



Demands and Resources; Update on Surgical Training Requirements and Resources

Bryan T Carroll M.D. PhD.

Ian A. Maher M.D.

We have no relevant conflicts of interest

- We will be discussing some educational interventions that we helped develop

We will cover a fair number of resources

- You don't need to take notes.
- We will send out a handout after the meeting!

Dermatology has a rich history of procedural innovation

- Mohs
- Local reconstruction
- Tumescent liposuction
- Botulinum toxin
- Fillers
- Acne surgery
- Chemical peels

Injectable cosmetics

Before



After



Mohs and reconstruction



This expanding knowledge has
placed an educational burden
on training programs

What are the current state of requirements?

ACGME Program Requirements for Graduate Medical Education in Dermatology

ACGME approved focused revision: June 14, 2015; effective:
July 1, 2016 Editorial revision: February 8, 2016

Medical Knowledge

IV.A.5.b).(4)

must demonstrate knowledge of proper techniques for botulinum toxin injections, soft tissue augmentation, repairs of cutaneous surgical defects using flaps and grafts, and the use of light, laser, and other energy-based modalities for skin conditions;

(Outcome)

IV.A.5.b).(5)

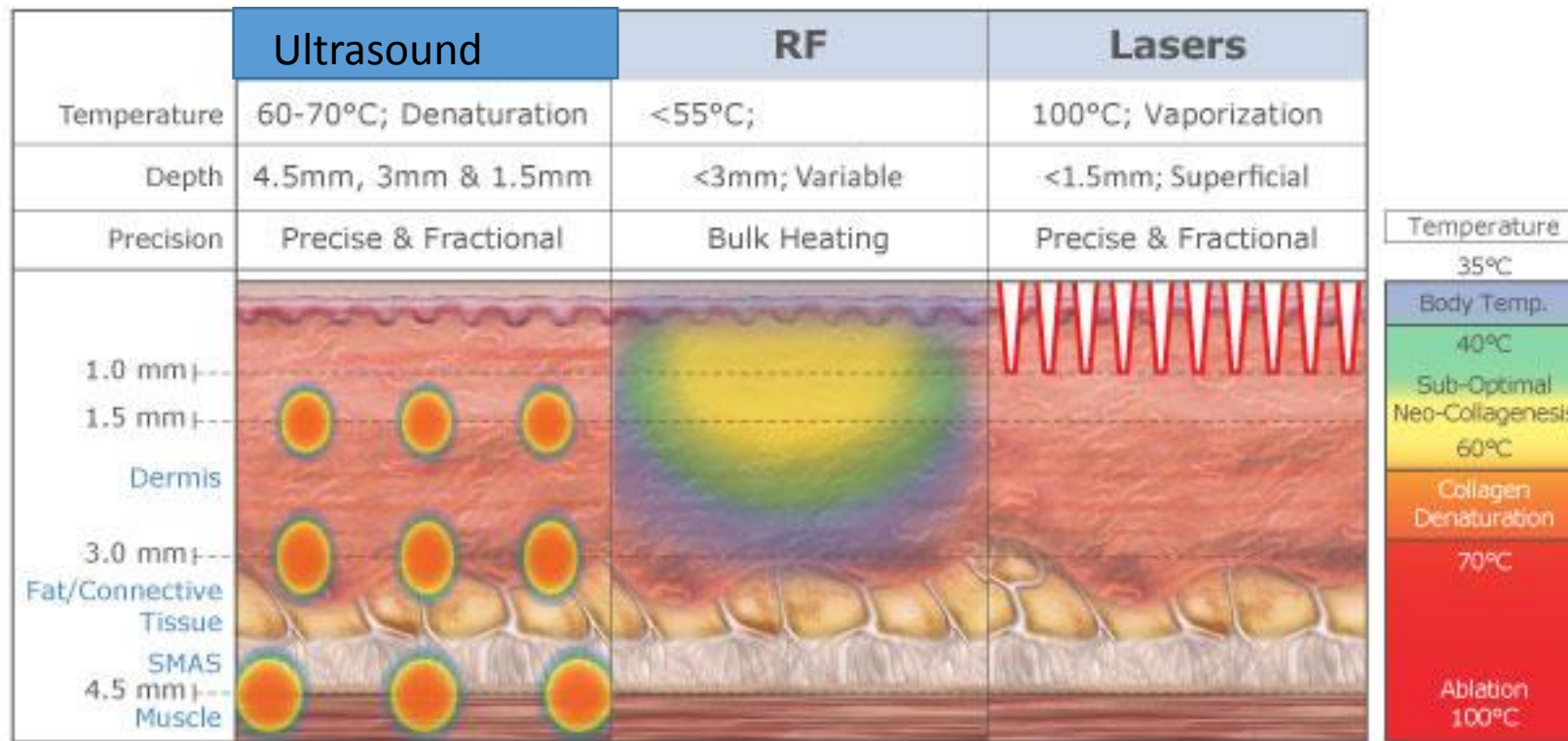
must demonstrate knowledge of indications and contraindications for, and complications and basic techniques of elective cosmetic dermatology procedures, to include chemical peels, dermabrasion, hair transplants, invasive vein therapies, liposuction, scar revision, and sclerotherapy; and,

