



MEDICAL TOXICOLOGY FOUNDATION
ANNUAL REPORT
2017

The mission of the American College of Medical Toxicology's Medical Toxicology Foundation (MTF) is to improve patient's lives through support of education, training, and research that advances the prevention, diagnosis, and treatment of patients adversely affected by drugs, chemicals, and natural toxins.

Coming Full Circle – Why Donating to the MTF Makes Sense for You and Medical Toxicology

When I was President of the American College of Medical Toxicology in 2008, the Medical Toxicology Foundation (MTF) was founded. The birth of this 501(c)(3) nonprofit organization was the realization of a vision I, along with Paul Wax, and many of ACMT's past leaders, had. It provides a tax-deductible mechanism for our members and the general public to sustain, improve and grow the practice of medical toxicology through its support of education and research programs.

In the last nine years, the MTF has grown and gained even more momentum. The Foundation recently revised its bylaws and now has a separate Board of Directors along with more programs and awards that are supported by you from your donation.

Despite gaining momentum in the past two years, we still need YOUR help in achieving new heights, not only in our total financial contributions, but, more importantly, in the impact that your donation will have on the future of our specialty.



*Erica L. Liebelt, MD, FACMT
President, Board of Directors
Medical Toxicology Foundation*

Why does donating to the MTF make sense for you?

- A wealth of research shows that generosity can also have benefits for the giver, ranging from a better outlook at your job to more years of life.
- Multiple scientific studies report that “Giving” reduces stress and boosts our immune system.
- Research, recently published in the Journal of Economic Psychology found that donating to charity may improve a giver's physical and emotional well-being.
- “Giving” keeps the cycle of “good” going even further. In other words, thinking about times you've helped others will then make you want to help others again – and what can be better than that?
- Finally, donating to the MTF makes YOU a part of sustaining and growing the practice of medical toxicology.

Why does donating to the MTF make sense for our specialty?

Your donation helps to advance the mission of the MTF: to improve patient's lives through support of education, training, and research that advances the prevention, diagnosis, and treatment of patients adversely affected by drugs, chemicals, and natural toxins. This is a powerful and impactful mission.

It is my hope that every ACMT member considers a financial contribution to this organization that is striving toward an even brighter future for medical toxicology. No other organization can help meet the demand for pursuing excellence in patient care while advancing education and research that will transform the healthcare of our patients.

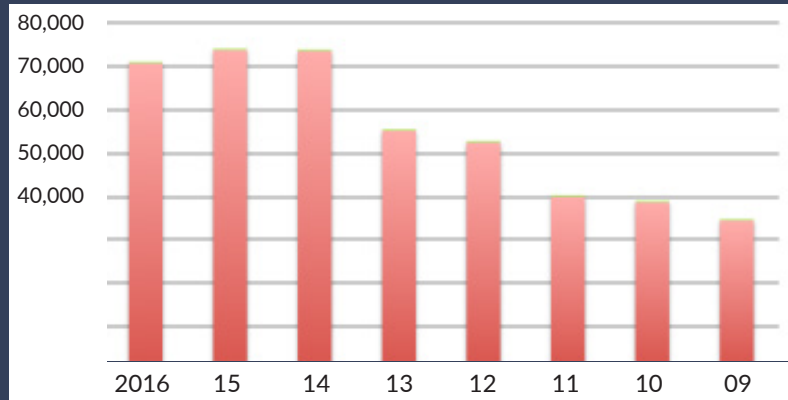
As the newly elected President of the MTF Board of Directors, life has come full circle for me. I am passionate about growing and cultivating our individual donors and the programs our foundation can sponsor. In addition, I hope to expand our reach and “asks” to other people and organizations who also share a passion for the principles and goals of our foundation.

Donating to the MTF makes sense for both you and our specialty. You play a pivotal role in advancing patient care, ensuring the future of medical toxicology and, at the same time, improving your own health and wellbeing.

~ Erica L. Liebelt

MTF Donation Summary

Year	Donations	No. of Donors
2016	\$68,650.00	60
2015	\$71,662.00	64
2014	\$71,462.00	72
2013	\$53,081.00	65
2012	\$50,426.00	70
2011	\$37,919.00	61
2010	\$36,675.00	56
2009	\$32,450.00	47
Total	\$422,325.00	



2017 Published Abstracts from MTF Grants

2016 Medical Toxicology Foundation Innovative Research and Teaching Award

Abstract: Lai J, Chai P, Boyle K, Boyer E. Acceptance Among Heroin Users of Advanced Technology in Studying Naloxone Distribution Programs. J Med Toxicol 2017;13:13 (abstract #30)

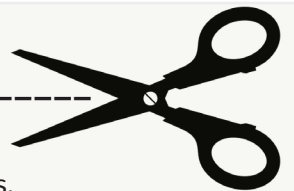
2015 Medical Toxicology Foundation Innovative Research and Teaching Award

Abstract: Chapman B, Lai J, Nader N, Carey J. Do Adolescents Post Social Media Content Indicative of Self-Harm and Intentional Poisonings? J Med Toxicol 2017;13:38 (abstract #103)

2014 Medical Toxicology Foundation Innovative Research and Teaching Award

Abstract: Menke N, Pizon A, Menke M. Utilizing a Machine Based Learning Algorithm to Predict Mortality in Acetaminophen Overdose. J Med Toxicol 2017;13:5 (abstract #6)

How to Support MTF with a Tax Deductible Gift



Give online at acmt.net/medical_toxicology_foundation or fill out the form below and mail to us.

