

The University of Michigan Department of Urology

3875 Taubman Center, 1500 E. Medical Center Drive, SPC 5330, Ann Arbor, Michigan 48109-5330

Academic Office: (734) 232-4943 FAX: (734) 936-8037

<http://medicine.umich.edu/dept/urology> <http://matulathoughts.org/>

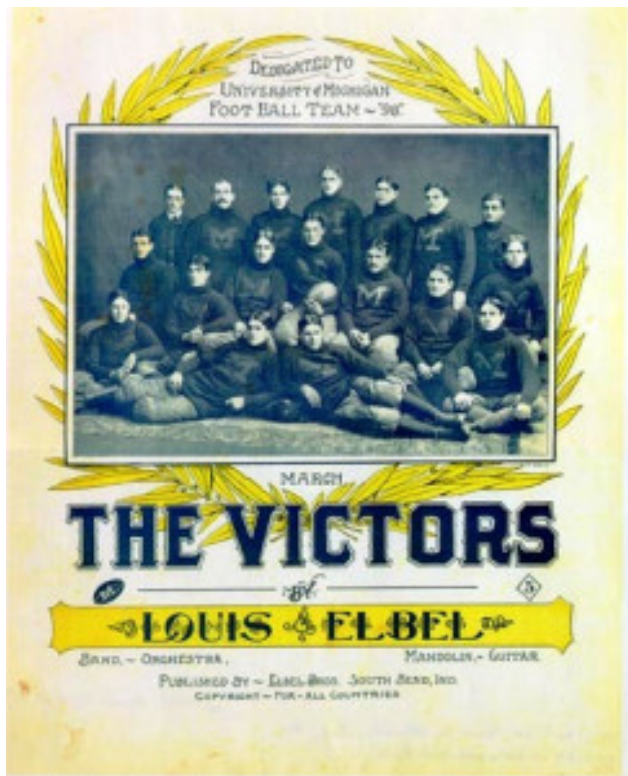


What's New March 3, 2017



10 Items, 30 Minutes

Periodic explanation: *What's New*, a weekly communication from the University of Michigan Department of Urology, is distributed most Fridays internally by email to faculty, residents, and staff dealing with specific personnel and programs of the department. On the first Friday of the month *What's New* is more general in scope, "a professor's personal perspective," and is also distributed to alumni, and friends of the department. The website (blog) version is matulathoughts.org, archived since 2013.



One.

Winter marches to a close this month and we perk up in anticipation of more temperate days, with spring in mind. The meteorological first day of spring was March 1st in the northern hemisphere, but the astronomical start of spring this year will be Monday, March 20. That day may not look quite like spring when you come into work or go home in Ann Arbor, even considering the start of Daylight Savings Time on March 12. Just as likely you won't notice any seasonal change in windowless clinics or operating rooms as you attend to the work at hand, but spring is here.



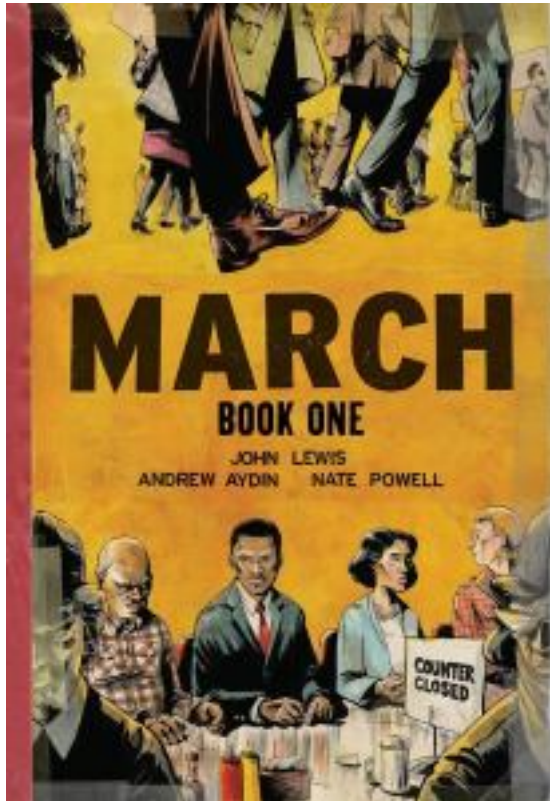
[March in Mott, 2012 – Kate Kraft & Matt Smith]

Named for Mars, the Roman god of war, March is the only month with a musical name, if you consider the genre of John Philip Sousa and the Michigan fight song. UM student Louis Elbel (1877-1959) composed *Hail to the Victors* in 1898 (sheet music shown at top) and copyrighted it the following year when *The March King*, Sousa, and his band performed it publicly. Marches, of course have a much older provenance, as the illusion to Mars suggests.

