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2006 ASA Rovenstine Lecture:

Jerry Reves, M.D., Responds to Dr. Guidry's Challenges Regarding Anesthesiology Research

W. Andrew Kofke, M.D., M.B.A., Editor AUA Update

Professor, Department of Anesthesiology and Critical Care University of Pennsylvania

In the Spring 2006 *AUA Update*, then ASA President Orin F. Guidry, M.D., appealed to AUA members and its leaders to devise a plan for improving research in anesthesiology. Debra A. Schwinn, M.D., and Jeffrey R. Balser, M.D., Ph.D., have contributed important suggestions in a recent issue of *Anesthesiology*.* Their suggestions, controversial to some, focused on training program changes, and they noted:

"Any such efforts to strengthen anesthesiology subspecialty training will undoubtedly fail without the strong support of our board and accrediting agencies. 'Optional' research electives are poorly subscribed in all centers and will never suffice for changing our future. There must be a willingness to establish new anesthesiology subspecialty training programs and to apply firm criteria to all such programs, because improving the standing of research and scholarship within our specialty will require a difficult cultural shift."

Their ideas and suggestions were further supplemented in this year's ASA Emery A. Rovenstine Memorial Lecture in the form of an interesting and provocative root cause analysis of problems with anesthesia research with some suggested solutions. The full text of the talk presented by Jerry Reves, M.D., on October 16, 2006, will appear in an upcoming issue of *Anesthesiology*. Dr. Reves was kind enough to provide some of the slides that detail his analysis and, without further comment, they are duplicated in the following pages.

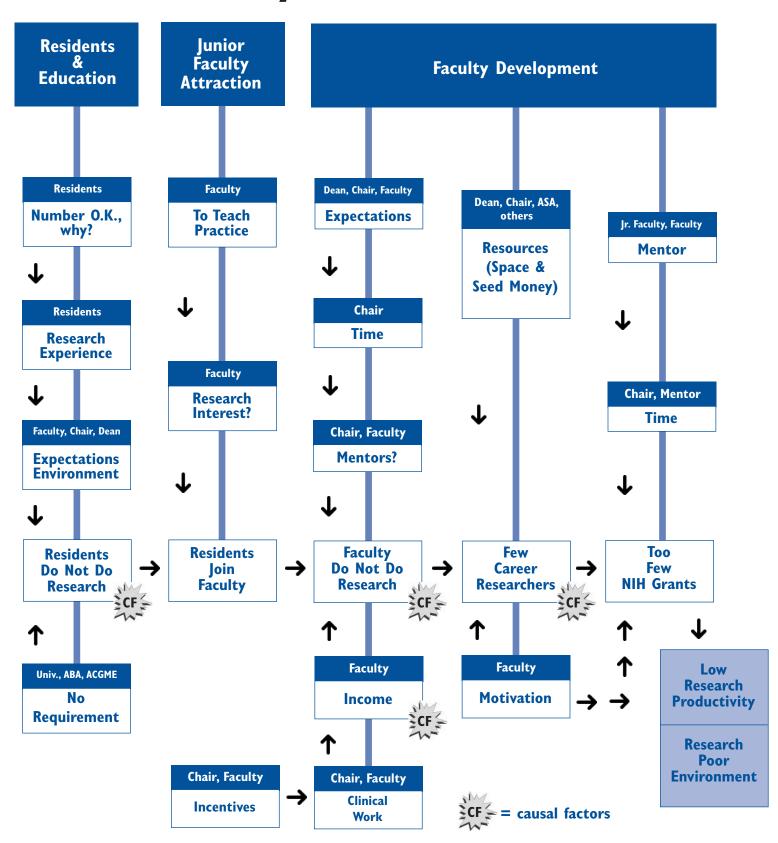
know that something needs
to be done, but I do not
know what. I call on AUA
and its members, as leaders
in academic anesthesiology,
to speak up and get
involved in this debate.
Submit written proposals to
whatever aspect of
organized anesthesiology
that is best suited to make
the change you propose. We
do not have much time."

"My frustration is that I

— Orin F. Guidry, M.D., Spring 2006 *AUA Update*

^{*} Schwinn DA, Balser JR. Anesthesiology physician scientists in academic medicine: A wake-up call. *Anesthesiology*. 2006; 104(1):170-178.

Root Cause Analysis Anesthesia Research



Reves JG. "We Are What We Make," presented at ASA 2006 Annual Meeting, October 16, 2006.

