

Department of Physical Medicine and Rehabilitation
New Jersey Medical School

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July 2010

Chair's Corner



Greetings NJMS alumni, friends and colleagues:

This completes my 23rd year as Chairman. I officially retired from all obligations in the Kessler system on June 30, 2010. My last title was Founding Director of the Kessler Foundation Research Center. I am now devoting full time to being the PM&R Department Chair at New Jersey Medical School. The Foundation has established the Kessler Foundation/Joel A. DeLisa, M.D. Award for Excellence in Research and Education in the field of Physical Medicine and Rehabilitation. This is to be a \$50,000 cash prize that will be awarded annually starting in 2011. They have stated it will be awarded for at least 20 years.

I have completed my term as Chair of the American Board of Medical Specialties (March 16, 2010). I continue as President of the International Society of Physical and Rehabilitation Medicine (ISPRM) until October 1, 2010. I encourage all of you to go to their website (www.isprm.org) to see their many activities and consider joining (30 euros per year). I continue to be a member-at-large of the National Board of Medical Examiners (NBME).

We had trainee graduation on June 9th, once again at the Richfield Regency. The 21st Annual Resident, Fellow, and Postdoctoral Fellow Research Day was held on June 9th. There were 16 platform presentations and 30 posters presentations. Five of the eight graduating seniors will be entering fellowships. Starting July 1, 2010, we will have 28 residents, five clinical fellows and five postdoctoral fellows. The training programs are doing very well. However, it is unclear how much support the Kessler Foundation will provide to these programs since I'm no longer an employee.

The Department of PM&R put on its 22nd Annual Board Review Course, April 22 to April 30, 2010. We had 214 participants (171 full paying and 12 paying for optional session only). Participants came from 27 states (New York was the largest with 68 attending) as well as Canada, Puerto Rico, Portugal, Hong Kong and Austria. It is the largest PM&R Board Review course in the nation.

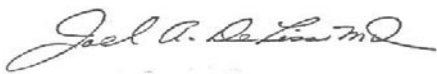
As of September 2010, the Kessler Foundation administrative offices on the first floor of 300 Executive Drive in West Orange, NJ, will be moved to the lower level and expanded. Kessler Foundation's Neuroscience Lab, currently on the lower level across from the construction site, will also be moved in the new office space. The current lab location, which is 5,000 square feet, will be transformed into a conference center. New space will total over 17,000 square feet for administration and research center activity when completed this fall.

With some of the employees of Kessler Foundation's administration currently located at Kessler Institute for Rehabilitation (KIR) moving to the new space at 300 Executive

Drive, the Kessler Foundation Research Center labs will have room to expand. Starting in Winter 2010, the 20,000 square foot space at KIR that currently houses Kessler Foundation's Research Center will be refurbished and updated with the latest technology for rehabilitation research development. By keeping a presence at KIR, Kessler Foundation researchers will be able to maintain relationships with clinicians, therapists and patients for research and implementation of new rehabilitation techniques. When completed, Kessler Foundation will have 37,000 square feet of space for research and administration in the two locations.

I hope each of you are doing well in your personal and professional lives.

Best regards,



Joel A. DeLisa, M.D., M.S.
Professor and Chair



We are putting together a directory of those of you who practice in and around the tri-state area for when we get requests for referrals. Kindly send your practice contact information to truppvc@umdnj.edu, so we can include you in our directory.

*f*rom the residency director...

Greetings! Hope all of you are well. This month marks the beginning of my fifth year here as Program Director! I am proud to see another class graduate and go out into the world; they represent the first class I met during interviews as fourth year medical students, that I was able to see go all the way to becoming competent physiatrists. Watching that transformation is one of the things which makes me love my job! This year we had a wonderful event: three new babies born right around graduation. Congratulations and welcome to the world, babies Liu, Donlon, and DeSipio [Benaquista]!! We anticipate that they will be starting their PM&R residencies in 2038. ;)

Our seniors yet again got amazingly competitive fellowships, and showed once more the variety of settings we have interests in as a program. Of the eight seniors graduating this June, two will be going into private practice, one will be joining the Maryland VA, and the others will be doing fellowships. The fellowships are diverse, both in content and geographically; one here at Kessler in SCI, one here at the DOC in musculoskeletal/pain, two in Spine & Sports at HSS in New York City, and one ACGME Pain Medicine fellowship in Los Angeles. You can see the complete list on the following pages.

