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## INSIDE THIS ISSUE

- 1 History of Medicine
- 4 How I Do It
- 5 Spotlight on Research
- 9 Fascinating Case
- 12 Research Projects
- 16 New Innovations in Medicine
- 17 @ Your Library
- 20 Important Numbers & Events

Her entire career before her autopsy revealed her to be a woman<sup>1</sup>. About the time that Dr. Stewart's career was in full swing, Elizabeth Blackwell and her sister Emily were attempting to gain admission to medical school in the United States of America.

Blackwell is a figure well-known to many, even those who are not avid students of history. She graduated in 1849, first in her class and awarded a Gold medal, although she had initially been rejected by over 20 medical schools, because of her gender<sup>2</sup>. When she did receive her degree, she could not find a job as a surgeon, because patients did not want to be seen by a female surgeon. Thus, she received training as an apprentice in Europe for some time before she returned to the U.S to open an infirmary and Medical School in New York. Seemingly, by this time, the next generation of aspiring female surgeons had awakened.

Many credit, Mary Edwards Walker, as the second woman to graduate medical school in the U.S, as being the first female surgeon in this country. Dr. Walker volunteered with the Union Army at the outbreak of the Civil War in order to practice true surgery; she is credited as having done dozens of amputations<sup>1,2</sup>. In addition to being a surgeon, she was also a feminist, abolitionist, a prisoner of war, and a recipient of the Medal of Honor. In the time following her graduation from medical school, her fledgling practice succumbed to financial hardship and

## HISTORY OF MEDICINE: The Making of Progress...One Gender at a Time

**Aamna Ali, M.D. PGY II**  
**Surgery**

*"Being challenged in life is inevitable, being defeated is optional". ---Roger Crawford*

Dr. Miranda Stewart is considered the first female surgeon in Britain: She spent over twenty years impersonating a man in order to practice medicine. Dr. Stewart, practiced as the "beardless" surgeon, Dr. James Barry for

social stigmas that female physicians could not be as well qualified as males. However, she continued to practice surgery and medicine till her death, which, unfortunately, came one year before the Nineteenth Amendment to the Constitution. Their-in-turn granting women the right to vote, of which she had been an ardent supporter<sup>3-4</sup>.

There are many other “Should-have-been” female surgeons that decorate the halls of history and deserve mention. Although, Virginia Apgar couldn’t find a job as a surgeon, and was even discouraged from doing so by Allen Whipple, her contributions to obstetrics and anesthesiology saved the lives of thousands of neonates and continue to do so today<sup>5</sup>. Dr. Florence Sabin, who initially intended to pursue surgery, was appointed the first female professor at Johns Hopkins Medical School in 1917. She saw more opportunity and less resistance in pursuing immunology than surgery, and her vaccination methodology has made it possible for communities worldwide to benefit from herd immunity<sup>3</sup>. Verena Holmes, another female physician upon whom the doors of surgery narrowed and barred entry, contributed to the surgical sciences by patenting over 100 inventions, including; otolaryngology tonsil forceps, various retractors, surgeon’s headlamp, and interestingly, but, unrelatedly, parts of internal combustion engines (#278, 827). Dr. Helen Taussig’s contribution to the Blalock-Taussig surgery for blue babies is well documented.

Meanwhile, the women who *were* allowed into the field of surgery, made staggering bounds of progress and many remain unsung heroes. Harriet Jones, M.D. was both the first licensed female surgeon in the U.S (1885) as well as the first woman to serve in the state legislature. It was almost sixty

years later, in 1940, when a woman would be board certified in surgery since many women who graduated from surgery residencies were not allowed to sit for the boards prior to this. Tenley Albright, M.D was one of the first specialized woman surgeons; she was also one of the first American women to win a gold medal in figure skating.

Nina Braunwald was the first woman elected to the American Association for Thoracic Surgery, additionally, she designed the first prosthetic mitral heart valve in the world, which she then proceeded to successfully implant in 1960 in the first surgery of its kind. Virginia Frantz was the first female President of the American Thyroid Society and, along with Dr. Whipple, described the secretion of insulin by pancreatic tumors in 1935<sup>2,6</sup>. The first two female surgeons deemed, “Fellows of the American College of Surgeons” (ACS) were Florence West Duckering, M.D, from the New England Hospital for women and children in Boston, and Alice Gertrude Bryant, M.D, both in 1913<sup>6,7</sup>. The female surgeons who led the path in opening the doors of many firsts were revolutionary not only in medicine but, usually, in several different arenas.

My personal favorite is Dr. Dorothy Lavinia Brown, who grew up in an orphanage in the south. She was not only the first African American female surgeon in the south and the first African American female in the ACS; she was also the first female to become a Chief of Surgery at any hospital in the country. Also, she became the first single woman in Tennessee to be granted the right to adopt a child; and later was the first, African American woman to serve in Tennessee state legislature<sup>8,9</sup>. Similarly, Elizabeth Farrett Anderson was the first British surgeon (openly known as a woman), the first female dean of a medical school, and the first female medical doctor in

France, the first woman to be elected to a school board, the first female mayor and the first female magistrate in Great Britain<sup>10</sup>.

There has been much published literature looking at whether, after all this rapid progress, there exists a glass ceiling to even be broken any longer or not<sup>11-13</sup>. Until 1970, women were 6% or less of any given medical school class in the U.S and less than 1% of the surgeons; by 2001, women were 24% of the physicians in the U.S, an increase from 5% in 1970. Also, only 14% percent of surgical residents were female in 2001, the number has been steadily increasing as the number of female medical students has equalized with their male counterparts. The number of women in faculty and especially tenured faculty positions in Surgery departments remains limited<sup>11,14</sup>. While the most logical explanation is the lag-time between graduation and involvement in academics, others wait cautiously, hoping that the barriers to women's progress have not found their way back into the system.

Whether or not the barriers are being broken down, or they are as sound as ever, it seems, somewhat less relevant than it was for our female predecessors. Why? To quote one of Dr. Miranda Stewart/James Barry's friends, "fighting for the right to be a woman is more complicated than simply be [ing] one". Intelligent women abound in medical school, and the ones who like problem-solving will always be attracted to the surgical science. Furthermore, to quote T.S. Eliot, "If we aren't in over our heads, how would we know how tall we are?". Indeed, tall enough, to contribute equally if not more to the progress of surgical science, than our male counterparts.

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### Attention: Medical Students!!!

**If you're interested in doing research, please visit the Office of Research and Grants on the lower level, next to the Sierra Conference room, in the main hospital**

## HOW I DO IT: The R Word

*Dr. Margaret Wacker, M.D.*

### Neurosurgery

Recently, I saw my oncologist for a follow-up. Mostly, good news, I am coming up to an anniversary. It is becoming less and less likely that my cancer will recur. Lab tests are looking better and he ordered the annual follow-up imaging, something that would require preauthorization. Since it's to be done a few months down the road, I began to think about when I should start calling the insurance company to explain why I needed this test. Should I wait for the denial or be pre-emptive? Each year, I have been denied, then after I called and demanded to speak to the oncology reviewer, who then approved the test.

