friends in Georgia and our District III (eight states). We each have a choice to stay on the same path year after year or create a new path for ourselves. What will your choice be in 2005?

A current legislative issue that ASCLS Georgia faces is found in a state government report. The state's Budgetary Responsibility Oversight Committee (BROC) has created a report, which evaluates any redundancy or duplication of inspection resources by the state, local, and federal governments. Of course, state laboratory inspections were a part of this report. Should the state disband laboratory inspections since labs are inspected under the Clinical Laboratory Improvement Amendments of 1988 (CLIA)? We need to stand behind our state laboratory inspections by writing Governor Purdue and our state representatives. At this time there are only 115 of the 1,134 clinical laboratories required to obtain federal certification which means an inspection every 2 years and a state license which requires an inspection every year. If the state drops the state inspection then the clinical laboratories would only have to comply with the CLIA regulations and be inspected every 2 years.

ASCLS Georgia would recommend the state assume the regulatory responsibility for the laboratories. To obtain this exemption the state would have to adopt laws and regulations that were equal to or exceed federal regulations and that apply to all types of clinical laboratories, including physicians' office laboratories. I am asking you to create that better path and write to your state representatives and governor in support of DHR's Laboratory Licensure Program.

Contents	
Presidents Message	1
Memo to Students	2
Student's Perspective	3
Call for Nominations	4
Biochemistry of True Weight Loss	5
State meeting details	6-7

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Memphis, TN
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- National Student Representative**
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The Pipette Line

Editor: *Bonnie Gum*

The Pipette Line is a quarterly Publication of the **Georgia Society for Clinical Laboratory Science** for its members.

Note: Copies of complete board minutes and committee reports are available to members on request from Patricia Linkous, GSCLS secretary. Address all correspondence to

Pipette Line Editor
135 Huntington Drive
LaGrange, GA 30240

**Special People are around us
everyday.**

**Take time out, right now, and let
us know about them. Perhaps
something outstanding has hap-
pened in your community. Please
share with the Pipette Line editor
at the address above or email**

nagum@charter.net

**Pictures from your laboratory are
most welcome!!**

News From ASCLS-GA Membership Chair and Student Advisor Barbara Kraj

To: MT/MLT students in Georgia

Soon all of you will be receiving invitations to attend the ASCLS-Georgia annual meeting in Atlanta. As usual, the meeting will consist of educational lectures for professional laboratory personnel and reviews for students with a purpose to help them prepare for the Board Exams. You'll enjoy multiple vendors' exhibits and meeting other ASCLS members over a cup of coffee. Our Chair, Mrs. Anne Ranne will have a warm welcome speech for you too.

We are planning to have ASCLS-Georgia Student Forum Elections on the first day of the meeting. The current Student Forum officers: Christine Bell, Ashley Lewis and Nicole Jefferson will be graduating in May 2005 and the Forum will need new officers. I hope all the students from all MT/MLT programs in Georgia will attend the elections. I encourage everybody with some leadership skills who will graduate later than in 2005, to consider running for one of the offices. If you are not the leader type, please attend the elections to support your favorite candidates. The responsibilities of the President, Vice-President and the Secretary of the Forum will be explained prior the elections. Let me highlight some of those here.

It is imperative that the newly elected President will attend the annual ASCLS meeting in Orlando, which is planned for July 26-30, 2005. The organization will pay some of the trip and accommodation expenses for the President. He/she will have candidate and voting rights during the National Student Elections and these rights are lost in case the President fails to attend.

Student Forum President is considered a part of ASCLS-Georgia Board of Directors so it is expected that he/she will attend some of the BOD meetings held every 3 months. Nobody will force you to participate in every meeting. We realize that your priority is studying (we used to be students too).

My new goal as a Student Advisor is to help the Student Forum Chair in maintaining the contact network (even if it is just exchanging ideas and information via e-mail) between the students from different schools in Georgia and with Student Forums from other states belonging to ASCLS Region III (North Carolina, South Carolina, Tennessee, Alabama, Florida, Mississippi and Puerto Rico). I am in the process of getting an up-to-date contact list from the National Student Advisor Scott Aikey and First Year Professional Chair Robbee Peetz. In previous years I did not coordinate this kind of network and I hope it will be useful. The elected officers will have to be introduced to Maia Maiden, who is at present the National Student Forum Chair.

The Vice-President's job will be to support and accompany the President, attend the meetings that the President can not be present at etc. There is a full spectrum of duties for the Secretary, including responsibility to update the student "corner" on our website page, which is currently under construction.