In other good news, I'm delighted to announce our new Associate Residency Program Director, Dr. Monifa Brooks. She did her SCI fellowship at Kessler, and then stayed on there as an attending. She will be helping with all sorts of things regarding the residency, including being a mentor for the first years at Kessler, and contributing new ideas to our program to make it even better. And Doreen remains the best Coordinator in the entire world. We are all looking forward to Dr. DeLisa's transition to full time at the University. I anticipate he will be much more actively involved in residency things now that he can focus more time on them. I'm sure this will be a great thing, but I know he'll keep me and the office staff busy as well!!

Please visit our website at:

http://njms.umdnj.edu/departments/physical_medicine_rehabilitation/residency. We are always interested in your feedback and suggestions for improving our residency; please feel free to contact me at susan.garstang@va.gov with any ideas for things we need to do better.

Best Wishes!
Susan Garstang, M.D.



FACULTY & ALUMNI NEWS

NJMS students nominated five members of the PM&R department for Golden Apple teaching awards in spring 2010. The PM&R department congratulates the following medical educators:

PM&R Faculty

- ❖ Patrick Foye, M.D.
- ❖ Nigel Shenoy, M.D.
- ❖ Peter Yonclas, M.D.

Nominees, Golden Apple (*cont'd*)

PM&R Residents

- ❖ Bethany Lipa, M.D. (PGY-3)
- ❖ Stephanie Liu, M.D. (PGY-4)

The NJMS magazine Pulse did a two-page feature story on **Patrick Foye, M.D.**, and his role as Director of the Coccyx Pain Service at University Hospital, Newark. Each year, Dr. Foye treats hundreds of patients with coccydynia (tailbone pain), many who fly in from around the country, and it has become his primary area of research publications. The Pulse feature article is available online by clicking on the following link: [A Closer Look at Doctor Tailbone](#) or at: http://www.tailbonedoctor.com/images/TAILBONE_PAIN_Service_Magazine_Article_about_Dr._Foye_in_Pulse.pdf

Patrick Foye, M.D., completed his term as Chair of the Medical Student Clerkship Directors Council of the Association of Academic Physiatrists. He now serves as Immediate Past Chair.

Brian Davis, M.D. (Class of '96) shares with us that he has been accepted to the Vancouver BC Paralympic games as a volunteer physician for Sledge Hockey. Also, he will be an editor for the new American College of Sports Medicine textbook, ACSM's Comprehensive Review.

Congratulations to **Sarah Dubowsky, Ph.D.**, who is completing six years of service to Kessler Foundation through both her doctoral and postdoctoral work. Dr. Dubowsky joined the Human Performance and Movement Analysis Laboratory (HPMAL) in late 2003, while a graduate student in the Biomedical Engineering Program at Rutgers. Under the mentorship of Dr. Sue Ann Sisto, and in collaboration with investigators in the HPMAL, she conducted research on shoulder pain in manual wheelchair users. From this work in the HPMAL, she completed her dissertation and first-authored two peer-reviewed publications. In May, 2008, she earned her Ph.D. in Biomedical Engineering from Rutgers and in June, 2008, she agreed to remain at Kessler as a UMDNJ/Kessler postdoctoral fellow. As a postdoc, she investigated in-vivo knee joint integrity via MR images in the Rehabilitation Engineering Analysis Laboratory (REAL), and she co-piloted a project looking at the effects of a dual-task scenario on cognitive and motor functioning in persons with Multiple Sclerosis. In addition to research endeavors, she took on a leadership role as chief postdoctoral fellow and was instrumental in fostering collaborative relationships between the medical residents and postdoctoral fellows. Given the significant contributions she has made during her time at the Kessler Foundation, her departure will be a loss. However, it is with great pleasure to announce that she has accepted an Assistant Professor position at the DeVry College of New York, where she will be teaching Biomedical Engineering

technology. Dr. Dubowsky will undoubtedly be a tremendous asset to this new organization and we wish her continued success in future teaching and research endeavors.

Gautam Malhotra, M.D. (Class of '05) shares with us that he has recently been boarded in Neuromuscular Medicine and Electrodiagnostic Medicine.

Dr. Malhotra is also a musician/singer/recording artist. He is a member of a hard rock cover band called [Twitch](#). (Click the link to join the mailing list.) He released an [album](#) of original music in '96 which is now available on iTunes. He also recently sang on Reza "Ron" Ziai's [album](#) which has received [great press](#). (Click to listen.)

Congratulations to **Bradley Marcus, D.O.** (Class of '05) informs us that he opened his own rehabilitation outpatient center in San Diego for people of all ages and disabilities. The center utilizes the latest in technologies. His website is www.MRKLab.com.