AAMC Recommendations That Anesthesiology Should Immediately Embrace

Recommendation 1: Every future physician should receive a thorough education in the basic principles of translational and clinical research, both in medical school and *during residency training*.

Recommendation 2: The Liaison Committee on Medical Education (LCME) should add education in translational and clinical research to the requirements for medical school accreditation, and the Accreditation Council for Graduate Medical Education (ACGME) should embed understanding of translational and clinical research within its required core competencies.

Can Anesthesiology be the first specialty to fully implement?



Root Cause Summary Table (Slide 3)

Causal Factor I	Recommendations
Residents Do Not Do Research	 Chair, residency director and faculty must expect some of the residents to excel in research. Recruit medical students who have experience and desire to continue research. Target M.D., Ph.D. grads. Provide resident with an advisor who stimulates resident to get involved in research in first and subsequent years. Have ample variety of research within the department. RRC and ABA must explicitly make research in the first three years more than an "exceptional" experience – research should be as easy and expected as a rotation on subspecialties, e.g., cardiac anesthesia. It should be possible to have done 30 months of research during a four-year residency for those who elect to do so. Provide research mentors (in or outside department) for the serious resident investigator. Create a departmental atmosphere where the joy and excitement of investigation fill the air – excellence in research, teaching and clinical care are all highly valued – there should be no separation of these three missions. Commit to the implementation of recommendations of the AAMC Task Force on Translational and Clinical Science.

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Root Cause Summary Table (Slide 4)

Causal Factor 2	Recommendations
Faculty Income	 Adjust the departmental value system to reflect university goals of achieving excellence in research and education. Constantly demonstrate the rewards of academic excellence compared to financial rewards in the community hospitals. Make it clear that academic anesthesia is about advancement of careers and furthering the field — not maximizing personal income. Provide non-remunerative rewards such as time for scholarly activities. Create an environment where the greatest gratification is seeing the next generation of anesthesiologists succeed and the present generation of academic anesthesiologists is advancing the field. Mix with faculty of all disciplines — especially the other "research-oriented" specialties — be full-fledged university faculty. Have an incentive plan in place that is consistent with excellence in all three academic missions.

Root Cause Summary Table (Slide 5)

Causal Factor 3	Recommendations
Faculty Do Not Do Research	 Have clear expectations that promotion in the department is dependent on scholarly activities in addition to clinical excellence. Have a mentoring plan for all junior faculty — mentors may be outside department — create faculty development plan that is reviewed each year. Assist the junior faculty person with resources to achieve educational and research goals (use VA). Have an incentive plan that rewards growth and development in research. Provide encouragement to the discouraged. Applaud publicly achievements along the road to investigative success.

Root Cause Summary Table (Slide 6)

Causal Factor 4

Recommendations

Few Career Investigators





- I. Determine how many career investigators the department can support.
- 2. Provide the resources (time, money and space).
- 3. Revoke the present anesthesiology teaching rule that specifically encumbers academic anesthesiology departments.
- 4. Secure support for developing clinical investigators from ASA, IARS, subspecialty societies and other foundations.
- 5. Demonstrate the great variety and potential for anesthesiology clinician scientists.
- 6. Participate in interdisciplinary and translational work.
- 7. Work in important and timely research areas.
- 8. Secure extramural peer-reviewed support for investigator-initiated research and for training grants.

Winter 2006

Compact Between Resident Physicians and Their Teachers

Alan Jay Schwartz, M.D., M.S.Ed. AUA Educational Advisory Board

Director of Education Pediatric Anesthesiology Fellowship Director Children's Hospital of Philadelphia Department of Anesthesiology and Critical Care Medicine Clinical Professor of Anesthesiology and Critical Care University of Pennsylvania

Education is experience after experience added to by further experience entered into by a multitude of players — residents and fellows, faculty teachers, residency and fellowship program directors, leaders of institutions that sponsor graduate medical education and patients, families and everyone with a vested interest in the public trust related to health care.

ducation is change in behavior based on experience. Education is experience after experience added to by further experience entered into by a multitude of players — residents and fellows, faculty teachers, residency and fellowship program directors, leaders of institutions that sponsor graduate medical education and patients, families and everyone with a vested interest in the public trust related to health care. Do all who "play the education game" speak the same language? Is communication clear enough to avoid missed expectations on the part of the different players? Unfortunately not!



Alan Jay Schwartz, M.D., M.S.Ed.