Originally timed to drum alone, military marches set the pace for foot soldiers. Brass instruments, commonplace inclusions by the 19th century, helped marches become entertainment. Mozart, Beethoven, Mahler, and other great composers wrote popular marches for the public, although marching armies still kept pace with music. Napoleon, allegedly, adopted a rapid tempo of 120 beats (steps) per minute so his armies could march faster than British and other foes. Today's militaries no longer set operational pace to music, except in movies. Marches now include a range of musical technologies and are far more likely to be heard on college football fields than on battlefields. Marches entertain and inspire, and the *Michigan Fight Song* may well have echoed in quarterback Brady's head during the Super Bowl drama last month, certainly as great an example of athletic bootstrapping as anyone can easily recall. [Below: Louis Elbel conducting in the Big House, 1958]



Political marches are also part of humanity's fabric and the recent *March* trilogy, a graphic memoir of John Lewis, is noteworthy. Written with Andrew Aydin and illustrated by Nate Powell, this was published between 2013 and 2016 and is an effective way of telling history to younger audiences, where it most matters. [Below: *March Book One*] Civil disobedience, inspired by Mohandas Gandhi, changed India in the first half of the 20th century and Martin Luther King, John Lewis, along with many others would similarly change the United States in the second half.



Two.

Technology drives the comforts and arts of modern life. No one can deny that planes, trains, automobiles, indoor plumbing, central heating, air conditioning, and Nike sportswear make work and life more comfortable and convenient than it was for our ancestors. Visual and auditory art, no less significantly, buttresses the human condition ever since the first cave dwelling paintings, sculptures, and musical instruments. Technology over the ensuing 40 or so millennia changed those and all other human arts.



[Lascaux, France cave painting 15,000-10,000 BC]

Art has particular value for us in health care education, clinical care, and research. Brain stimulation, through artistry of one sort or another, makes us attentive, provokes curiosity, facilitates learning, and stimulates creativity. When the brain is stimulated, questions are raised, nuances perceived, conflicts understood, elegance appreciated, boundaries erased, and truths discovered. For these reasons we add art to walls, humor to lectures, magazines to waiting rooms, and music to surgical suites. Art expands the imagination that fuels the missions of academic medicine and fulfillment in our greater lives. This is the reason for our *Chang Lecture on Art and Medicine*, to be held this year during the Ann Arbor Art Fairs (July 20, 2017). David Watts, San Francisco gastroenterologist and author, will be our speaker.



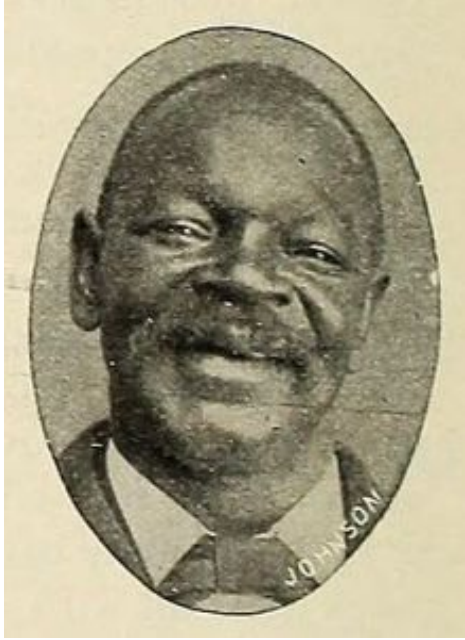
[Jackson Pollack, *The She-Wolf* 1943. MOMA, NY]

Anticipating that lecture I read Eric Kandel's latest book, *Reductionism in Art and Brain Science, Bridging the Two Cultures*. A review in *Science* caught my attention and I ordered the book at Literati, our local bookstore. [Alva Noë. Scientist's Guide to Modern Art. *Science*. 353:1215, 2016] Nobel Laureate Kandel draws on neurobiological work in sea slugs to understand more complex processes of human learning and memory and concludes that our brains process abstract (modern) art very differently than we process traditional figurative art. [Eric Kandel. Columbia University Press, 2016] Interestingly, Kandel dedicated the book to Lee Bollinger, former University of Michigan president.