(Outcome)

Residents must have didactic instruction for these topics, but neither performance of these procedures nor direct observation is required.

(Detail)

“Other energy based”



Patient Care and Procedural Skills

Residents must be able to competently perform all medical, diagnostic, and surgical procedures considered essential for the area of practice.

The dreaded case log

Categories	Asst/Observe	Primary Prov	Resident Surgeon	Total	Minimum
Botulinum toxin chemodeinnervation	0	0	2	2	10
Excision - benign or malignant	0	0	2	2	50
Flaps and grafts (split or full)	0	0	0	0	13
Laser - combined (ablative, non-ablative, vascular)	0	0	0	0	15
Mohs Micrographic Surgery	0	0	0	0	15
Nail Procedures	0	0	0	0	3
Repair (closure) - simple/intermediate/complex	0	0	1	1	50
Soft tissue augmentation/skin fillers	0	0	0	0	5

Note: The minimums for excision and repair are based on surgeon only, all other categories are based on the total of surgeon and observed/assist.

“Surgeon” requirements

- **Basic Principle:** To be recorded as the resident “surgeon” in the ACGME Resident Case Log System, a resident must be present for, and must participate in, **all** of the critical portions of the procedure being logged, under the supervision of an attending surgeon. Involvement in the pre-operative assessment, intra-operative planning, and the post-operative management of that patient is critical to that participation. The attending surgeon remains responsible for resident supervision and patient care.

“Competence” required

- Skin biopsy techniques
- Local and regional anesthesia
- Destruction of benign and malignant tumors,
- Excision of benign and malignant tumors
- Layered repair


Resources for attaining competence

- Clinical experience
- Hands on courses
 - ASDS
 - Cadaver and model based
 - AAD
 - Model based
 - Regional courses
 - Mainly cadaver based



Cadaver courses are educationally powerful! But crushingly expensive.

Masters Workshop:
**Advanced Flaps and
Aesthetic Facial Reconstruction**
A Hands-On Cadaver Workshop



SAINT LOUIS
UNIVERSITY
An offering through:
Practical Anatomy & Surgical Education,
Department of Surgery
Saint Louis University School of Medicine

COURSE DIRECTORS:
Scott W. Fosko, MD
Morris E. Hartstein, MD, FACS
David EE. Holck, MD, FACS
Ian A. Maher, MD

HONORED GUEST FACULTY:
Tri H. Nguyen, MD

Register on-line at <http://pa.slu.edu>



Model based courses at meetings

Cheap, relatively high impact



Resources for assessing competence

Original Investigation

**Objective Structured Assessment of Technical Skills
in Elliptical Excision Repair of Senior Dermatology Residents**
A Multirater, Blinded Study of Operating Room Video Recordings

Objective Structured Assessment of Technical Skills in Elliptical Excision Repair of Senior Dermatology Residents A Multirater, Blinded Study of Operating Room Video Recordings

Table 3. Applicants Correctly Performing Task on Technical Skill Task Checklist by Rater