The matrix of education and its participants enables exponential combinations and permutations of interpersonal interactions that can positively and/or negatively influence the experience. Without explicit, clearly articulated common principles that all of the players understand and agree to, the education that results can be like a "Tower of Babel."

The Association of American Medical Colleges (AAMC) clearly recognizes this potential (or real) disaster. In January 2006, AAMC published the "Compact Between Resident Physicians and Their Teachers" (the Compact) to provide explicit and clearly articulated common principles that all of the players in the educational endeavor understand, have common expectations about and can agree upon.¹

"The Compact ... is a declaration of the fundamental principles of graduate medical education (GME) and the major commitments of both residents and faculty to the educational process, to each other and to the patients they serve... [Its] purpose is to provide institutional GME sponsors, program directors and residents with a model statement that will foster more open communication, clarify expectations and re-energize the commitment to the primary educational mission of training tomorrow's doctors."

Thirty-three influential medical education organizations supported the Compact. AUA, the Accreditation Council for Graduate Medical Education [ACGME] (representing, among others, the Residency Review Committee for Anesthesiology) and the American Board of Medical Specialties (representing the American Board of Anesthesiology, among others) are included in the 33 sponsors.

"This compact [which] serves both as a pledge and as a reminder to resident physicians and their teachers that their conduct in fulfilling their obligations to one another is the medium through which the profession perpetuates its standards and inculcates its ethical values" is an elegantly written three-page document with the following outline:

- Introduction
- Three Core Tenets of Residency Education
- 10 Commitments of Faculty
- 10 Commitments of Residents²

On face value, the Compact can be used "as is" to enable all of the players to reach an agreement, a consensus, on what the educational experience is and how it will proceed. Like Talmudic scholars, AAMC took one step further and considered additional uses for the Compact.³

"Among the possibilities that have been suggested by those who have reviewed the document thus far are the following:

- As a point of departure for discussions with residents, faculty and institutional leaders about relevant issues addressed by the Compact.
- As part of the orientation of first-year residents.
- As part of the orientation of new faculty.
- As part of the programs' written curricula to be reviewed yearly with all residents and faculty.
- As a topic for residents' retreats, noon conferences or grand rounds to highlight exemplary as well as unacceptable behavior and appropriate expectations of both residents and faculty.
- As a component of resident and/or faculty evaluations.
- As a recruitment tool to be distributed to prospective residency applicants, signifying the program's commitment to its core educational mission.
- As part the ACGME-required internal review of the program's compliance with institutional standards.
- As part of a "Professionalism Ceremony" in which the Compact could be signed by faculty and residents as a formal pledge to uphold its commitments."³

Have you read the Compact? Do your residents and fellows have a copy of the Compact? Have your faculty colleagues adopted the Compact as a guide to their graduate medical education scholarly activity? The "Compact Between Resident Physicians and Their Teachers" is an essential document for everyone involved in medical education and patient care. Couple the Compact with the "Hippocratic Oath," and all bases will be covered on the hows and whys of graduate medical education!

References:

- < www.aamc.org/meded/residentcompact > . Accessed November 8, 2006.
- 2. < www.aamc.org/meded/residentcompact/residentcompact.pdf > . Accessed on November 8, 2006.
- 3. < www.aamc.org/meded/residentcompact/compactuses .pdf > . Accessed on November 8, 2006.

"Couple the Compact with the 'Hippocratic Oath,' and all bases will be covered on the hows and whys of graduate medical education!"

Winter 2006 AUA Update

Would YOU Like to Influence the Educational and Scientific Content of the AUA Annual Meeting?

The AUA Educational Advisory Board (EAB) helps to develop programs for the Annual Meeting. These programs are oriented toward the educational mission of our specialty. The EAB also contributes articles to the AUA newsletter. The full committee meets during the AUA Annual Meeting.

Committee members are expected to attend the annual meeting and the EAB committee meeting as well as actively participate in all committee activities.

AUA members who are interested in serving on the EAB, who plan on attending AUA annual meetings and who are willing to help undertake the work of the committee are encouraged to submit their names or those of other members with a brief resume by March 1, 2007, to:

Peter Rock, M.D., M.B.A., EAB Chair

< prock@aims.unc.edu >

The AUA Council and the EAB chair will choose three candidates who will then be contacted to confirm their willingness to serve. The three-year term begins after the AUA Annual Meeting.