As new officers **YOU** will establish new duties and responsibilities for each office and create new offices or committees so every student who wants to be involved in ASCLS will be able to do that. (continued on page3)

(News From ASCLS-GA Membership Continued from page2)

The candidates running in the elections will have a chance to present themselves to other students so please discuss between yourselves the issues that bother you as MT/MLT students and be ready to address them during your election speeches. GOOD LUCK!

Please, keep in mind that my function is to be an Advisor, not a Supervisor! I look forward to hear any comments or suggestions from you. You may either e-mail me at bkraj@mail.mcg.edu or call me at work at 706-721-1136 or at home at 706-737-8227.

If you are not an ASCLS-Georgia member I hope you will become one soon. I am sure your professors and instructors will encourage you to do so. Please take your time and check the ASCLS website www.ascls.org to find out more about the Society. If you do not know how to become a member please, let me know and I will provide you with all the information you need.

If you already are a member, please, maintain your membership current so you don't fall into the lapsed members' list and keep all your contact information current in the members' section of the ASCLS website (www.ascls.org). If you can not reach the members' section because you forgot your password or your membership number I will help you resolve the problem. It is vital that the contact information is constantly updated. This way all the correspondence with the upcoming ASCLS events will reach you on time!



Board Meeting in Savannah, November 2004

Left to Right: Hassan Aziz (Armstrong), Michelle Butina (Armstrong), Lisa Anderson (Armstrong), Cathy Weaver (Wellstar), Anne Ranne (MCG), Lester Pretlow (MCG), Ron Macy (Irwin County Hospital)

From a student perspective: The Broad Spectrum of Opportunity-Christine Bell

Upon entering the field of Clinical Laboratory Science, I did not really know what to expect. I thought that many of the other students would have the same goals as myself, wanting to get a Bachelor's degree and work in a hospital laboratory. I discovered that many students use medical technology as an avenue for many other medical professions such as: medicine, dentistry, physical therapy, and physician's assistant. Clinical Laboratory Science is also a broad field providing in-depth technical knowledge in preparation for careers such as: hospital clinical laboratory scientists, reference laboratory scientists, educators, supervisors, and Point of Care Testing coordinators. While options are also available at the Centers for Disease Control or Georgia Bureau of Investigation, my new personal favorite has become medical missions.

Studying for classes and labs can be very intense and exhausting, but for me in the last week they have taken on a new meaning. I look forward to progressing through my clinical rotations, graduating in May, and going to Honduras to work as a Medical Technologist in Loma De Luz Missionary Hospital for the summer. I am very excited about using the knowledge that I have gained the last two years and look forward to sharing it in an undeserved area where there is little to no healthcare. I now have a new joy for learning as I feel I am working toward a greater goal. I will bring what I learn here to another part of the world where people do not have as much healthcare education. When I attended the ASCLS convention in LA, I realized the wealth of knowledge that Clinical Laboratory Scientists

Students fill a vital role in this organization. We need to hear from you. Submit your articles to Bonnie Gum at

gumb@wghs.org

Tell me about what your class is doing, where they are going after they graduate, what's in your future.

ASCLS CALL FOR NOMINATIONS

The ASCLS-Georgia Nominations Committee is seeking nominations for the following positions. All currently active (dues-paid) members may nominate other active qualified members for these posts.

President-elect - Responsibilities:

Shall act as the chief executive officer of the Society in the absence, disability or death of the president; shall serve on the Region III council of ASCLS; shall assume other responsibilities customary to the office; shall serve as President for the succeeding term.

Qualification: Must have been an active member of the Society for a period of twelve months prior to nomination.

Term of office: One year as President-elect (2005-2006), one year as President (2006-2007), one year as Past-President.

Secretary - Responsibilities:

Shall prepare and keep a file of the minutes of all meetings; be responsible for the preparation and distribution of the Annual Report; shall notify all members of the Society of the place and time of the meetings; shall notify members of the Board of Directors of Board Meetings; other responsibilities customary to the office.

Qualification: Must have been an active member of the Society for a period of twelve months prior to the nomination

Term of office: One year 2005-2006. May succeed him/herself for one (1) term only.

Treasurer - Responsibilities:

Shall record and have charge of all funds of this Society; deposit such funds in a bank designated by the Board of Directors; initiate an annual review of the books; report the financial condition of the Society to the Officers or Board whenever requested; receive dues from membership from the Executive Office of ASCLS.

Qualification: Must have been an active member of the Society for a period of twelve months prior to the nomination.

Term of office: Two years 2005-2007.. May succeed him/herself for (1) term only.