I am a physician. I know the lingo. I can talk to the oncology reviewer and explain my case, but, what of my patients? It's clear why they might slip through the cracks. If the clinic nurse doesn't "bird-dog" every study for utilization approval, call when needed, and involve the doctor when needed, studies and procedures may not get approved. The denial may slip past. The patient may return to clinic, unable to get the study, and not know why. It's unlikely for a patient to know where to start. Furthermore, even if they did, many of my patients don't know English, or does not speak it well enough to address the denial themselves. They must rely on their doctors and nurses to intercede for them. Yes, that is part of the job, but on the day to day basis, it often seems there are more urgent problems to deal with.

Today, a colleague was venting about how hard it was to get things done, to get referrals or studies. We discussed the process for a patient with a herniated disc. He talked about how hard it was to get a

specialist referral. Sometimes it could be months, he said. Our nurse chimed in to say that we usually schedule the patient within 2-3 weeks of receiving the referral. Understandable, we want imaging done first. So, the patient has already had to jump through the pre-approval hoop twice, once for the MRI (or sometimes CT), and the other for the specialist consultation. Maybe a third time for physical therapy. Each of these may take 2-3 weeks with someone "bird-dogging" the referral, longer without and, then, after seeing the surgeon, maybe more physical therapy and possibly a pain clinic referral, with more pre-authorizations. Sometimes, each of these steps has to go back through the primary care provider. Thereafter, if the patient doesn't improve with conservative care, yet another pre-approval process for surgery. So, it can be a very slow process at times. The American version of waiting lines for surgery, for some surgeries, this may not be a bad idea, since many patients may recover on their own from some other problems. Often, they do with herniated disc problems.

Meanwhile, what of other problems? The answer is that it varies. Emergencies don't go through the pre-approval process, but rather retrospective review. While, I was off due to my own illness, and some since, I have done some of these reviews. For all, the key to approval is documentation. The provider must clearly document the reason for the test or procedure. This is good medical practice. Sometimes, as a reviewer, I have been able to infer why something is being done, but the documentation must be there, and it must fit in the boxes defined as approved by the insurance company. Sometimes, there isn't enough documentation, so there is simply a denial. Sometimes, the reviewer may need something clarified. Mostly, once the information is made available, the request

makes sense. Sometimes, it doesn't. These are the test and procedures that probably should be denied.

This process may take some time. Many patients get lost in all of this, and come back angry that "nobody cares." Their problem didn't get better, and may have gotten worse as they stumble through the system. To me, this seems like the American version of the waiting lines for treatment in other countries. We wait at each step of the way. Sometimes, patients get frustrated and feel there is no way to navigate the system. Therefore, the insurance company saves the money they otherwise would have had to spend.

The American version of the "R Word" rationing, it is a system of rationing that affects those who are least able to speak, eloquently for themselves more than those who can. So, the most vulnerable may not get the care they need. We see income disparities in length and quality of life, since income may serve as a marker for education and status. Seemingly, this is why so many candidates for office don't want to address the issue of rationing, because they would need to admit that we already have rationing and that America has financial rationing of health care. It affects nearly all of us, since, even with private or employer sponsored insurance, most of us have HMOs or PPOs, so our insurances have forced this upon us.

"Modern medical advances have helped millions of people live longer, healthier lives. We owe these improvements to decades of investment in medical research".

-----Ike Skelton-----

## SPOTLIGHT ON RESEARCH: Emergency Medicine Cost-Effective Health Care In The Era of Healthcare Reform; Do Physicians Need Routine Education Regarding The Cost of Medical Care?

*Andrew Crouch D.O. PGY IV*

*Rodney Borger, MD, FACEP*

*Michael M. Neeki, D.O, MS, FACEP*

### Abstract

**Introduction:** The cost of medical care including, medicine and diagnostic test has increased exponentially, over recent years and continues to increase. As test and treatments improve so does the expense. In 2013 health care bills were the leading cause of bankruptcies in the United States. The United States spent more than \$2.3 trillion dollars on health care in 2008. This represents more than \$7, 500 per person and 16% of the gross domestic product. The majority of residency programs in the United States do not include education on the financial costs of standard laboratory test, radiologic examinations and treatments in their current curriculums (Grant 2000). The purpose of this project was to gauge the understanding of the cost of healthcare across different residency programs in the United States and assess how much training residents receive on this topic.

**Methods:** This study was a cross-sectional survey of residents in all levels of training within Emergency Medicine, Internal Medicine and Family Medicine Residency programs. A ten-question survey was sent out to twenty-two residency programs within the American Osteopathic Association.

**Results and Discussion:** The results demonstrated that 94% of residents believed



that they had deficient knowledge in regards to the financial costs of routine exams that they order and 84% stated they receive less than 2 hours per year of education on this topic. A majority of residents stated that increased education on this topic would benefit patient care and the health care system as a whole. Currently, there is very little attention given to this topic in our medical and residency training programs. Only 6% of residents surveyed in this study felt that they had sufficient knowledge about the costs of the majority of the routine tests ordered on a regular basis. Although, the response to how added training on this topic would change how, their practice was divided, it is obvious that there is a need for increased education on this topic. It is important to consider that training on this topic could only serve to benefit our understanding of the health care industry and improve our task on providing cost-effective health care.

## Introduction

The cost of medical care including medicine, treatment and diagnostic tests has increased exponentially over recent years and continues to increase (Grant 2000). As tests and treatments improve so does the expense. In 2013 health care bills were the leading cause of bankruptcies within the United States and Americans spent more than \$2.3 trillion dollars on health care in 2008. This represents more than \$7,500 per person and 16% of the gross domestic product. This is much higher than most industrialized countries.

During the course of residency a majority of the education is focused on the medical training and often the costs of medical care is ignored or not addressed at all. Overutilization of medical resources in the setting of academic training centers is

considered to be an inherent cost of medical education (Hampers 1999). Little research exists on the efficacy of residency training on the cost of medical treatment and diagnostic studies. One study published in *Pediatrics*, in 1999, examined if the number of diagnostic test ordered by providers within a Pediatric Emergency Department was affected by providing pricing information to the providers. The study concluded that there was a reduction of overall patient charges without any change in overall outcomes and family satisfaction (Hampers 1999). Another Study published in *The Journal of Medical Education* reviewed the overall knowledge of medical costs of Internal Medicine resident and physician staff at Oregon Health & Science University. This study showed that the staff had very limited knowledge as to the cost of tests ordered (Sehgal 2011). In the changing economic climate it is important to assess how much focus is paid to this topic during residency training. The purpose of the project is to gauge the understanding of the cost of healthcare across different residency programs and assess how much training residents receive on this topic.

## Methods

The project was a cross-sectional survey of residents in all levels of training within Emergency Medicine, Internal Medicine and Family Medicine Residency programs. The survey was sent out to Residents at Arrowhead Regional Medical Center in Colton, California and twenty-one other residency programs nationwide. Survey questions are designed to evaluate the level of training that residents receive on the cost of medicine. The survey was sent out using the website <http://www.surveymonkey.com> Survey sample is included as image 1. Survey questions entail the amount of time spent on cost effective medicine, billing and coding.

This study is meant to be pilot study, which will later be expanded to include residency programs at other facilities and with more detailed questions. The study did not involve human experimentation and was considered exempt from review by the university's research ethics committee.

### Image 1

The survey as it was sent out to resident recipients.