The AUA Council would like to invite AUA members to nominate another member or apply themselves for service on the Scientific Advisory Board (SAB). The SAB determines the scientific content of the Annual Meeting and provides input to the AUA Council on issues pertinent to the scientific mission of AUA. An SAB member has three responsibilities: 1) grade abstracts for the AUA Annual Meeting; 2) attend the Annual Spring Meeting to help with scientific sessions and to meet at the SAB luncheon for discussion of issues relevant to the SAB; and 3) contribute a 500- to 1,000-word article pertaining to science in some way to the AUA newsletter once during the three-year term on the SAB. Articles might be short reviews of some recent scientific advance or pertinent topic, a meeting review or an opinion

To nominate a member or to apply for service on the SAB, please e-mail curriculum vitae by **March 1**, **2007**, to:

C. Michael Crowder, M.D., SAB Chair

< crowderm@morpheus.wustl.edu >

The AUA Council and the SAB chair will choose three candidates who will then be contacted to confirm their willingness to serve. The three-year term begins after the AUA Annual Meeting.

Membership Nominations

Online AUA Membership Nominations Now Available

The online process has been improved, and AUA will ONLY ACCEPT online nominations. Paper nominations will be returned to the nominator and will not be considered.

Submission Deadline is January 28, 2007

How Do I Nominate Someone?

ll AUA members are invited to nominate candidates for membership in the association beginning on Wednesday, November 29, 2006. Qualifications for active membership are: An individual a) who occupies and has occupied a faculty position in anesthesiology in a medical school or its affiliated teaching hospital in the United States or Canada for at least 24 months, following completion of graduate university residency training in anesthesia, and b) whose work as anesthesiologist, teacher or investigator gives promise of a successful career in academic anesthesia. However, c) individual exceptions to the above residency qualifications shall be made at the discretion of the Executive Council when one of the following two conditions apply: 1) when the candidate has had a course of graduate training in anesthesia of a high standard or 2) when the candidate has shown a continued productive interest in, and contribution to, academic anesthesiology.

The Council recommends for election by the general membership those candidates who seem best qualified. In the Council's deliberations, great emphasis is placed on excellence in areas of pertinence to the goals of the Association. This year the Council is requesting that the nominator identify — from among the areas of teaching, administration and research — the one in which the candidate is most outstanding. The nominating letter should discuss accomplishments and contributions in teaching, research, administration and patient care, but should emphasize the identified area of excellence.

The Council seeks evidence of a nominee's impact on anesthesiology beyond his or her own institution and of activity of more than local interest. Such documentation should be as objective and non-anecdotal as possible. Ensuring that all the documentation is in order will facilitate consideration of the nomination. Lack of documentation of achievements and lack of supporting letters are frequent causes of failure of a nomination.

Although AUA is primarily oriented toward U.S. and Canadian anesthesiologists who have actively contributed to academic anesthesiology, occasionally it is appropriate to provide Honorary Membership to anesthesiologists residing in other countries. Honorary Membership in AUA should be limited to those few exceptional individuals who have made sustained and significant contributions to the specialty. Their contributions should have significantly and fundamentally altered the practice of anesthesiology and/or enhanced the understanding of basic science related to anesthesiology. These individuals and their accomplishments should be known and recognized by most, if not all, members of AUA. The reason for such Honorary Membership should be clearly stated by the nominators, emphasizing how such recognition would benefit the AUA. The format for nominations is the same as for Active Members; nominators should also state the willingness of the nominee, if elected, to meet the same meeting attendance requirements as Active Members.

New to this year's process, only electronic submissions via the AUA Web site will be accepted beginning Wednesday November 29, 2006. Paper nominations will not be considered by the Council and will be returned to the nominator.

Nominators can access the online nomination process by visiting < www.auahq.org > and clicking on the "Membership Process" section. You will need the AUA username "auamember" and password "papper." Please have the following information available before you begin the submission process. You will not be able to save your information during this process. All information must be completed at one time in order for the submission to be completed. Please allow approximately 30 minutes to complete the following steps needed to submit your nomination.

The following information is needed in order to complete the nomination process:

- 1. The nominator contact information (full name, title, institution, address, phone, fax and e-mail address).
- 2. The nominee contact information (full name, title, institution, address, telephone, fax and e-mail address).
- 3. The nomination letter (this information can be copied and pasted into text boxes).
- 4. The seconding nominator information. (full name, title, institution, address, telephone, fax and e-mail address).
- 5. The seconding nominator letter (this document must be in a Word or PDF file).
- 6. Five references [NEW policy beginning in 2007] (full name, title, institution, address, telephone, fax and email address).
- 7. Curriculum vitae (this document must be in a Word or PDF file).
- 8. Peer-reviewed grant funding (this may be copied and pasted into a text box or uploaded as a Word or PDF file).