Task	Surgeon Trainees, No. (N = 12)
Selection of appropriate instruments and suture	12
Correct placement of needle in holder	11
Correct insertion of needle into tissue >80% of bites (ie, at 90°)	10
Equal bites on either side of wound	11
Correct entry and exit points for given needle	10
Distance between sutures	10
Curvature of needle followed	12
Smooth passage of needle, no hesitancy	11
Careful handling of skin edge with forceps	12
Dermis handled to cause eversion of edge	10
Adequate dermis bite	11
Square knot from first 2 throws	11
Adequate number of throws	11
Knot moved from suture line to cause eversion if necessary	11
Stitch perpendicular to wound edge	12
Eversion and apposition of wound edge	8

“Significant exposure” required.
Direct observation or assistant in;

- Mohs
- Flaps and grafts
- Laser and energy sources
- Botulinum toxin
- Soft tissue procedural dermatology

Medical Knowledge

IV.A.3. Regularly scheduled didactic requirements

- There should be a well-organized course of instruction in **the basic sciences** related to medical dermatology, surgical and aesthetic dermatology, dermatopathology, and pediatric dermatology. (Core)
- Didactic sessions should include lectures, conferences, seminars, demonstrations, clinical education rounds, book and journal reviews, patient case reviews, and histologic slide review. (Core)
- **Topics relating to cosmetic techniques, including liposuction, scar revision, laser resurfacing, hair transplants, and invasive vein therapies, must be included in didactic sessions.** (Core)

Resources

- Durable E-resources
 - Online voice over PowerPoint curriculums
 - Video lectures for basic and advanced techniques
 - Online journal review and didactic aids
- Live
 - ASDS Visiting professor program
 - Dermatologic Surgery Journal Club Webinar

MDlive.net



A forum to gather and share medical Information.

MEETINGS & LECTURES

MDwebNews

ABOUT US

Dermatologic Surgery Core Curriculum

Directed by Stuart J. Salasche, MD

Lecturer	Topic	
Stuart Salasche	Surgical Anatomy: Part I	
Stuart Salasche	Surgical Anatomy: Part II	
Robert Kirsner	Wound Healing	

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http://mdlive.net/dermsurg_sch.htm

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MEETINGS & LECTURES

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ABOUT US

Jeffrey Dover	<u>Laser Surgery Part I: Principles and Concepts</u>
Roy Geronemus	<u>Laser Surgery Part II: Vascular Lesions</u>
Roy Grekin	<u>Laser Surgery Part III: Hair Removal, Pigmented Lesions</u>
Marc Avram	<u>Introduction to Hair Replacement Therapy</u>
Naomi Lawrence	<u>Introduction to Liposuction and Tumescent Anesthesia</u>
Gary Monheit	<u>Introduction to Face Peels</u>
Mitchel Goldman	<u>Introduction to Sclerotherapy</u>
Christopher Zachary	<u>Laser Surgery Part IV: Resurfacing</u>

http://mdlive.net/dermsurg_sch.htm



UCIRVINE

Dermatologic Surgery Fundamentals

Lecture #15: Complications in Dermatologic Surgery

Franki Lambert Smith, MD; Mariah Ruth Brown, MD;
and Adam M. Rotunda, MD

Dermatologic Surgery Fundamental Series

- Surgical Instruments and Sterilization
- Suture Properties and Wound Closure Materials
- Electrosurgery
- Wound Healing and Dressings
- Suturing
- Local Anesthetics
- Elliptical Excision
- Neurotoxins
- Laser and Light-Based Devices
- Sclerotherapy
- Complication in Dermatologic Surgery
- Grafts Part I: Full and Split Thickness Skin Grafts
- Grafts Part II: Other Grafts, Skin Substitutes and Second Intention Healing
- Mohs Micrographic Surgery
- Local Flaps and Interpolated Flaps



Procedural Dermatology Series

- Sutures Part I
- Sutures Part II
- Biopsy Tips and Tricks
- Excision



David Carr MD and Thomas E. Rohrer MD

**Step-by-Step
Procedural Videos**







Excisions

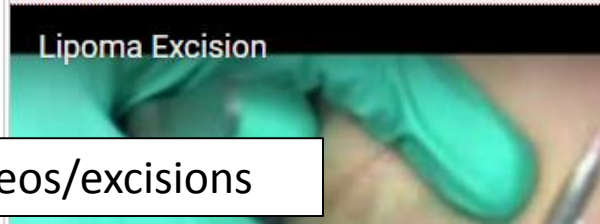
Cyst Excision

Cyst Excision



Lipoma Excision

Lipoma Excision

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Online Video Tutorials in Oculoplastic Surgery

Welcome to Oculoplastics.info.