Three.



Every generation has its own music and for mine the new genre of rock and roll on 45-RPM single play records was the baseline. [Above: Francis Barraud's painting of his brother's dog Nipper, 1898] Music is a story of technology and its recording formats have been contested since their start. Thomas Edison's tinfoil sheets (1877) and later wax cylinder phonographs were early technologies, but flat discs proved more practical. Emile Berliner (1851-1929), German-born American inventor, patented the Gramophone in 1887 and marketed 5-inch discs. One of his earliest recording artists was Manhattan singer George Washington Johnson (1846-1914).



[Above and below: George W. Johnson and his 1897 Berliner Gramophone recording. Source: *Wikipedia*]



Nipper achieved lasting fame when English artist Francis Barraud painted his brother's dog listening at the horn of a Gramophone in the winter of 1898 and Berliner took the image for the logo when he formed the Victor Talking Machine Company 1901.

Cylinder recording technology, however, held on for a time and transitioned from wax to celluloid Blue Amberol cylinders in 1912 with playtimes of nearly 5 minutes. The flat disc, however, was destined to dominate with shellac and 78-RPM as the material and play speed of choice. In 1929 Victor Talking Machine Company became RCA (Radio Corporation of America) Victor and would make the

first 33 1/3-RPM Long Play (LP) records. Columbia's 12-inch vinyl 33 1/3 LPs in June 1948 were a step forward in fidelity and durability. RCA Victor released the first 7 inch 45-RPM vinyl single record in March, 1949.



No single record precisely demarcates the start of rock and roll, although one contender for priority was *Rocket "88"*, a song recorded in Memphis around this day in March, 1951 by Jackie Brenston and Ike Turner. Brenston was the saxophonist in Turner's band, The Delta Cats. [Above: Turner and Brenston] The tune rocketed to number one on the Billboard R&B chart and the title referred to the Oldsmobile 88. Somehow the recording identity and profits went to Jackie, rather than Ike and his band, setting off a lifetime of grievance. A second version of the song was recorded a few months later by Bill Haley and The Saddlemen. Haley's better-known recording, *Rock Around the Clock*, came out in 1955.

Four.



Olds 88, produced by GM from 1949 to 1999 (shown above) initially paired a Rocket V8 engine with the Futuramic B-body platform (full size rear-wheel drive). Cars like this offered more than just transportation and fueled the imagination of generations throughout the 20th century in the music of the times, drive-in movies and eateries, and springtime road trips. House designs changed accordingly to include garages, highways changed cities, shopping patterns altered, and cars became offices or homes for some people. Detroit was the epicenter of the automobile industry and became a microcosm for entertainment, the labor movement, civil rights, urban collapse, and suburban sprawl. A perceptive book on this aspect of Detroit by David Maraniss was brought to my attention by our thoughtful correspondent at Emory.

“The city itself is the main character in this urban biography, though its populace includes many larger-than-life figures – from car guy Henry Ford II to labor leader Walter Reuther; from music mogul Berry Gordy Jr. to the Reverend C.L. Franklin, the spectacular Aretha’s father – who take Detroit’s stage one after another and eventually fill it.

The chronology here covers eighteen months, from the fall of 1962 to the spring of 1964. Cars were selling at a record pace. Motown was rocking. Labor was strong. People were marching for freedom. The president was calling Detroit a “herald of hope.” It was a time of uncommon possibility and freedom when Detroit created wondrous and lasting things. But life can be luminescent when it is most vulnerable. There was a precarious balance during those crucial months between composition and decomposition, what the world gained and what a great city lost. Even then, some part of Detroit was dying, and that is where the story begins.” [Author’s introduction. *Once in a Great City: A Detroit Story*. Simon & Schuster. NY 2015.]

Five.