If you have questions regarding the new process, please contact the AUA office at (847) 825-5586 or <j.davis@asahq.org>.

Winter 2006 AUA Undate



54th Annual Meeting April 26-29, 2007

Sheraton Chicago Hotel and Towers



Thursday, April 26

5 – 8 p.m.

8 – 10 p.m.

Friday, April 27

7 a.m. - 5:45 p.m.

7 - 8 a.m.

8 - 8:15 a.m.

8:15 - 10:15 a.m.

10:15 - 10:20 a.m.

10:20 - 10:45 a.m.

10:45 - 11:45 a.m.

11:45 a.m. - 1:15 p.m.

1:15 p.m. – 2 p.m.

2 – 3:45 p.m.

2 - 2:20 pm.

2:20 - 2:40 p.m.

2:40 - 3 p.m.

3 - 3:20 p.m.

3:20 - 3:45 p.m.

Registration

Welcoming Reception

Registration

Continental Breakfast

Introductions
Jeffrey L. Apfelbaum, M.D.
C. Michael Crowder, M.D.,
Ph.D.

Oral Presentations

Presentation of Travel Awards

Coffee Break, Poster Viewing and Discussion

NIH Session: Challenges and Opportunities for the National Institute of General Medical Sciences Jeremy M. Berg, Ph.D.

Group Luncheon

ASA President's Address Mark J. Lema, M.D., Ph.D.

EAB Session — Part 1: Resident Issues That Affect Every Training Program Moderator: James R. Zaidan, M.D., M.B.A.

The Disruptive Resident Experience From a Program Steven J. Barker, Ph.D., M.D.

Record Keeping, Counseling, Steps to Dismissal James R. Zaidan, M.D., M.B.A.

Return to Residency Aftercare and Recovery Catherine K. Lineberger, M.D.

Experiences With the Law ADA and FMLA as They Apply to Residency M. Christine Stock, M.D.

Question-and-Answer Session

3:45 - 4:15 p.m.

4:15 - 5:45 p.m.

4:15 - 4:30 p.m.

4:30 - 4:45 p.m.

4:45 - 5 p.m.

5 - 5:15 p.m.

5:15 - 5:30 p.m.

5:30 - 5:45 p.m.

5:45 p.m.

Coffee Break, Poster Viewing

and Discussion

AUA President's Panel: Strategies for Keeping Academics in Academic

Anesthesiology

Overview and Review of

Issues

Roberta L. Hines, M.D.

FAER Medical Student Anesthesia Research Fellowshib

Alan D. Sessler, M.D.

Innovative Resident Training Progress for Future

Academic Physicians: The APGAR Program Margaret Wood, M.B.

Interdisciplinary Research: Our Answer to the Roadmap Laura E. Niklason, M.D., Ph.D.

Emeritus Faculty: An Underutilized Resource Fredrick K. Orkin, M.D., M.B.A., M.Sc.

Discussion Session

Evening on own

Saturday, April 28

7 a.m. – 5:15 p.m.

7 - 7:45 a.m.

7:45 - 11:35 a.m.

7:45 - 8:35 a.m.

8:35 - 9:25 a.m.

9:25 - 9:50 a.m.

Registration

Continental Breakfast

The University of Chicago Hospitals Host Program

First Steps: Discovering the Earliest Creatures to Walk on Land Neil Shubin, Ph.D.

The Dead Sea Scrolls Controversy — How It Happened and Where It Stands Today Norman Golb, Ph.D.