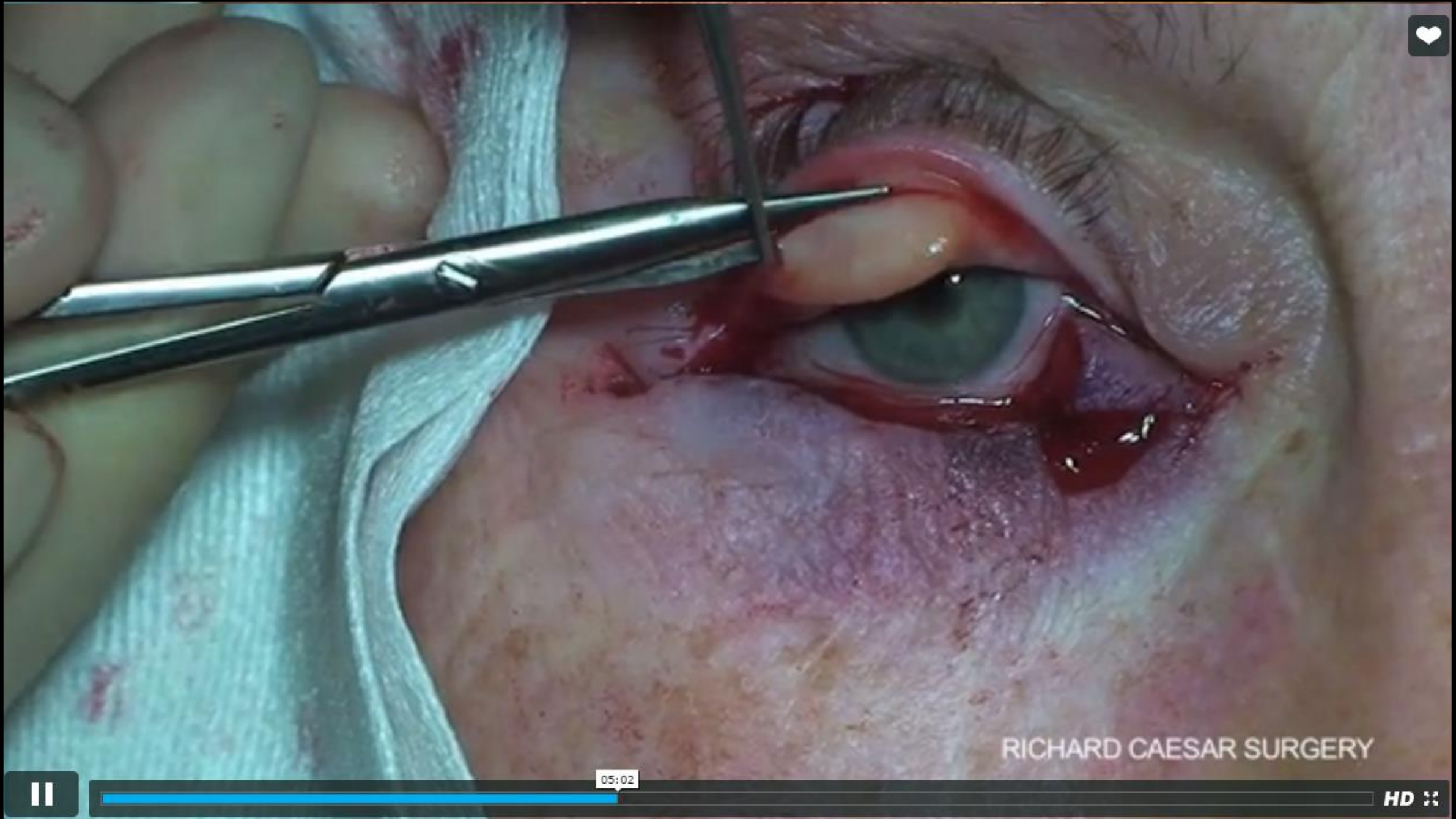
This site has aimed to provide surgical trainees with free access to a comprehensive video atlas of oculoplastic surgical techniques and tutorials since 2009. The original site featured flash video but as iPads and iPhones and the mobile internet have become more and more prevalent the site has now been updated to feature a fully responsive design with HTML5 videos.