Resident Physician Awareness of In-Hospital Diagnostic Testing Costs

<p>1) What is your specialty?</p> <p>A. Emergency Medicine B. Internal Medicine C. Family Medicine</p> <p>2) In what residential setting do you practice?</p> <p>A. Urban B. Suburban C. Rural</p> <p>3) In which hospital setting is your program?</p> <p>A. University Hospital B. County Hospital C. Community Hospital</p> <p>4) Do you believe resident physicians should be expected to know the cost of each diagnostic test they order?</p> <p>A. Yes B. No</p> <p>5) What amount of diagnostic tests that you order do you know the cost of?</p> <p>A. None B. &lt;50% C. &gt;50% D. Almost All</p>	<p>6) How much formal education regarding costs of diagnostic tests do you receive from your hospital and/or residency program?</p> <p>A. None B. &lt;2 hours/year C. 2-5 hours/year D. 5-10 hours/year E. &gt;10 hours/year</p> <p>7) Do you feel formal education regarding the costs of diagnostic tests would change your ordering practices?</p> <p>A. Yes B. No</p> <p>8) Who would benefit from resident physicians knowing the cost of diagnostic tests? Mark all that apply.</p> <p>A. No one B. Patients C. The Hospital D. The Health Care System</p> <p>9) Do you discuss the costs of tests with your patients?</p> <p>A. Yes B. No</p> <p>10) Do you feel a patient's willingness to have a test done would be influenced if they knew the cost ahead of time?</p> <p>A. Yes B. No</p>
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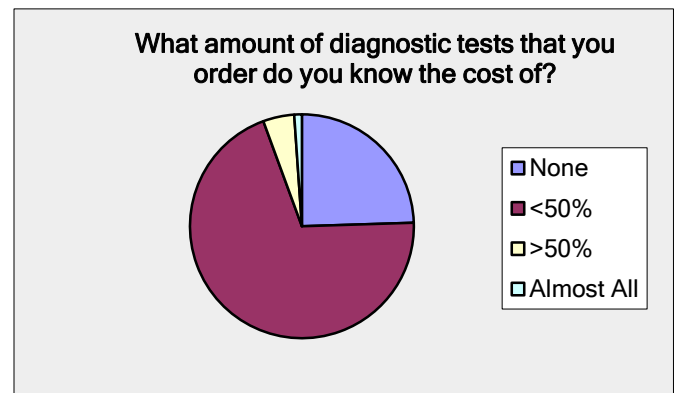
## Results

The Survey was sent out to twenty-two Emergency Medicine, Internal Medicine and Family Practice Residency Programs in the AOA. A Total of 269 responses were received back. A majority of the respondents, 81% were from Emergency Medicine programs. The remaining 19% were Internal Medicine

and Family Practice Programs. The responses came from a diverse group of residency programs, 41% from University based programs, 23% from County Facilities and 36% from Community Hospitals. 72% of the responses identified their training to be located within an urban setting.

For the question of whether or not residents should be trained on the cost of medical exams and laboratory studies a majority of residents 64% felt that residency training should incorporate some education on this topic. A grand majority 94% of respondents felt that they do not know the cost of less than half the tests they order, with 25% of all respondents stating they do not know the cost of any of the exams that they order (graph 1)

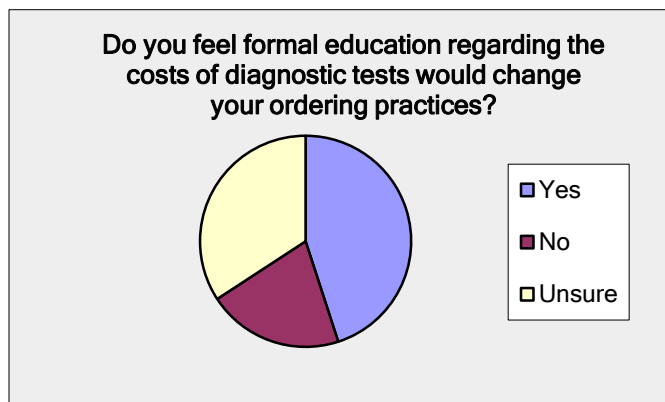
Graph 1



When asked how much time is spent on the learning about the cost of exams procedures and interventions, 40% of residents surveyed felt that no time was spent on this topic and 44% felt that less than 2 hours per year of training was spent discussing this topic. 64% of respondents felt that physicians should be expected to know the costs of the tests they order. When asked if knowledge of the cost of routine exams would change their practice 45% stated that they believed it would. Only 21% stated that further training in healthcare

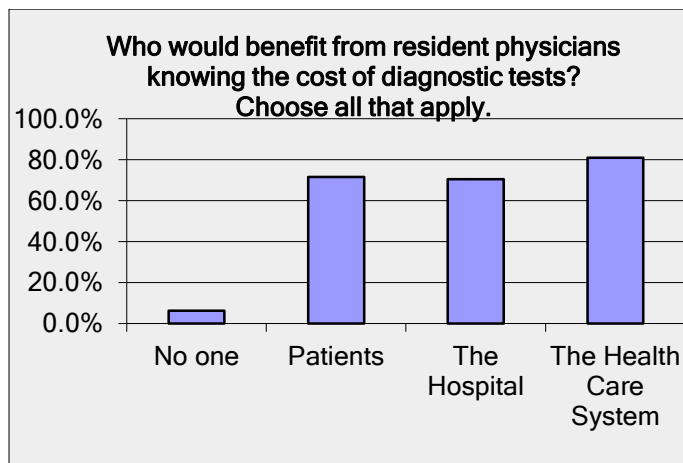
costs would not change their practice and 34% were undecided on the matter. (graph 2)

**Graph 2**



80% of residents in the survey stated that they do not currently discuss the cost of the exams they are ordering with their patients. 85% responded that they believe a patient's knowledge of the cost of exam may influence their willingness to have them done. When asked who would stand to benefit of increased knowledge in regards to the cost of medicine. Only 6% responded that no one would benefit. 81% thought that stated the health care system and 72% thought the patients would stand to benefit for increased training. (graph 3)

**Graph 3**



## Discussion

The results of survey reveal that a majority of residents believe that increase education on the cost of healthcare would benefit patient care and the healthcare system as a whole. Currently, there is little to, no attention given to this topic in our residency training. Only 6% of residents surveyed felt they did know the costs of the majority of the tests they order on a regular basis. Although, the response to how added training on this topic would change their practice was divided, it is obvious that there is a need for increased education on this topic. It is not readily apparent what impact an increase in training on the cost of healthcare will have, but it is important to consider that training on this topic could only serve to benefit our understanding of the health care industry.

## Limitations and Further Research

This was a survey study meant to assess the residents feeling on this topic of the cost of healthcare and the need for increased education. The survey itself did not include any objective measurement of residents' actual knowledge of the cost of routine laboratory exams. Further research should include the implementation of a training protocol and assessment of efficacy, as well as an assessment of whether increased education did impact clinical practice.