History of the Resident Teaching Awards *Patrick Foye, M.D.*

We are very proud of the active educational role we play in all four years of the medical school curriculum at NJMS. As a department with fewer faculty members than many other departments, we recognize that our resident physicians play an important and indeed crucial role in helping us to educate our medical students. During various years, resident physicians have joined us in teaching students within the gross anatomy cadaver labs, or within the musculoskeletal physical exam workshops for 1st or 2nd year medical students, or at "career nights" where students learn about our specialty, and certainly the residents help teach our students during the students' mandatory and elective clinical rotations.

We have always highly valued and appreciated these resident contributions. But we never had a formal way of acknowledging residents for this, nor a formal way of recognizing the residents who displayed the most exceptional teaching skills and efforts.

But after I was on faculty for a couple of years, I remember being particularly impressed with resident physicians like Brian Greenwald, MD, and Paul Cooke, MD, who seemed truly nonstop in their dedication to teaching our students (while we were seeing patients together, or in between patients, or at the end of the workday, etc.). As I sat at their graduation from the residency program (in 1999) I thought that exceptional dedication like theirs should be officially recognized, so the idea was born for the "Resident As

Teacher" award. While the award was created too late for those two doctors, many other exceptional residents have followed in their footsteps. While we only give the award to one resident per year, we use it as an opportunity to express our appreciation for teaching done by ALL of the residents.

In 2005, on our residency graduation day, I felt that there should be some way to recognize James McClean, M.D., for his exceptional contributions to teaching his resident colleagues (the other award was geared towards teaching of *students*). This idea dawned on me literally a few hours before that day's graduation ceremonies. I bounced the idea off faculty member Peter Yonclas, M.D., who wisely encouraged me to proceed. We had no time to order a plaque, so I took a framed award off the wall of my office and used the frame to hold a customized certificate that we printed from template we found online. With the residency director's blessing, Jim received the award that evening. In subsequent years, it has been named after Jim McClean and presented to one resident each June. Since Jim's tragic death via a snowboarding accident in 2008, it has become all the more meaningful to our department (and I'm all the more glad that I didn't let his time here slip by without him being recognized in this way).

Overall, we learn from all of those around us. As physicians, we learn from our patients, our students, our residents, our fellows, our colleagues, our Chairman, and from medical issues in our own families and friends. The roles of teacher and learner are constantly interwoven. There are countless times where an insightful question or comment from students or housestaff has catapulted my knowledge base or inspired me to study more rigorously on a given topic. One of my favorite parts of being in academics is the camaraderie of seeing patients while surrounded by bright and enthusiastic trainees. We are fortunate to have a residency program filled with such individuals and it is an honor to acknowledge them each year.



Recipients of the "Resident As Teacher" Award

- 2000 Pietro Memmo, M.D.
- 2001 Raymond Esquieres, M.D.
- 2002 Robert Savarese, D.O.
- 2003 Gautam Malhotra, M.D.
- 2004 Helen Chung, M.D.
- 2005 Ariz Mehta, M.D.
- 2006 Gary Chimes, M.D.
- 2007 Nigel Shenoy, M.D.
- 2008 Maya Evans, M.D.
- 2009 Jennifer Epperlein, D.O.
- 2010 Benjamin Levy, M.D.

Recipients of the "Resident Teaching Resident" Award

- 2005 James McLean, M.D.
- 2006 James McLean, M.D.
- 2007 Ariz Mehta, M.D.
- 2008 Christopher Visco, M.D.
- 2009 Jonathan S. Kirschner, M.D.
- 2010 James P. Wyss, M.D.

The following awards were presented in 2009 by the PM&R Department.

Name of Award	Name
PM&R Medical Student Award	<i>Alice Hon</i>
Resident as Teacher Award	<i>Benjamin Levy, M.D.</i>
Mitchell Rosenthal, Ph.D., Resident Research Award	<i>Stephanie Liu, M.D.</i>
Mitchell Rosenthal, Ph.D., Fellow Research Award	<i>Sarah Dubowsky, Ph.D.</i>
National Teaching Award	<i>Walter R. Frontera, M.D., PhD</i>
Annual Teacher of the Year Award	<i>Chae Im, M.D.</i>
Alumni Award	<i>Andrea Cheville, M.D.</i>
Mentor Award	<i>Steven Kirshblum, M.D.</i>
James P. McLean Award for Resident Teaching Residents	<i>James F. Wyss, M.D.</i>

Resident Awards

Dr. Amrish Patel is the AAPMR liaison to the AMA.

PM&R Department Welcomes Incoming Residents...

The faculty and trainees welcome the following members of the PM&R residency class of 2013, who entered our program on July 1, 2010.

Melissa Fleming, M.D.

Med Sch: New York Medical College, NY
PGY-1: Long Island Jewish Medical Center, NY

Christine Greiss, D.O.