Coffee Break, Poster Viewing and Discussion

9:50 — 10:45 a.m.	Pheromones, Social Scents and the Unconscious Martha McClintock, Ph.D.
10:45 — 11:35 a.m.	The Dark Side of the Universe Edward Kolb, Ph.D.
11:35 a.m 12:45 p.m.	Luncheon
11:35 a.m. – 12:45 p.m.	Resident Luncheon
12:45 – 1:30 p.m.	AUA Business Meeting
I:30 – 2:30 p.m.	SAB Plenary Session Charles Berde, M.D., Ph.D.
2:30 – 3:45 p.m.	Moderated Poster Session
3:45 – 5:15 p.m.	EAB Session – Part 2: Entrepreneurial Strength as a Goal of an Academic Department Moderator: William E. Hurford, M.D.
3:45 – 4:05 p.m.	Practice Management Consultation: Using an Academic Approach for Development of Optimal Practice Patterns Franklin Dexter, M.D., Ph.D.
3:45 — 4:05 p.m. 4:05 — 4:25 p.m.	Consultation: Üsing an Academic Approach for Development of Optimal Practice Patterns
Sheet 2	Consultation: Using an Academic Approach for Development of Optimal Practice Patterns Franklin Dexter, M.D., Ph.D. How to Facilitate Successful Implementation of Inventions and Patents
4:05 – 4:25 p.m.	Consultation: Using an Academic Approach for Development of Optimal Practice Patterns Franklin Dexter, M.D., Ph.D. How to Facilitate Successful Implementation of Inventions and Patents Warren M. Zapol, M.D. Telemedicine: The Journey From Concept to Commercialization

Sunday, April 29

7 - 10:30 a.m. Registration 7 - 8 a.m.Continental Breakfast 8 - 10 a.m. **Oral Presentations**

10 - 10:30 a.m. Coffee Break, Poster Viewing, and Discussion

Museum of Science and

Industry

Hotel Information

AUA has reserved a block of rooms at the Sheraton Chicago Hotel and Towers in Chicago, Illinois. Daily guest rates for attendees who indicate that they are attending the AUA 54th Annual Meeting will be \$243 per night for single/double occupancy, plus applicable taxes. This rate will apply three days prior to and three days after the dates of the Annual Meeting. All room reservations must be guaranteed with a major credit card or one night's deposit; a 72hour cancellation fee applies for room cancellations. Please make your room reservations by accessing the following site: <www.starwoodmeeting.com/Book/AUA07>.

Please note, if you wish to arrive prior to April 26 or depart after April 29, you must call Sheraton reservations at (877) 242-2558. The cut-off date to book your hotel reservations is March 26, 2007. Reservations received after the cut-off date are subject to space and rate availability.

Registration Fees

Early Bird on/before April 5, 2007	After April 5, 2007	Membership Renewal
\$335	\$360	\$200
\$335	\$360	
\$250	\$275	
\$200	\$235	
event \$125	\$135	
	on/before April 5, 2007 \$335 \$335 \$250	on/before April 5, 2007 \$335 \$360 \$335 \$360 \$250 \$275 \$200 \$235

^{**}Reception and Dinner at the Museum of Science and Industry.

* Please note that your membership dues must be current in order to attend the AUA Annual Meeting.

Winter 2006 AUA Undate



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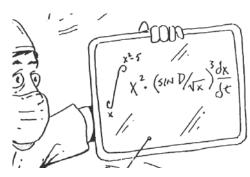
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To the Editor:

Te are concerned about the implications of the cartoon that appeared in the September issue of the AUA Update. In this cartoon, an anesthesiologist is depicted asking a patient to solve a mathematical problem to demonstrate readiness for extubation.

While we certainly do not object to the use of problems from the integral calculus to assess the mental state of our patients, we think that this particular problem is unfair. The integral shown in the cartoon is poorly formulated and is without an appropriate differential form. If the differential operator (d/dt) were placed prior to the integral, then the integral can be computed. However, this is going to require some judicious substitutions [we tried y = x-1/2 and used sin(3x)



= $3 \sin(x) - 4 \sin 3(x)$]. With these substitutions, the problem seems to yield a long integration by parts with over a dozen terms and two infinite series. Of course, if x is not a function of t, then this is a trick question, and the answer is 0. This may not be readily apparent to a patient who still has disconjugate gaze.

Perhaps the clinician who wishes to assess mentation in a patient emerging from anesthesia should stick to more traditional questions. For example, one might ask the patient to hold up fingers representing the first nine digits of pi (3.14159265), to indicate the number of elements in the null set (0), or even to answer a word question (e.g., "Which amendment in the U.S. Bill of Rights prohibits excessive bail or cruel and unusual punishment?" [VIII]).

Please be assured that we continue to support our AUA and its newsletter in the quest to maintain the highest standards of patient care.

Sincerely, Stanley Rosenbaum, M.D. Professor of Anesthesiology, Internal Medicine and Surgery

Keith J. Ruskin, M.D. Professor of Anesthesiology and Neurosurgery

Jeffrey Schwartz, M.D. Associate Professor of Anesthesiology

Yale University New Haven, Connecticut