Marching and retreating. When I became chair in 2007 I thought I had a good sense of what the job entailed, having been “schooled” under great leaders like Bill Longmire in Surgery at UCLA, Joe Kaufman (Urology at UCLA), Ray Stutzman (Walter Reed), Ed McGuire (here at UM), and of course our inaugural urology department chair, Jim Montie. Still, I had some unease, given an abrupt transition, and thus invited myself to Chicago to visit Bob Flanigan of Loyola. Our former

dean Allen Lichter and my fellow chair Karin Muraszko advised me that I still needed help and linked me to an advisor with experience in practically any problem in academic medicine. That was David Bachrach who, from day one and my first faculty retreat, has been has been a stalwart adviser for our urology department.

Our team has grown since then with a full time urology faculty cadre exceeding 40, 18 joint faculty, 15 adjunct, 30 residents and fellows, 16 advanced practice providers, 22 nurses, 29 MAs, 52 research staff, and 51 administrative staff. We conduct clinics at 12 sites, operate in 7 locations, and have 8 research laboratories, including those of our joint faculty. The Nesbit Society, numbering 324, is one of our key stakeholders. This is a lot of stuff to keep in play at any moment, and anticipating a change in departmental leadership it is wise to take stock of our position and lay out plans for the future. Whoever assumes the chair position will find strong divisions that thoroughly understand their needs, aspirations, and plans within our department. The chair stands on robust shoulders; in my case, Jim Montie had tee'd up the job superbly and I have had a lucky and fairly easy swing for my turn.

A retreat is the converse of a march. As an organizational technique retreats are occasions for conversation, teambuilding, and realignment. A retreat is a purposeful opportunity to take stock of one's position and figure out the next steps. If an organization is doing well, a retreat can be a process to figure out how to keep doing well, or to improve a team's position, in a changing environment. If the organization, army, or unit is stuck in the mire, a retreat is a chance to bootstrap out of the situation into a better one. Historically, that 19th century term means to lift yourself up by your own bootstraps, a phenomenon that is physically impossible. This useful hyperbole, an adynaton, was a metaphor of absurdity until modern technology made it a reality in today's computer world where rebooting (as the term has become) is something we do often.



[Postcard, in a series by German illustrator Oskar Herrfurth (1862-1934), depicting Baron Munchausen pulling himself out of a mire by his own hair.]

Six.

Movies, more than most other art forms, reflect and change our view of reality and sense of meaning. The Star Wars franchise, a powerful example of imagination surpassing any initial expectations of success, has extended recently from popular culture into economic theory. Zachary Feinstein, professor of financial engineering at Washington University in St. Louis, drew on the saga to predict that the destruction of the Death Star would have triggered a calamitous galactic financial crisis. [Feinstein. *It's a trap: the Emperor Palpatine's poison pill*. December 1, 2015. <https://arxiv.org/pdf/1511.09054.pdf>]

In response to the Feinstein paper, *The Economist* magazine undertook a deep analysis of the first six episodes of the saga (prior to the most recent iteration, number 7) and came up with three “important lessons for residents of the Milky Way,” that are relevant for the real world.

- Lesson one: regarding the value of trade – the freer the better.
- Lesson two: although globalization (galacticization) is an economic boon, it

presents all sorts of political challenges that are not easily managed.

- Lesson three: regarding career options in the era of artificial intelligence and robots, humans will “still labor at dangerous and unpleasant tasks” because of inequities in the galactic political system.

The Economist concluded: “Humans will work for a pittance, if necessary, to scrape by. This may lead them to the dark side. Worse, it might prompt inquisitive souls to ask what forces drive such an uneven distribution of wealth, turning them [the inquisitive souls] into those most dreaded of creatures: economists.” [*The Economist*. December 19, 2015. *Free exchange: Wikinomics*]

Further pan-galactic insights are found in the book, *The World According to Star Wars*, by Cass Sunstein. [Sunstein. HarperCollins Books, NY. 2016] The author offers two opening quotes. The first, by Yoda, is: “Difficult to see. Always in motion is the future.” The second, by UM alumnus Lawrence Kasdan is: “It’s the biggest adventure you can have, making up your own life, and it’s true for everybody. It’s infinite possibility.” These thoughts encompass the great intersection of reality and imagination. Expressed differently, this is the intersection of the gift of human self-determination (that aspiration of democracy) and Shannon’s number of human imaginative possibilities that exceeds any galactic scale. [Claude Shannon, another Michigan alumnus, was discussed on these pages on May 3, 2013.]