Med Sch: New York College of Osteopathic Medicine of the New York Institute of Technology, NY
PGY-1: Christ Hospital, NJ

Jay Jani, M.D.

Med Sch: Government Medical College Surat, India
PGY-1: Brookdale Hospital Medical Center, NY

Joslyn John, M.D.

Med Sch: UMDNJ-New Jersey Medical School, NJ
PGY-1: Long Island Jewish Hospital, NY

Jong Kim, M.D.

Med Sch: Catholic University of Korea College of Medicine, South Korea
PGY-1: UMDNJ-New Jersey Medical School

Shounuck Patel, D.O.

Med Sch: Chicago College of Osteopathic Medicine of Midwestern University, IL
PGY-1: Plainview Hospital, NY

Incoming Residents (*cont'd*)

Sara Salim, M.D.

Med Sch: American University of the Caribbean School of Medicine, Netherlands Antilles
PGY-1: Erie County Medical Center, NY

David Seto, M.D.

Med Sch: UMDNJ-New Jersey Medical School, NJ
PGY-1: New York Medical Center, NY

Jiaxin Tran, M.D.

Med Sch: UMDNJ-New Jersey Medical School, NJ
PGY-1: UMDNJ-Robert Wood Johnson University Hospital, NJ

Ian Wendel, D.O.

Med Sch: Lake Erie College of Osteopathic Med, PA
PGY-1: Christ Hospital, NJ

...and Bids Farewell to the Class of 2009!

Graduating Residents

Neeti Bathia, M.D. – *Sports Medicine/Spine Fellowship, Hospital for Special Surgery, NY*

Miguel Coba, M.D. – *Spinal Cord Injury Medicine Fellowship, UMDNJ/Kessler, NJ*

Margaret Donlon, M.D. – *Maternity*

Brett Gerstman, M.D. – *Pain Medicine, University of California, Los Angeles*

Richard Hoppe, M.D. – *Veterans Administration, Baltimore, MD*

Stephanie K. Liu, M.D. – *Maternity*

Janel Solano, D.O. – *Musculoskeletal/Pain Fellowship, UMDNJ, NJ*

James Wyss, M.D., PT – *Sports Medicine/Spine Fellowship, Hospital for Special Surgery, NY*

Graduating Clinical Fellows

Gina Benaquista, D.O. (SCI) – *Maternity*

Jeffery Chacko, M.D. – *pending*

Pinella Holder, D.O. – *pending*

Joseph Mejia, D.O. – *Private Practice (Paul Abend, DO), NJ*

**PM&R Department Welcomes
Incoming Clinical Fellows**

James Chang, M.D. – *Spinal Cord Injury Medicine*

Residency: New York University Medical Center, NY

Miguel Coba, M.D. – *Spinal Cord Injury Medicine*

Residency: UMDNJ-New Jersey Medical School, NJ

Maya Evans, M.D. – *Pediatric Rehabilitation (2nd Year)*

Residency: UMDNJ-New Jersey Medical School, NJ

Michael Rhee, M.D. – *Traumatic Brain Injury Medicine*

Residency: UMDNJ-New Jersey Medical School, NJ

Janel Solano, M.D. – *Spinal Cord Injury Medicine*

Residency: UMDNJ-New Jersey Medical School, NJ

Faculty Appointments

Denise Fyffe, Ph.D. joined the department as an Assistant Professor coterminous with the Kessler Foundation Research Center. Her major research interest includes health disparities, geriatric mental health and improving the care provided to medically underserved/disadvantaged groups.

Helen Genova, Ph.D. joined the department as an Assistant Professor co-terminous with the Kessler Foundation Research Center. Her major research interests have encompassed studying cognitive deficits and fatigue in clinical populations such as Multiple Sclerosis, Traumatic Brain Injury and Chronic Fatigue Syndrome.

Gudrun Lange, Ph.D. has joined the department as a professor. She is a member of the medical staff at the New Jersey Healthcare System Department of Veteran's Administration in East Orange. Her major research interests are the investigation of the pathophysiology underlying chronic pain and fatigue conditions following illnesses including cancer, stroke and traumatic brain injury, but also includes disorders such as Fibromyalgia, Chronic Fatigue Syndrome, and most recently pain and fatigue symptoms reported by veterans returning from Iraq and Afghanistan.

Cesar Roige has joined the department as an Associate and is American Board Certified as a Certified Fitter and has a Prosthetics certification from the Board for Orthotics. Mr. Roige also works at Monmouth Medical Center as well as Riverview Medical Center in Ortho and Physical Medicine and Rehabilitation fitting, repairing and maintaining medical support devices, such as artificial limbs, braces and surgical supports according to specifications.