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## **FASCINATING CASE: Diagnosis and Treatment of Dementia Related Psychosis in Early Onset Major Neurocognitive Disorder Due to Alzheimer's disease.**

**Graham Johnson, D.O. PGY IV**  
**Psychiatry Resident**

### **Presentation and Brief History**

Mrs. M is a 58-year-old, Hispanic female, who was referred to an outpatient psychiatric clinic by her primary care physician (PCP) for management of depression with new onset visual hallucinations (VH). Mrs. M. was born in Mexico, but spent most of her adult life in San Bernardino and while she worked multiple odd jobs throughout her life, she was the primary caregiver to her two children, while her husband worked full time. She has a High School education with no history of special education or developmental delays. She has struggled with depression intermittently throughout her life and estimates that this is her fourth bout of major depression. She denies a history of suicide or any current suicidal ideations. She denies a history of severe mood liability, mania; adverse reactions to antidepressant therapy, or ever her symptoms have been successfully managed by her PCP during her previous bouts of depression. She has no major current medical problems, has never had a MI or CVA, and has had surgery only once approximately 6 months prior to presentation due to an abdominal abscess and fistulas. She denies substance abuse and has no legal history and denies any medication allergies. Her only current medications, include Celexa 20mg PO Q AM which she has been on for about 4 months from her PCP and Risperdal 2mg PO BID,

prescribed at another outpatient psychiatric clinic to treat her hallucinations approximately 2 months prior. She is currently not seeing a therapist or any other type of mental health professional. Mrs. M is unable to say what has triggered this most recent bout of depression and denies any major life stressors, while describing her relationship with her husband and family as "great". Her symptoms include a four month history anhedonia, lack of energy, difficulty initiating sleep, some psychomotor retardation, and decreased concentration, with many of these symptoms showing much improvement since she started the Celexa. She has good insight into her depressive symptoms and describes her symptoms as "not too bad anymore", and explains that pronounced, VH. She estimated that her VH started about 3 years ago, initially minimally disruptive but now becoming more prominent. She has never mentioned them to her PCP prior to her referral. The hallucinations are almost always of "little children playing" and they almost always occur during the daytime while she is indoors and the frequency has gradually increased over the past 34 years to most days of the week. She feels they are moderately distressing and her husband adds he often sees her pointing at them and having a distressed look on her face. Since starting on the Risperdal, she feels she has had no reduction in her hallucinations. Neither Mrs. M nor her husband volunteer any concerns at this time of presentation.

### **Diagnosis**

Mrs. M's working diagnosis was Major Depressive Disorder, recurrent, and severe, with Psychotic Features. After a thorough interview with Mrs. M and discussing her clinical course with her and her husband, there were many factors that indicated a more complex underlying cause of her

symptoms. While affect is not a criteria for diagnosis of Major Neurocognitive Disorder Due to Alzheimer's disease (formerly known simply as Alzheimer's disease in DSM-IV TR), Mrs. M often looked confused when answering simple questions. Also, she often had to be asked a question multiple times before offering an answer. Furthermore, while hallucinations associated with depression often seen in psychiatry, it is most common in those who suffer from profound depression. Mrs. M. described her depression as "mild", yet was having complex VH. Furthermore, hallucinations associated with severe depression are often "mood congruent" in quality. For example, a severely depressed patient often reports Auditory Hallucinations telling them that they are worthless or a bad person, thoughts consistent with severe depression. In contrast, Mrs. M's Visual Hallucinations of children playing is mood-incongruent with her depressive symptoms. While Mrs. M did not have any complaints initially about her memory, upon questioning her husband quickly described her memory as a "major problem." He described her memory as "very bad", saying she will often leave the stove on and "cannot remember her children's names sometimes." He says that the problems have gotten so bad that she requires almost constant supervision because her family is concerned that she will "hurt herself by accident." He estimates these symptoms began about three years prior and slowly getting worse, but they had never mentioned these symptoms to her PCP. Mrs. M agrees that she has much difficulty remembering things but she cannot estimate when they began. A Mini Mental Status Exam (MMSE) done in the office revealed a score of 14 out of 30. With further questioning, Mrs. M. and her husband confirm that her Visual Hallucinations started at the same time that her memory problems began and she had never had any type of hallucination during

her previous bouts of depression. She was diagnosed with Major Depressive Disorder, Major Neurocognitive Disorder Due to Alzheimer's Disease, and Dementia-Related Psychosis.

### Differential Diagnosis

It is most important to rule out the possibility of pseudo-dementia or a reversible dementia due to a general medical condition. A comprehensive dementia workup was performed by Mrs. M's PCP that included blood work and imaging of her brain and no major abnormalities were found except for some nonspecific cortical atrophy seen on CT. The possibility of pseudo-dementia is considered less likely due to her subjective reports of her depression as "mild" as well as the relative severity of her amnesic symptoms. A relatively unremarkable medical workup makes a reversible dementia less likely. Furthermore, although she initially denies a family history of any major medical or psychiatric concerns, a more focused and direct line of questioning revealed that her father had "the same thing" and had "major memory problems" that started approximately at age 55 and lead to what Mrs. M describes as profound difficulties with memory.

### Treatment

Dementia Related Psychosis is a difficult condition to treat. No second generation antipsychotic (SGA) is approved for treatment for dementia related psychosis. In fact, all SGAs carry a black box warning that indicate a higher risk of mortality associated with the use of these drugs in the demented with psychosis<sup>3</sup>. There appears to be a 1.6-1.7% increased risk of mortality associated with SGA use in this population and risk is also applied to older first generation antipsychotics as well<sup>4</sup>. Furthermore,

evidence also demonstrates that there is a relative lack of efficacy of these drugs in this clinical scenario, which was indeed seen in Mrs. M's case<sup>5</sup>. While follow-up studies question the risk associated with the use of these drugs in dementia-related psychosis, it is generally accepted in the psychiatric community that these drugs are not indicated in this population<sup>2,3</sup>. After discussing the risks, benefits, alternatives, and consequences of not using these medications with Mrs. M and her husband, they both agreed to not use antipsychotics and to try alternative modalities.

In order to optimize her treatment while respecting Mrs. M's autonomy, I gently tapered her off of the Risperdal while optimizing her dose of Celexa. Interestingly, after discontinuing her Risperdal, Mrs. M did not report any worsening of her psychotic symptoms, a phenomenon that is consistent with studies assessing the efficacy of SGAs in the demented population with psychosis<sup>5</sup>. Supportive psychotherapy was started, assuring the patient that the VH are a result of her illness and that a team of mental health professionals would be available to her during this difficult time. While it was obviously difficult to hear, explaining the natural course of Mrs. M's diagnosis to both her and her husband with empathy and support was very beneficial to both parties. Strategies were employed for both Mrs. M and her husband if her VH became very distressing, including gently talking down, open communication about what she was experiencing, and a plan to move Mrs. M outdoors as her VH only occur indoors. Optimizing treatment of her depression included dose adjustments of her SSRI, a

referral to a therapist for weekly psychotherapy, and an additional agent to help optimize her sleep. Also, after discussing the risks and benefits of the medication, a trial of Aricept was also started. Given the chronic and debilitating course of Major Neurocognitive Disorder Due to Alzheimer's disease, I assured Mrs. M and her husband that staff would be available to support her and her family and we would coordinate with her PCP to best address her future needs.