Seven.

Helmut Stern, friend and benefactor of the University of Michigan, passed away earlier this year. He was 97 when he died on January 21. Helmut encompassed that infinite possibility of self-determination better than most of us, and did it with unusual kindness, grace, and imagination. Born in Hanover, Germany in 1919, his outspoken nature had put the Nazis on his case when he was 18 years old and he immigrated to the United States in 1938, aided in getting a visa by his Uncle Oscar. Moving to Washington D.C. he found a job working at night and attended George Washington University by day. Helmut hoped to go to medical school and moved to Ann Arbor in 1942 where he took a job at Metrical Laboratories to earn a living, but his career plans changed after he came to own the company. He then started another company, Industrial Tectonics, Inc. (ITI) manufacturing ball bearings, and soon had plants and licensees around the world. Helmut’s business acumen was unusually sharp and his manufacturing footprint

expanded. In 1981 he sold ITI to devote time to another company of his, Arcanum, with the hope of making clean-burning coal. Helmut was a community builder, mentoring many younger colleagues in business and organizational management. He funded efforts to advance voting in young people and initiatives to strengthen the local safety net for those less fortunate. Helmut was kind, curious, and generous, a Renaissance Intellectual in every sense of the term. His art collection, with a focus on African work, stimulated his imagination, and he gave much of it to the UM Art Museum. The effects of his philanthropy echo throughout our University and community today. Helmut and his wife Candis (to whom I owe thanks for these biographic notes) moved to Las Cruces, New Mexico in 2009, returning to Michigan every six months until 2013 and during those visits he and I sometimes had lunch and discussed things such as the biology of morality, politics, and art. When travel became too difficult for him, Las Cruces became his permanent and final home.



[Former regent Julia Darlow with Candis and Helmut Stern at inauguration of Jim Stanley's endowed professorship 2012.]

Eight.



Michigan Medicine is the new name for the University of Michigan Health Care System and I first saw it in prominent display in Wyoming, Michigan when I visited MetroHealth, our new partner. This new name and relationship are part of a new chapter in the story of medicine at the University of Michigan, but it has been a natural and inevitable progression that began when a faculty house became a hospital on our campus in 1869. The hospital iterations thereafter grew quickly to match the expanding conceptual basis of healthcare, medical specialties, and graduate medical education training programs that became the career-defining part of medical education. An outpatient building in 1953 was evidence of the growing importance of ambulatory healthcare not just for clinical practice, but also in education and research. Satellite clinics, surgical suites, and professional service agreements with other healthcare organizations followed the ambulatory attention as the 20th century turned into the 21st. A significant relationship with MidMichigan Health in 2013 placed the Block M prominently in the “outstate” arena.

The ultimate justification for expansion of the UM clinical footprint is the need to maintain our educational and research programs. This justification was reflected in name of the first serious A3 I produced, that having been in the winter of 2012-2013. An A3 exercise (named for the size of the sheet of paper used in the Toyota Lean Process approach to problem-solving) is a way to tell a story or to define and solve a problem. I titled my A3: "Our clinical footprint is falling short of our needs and aspirations" and it took close to 40 drafts to complete. Those needs and aspirations comprise our mission and our expectation to be leaders and best. In that earlier part of the new century's second decade, it seemed that healthcare

economics, policy changes, and consolidation of competitors threatened to make UM too small to matter and we had to find a way to bootstrap ourselves out of a position that was becoming untenable. We seem to be on the right track now.

Nine.

Imagination and reality go back and forth. Last month we considered the Angelman story and, as I was thinking of other examples, Baron Munchausen came to mind. This fictional character (although modeled after a real person) was created by German writer, librarian, and eccentric scientist, Rudolf Erich Raspe. Born in Hanover March 1736 he became a versatile scholar and a zoological paper of his led to membership in London's prestigious Royal Society. Raspe fled to England in 1775 due to financial improprieties, and continued his scholarly interests including the imaginative stories in *The Surprising Adventures of Baron Munchausen*, a novel that he began to write in Cornwall when he was assayer and storekeeper at the Dolcoath mine in 1785. Around that time he also wrote books on geology and the history of art. He died in 1794.