Faculty Awards/Honors

Dr. Trevor Dyson-Hudson was awarded \$97,500 from The Craig H. Nielson Foundation for his project entitled, "The E-Z Guide to Managing Medical Complications Associated with SCI," starting January 1, 2010 through January 31, 2011.

Linsenmeyer, T. (2010). Clinical Trial - Effectiveness of the MTG EZ-Gripper® Catheter at Allowing Catheterization in Neurologically Impaired Individuals with a Neurogenic Bladder and Decreased Hand Function. Funding dates: 01.14.10 – end of study. Total Award: \$7,980. Sponsor: Medical Technologies of Georgia.

McKenna, C. (2010). Predicting Fall Risk in Acute Rehabilitation and Long-Term Care via Innovative, Targeted Cognitive Assessment. Funding Dates: 2010 – 2013. Total Award: \$120,774. Sponsor: Select Medical.

Faculty Publications

Bauman, W. A., Schwartz, E., Song, I. S. Y., Kirshblum, S., Ciriogliaro, C., Morrison, N. et al. (2009) Dual energy x-ray absorptiometry overestimates bone mineral density of the lumbar spine in persons with spinal cord injury. *Spinal Cord*, 47(8), 628-33.

Chen B, Putcha N, Stitik TP, Foye PM, DeLisa JA. The Role of Diagnostic Ultrasound in Knee Joint Injections and Aspirations A pilot study. *AJPMR*, 2010 April; 89(4):S78.

Chiao, C., Weng, L., & Botticello, A. (2009). Do older adults become more depressed with age in Taiwan? The role of social position and birth cohort. *J. Epidemiol. Community Health*; 63: 625-632.

DeLuca, J., Pei, Y., Xu, Y., Barbour, R.L. (2009). Using co-variations in the Hb signal to detect visual activation: a near infrared spectroscopic imaging study. *Neuroimage*, 47(2), 473-81.. doi: 10.1016/j.neuroimage.2009.04.056

De Sanctis, P., Gomez-Ramirez, M., Sehatpour, P., Wylie, G.R. & Foxe, J.J. (2009). Preserved executive function in high-performing elderly is driven by large-scale enhancement of prefrontal cortical mechanisms. *Human Brain Mapping*, 30(12):4198-214.

Dyson-Hudson, T.A. & Nash, M.S. (2009). Guideline-driven assessment of cardiovascular disease and related risks after spinal cord injury. *Top Spinal Cord Rehabilitation*, 14(3), 32-45.

Foye PM, Kamrava E, Enriquez R, Sanderson S, Smith J. Psychological versus Physical Pain Descriptors in Patients with Tailbone Pain. *AJPMR*, 2010 April; 89(4):S32-3.

Foye PM. Coccyx Pain Diagnostic Workup: Necessity of MRI in Detecting Malignancy Presenting with Tailbone Pain. *AJPMR*, 2010 April;89(4):S33.

Foye PM, Stitik TP. Diagnostic Ultrasound in a Patient with Tailbone Pain: Detecting Coccygeal Dislocation/Listhesis but Failing to Detect an Avulsion Fracture of the Coccyx. *AJPMR*, 2010 April;89(4):S33.

Foye, PM, Coccyx Pain and MRI: Precoccygeal epidermal inclusion cyst. *Singapore Med J*. 2010 May; 51 (5):450.

Kim N.H., Wininger M., William C. (2010). Training Grip Control with a Fitts' Paradigm: A Pilot Study in Chronic Stroke. *Journal of Hand Therapy*, 23(1), 63-72.

Kwarciak, A.M., Sisto, S.A., Yarossi, M., Price, R., Komaroff, E., Boninger, M.L. (2009). Redefining the manual wheelchair stroke cycle: The identification and impact of non-propulsive pushrim contract. *Archives of Physical Medicine*

and Rehabilitation, 90(1), 20-26.

Kwarciak, A.M., Yarossi, M., Ramanujam, A., Dyson-Hudson, T.A., Sisto, S.A. (2009). Evaluation of wheelchair tire rolling resistance using dynamometer-based coast-down tests. *Journal of Rehabilitation Research and Development*, 46(7), 931-938.

Slavin, M., Kisala, P., Jette, A., & Tulskey, D. (2010). Developing a contemporary functional outcome measure for spinal cord injury research. *Spinal Cord*, 48(3), 262-267.

Sumowski, J.F., Chiaravalloti, N.D., & DeLuca, J. (2009). Cognitive reserve protects against cognitive dysfunction in Multiple Sclerosis. *Journal of Clinical and Experimental Neuropsychology*, 31, 913-926, DOI: 10.1080/13803390902740643

Terry, K., Griffin, L. (2010). Coherence and short-term synchronization are insensitive to motor unit spike train nonstationarity. *Journal of Neuroscientific Methods*, 185(2), 185-198.