I hope you like the new design.



Social Media Links





RICHARD CAESAR SURGERY

05:02



HD

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Dermatology

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National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, USA

**Georg Stingl**

University of Vienna Medical School, Austria

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Cells to Surgery Quiz

The *JID*'s monthly Cells to Surgery Quiz features clinical images. It covers the contents of a new *JID* original article and discusses the latest surgical literature as it pertains to that article. This activity will help solidify the reader's understanding of the information by linking events at the molecular, cellular, and clinical levels.

[Current Quiz](#)[2016](#)[2015](#)[2014](#)

Cells to Surgery Quiz: October 2016

Ariel E. Eber, Robert J. Magno, John P. Tsatalis, Marina Perper, Adam S. Aldahan, Keyvan Nouri

Journal of Investigative Dermatology, Vol. 136, Issue 10, e107

[Full-Text HTML](#) | [PDF](#) | [Supplemental Materials](#)



Cells to Surgery Quiz: September 2016

Marina Perper, Christopher P. Emerson, Rachel A. Fayne, Amr Molla, Adam S. Aldahan, John P. Tsatalis, Keyvan Nouri

Journal of Investigative Dermatology, Vol. 136, Issue 9, e97

[Full-Text HTML](#) | [PDF](#) | [Supplemental Materials](#)



Cells to Surgery Quiz: August 2016

John P. Tsatalis, Marina Perper, Adam S. Aldahan, Christopher P. Emerson, Amr Molla, Keyvan Nouri

Journal of Investigative Dermatology, Vol. 136, Issue 8, e85

[Full-Text HTML](#) | [PDF](#) | [Supplemental Materials](#)



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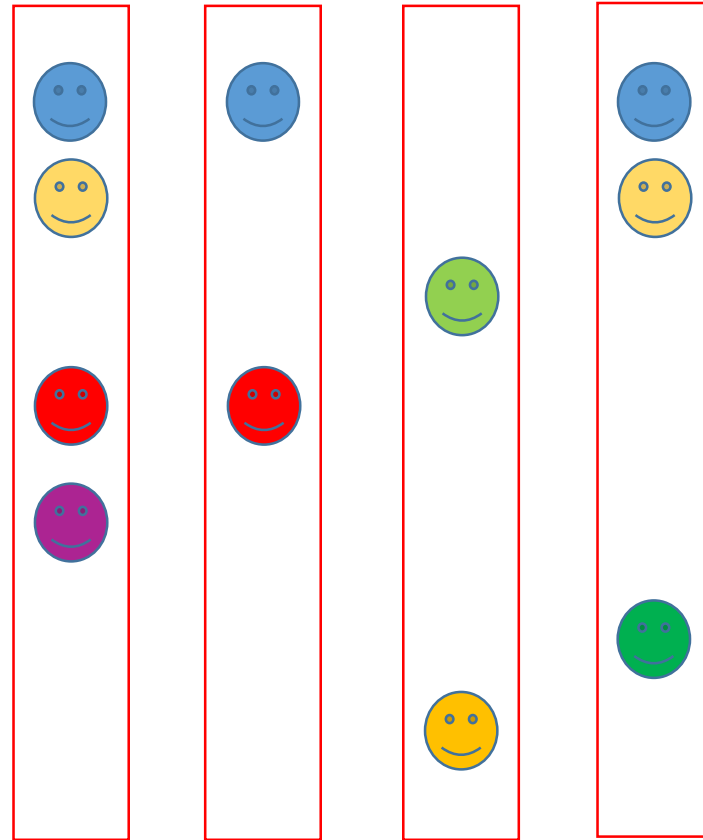
Few Programs have an expert to provide hands on training for every technique

- Excisions
- Mohs
- Tumescant liposuction
- Botulinum toxin
- Fillers
- Acne surgery
- Chemical peels



Since most programs can offer only a subset of skills, what is available for increased exposure?