## References

1. Kaplan and Sadock's Synopsis of Psychiatry, 11<sup>th</sup> Edition. Chapter 8-Mood Disorders
2. Kaplan and Sadock's Synopsis of Psychiatry, 11<sup>th</sup> Edition Chapter 21-Neurocognitive Disorders
3. Alan F. Schatzberg, M.D.; Charles DeBattista, D.M.H., M.D., Manual of Clinical Psychopharmacology, 8<sup>th</sup> Edition. Chapter 12-Pharmacotherapy in Special Situations.
4. Trifirò G, Verhmamme KM, Ziere G, et al: All-cause mortality associated with atypical and typical antipsychotics in demented outpatients. *Pharmacoepidemiol Drug saf* 16(5):538-544, 2007
5. Schneider LS, Tariot PN, Dagerman KS, et al; CATIE-AD Study Group: Effectiveness of atypical antipsychotic drugs in patients with Alzheimer's disease. *N Engl J Med* 355(15):1525-1538, 2006

"It is important to fund young researchers who want to do curiosity-driven research. Curiosity-driven research is a part of life. Some people are curious. They want to learn more about nature and society should help that. It's like art: you can learn more and bring more beauty".

-----Serge Haroche-----

## RESEARCH PROJECTS AT ARMC

Are you interested in research? Are you a student, resident, staff, or faculty member at ARMC? Please contact the offices listed below to participate in any of the following ongoing studies.

### Emergency Medicine 909-580-6370

Archambeau, Benjamin DO PGY I Avila, Alfonso, DO PGYI	A Comparative Study of Levetiracetam and Phenytoin Levels in Patients with Traumatic Brain Injury and Increased ICP Requiring Ventriculostomy
Young, Stephanie DO PGY I	Correlated Length of Stay with Implementation of the Sepsis Program-One Hosital's Experience
Avila, Liezl DO PGY II Hendy, Dylan DO PGY III Neeki, Michael DO	A Propective Randomized Comparative Outcome Study of Emergency Medicine Physician Treatment of Minor Burn After a Short Training Workshop by a Burn Specialist Comparted to Burn Specialist Care of Similar Patients
Carrico, Braeden DO PGY II Seiler, Kathryn DO PGY II	A Retrospective Study of Incidence of Ischemic CVA Resulting from SBP Reduction Greater than 25% during Treatment of HTN Emergency
David, Nina DO PGY II Jabourian, Alex DO PGY Neeki, Michael DO	A Retrospective Analysis of Lunate and Perilunate Fracture-Dislocation Closed Reductions in the Emergency Department
Takehana, Lauren DO PGY II Pennington, Troy DO Lee, David DO PGY II Neeki, Michael DO	1. The HEART Score: A Retrospective Review in a Multiethnic Population 2. Sepsis Mortality and BMI 3. Hemiparesis in a Sturge Weber Patient: Seizure vs. CVA
Avera, Leigh DO PGY II Minahan, Thomas DO Neeki, Michael DO	1. The Expanding Role of Paramedics in the Optimal Utilization of Emergency Department Services 2. Concomitant CE-Inhibitor Use and Alteplase in Ischemic Stroke, Increased Risk for Angioedema: Case Report and Pathophysiology Review
Inglis, Travis DO PGY III Kuzmack, Edward DO PGY III Seng, Sakona DO	A Retrospective Analysis of the Outcome of Patients Daignosed with Apparent Life Threatening Event (ALTE), in the Emergency Department to Determine if the Current Protocol for Work-up and/or Admission is Warranted
Mistry, Jamshid DO PGY I Piibe, Remy M.D Lux, Pamela DO Nguyen, Ann M.D Neeki, Michael DO	1. Case Report: Tension Hydrothorax, an unusual case. 2. Spinal Epidural Abscess: A Retrospective Analysis 3. A Novel Approach to Diagnosis/ The SEA Score 4. Intracranial Hemorrhage following Bath Salt Use: A Case Report Double Blined Prospective Study: TXA, Neeki M et al. (I'm part of the et al)
Nassman, Dalia DO PGY II Neeki, Michael DO	The Effect of Methamphetamine Use ofn Heart Rate and Mortality in Trauma Patients in San Bernardino County
Richard, Aurore DO PGY II Neeki, Michael DO	1. A Prospective Randomized Comparative Outcome Study of Emergency Medicine Physician Treatment of Minor Burn After a Short Training Workshop by a Burn Specialist Comparted to Burn Specialist Care of Similar Patients 2. Pneuoecephalous Post Epidural
Than, Nhat Tan DO PGY III Neeki, Michael DO	The Expanding Role of Paramedics in the Optimal Utilization of Emergency Department Services
Ayvazian, Arbi DO PGY IV Lux, Pamela DO Neeki, Michael DO	1. Manifestation of Necrotizing Fascitis: A Retrospective Review of Patients Presenting to a San Bernardino County Emergency Department 2. Eaten from the inside: A Rare Case of Disseminated Stronglyoides Infection 3. Hemophilia
Batt, Joshua DO PGY IV Yuen, Ho-Wang M.D Nguyen, Ann DO Stone, Benjamin DO Neeki, Michael DO	1. Hyotension after Large Volume, Thereapeutic Paracentesis in the Emergency Department: Reality or Myth? 2. Intracranial Hemorrhage Following Bath Salt Use: A Case Report 3. Osteopathic Manipulative Medicine in Tarsal Somatic Dysfuntion: A Case Report 4. The Need for Blood Transfusion in Trauma Patients Using Selective Serotonin Reuptake Inhibitors 5. Conus Medullaris Syndrome from Spinal Metastasis
Boulos, Sara DO PGY IV Yen, Ho-Wang M.D Pennington, Troy DO Piibe, Remy M.D Neeki, Michael DO	1. A Retrospective Review of Anaphylaxis and Allergy Emergencies in the Emergency Department of a Large Urban County Hospital in Southern California. Chagas Induced Cardia Arrest 2. Spontaneous Liver Hematomas in a Patient with Hemophilia B: A Case Report 3. Vertebral Artery Dissection 4. A Case Report: Syncope and Dyspnea Associated with Takostubo Cardiomyopathy
Crouch, Andrew DO PGY II Neeki, Michael DO	1. Do Resident Physician Know About Cost of Medical Care in their Hospital 2.The Effect of Methamphetamine on Size and Distribution of Stroke
Hintzche, Gabriel DO PGY II Yuen, Ho-Wang M.D	1. A Retrospective Review of Anaphylaxis and Allergy Emergencies in the Emergency Department of Large Urban County Hosptial in Southern California 2.Vertebreal Artery Dissection
Johansson, Jens DO PGY IV	1. Early Administration of Long-Acting Insulin in the ER In the Setting of DKA; and Its Impact On

Neeki, Michael DO Seng, Sakona DO	Mortality/Morbidity/Length in the ICU/Costs 2. A Case of Suspected Wound Botulism
Lee, David DO PGY IV Yuen, Ho-Wang M.D	1. Hypotension After Large Volume, Therapeutic Paracentesis in the Emergency Department: Myth or Reality? 2. Guillan Barre with Succinylcholine
Nguyen, Edward DO PGY II	1 Early Administration of Levemir in the ER in the Setting of DKA and its effect on Length of Stay in the ICU, Mortality and Morbidity, and Costs 2 Guillian Barre with Succinylcholine

**Family Medicine 909-580-6236**

Calinisan, Jason DO Soberano, Hernani M.D Sun, Edward DO	Accuracy and Cost Efficacy of Rapid GBS Testing During Labor
Diaz, Matthew DO Schluederberg, Eric DO Smith, Rory M.D	FMI to FHC Transitions Project
Thanh, Ngo DO Ronay, Marianne M.D	Retrospective Study: Success of Structured Smoking Cessation Intervention
Pickle, Lara DO Melendez, Martha M.D	Dramatic Reduction of HgA1C & Neuropathic Pain Following Adoption of Plant Based Diet in 52 yo T2DM Patient
Swingle, Jennifer DO Gupta, Pooja DO	A Case Study: Brugada Syndrome and Adrenal Crisis with Empty Sella