Toglia, J., Johnston, M.V., Goverover, Y., & Dain, B. (2010). A Multicontext Approach to promoting transfer of strategy use and self regulation after brain injury: An exploratory study. *Brain Injury*, 24, 664-677.

Wylie, G.R., Graber, H.L., Voelbel, G.T., Kohl, A.D., Richards, J.S., Dyson-Hudson, T., Bryce, T.N., Chiodo, A. (2009). Pain after spinal cord injury, Model Systems Knowledge Translation Center, Consumer Fact Sheet.



Noninvasive Mechanical Ventilation: Airway/Body Paradigm Shifts and PM&R, Part 1

John Bach, M.D.

PM&R physicians were the first to describe all aspects of noninvasive positive pressure mechanical ventilation (NIV) including NIV via noninvasive facial interfaces as well as mechanically assisted coughing for long-term noninvasive respiratory support and extubation and decanulation of unweanable ventilator users. PM&R physicians first described glossopharyngeal breathing, mouth piece NIV, nasal NIV, the relative ineffectiveness of body ventilator use and transition to NIV, and got the mechanical in-exsufflator (CoughAssist™) back on the market for expiratory muscle support. Even though these interventions save lives, avoid hospitalizations and long-term institutionalizations, and avert resort to invasive airway tubes, they are not widely used. In fact, people tend to take it for granted that "in a debate good ideas defeat bad ones making progress possible. However, peer-group pressure often halts progress in its tracks..."

(leading to) stasis, delay, digression.” Peer pressure, financial disincentives, and inadequacy of the pre-frontal cortex (PFC) to question the accepted treatment paradigms (“paradigm paralysis”) stalls the development of interventions that can shift paradigms to save lives.

The PFC is the executive sector of our brains. It permits us self-reflection, self-consciousness, rational analysis, innovation and creativity, the ability to plan for the future, to distinguish reality from fantasy and falsehood, and to repress impulses. However, it has had only 160,000 years to evolve in our species as opposed to over 400 million years for lower brain centers that are concerned only with the immediate, that is, instinct, feelings, and subconscious pattern recognition to trigger reflex and other sudden movements like hitting a fast ball. Once concepts (paradigms) are accepted by the PFC, no matter how unsubstantiated by reason or fact, the PFC accepts information consistent with the accepted paradigm and filters out that which is not. This can make it impossible to “see” and learn better ways of doing things or discerning truth from fiction. The failure to reassess accepted paradigms and analyze new ones (“paradigm paralysis”) is the reason why it is rare for a Yankee fan to become a Red Sox fan, a Jew a Muslim, a Muslim a Christian, a liberal a conservative, or a patient’s lungs to be ventilated noninvasively rather than invasively. It is the reason that the microscope and infection theory were buried by our profession for almost 200 years, why 300,000 new mothers and their newborns died from childbed fever although it had been proven and published in articles and books that chlorine antiseptics prevents it, and why patients are left to weaken and develop ventilatory failure and die or require critical care rather than be managed by noninvasive respiratory muscle aids. Failure of the PFC to check lower brain impulses for immediate gratification is also why 120 million American families have an average credit card debt of over \$9000, the federal government is going bankrupt, the drain on our natural resources and our population growth are unsustainable, and we are provoking the 6th great mass extinction of plant and animal species in the geological history of this planet. The following are only a few examples of the paradigm paralysis of the PFC in medicine.

The germ theory of contagion was described in 1546, by Girolamo Fracastoro. He wrote that infections occurred by contagious “seminaris prima” or seeds that were transmitted by simple contact and that each condition, including leprosy, scabies, and tuberculosis had a specific “seed”. These seeds could also be transmitted by fomites such as clothes, begging (plague, small pox), and via seeds in the air that could endure there for a long time, i.e. plague and small pox. He differentiated these infections including small pox from measles, described typhus and first recognized that tuberculosis was contagious as well as rabies and syphilis. He described the infectious nature of fevers. Thus, although he said that each infectious disease had a specific cause and

was right, his work “De Contagione et Contagiosus Morbis et Eorum Curatione, Librii III, 1546,” was ignored by the medical profession for 300 years.