- Excisions
- Mohs
- Tumescant liposuction
- Botulinum toxin
- Fillers
- Acne surgery
- Chemical peels



Visiting Professor Program



Naomi Lawrence, MD (third from left), shares her knowledge of fillers and skin aging with University of Utah dermatology residents during her trip to Salt Lake City as part of the ASDS Visiting Professor Program.

ASDS Visiting Professor Program

NAME	LOCATION	COSMETIC	SILICONE	VEIN SURGERY / SCLEROTHERAPY	LASER SURGERY / RESURFACING	CHEMICAL PEELS	DERMABRASION	PHLEBOLOGY	BLEPHAROPLASTY	TUMESCENT LOCAL ANESTHESIA	LIPOSUCTION / TUMESCENT LIPOSUCTION	EXCISIONAL SURGERY	MOHS SURGERY / MICROGRAPHIC	SURGICAL PRACTICE	RECONSTRUCTIVE SURGERY	SOCIOECONOMIC	FACELIFT
R. Rox Anderson, MD	Boston, MA				X												
Harold J. Brody, MD	Atlanta, GA	X	X			X											
Mitchel P. Goldman, MD	San Diego, CA	X		X	X			X									
George J. Hruza, MD, MBA	Chesterfield, MO				X							X	X	X	X	X	
Jeffery A. Klein, MD, MPH	San Juan Capistrano, CA									X	X						
Naomi Lawrence, MD	Marlton, NJ	X									X		X	X	X		
Stephen Mandy, MD	Miami Beach, FL	X		X	X		X			X	X	X	X				
Gary Monheit, MD	Birmingham, AL	X		X	X	X							X	X	X		
Ronald Moy, MD	Beverly Hills, CA	X			X				X				X		X		X
Arisa Ortiz, MD	San Diego, CA	X			X								X		X		
Thomas Rohrer, MD	Chestnut Hill, MA	X			X								X		X		

Dermatologic Surgery Journal Club Webinar

- Started in December 2012 by Murad Alam and Ian Maher.
- Frequently only a single derm surgeon/department
- Can lead to intellectual isolation vis a vis surgical topics
- Aim to provide high impact session reviewing best of previous month's derm surgery relevant literature.
- 30-45 minute monthly webinar session

Sentinel Lymph Node Biopsy in Thin Cutaneous Melanoma: A Systematic Review and Meta-Analysis

Annals of Surgical Oncology



**Dermatology and
Skin Surgery Center**
University of Missouri Health Care

DERMATOLOGIC SURGERY

Identifying and defining complications of dermatologic surgery to be tracked in the American College of Mohs Surgery (ACMS) Registry

M. Laurin Council, MD,^a Murad Alam, MD, MSCI,^b Hugh M. Gloster, Jr, MD,^c Jeremy S. Bordeaux, MD, MPH,^d
Bryan T. Carroll, MD, PhD,^e Justin J. Leitenberger, MD,^f Oliver J. Wisco, DO,^g and Ian A. Maher, MD^h
*St Louis, Missouri; Chicago, Illinois; Cincinnati and Cleveland, Ohio; Norfolk, Virginia;
and Portland and Bend, Oregon*

May 24, 2016

Mariah Brown MD
University of Colorado

Is There a Role for Arnica and Bromelain in Prevention of Post-Procedure Ecchymosis or Edema? A Systematic Review of the Literature

DEREK HO, BS,* JARED JAGDEO, MD, MS,^{*†‡} AND HEIDI A. WALDORF, MD^{§||}

David R. Carr, MD FAAD FACMS

The Ohio State University

Division of Dermatology

“Competence” required

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- Clinical experience and patient care boards
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- Book-based curriculum and surgical journal club
- Electronic Resources
 - Online voice over PowerPoint curriculums
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- Visiting Professor Program

Thank you for your time and attention!
Any questions?