**Internal Medicine 909-580-6270**

Raoufi, Kambiz M.D	An Observational Study of Factors Affecting ICU Readmissions at ARMC
Choudhary, Samiksha DO Arabian, Sarkis DO	The Benefits of Early Administration of Long Acting Insulin in DKA Patients
Boulos, Andrew DO Boulos, Sarah DO PGY II Arabian, Sarkis DO	A Retrospective Review of Initial Volume Resuscitation in Severe Sepsis and Septic Shock in the Emergency Department of a Large Urban County Hospital in Southern California
Twohig, Ling DO Boone, Lynne DO PFY II Fitzmorris, Steven DO Lawrence, Larry M.D	An Exploration Into the Association of Depression After Implantation of Automated Implantable Cardio-Verter Defibrillator (AICD) vs. Pacemakers
Napolitan, Phillip DO Redinski, John DO Landis, Claudia M.D	Comparing the Incidence of Acute Kidney Injury Between the Empiric Combination of Vancomycin and Piperacillin-Tazobactam, Vancomycin and Cefepime or Vancomycin and Meropenem in the Treatment of Sepsis, Severe Sepsis and Septic Shock.
Jones, Sarah DO Kator Mulk, Taiba DO Landis, Claudia M.D	Vanco and Finding Therapeutic Levels in ESRD Patients on ESRD

**MFM Fellowship Program 909-580-3496**

Roloff, Kristy DO Stephanyan, Gohar DO PGY VII Valenzuela, Guillermo M.D	Methamphetamine Use Increases Chances of Preeclampsia
Stepanyan, Gohar DO	Group B Streptococcus
Roloff, Kristy D.O	Cumulative Oxytocin Dose and Primary Cesarean Delivery Rates with Spontaneous and Induced Labor: Comparing Outcomes in Obese and Non-Obese Patients
Roloff, Kristy D.O Brown, Elizabeth D.O PGY III	Timing of Indicated Repeat Cesarean Delivery Prior to 39 Weeks of Gestation
Roloff, Kristy DO Kazemi, Mina DO Underwood, Lisa DO	Relationship Between the External Scar Characteristics and the Degree and Severity of Intra-Abdominal Adhesions at Repeat Cesarean Section

**Neurosurgery 909-580-3372**

Miulli, Dan DO Cabanne, Marc DO PGY V	Effects of Methamphetamine Use of TBI
Miulli, Dan DO Carson, Tyler DO PGY IV	Does Methylphenidate Reduce ICU Stay and Length of Hospital Stay in Brain Injury Patients?
Miulli, Dan DO Dahlin, Robert DO PGY IV	Reduced Incidence of Recurrent Chronic Subdural Hematomas in Patients on ACE Inhibitors
Miulli, Dan DO Mahato, Deependra DO PGY VI	Optimum Time to Control Systolic Blood Pressure Below 140 to Prevent Rebleeding in Acute Hemorrhagic Stroke Patients
Miulli, Dan DO Duong, Jason DO PGY III	Effects of Amphetamines on Traumatic Brain Injury
Siddiqi, Javed M.D. Ph.D Miulli, Dan DO Hariri, Omid DO PGY V	Would Clinically-Indicated Cerebral Spinal Fluid Surveillance Predict External Ventricular Drain Associated Ventriculitis or is Frequent Routine Cerebral Spinal Fluid Surveillance Necessary?



Miulli, Dan DO Huynh, Katie DO Duong, Jason DO PGY III Ogunlade, John DO PGY II	Validation of the Spinal Instability Neoplastic Score (SINS) Grading Criteria: A Retrospective Chart Review
Miulli, Dan DO Huynh, Katie DO Elia, Chris DO PGY II Majeed, Gohar DO PGY II	Clinical Correlation Between Nursing Education on External Spinal Orthosis and Patient Outcome: A Multi-Center Study at 3 Trauma Hospitals
Miulli, Dan DO Krel, Mark DO PGY II	Optimization of Cholesterol Level for Minimization of IPH Size
Siddiqi, Javed M.D., Ph.D Miulli, Dan DO Ma, Quang DO	Incidence of C Diff Infection in Neurosurgery Related Prophylactic Antibiotic Usage
Miulli, Dan DO Ma, Quang DO	Single Surgeon Institution for Posterior only Stabilization for Traumatic Thoracolumbar burst fractures
Siddiqi, Javed M.D, Ph.D Ma, Quang DO	Factors that Predict Failure of Bed Side Chronic Subdural Hematoma Evacuation
Miulli, Dan DO Majeed, Gohar DO PGY II	Is Time to Intervention dependent upon Cerebral Aneurysm Treatment with Clipping vs Coiling and Does it Affect Outcome & Stroke Care Measure
Miulli, Dan DO Billings, Marc DO PGY III	Neurophysiologic and Clinical Effects of Interventricular Cavernomas with Hemorrhage: How Surgery Alters Hemodynamics Leading to Symptomatic Recovery
Wong, Dan DO Minasian, Tanya DO PGY VI	How Effective is Bracing in Spinal Fractures
Miulli, Dan DO Ogunlade, John DO PGY II	The Long Term Systemic Disease Aftermath of Moderate to Severe Head Trauma
Siddiqi, Javed M.D. Ph.D	A Retrospective Review on the Necessity for Ventriculostomy
Miulli, Dan DO Sweiss, Raed DO	Placement in Patients with Glasgow Coma Scale of Less than 8 with no Significant Radiographic Injury and Scale to Determine the Necessity of Ventriculostomy Placement in these Patients based on Radiographic Imaging
Miulli, Dan DO Taqi, Muhammad DO Ramakrishnan, Vivek DO	Predictive Value of CT-Angiogram Collateral Score vs. CT-Perfusion for Outcome in Acute Thrombectomy Patients
Miulli, Dan DO Connelly, Mark Ray, Kevin DO PGY II	Using EEG to Predict Time to an Extent of NIHSS Recovery by Location of Hemorrhagic Stroke
Miulli, Dan DO Watkins, Justen DO PGY III	Vitamin C Levels and Intracerebral Hemorrhage; is there a Correlation?
Miulli, Dan DO Zampella, Bailey DO PGY II	What is the Incidence of Clinically Significant Testosterone Hormone Range in Men with Functional Pituitary Tumors (with Possible Comparison to Post-Operative Sexual Dysfunction)
Miulli, Dan DO Oros, Amber DO PGY II	Thoracolumbar Orthotic Brace Treatment of Non-Operative Compression Fractures.
Siddiqi, Javed M.D., Ph.D Miulli, Dan DO Hariri, Omid DO PGY V Minasian, Tanya DO PGY VI	Traumatic Subarachnoid Hemorrhage and Vasospasms Possible Treatment Options
Siddiqi, Javed M.D., Ph.D Minasian, Tanya DO PGY VI Hariri, Omid DO PGY V	An Analysis of Neuron Specific Enolase (NSE) and its Prognostic Value in Traumatic Brain Injury (TBI) Patients