Following discovery of the microscope in 1610, August Hauptmann wrote that diseases were caused by minute wormlets. In 1658, Anathasius Kirchner a Jesuit priest said that “small living animals invisible to the naked eye” (subvisible effluvia animate) spread contagious diseases including the plague, leprosy, elephantiasis, and venereal disease and Anthony van Leeuwenhoek substantiated this by describing bacteria causing infection in worms and other small animals on September 17, 1683. Physicians, however, who made a living by bleeding, cautery, purging, and using emetics to balance body “humors” for at least 4500 years were not interested in micropathology to diagnosis disease any more than they would want to take a clock apart to tell the time. David Wootton, in his 2007 book, “Bad Medicine,” described seemingly countless examples of difficult to explain delays in the translation of innovation into general clinical practice. Even Wootton, however, did not mention the deadly results of paradigm paralysis in respiratory medicine that continue to this day.

Failure to use surgical anesthesia is another relevant example. Aesculapius, a deified Greek physician was said to have used nepenthe, an anti-depressant that provides conscious sedation, for surgical procedures around 1700 BCE. It was the “magic potion” given to Helen to help her forget. In the 13th century Theodoric reported an inhaled soporific agent made up of opium, hemlock, henbane, mandragora leaves, wild ivy and a salad plant seed. A comparable mixture was reportedly used for amputations in Boccaccio’s Decameron. Since some patients died from the anesthesia and pain was considered righteous, no one standardized the mixtures or provided indications for surgical anesthesia until 1761, when Matthew Turner published “An account of the extraordinary medicinal fluid, called aether.” Turner had the patients “snuff (ether) up the nostrils.” In 1795, the anesthetic qualities of nitrous oxide were discovered and, along with ether, nitrous oxide was widely used for amusement in carnivals yet physicians ignored it. In fact, it was dentists who pioneered its use and were, as a result, harassed by the medical profession, in one case to committing suicide in 1844. Massachusetts General Hospital surgeon Henry Jacob Bigelow presented a surgical case done under ether anesthesia on November 18, 1846, in the Boston Medical and Surgical Journal, it was immediately reported in Philadelphia that Boston physicians were giving succor to quackery and that if such actions continued, “Physicians and quacks will soon constitute one fraternity.” In December 1846, European surgeons called anesthesia “American cheating”. The “indifference, the strength, the pride, the sheer speed (of the surgeon) were suddenly irrelevant.” Anesthesia would no longer necessitate quick, agile surgeons who could ignore the agony of their patients. With anesthesia they would have to abandon their self-image,

their professional training, and the working paradigms of their profession. Patient screams were “normal.” Sir James Paget, Victorian surgeon and pathologist emphasized the “misery was so frequent, so nearly customary, deemed so inevitable that though it excited horror... it did not excite to ‘strenuous action’...” Our successors... will look back with horror, and on us with wonder and contempt for what they will call our idleness or blindness or indifference to suffering.” Just as patient agony was “normal” for the surgeon, and the needless deaths of 300,000 young mothers and newborns “normal” to 19th century obstetricians other than Dr. Semmelweis who discovered that chlorine hand washing could prevent them but was also ignored. Today the inevitability of patients with progressive respiratory muscle weakness developing ventilatory failure, although also avoidable, continues to be the accepted paradigm.

End of Part 1
Contact the author for references



Philosophical Sayings

If we knew what it was we were doing,
it would not be called research, would
it?

Albert Einstein

“There are only two days that are important in one’s life...
the day you are born... and the day you know why.”

Unknown

“You’ve got to be very careful if you don’t know where
you are going because you might not get there.”

Yogi Berra

“Some cause happiness wherever they go; others, whenever
they go...”

Oscar Wilde



Culinary Corner



Grilling Pizzas

By: *Allrecipes Staff*

*Want pizza with a crispy, chewy crust
and wonderful smoky flavor? Then put
your pie on the grill!*

Grilled pizzas are a specific style of pie: typically thin-crust, they’re lightly sauced (too much liquid means a soggy crust) with minimal toppings. They also cook *very* fast.

***Make the Dough**

Use your favorite crust recipe. Divide the dough into two or more pieces and shape into balls for individual-sized pizzas. Set the dough aside to proof while you prepare your toppings.

Tip: If you have a heavy-duty mixer or bread machine, double the recipe. Divide and shape the dough, and freeze each portion in a plastic freezer bag greased with about a tablespoon of olive oil.

Assemble Your Toppings

With grilled pizza, the crust is the star. Choose a few simple ingredients that can showcase the smoky flavor and crispy crust. Or go for minimalism: top the grilled bread with a brushing of good olive oil, a sprinkling of coarse salt, and bit of chopped fresh herbs.

Suggested bases: marinara, pesto, flavored olive oil, barbeque sauce, guacamole, salsa verde

Suggested cheeses: mozzarella, fresh mozzarella, ricotta, goat cheese, Parmesan, Gorgonzola

Ideas for toppings: grilled vegetables, prosciutto and fresh figs, salami, chicken, fresh herbs, fresh arugula, toasted pine nuts, olives or capers, caramelized onions, roasted garlic



Grill the Crust

Prepare the grill for high heat. Dust a baking sheet, a peel, or a plate with flour or cornmeal so the dough won’t stick.