The fictional baron continues to illuminate the world far beyond Raspe's expectations. *Munchausen syndrome* is a disorder in which a person feigns disease for any number of reasons. In the urology world, the drug-seeker who comes to the Emergency Department with abdominal pain and bloody urine (a finger cut dipped into their urine sample usually does the trick) is a common experience for our residents and on-call faculty. *Munchausen syndrome by proxy* is an odd situation we sometimes encounter in pediatric urology wherein a parent or caregiver fabricates or induces a physical or mental health problem for a child or other person in their care, the usual motivation being that of attention or sympathy. The *Munchausen trilemma* is a thought experiment involving a decision among three equally unsatisfying options. The *Munchausen number* is a perfect digit-to-digit number, a natural number equivalent to the sum of its digits each raised to the power of its digits. This is also called a perfect digit-to-digit invariant, for example, $3435 = 3^3 + 4^4 + 3^3 + 5^5$. (WordPress seems unfriendly to math notation). Van Berkel coined the term because each number is "raised up" by itself, in the Baron Munchausen tradition. [van Berkel, Daan. "On a curious property of 3435." arXiv preprint arXiv:0911.3038,2009]

Ten.

A perfectly satisfying national healthcare policy is a Munchausen trilemma. Everyone wants availability, quality, and affordability of healthcare, but we cannot figure out how to provide all three simultaneously. The private sector is complex, with insurance and capitated systems such as Kaiser, working in tandem with various government iterations of Medicare. The VA and other federal or community systems, such as our Hamilton Federally Qualified Health Center (FQHC) or Rural Health Clinics (RHCs), serve a growing segment of the public. The FQHCs and RHCs have over 6,600 sites of care and serve 66,000,000 patients each year, while the VA has over 1,700 sites and serves nearly 9 million veterans per year. This aggregate population of 75,000,000 largely underserved patients in these publicly-funded facilities constitutes more than 23% of the United State's population. [Thanks to Michael Giacalone, Jr. for much of this data.]

Governor Rick Snyder championed Medicaid Expansion in Michigan against the grain of his political affiliation. He must have believed that it was the right thing to do for the people of Michigan and, as an accountant at heart, he may have had an intuition that the expansion made economic sense. A paper in *NEJM* by our faculty colleague John Ayanian et al showed how the Healthy Michigan Plan covered over 600,000 mostly uninsured people defrayed a large economic load on the state, families, businesses, and health care providers. Additionally, the state government ended up with more than it paid out for the program, Michigan gained 30,000 jobs, giving its people \$2.3 billion more to spend. Projections to 2021, even as the state cost-share increases, will continue to be positive. [Ayanian JZ, Ehrlich GM, Grimes DR, and Levy H. *Economic Effects of Medicaid Expansion in Michigan. N Engl J Med* 2017; 376:407-410]



John Ayanian is the Alice Hamilton Professor of Medicine at UMMS and the Director of the UM Institute for Healthcare Policy and Innovation, where our Urology Department Dow Health Services Research (HSR) Division is located, with David Miller as its head. Alice Hamilton (1869-1970) was one of the most important UMMS graduates (1893). She went on to being a leader in the emerging fields of occupational health and toxicology and was the first woman on the faculty at Harvard Medical School. It's appropriate to see her name celebrated by such a worthy colleague as John Ayanian. [Above: John & Ann Ayanian with Chad Ellimoottil at our Dow HSR Division reception 2016.]

Thanks for reading *Matula Thoughts*, this March of 2017.

David A. Bloom, M.D.
University of Michigan, Department of Urology, Ann Arbor
734-232-4943
dabloom@umich.edu

Postscript

Last month's internal weekly "*What's New*" profiled: a.) PGY1s Scott Hawken, Lauren Corona, Udit Singhal, and Adam Cole; b.) Michigan Urological Surgery Improvement Cooperative (MUSIC); c.) Dr. Dana Ohl and Susanne Quallich Ph.D. [<https://medicine.umich.edu/dept/urology/february-2017-whats-new>]