#### Opthalmology 909-583-1369

Storkersen, Kris M.D Suther, Mukesh M.D Tokuhara, Keith M.D Chinichain, Sahmon DO PGY IV	Macular Atrophy Associated with Neonatal Alloimmune Thrombocytopenia
Storkersen, Kris M.D Suthar, Mukesh M.D Tokuhara, Keith M.D Chinichain, Sahmon DO PGY IV	Macular Ischemia Associated with Beurgers Syndrome
Tokuhara, Keith M.D Chinichian, Sahmon DO PGY IV	Dangue Fever with Associated Anterior Uveitis after Interocular Lense Placement
Storkersen, Kris M.D Suther, Mukesh M.D Tokuhara, Keith M.D Chinichian, Sahmon DO	Ocular Manifestations of Rosai-Dorfman Disease
Storkersen, Kris M.D	Epidemiology of Corneal Ulcers Evaluated at a Tertiary Hospital in Southern California

Suther, Mukesh M.D Tokuhara, Keith M.D Kim, Sarah DO PGY III	
<b>Pharmacy 909-580-0016</b>	
Subbiah, Shanmuga M.D Park, Gabriel Pharm.D Eisenbud, Lauren Pharm.D Lowe, Andrew Pharm.D	To Assess the Efficacy of Gabapentin Versus Placebo in the Prevention of Chemotherapy-Induced Peripheral Neuropathy (CIPN) in Patients Receiving Paclitaxel
Lowe, Andrew Pharm.D Meyou, Nightingale Pharm.D Varner, Susan D.N.P.	Reducing Chronic Pain Complaints in Clinically Depressed Patients with first time use of Serotonin Norepinephrine Reuptake Inhibitors (SNRI): Venlafaxine and Duloxetine
Chen, Jessica Pharm.D Landis, Claudia, M.D	Comparison of Using the three different FGR Estimating Equations, Including the Newest Chronic Kidney Disease Epidemiology Collaboration Equation, in Dosing Vancomycin in an Elderly, White, Female Hospitalized Population
Zakhary, Marena Pharm.D Zeid, Kayali M.D	Achieving Sustained Virologic Response with Direct-Acting Antiviral Agents and the Effect on the Development of Hepatocellular Carcinoma
<b>Psychiatry 909-580-3830</b>	
Twohig, Ling DO Boone, Lynn DO PGY III Fitzmorris, Steven M.D Lawrence, Larry M.D	Incidence of Depression After Placement of ACID vs. Pacemaker
Lay, Lindy DO Porter, John DO Unwalla, Khushro M.D	Investigation of use of PRN Medications, Nicotine Replacement, Utilization of Code Greys and restraints in the Behavioral Health Unit Before and after Implementation of Hospital Wide Smoking Cessation Policy
<b>Surgery (ACGME) 909-427-5626</b>	
Trujillo, Charles M.D PGY I	1. Incidental Appendectomy: Does it Increase the Risk of Complication During Abdominal Procedures? 2. Complex Abdominal Wall Hernias and Management 3. Still in Development: Data Collection for Possible Use of Telephone Follow-up on PTS who Underwent Uncomplicated Appendectomy
Fowler, Aaron M.D PGY III	1. Squamous Cell Carcinoma of the Gallbladder: A Palliative Surgical Approach 2. Complex abdominal Wall Hernias and Management
<b>Surgery (AOA) 909-580-3362</b>	
Schulz, Costello, K D.O PGY I Jreije, K Hussain Farabi M.D Davis, Joseph	Case Report of Bilateral Idiopathic Granulomatous Mastitis and Literature Review
Schulz, Costello, K DO PGY I Davis, Joseph	Early Prehospital Antifibrinolytic Therapy (EPAT) is a Prospective Cohort Study of Early Administration of Tranexamic Acid (TXA)
Schulz C., Katherine DO PGY I Davis, Joseph	Retrospective Review of National Trauma Database Regarding Traumatic Diaphragmatic Hernia
Schulz, Costello, K DO PGY I Davis, Joseph	Case Report: A Rare Case of Acute Pancreatitis with Normal Pancreatic Enzyme
Schulz, Costello, K DO PGY I Davis, Joseph	Recurrent and Bilateral Carotid Body: Case Report and Literature Review. Created and Presented Poster Presentation at Arrowhead Regional Medical Center
Schulz, Costello, K DO PGY I Davis, Joseph	Investigation and Report of New Frontiers in Minimally Invasive Management of Gastroduodenal Artery Pseudo aneurysms Through Two Interesting Case Reports.
<b>Women's Health 909-580-3470</b>	
Brown, Elizabeth DO PGY III Roloff, Kristy DO Stephanyan, Gohar DO Valenzuela, Guillermo DO	Timing of Indicated Repeat Cesarean Delivery Before 39 Weeks of Gestation
Kazemi, Mina DO Roloff, Kristy DO Valenzuela, Guillermo DO	Relationship Between the Eternal Scar Characteristics and the Degree and Severity of Intra-Abdominal Adhesions at Repeat Cesarean Section
Underwood, Lisa DO Roloff, Kristy DO Stepanyan, Gohar DO Valenzuela, Guillermo DO	First and Early Second Trimester Ultrasonound to Predict Morbidly Adherent Placenta

## New Innovations in Medicine: Google Glass in Medicine

*Aisha K. Memon, M.D. PGY III*  
Family Medicine

Imagine, having to visit patients without having to carry or find any records and results. Well, Google Glass just might be able to make that possible, or so we hope. It's a device that looks like eyeglasses without the lenses and has a tiny computer and camera built into the frame, commands, and a touchpad on the side of the frame. Physicians and hospitals have been among the first to experiment with this new technology with the goal of enhancing the practice of medicine. One of the major attributes of Google Glass for Physicians is being able to go through patient profiles, review their medical data and lab results without looking away from the patient for more than a couple seconds or ever leaving their bedside. It also allows for hands free web searching of unfamiliar treatment options or syndromes. Recalling this information rapidly could potentially improve workflow for doctors by being a time saving measure. Aside from taking pictures, Google Glass can also make video calls to allow for live streaming and remote mentoring. Last year, Rhode Island Hospital started a study to test the use of Google Glass as a tool for Dermatology consultations in the Emergency Department. Video and audio information from patient encounters was relayed to an on call Dermatologist, who was able to evaluate the patient and provide treatment advice in real time without actually seeing the patient in person. Not only did this prove as a practical tool, but the patient responses were positive as well. Many are excited about the prospect of how Google Glass may be able to completely transform medical education. Residents can attain remote mentoring on a procedure, via live streaming

video guidance. Better yet, surgeons can give students a first person video review of a surgery they are scrubbed into, while narrating through the entire process, it has been done in several major medical centers across the states. Although, there has been much enthusiasm about this new innovation in medicine, there are quite a few necessary improvements that need to be made before Google Glass can be made part of mainstream health care deliverance. Some of the major concerns brought up in several interruptions during transmission and poor audio/video quality at times. Google Glass is yet another example of the potential for technology merging with medicine to improve how we practice and tend to our patient care. Real time data streaming of patient encounters, all-in-one access to medical tests, hands free photo and video documentation, as well as, changing medical education for a more dynamic experience are just a few of the things Google Glass has to offer so far.

### References

Google Glass in pediatric surgery: An exploratory study. International Journal of Surgery. April 2014, Volume 12, Issue 4, pages 281-289.

Monegain, Bernie. Google Glass links to HER. June 19, 2014.