District Directors See ASCLS-Georgia Handbook or By-laws for a complete list of counties in each district.
II. Savannah and Brunswick IV. Macon V. Columbus –Americus-Lagrange VI. Atlanta-NW GA
VIII. Gainesville

Responsibilities: Shall include close liaison and representation between membership within the District and the Board of Directors of the Society and other responsibilities of the Board members.

Qualification: Must be an active or emeritus member of the Society; must have been a member of the Society for at least one year prior to the nomination.

Term of office: Two years 2005-2007. A District Director may serve no more than two consecutive terms.

Nominations and Elections Committee (two members)

Responsibilities: Publish (90 days prior to the annual meeting) a call for nominations and a list of officers and board members whose terms will expire at the end of the annual meeting; certify eligibility of those nominated; present a slate of candidates for office 30 days prior to the annual meeting; conduct the elections during the annual meeting.

Qualification: Active member of the Society

Term of office: Two years (2005-2007), two members elected annually

Please send nominations to the Chair of the Nominations Committee:

Cathy Weaver
3927 Paces Ferry Drive
Atlanta, GA 30339-4415
Cweaver@czinc.com
H 770-434-8889
W 770-793-5445

Biochemistry of True Weight Loss

(This article is based on a presentation by Linda S.Gorman, Ph.D. at ASCLS in Los Angeles, July, 2005.)

Holiday festivities delay the ultimate selection of the first diet of the New Year. As a refresher, students of the weight loss process should understand four basic points:

1. The metabolism in endurance training increases muscle utilization of energy.
2. A comparison of benefits and disadvantages of high CHO, low fat diets.
3. A critical evaluation of high protein low CHO diets.
4. The chemistry factors involved in energy metabolism leading to successful weight loss.

Energy metabolism is either aerobic or anaerobic. Aerobic energy is sustained over a long time period by ATP from the Krebs cycle, maintaining a high oxygen level and balanced muscle contraction. Anaerobic energy offers short energy bursts from glycolysis-generated ATP but low oxygen levels and greater muscle fatigue.

Although muscle is 75% , 20% protein and 5% other chemicals, the key energy related components are the myoglobin, blood supply and muscle fibers. Myoglobin binds the oxygen. An increased blood supply to the muscles of endurance trained athletes increases nutrient and hormone flow to the tissues and quickly removes heat and waste products from the contraction. Endurance training increases the percent of slow twitch skeletal muscle fibers. These are high in mitochondria, have low myosin-ATPase, handle Ca^{+2} slowly resulting in high-energy aerobic metabolism. The fast-twitch quick action fibers rely on anaerobic metabolism of myosin-ATPase and rapid Ca^{+2} release and uptake. Fewer mitochondria are present and the muscle fatigues more quickly.

Adequate oxygen supply enables muscles to use fatty acids and some glucose as energy sources. Fatty acids are released from adipose tissues when the sympathetic nervous system stimulates release of epinephrine and norepinephrine, which in turn activate hormone-sensitive lipase to breakdown stored triglycerides in adipose tissue.

Endurance training increases slow-twitch large muscles, sustains an elevated heartrate and maintains an aerobic mode at a heart rate of 80% or less. Sprinters short distance training and sedentary lifestyles fosters fast twitch muscles and anaerobic energy. Exercise increases several hormone secretion rates: pituitary (growth hormone, TSH, prolactin), adrenal aldosterone, thyroid T3 and T4, pancreatic glucagon and kidney renin (B.P. regulator). FSH and LH levels remain unchanged. Cortisol and epinephrine increase only after heavy exercise. Insulin decreases with exercise, possibly due to increased glucagon and shift to aerobic metabolism with less glucose in circulation.

Weight loss diets often cause the body to enter an energy-preservation mode marked by lower metabolic rate, low oxygen consumption, decreased enzyme synthesis and actual weight gain by decreasing T3 and T4. An ideal diet maximizes body fat loss and minimizes loss of lean body mass.

High fat, low CHO, high protein diets like the Atkins and South Beach diets, lead to a ketogenic state from high protein. High water loss precedes any body fat loss. These diets are nutritionally deficient in Vitamins E, A, thiamin, B6, folate, dietary fiber, calcium, magnesium, iron and potassium. Physical activity combined with these diets will help maintain lean body mass and encourage fat loss. High protein diet metabolism results in ketosis, increased uric acid from purines, increased LDL-cholesterol, decrease in insulin as a protein cycle component, decrease in leptin (appetite depressor), bone loss, kidney changes (size and function) and variable results in blood pressure.