Shape the dough into rounds, either stretching it by hand or using a rolling pin. Each round should be no more than ¼ inch thick. You can stack the rounds by layering waxed paper, parchment, or a clean well-floured kitchen towel in between the individual crusts.

When the coals are hot, have all of your toppings ready near the grill.

The easiest method for grilling pizza is to par-bake the crust: grill one side just long enough to firm up the crust so you can move it easily. By taking it off the heat, you can take your time arranging the toppings and are less likely to burn the bottom of the pizza.

Begin by placing one dough round on the grill. You can oil the grill’s grate, but it’s not necessary; once the crust has set, after about three minutes, it should be easy to pull off the heat with tongs, a spatula, or your fingers.

- Don't worry if it droops a little through the grate--it'll firm up fast.
- After two to three minutes, give it a little tug--it should move easily. If it sticks, give it another minute or so.
- When the crust is set, remove it from the heat and transfer it to a plate or peel; flip it over so the "done" side is up, and add the toppings.
- Repeat the process with the rest of the dough rounds.
- If this is a group effort, friends and family can start topping the pizzas while you grill the crusts.

Grill Your Pizzas

Grill the topped pizzas until the cheese melts and the toppings are heated through. Depending upon the heat of the grill and the size of your pies, this can take two to 10 minutes (if your grill has cooled dramatically, you might need to cover it with a lid to finish the cooking).

**An alternative to making the dough would be to purchase frozen pizza dough from your grocer's freezer or from a local pizzeria, if they're willing to sell their dough.*



A fluffy mixture of sweetened whipped cream and cream cheese adds a light touch to this layered July 4th dessert. You can substitute sliced fresh strawberries for the raspberries, if you prefer.



Red, White and Blueberry Trifle

Serves 6

- 1/4 cup(s) sugar
 - 1/3 cup(s) sugar
 - 1/4 cup(s) fresh lemon juice
 - 1 (12-ounce) store-bought pound cake (cut into 3/4-inch thick slices)
 - 1 bar(s) (8-ounce) reduced-fat cream cheese (room temperature)
 - 1 cup(s) heavy cream
 - 3 cup(s) (three 1/2 pint containers) fresh blueberries (rinsed and dried)
 - 3 cup(s) (two 6-ounce containers) fresh raspberries
1. Make lemon syrup: In a small saucepan, bring 1/4 cup sugar, lemon juice, and 1/4 cup water to a boil over medium heat, stirring to dissolve sugar. Let cool completely, then brush over both sides of cake slices. Quarter each slice.
 2. With an electric mixer, beat cream cheese with remaining 1/3 cup sugar on high speed until lightened. With mixer on medium speed, gradually add heavy cream in a steady

stream; continue beating until mixture is light and airy (mixture will be like a very soft whipped cream).

3. Arrange half the cake pieces in the bottom of a 2-quart serving dish. Spoon half the cream cheese mixture over cake in dollops; spread to sides of dish. Scatter half the blueberries and raspberries on top. Repeat layering with remaining cake, cream cheese mixture, and berries, piling berries in the center.
4. Cover, and refrigerate until chilled, at least 1 hour and up to overnight.

Courtesy of Martha Stewart



For the pooch in your family

After-dinner Mints

Is your dog incredibly affectionate? If so, you may want to encourage him to nibble on an After-dinner Mint or two before you cuddle up together on the sofa. Mint, parsley and charcoal are bursting with bad-breath-busting ingredients and they taste good too.

Makes 30-40
Prep time: 15 mins.
Cooking time: 25-30 mins.

- 8 oz (250 g) wheat- and gluten-free flour
 - 1 oz (25 g) mint, chopped
 - 1/2 oz (15 g) parsley, chopped
 - 1 tablespoon activated charcoal
 - 3 tablespoons olive oil
 - 8 fl oz (250 ml) cold water, approximately
1. Combine the flour, herbs and activated charcoal in a large mixing bowl. Mix in the olive oil and add enough of the measured water, a little at a time, to make a smooth dough. Roll into 1/2-inch (1 cm) balls and place on a greased baking sheet.
 2. Bake in a preheated oven, 350°F (180° C, gas mark 4) for 25-30 minutes. Remove the baking sheet from the oven and leave the After-dinner Mints to cool. Store in an airtight tin for up to 4 weeks.

Tips 'n Tails

Activated charcoal is available from good health food stores.

Taken from **PUPSNACKS**

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