<http://www.healthcareitnews.com/news/drchronos-bright-ideas-google-glass>

Jones, Andrew. Researchers seek to enhance medicine with Google Glass. April 9, 2014.

<http://www.browndailyhearld.com/2014/04/09/researchers-seek-enhance-medicine-google-glass>

Vhabzadeh, Arshya. How will Google Glass Affect Medicine? April 14, 2014.

<http://www.bostonmagazine.com/health/blog/2014/04/14/google-glass-will-affect-medicine/>

## @ YOUR LIBRARY!

### NEW RESOURCES

1. ***Red Book Online 2015***: Report of the Committee on Infectious Diseases (RBO)
2. ***Psychiatry Online (POL)***
3. ***SESAP Online***
4. ***MKSAP 17***
  - *Part A* - (the online version will be available about 8/31/15)
  - *Part B* - (the online version will be available about 1/31/16)
5. ***MedStudy 16***

### REMOTE ACCESS

Trying to use the Online Library Resources off campus has generated a plethora of questions and concerns. Follow these instructions for Remote Access through Citrix.

1. Go to <http://armcportal.sbcounty.gov>
  - Login as you do at ARMC
  - Click on ARMC Intranet
  - Click on Departments, then Library
2. Copy the URL  
Close the Library webpage

3. Right click in the middle of your desktop

- In the new window, click on "New", then "Shortcut"
- In the Create a Shortcut window, paste the URL you just copied
- Click "Next"
- Type a name for the shortcut: Example - **Library**
- Click "Finish"
- You now have a **Library** Shortcut/App on your desktop

*(No more boxes requesting username & password)*

4. Next time you need to use the Library Resources, just click on your **Library** shortcut.

### OPHTHALMOLOGY eBooks in ClinicalKey & AccessMedicine

There are many requests for new books from the various residency programs. On many occasions the book is available in ***ClinicalKey***, ***AccessMedicine***, or ***AccessSurgery***.

I am including a list of Ophthalmology eBooks for our library users. A list of eBooks, of the other ARMC resident programs, will be included in the future ***JARMC issues***.

## @ YOUR LIBRARY! Continued..

### Ophthalmology eBooks in ClinicalKey:

- Adler's Physiology of the *Eye*
- Aesthetic* Oculofacial Rejuvenation
- Albert & Jakobiec's Principles & Practice of *Ophthalmology*
- Atlas of Clinical and Surgical *Orbital* Anatomy
- Becker-Shaffer's Diagnosis and Therapy of the *Glaucomas*
- Case Reviews in *Ophthalmology*
- Cataract Surgery
- Clinical Diagnosis in *Ophthalmology*
- Clinical *Ocular* Toxicology: Drugs, Chemicals, and Herbs
- . Clinical *Ophthalmology*: a Synopsis
- . Clinical *Ophthalmology*: A Systematic Approach
- . Clinical Procedures in Primary *Eye* Care
- . *Color Atlas of Cosmetic* Oculofacial Surgery
- . Color Atlas of *Ophthalmic* Plastic Surgery
- . *Contact Lens* Complications
- . *Cornea*
- . *Cornea* Atlas
- . *Corneal* Surgery: Theory, Technique and Tissue
- . *Eye*: Basic Sciences in Practice
- . Glass' Atlas of *Macular Diseases*
- . *Glaucoma*
- . Handbook of *Retinal* OCT: Optical Coherence Tomography
- . Kanski's Clinical *Ophthalmology*
- . Massachusetts Eye and Ear Infirmary Illustrated Manual of *Ophthalmology*, The
- . *Neuro-Ophthalmology*
- . *Neuro-Ophthalmology*: Diagnosis and Management
- . *Ocular* Disease: Mechanisms and Management
- . *Ocular* Pathology
- . *Ocular* Surface Disease: Cornea, Conjunctiva and Tear Film
- . *Ophthalmic* Assistant, The
- . *Ophthalmic* Clinical Procedures
- . *Ophthalmic* Surgery: Principles and Practice
- . *Ophthalmic* Ultrasonography
- . *Ophthalmology*
- . *Ophthalmology* Secrets in Color
- . *Orbital* Imaging
- . Pediatric *Ophthalmology* and Strabismus
- . *Putterman's* Cosmetic Oculoplastic Surgery
- . Radiology of the *Orbit* and Visual Pathways
- . Rapid Diagnosis in *Ophthalmology*: Anterior Segment
- . Rapid Diagnosis in *Ophthalmology*: Lens and Glaucoma
- . Rapid Diagnosis in *Ophthalmology*: Neuro-*Ophthalmology*
- . Rapid Diagnosis in *Ophthalmology*: *Neuro-Ophthalmology*
- . Rapid Diagnosis in *Ophthalmology*: Oculoplastic and Reconstructive Surgery
- . Rapid Diagnosis in *Ophthalmology*: Pediatric *Ophthalmology* and Strabismus
- . Rapid Diagnosis in *Ophthalmology*: Retina
- . *Retina*
- . *Retinal* Atlas, The
- . Roy and Fraunfelder's Current *Ocular* Therapy
- . Ryan's *Retinal* Imaging and Diagnostics
- . Signs in *Ophthalmology*: Causes and Differential Diagnosis
- . Surgical Techniques in *Ophthalmology*: Glaucoma Surgery
- . Surgical Techniques in *Ophthalmology*: Oculoplastic Surgery
- . Surgical Techniques in *Ophthalmology*: Refractive Surgery
- . Surgical Techniques in *Ophthalmology*: Retina and Vitreous Surgery
- . Synopsis of Clinical *Ophthalmology*
- . *Uveitis*
- . *Video Atlas* of Oculofacial Plastic and Reconstructive Surgery

### Ophthalmology eBook in AccessMedicine

- . Vaughan & Asbury's General *Ophthalmology*, 18e



# ANNOUNCING THE 11<sup>th</sup> Annual ARMC Research Day May 27<sup>th</sup> 2016 Oak Room

Please save the date, more information to follow on how to participate, deadlines, etc....



## Important Numbers

### ARMC

400 North Pepper Ave  
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### JARMC & Research Educator:

Teckah Lawrence

Phone: 909-580-6337

E-mail: [lawrencete@armc.sbcounty.gov](mailto:lawrencete@armc.sbcounty.gov)

### Institutional Review Board Coordinator:

Sabreen White

Phone: 909-580-6336

Email: [WhiteSab@armc.sbcounty.gov](mailto:WhiteSab@armc.sbcounty.gov)

The schedules for the following issues are:



#### 2<sup>nd</sup> Issue 2016

History of Medicine	OB/GYN
How I do it	Surgery
Spotlight on Research	Internal Medicine
Fascinating Case	ER
Innovations in Medicine	Neurosurgery

#### 3<sup>rd</sup> Issue 2016

History of Medicine	ER
How I do it	Psychiatry
Spotlight on Research	Family Medicine
Fascinating Case	Ophthalmology
Innovations in Medicine	Internal Medicine

## Dates to remember...

-  **Deadline for submissions to the next issue of JARMC: April 20, 2016**
-  **Upcoming IRB Meetings:**  
**Feb 8<sup>th</sup>, March 14<sup>th</sup> and April 11<sup>th</sup> in the Sierra Conference room from 12:30-2pm. Please remember that the deadline for submission is two weeks prior to the IRB meeting. No exceptions!**