Low fat, high CHO diets (Pritkin or Ornish) are distinguished by soy dairy products, vegetables and fruits and very limited if any meat or fish. Vitamin E, B12 and zinc insufficiencies occur. HDL-cholesterol levels may decrease. Triglycerides generally lower with weight loss but may increase short term if the CHO are not associated with high fiber. The most positive outcomes for high CHO diets include decreases in lipids, blood pressure, glucose and insulin.

Successful weight loss diets rely more on reduced caloric intake than the actual composition of the diet. Weight loss continues until body metabolism converts to a self-preservation mode to maintain itself. Exercise maintains lean body mass throughout a diet. The National Weight Control Registry promotes this maintenance diet protocol:

- 40g fat (24% energy)
- 200 g CHO (56% energy)
- 70 g protein (19% energy)
- fruits, vegetables, Ca^{+2} -rich, low Fe
- exercise to maximize usage of energy-source intake

**ASCLS-GA 2005 Annual Meeting
REGISTRATION FORM**

Name: _____

Address: _____

City, State, Zip _____

Phone: _____ (Work) Phone: _____
(Home)

ASCLS Member #: _____ Non-member: _____

Employer: _____

Email Address: _____

ASCLS Member: 2 days \$ 120 _____

1 day (Mon or Tue) \$ 60 _____

Non-Member: 2 days \$ 150 _____

1 day (Mon or Tue) \$ 70 _____

Student Member: 2 days \$ 50 _____

1 day (Mon or Tue) \$ 25 _____

Student Non-Member: 2 days \$ 50 _____

1 day (Mon or Tue) \$ 25 _____

Institution Passes: 2 days (for 3) \$ 375 _____

Late Fee/On-site Fee: Add to any registration fee if
received after

February 15, 2004 (exception: students) \$20 _____

TOTAL _____

**MAKE CHECKS PAYABLE TO ASCLS-GA
PAYMENT MUST ACCOMPANY REGISTRATION
FORM. Sorry, credit cards are not accepted. Refund
requests must be made in writing and postmarked by
February 15. Indicate below the session numbers of the
programs that you plan to attend**

Monday: _____

Tuesday: _____

Name: _____

Send REGISTRATION FORM to:

Lester Pretlow, Treasurer
ASCLS-Georgia
1059 Hampstead Place
Augusta, GA 30907
706-721-3046
706-721-7631 (fax)
lpretlow@mcg.edu

Hotel Information:

Marriott Century Center

2000 Century Boulevard

Atlanta, Georgia 30345

Reservations: 800-228-9290

Phone: 404-325-0000 Fax: 404-325-4920

<http://marriott.com/property/propertyPage/ATLNE>

The Marriott Century Center has set aside a block of rooms for meeting attendees. When making reservations be sure to identify yourself as attending the ASCLS-Georgia 2005 Annual Meeting. Guest room reservations must be received by February 6 or availability and room rates cannot be guaranteed.

Room Rate: \$115 + tax

Check In: 4:00 PM

Check Out: 12:00 Noon

With in the Greater Atlanta area, the Marriott Century Center offers a convenient location, yet puts you close to the sights and sounds of Atlanta.

* Adjacent to interstate 85

* 19 miles to Atlanta International Airport

* Minutes from downtown Atlanta

* Numerous restaurants/fast food establishments to fit every whim within just a few blocks

Registration Information:

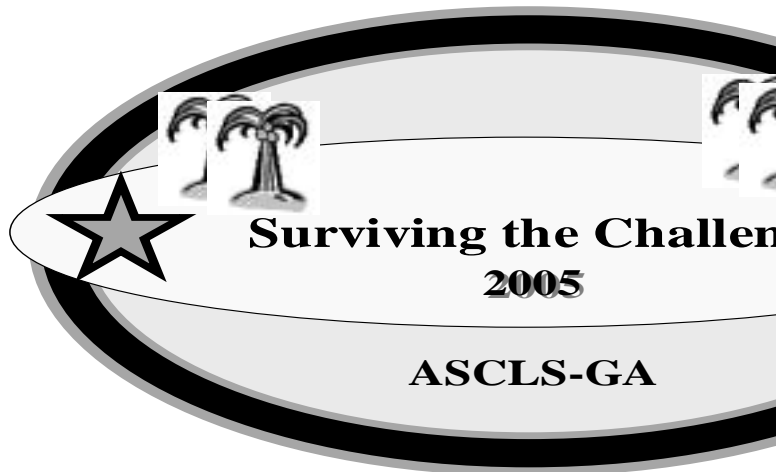
1. Two day registration includes the exhibits, lunch, breaks and all educational sessions.

2. An institutional pass consists of a badge to be used by three persons at a time. When a user leaves the meeting, the badge is returned to the registration desk for the next user. The badge allows attendance at all educational sessions.

Three lunches are included per day. Additional participant attendance may be purchased at \$25 each prior (no lunch included). Additional brown bag lunches are \$10.

3. Registration forms will not be accepted without full payment.

4. Requests for refunds must be in writing and postmarked by **February 15, 2005.**



57th ANNUAL ASCLS-GA MEETING
February 28-March 1, 2005
Atlanta, Georgia
Marriott Century Center

Monday, February 28, 2005

7:00-8:00 AM **Registration, and Coffee**

8:15-9:15 AM **Keynote Speaker: Joeline Davidson "Surviving The Challenge, 2005"**

Reviews, Sessions, and Workshops

Morning

- | | | | |
|---|---|--|---|
| 1. Dr. Lester Pretlow, MCG
Chemistry Review
8:00-10:00 AM | 2. Shrita Smith, BD
Phlebotomy Workshop
9:30-12:15 AM | 3. Dan Kirk, GBI
GCMS: An Analytical Application
9:30-10:30 AM | 4. Kim Randolph, Lanier Tech
Hematology Review
10:15-12:15 PM |
|---|---|--|---|

Afternoon

- | | | | |
|---|---|--|---|
| 5. Anne Ranne, MCG
The Lab's Role in Bio-Terrorism
11:00-12:15 PM | 6. Dr. Hassan Aziz, AASU
Microbiology Review
1:30-3:30 PM | 7. Dr. Anne Herdman, MCG
Pathology Case Study
1:30-2:30 PM | 8. Dr. James Fulcher, MCG
Pathology Case Study
2:30-3:30 PM |
|---|---|--|---|

Late Afternoon

- | | | | |
|--|---|---|---|
| 9. Regina Mobley, Bayer
UA Case Study
1:30-3:30 PM | 10. Ann Arnette, MCG
Immunology Review
3:45-5:30 PM | 11. Dr. Hassan Aziz, AASU
Ed. Methods for Clinical Instructors
4:15-5:30 PM | 12. K. Norris/A. Sekhda, MCG
Molecular Diagnostics
4:15-5:30 PM |
|--|---|---|---|

12:15-1:45 PM Lunch, Exhibits, Student Meeting & Elections

Tuesday, March 1, 2005

Morning

- | | | | |
|--|--|--|---|
| 1. Anne Ranne, MCG
Introduction
8:00-8:15 AM | 2. Dr. E. Kenimer-Leibach, MCG
Blood Bank Review
8:00-10:00 AM | 3. Dr. Lester Pretlow, MCG
Metabolism & Low Carb Dieting
8:15-10:00 AM | 4. CLIA, CAP, JCAHO Roundtable
8:15-10:00 AM |
|--|--|--|---|

Midmorning

- | | | |
|---|--|--|
| 5. Christopher Fetters, NOVA
POC Billing: Yes You Can!
10:45-12:15 PM | 6. Regina Mobley, MCG
UA & Body Fluids Review
10:15-12:15 PM | 7. S. Anderson, Thermogenesis
Cord Blood Processing
10:45-12:15 PM |
|---|--|--|

Afternoon

- | | | | |
|--|---|--|--|
| 9. Michelle Butina, AASU
Coagulation Review
1:45-2:45 PM | 10. Shrita Smith, BD
Phlebotomy Workshop
1:45-4:00 PM | 11. Lisa Anderson, AASU
Blood Bank Case Study
1:45-4:00 PM | 12. Barbara Russell, MCG
Mycology/Parasitology Review
3:00-4:00 PM |
|--|---|--|--|

12:15-1:45 PM Lunch, Exhibits, Awards

4:00-5:15 PM ASCLS-GA Business Meeting

February 24-26, 2005

**Clinical Laboratory Educators Conference
Williamsburg, VA**

February 28-March 1, 2005

57th Annual ASCLS-GA Meeting, Atlanta, GA

March 21-22, 2005

Legislative Symposium, Washington D.C.

April 28-30, 2005

Institute for Quality in Laboratory Medicine, Atlanta, GA

July 26-30, 2005

ASCLS Annual Meeting, Orlando, FL

TBA 2005

**Expo for Health Careers, ASCLS Learning for Life
Explorers Committee**



website <http://www.ga.ascls.org>

ASCLS - GA

135 Huntington Drive

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