Please make all checks payable to the Medical Toxicology Foundation;
10645 N. Tatum Blvd., Suite 200-111; Phoenix, AZ; 85028

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 Sponsor (\$250) _____
 Patron (\$500) _____
 President's Circle (\$1,000) _____
 President's Circle, Platinum (\$2,500) _____
 Benefactor (\$5,000) _____
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Name: _____

Address: _____

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The Medical Toxicology Foundation is a not-for-profit charitable organization affiliated with the American College of Medical Toxicology and is intended to provide ACMT members, the general public and commercial sponsors with a tax deductible mechanism to support Medical Toxicology. Your gift to the Medical Toxicology Foundation - a 501(c)(3) educational organization - is tax-deductible to the fullest extent allowable by law.

MTF Research Grant Awardee Studies Urinary Gadolinium Retention Levels



Winner of the 2017-18 MTF Emergency Medicine Foundation Research Grant, Dalia Alwasiyah, MD, is currently part of a team examining the connection of Urinary Gadolinium levels and long-term retention after contrast enhanced MRIs.

Gadolinium chelates (GDCA) are commonly used as contrast agents, and early pharmaceutical studies estimated that 100% of the contrast agent was excreted in the urine within 72 hours. But recent studies suggest a delayed phase of elimination beyond that timeline. Additionally, some patients

exhibit symptoms of “gadolinium toxicity” which can cause chronic pain of the bones and joints, skin changes and even neurological and gastrointestinal symptoms.

“Because of greater MRI utilization in the emergency department for patients undergoing rapid diagnostic ‘code stroke protocols,’ the emerging health concerns, and unclear kinetics, we feel compelled to explore the possibility of prolonged urinary gadolinium excretion as a marker for long-term retention,” Dr. Alwasiyah said. *“This protocol is an Institutional Review Board (IRB) approved pilot study that will investigate the urinary excretion of gadolinium up to one month after subjects undergo a GDCA MRI in collaboration with Mayo Medical Laboratories.”*

“The main hypothesis is that gadolinium is excreted in the urine beyond 72 hours in at least some patients with normal renal function after exposure to GDCA enhanced MRI. Our team’s aim is to test gadolinium levels in the urine before receiving GDCA and then at 3, 10, and 30 days after. We will also be exploring possible clinical implications by administering a symptomatology questionnaire at the end of each subject’s enrollment (thirty days after receiving GDCA).”

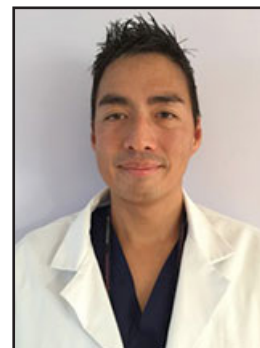
MTF Innovative Teaching and Research Award

Recipient of the 2017-18 Innovative Teaching and Research Award, David Jang, MD, continues to work on his ACMT-funded study seeking to evaluate both the changes in mitochondrial bioenergetics and dynamics using blood cells obtained from patients affected by carbon monoxide (CO) poisoning. His team also proposes to apply a new pharmacologic strategy of mitochondrial-directed therapy in blood cells obtained from poisoned patients.

“This study has a high degree of complexity as the pathophysiology of acute carbon monoxide poisoning is multifactorial,” Dr. Jang said. “It includes hypoxia and lipid peroxidation. Our recent publication, along with our preliminary data also implicates the effects of CO on cytochrome c oxidase (Complex IV) with both a decrease in mitochondrial respiration and increased ROS generation.”

Dr. Jang and his team seeks to investigate abnormal mitochondrial bioenergetics and motility signatures as indices using isolated blood cells obtained from acute CO-poisoned patients. They also plan to utilize a new pharmacological strategy to provide mitochondrial substrates to improve function in blood cells.

“We propose to utilize a new pharmacological strategy to directly provide mitochondrial substrates to improve mitochondrial function. We will evaluate the response to complex-linked activities, H₂O₂ generation and dynamics to the following mitochondrial-directed therapy using a succinate prodrug (NV118) that increases complex II respiration in intact cells.” This study is ongoing.



Medical Toxicology: A Crossroads of Opportunity and Challenge

Timothy J. Wiegand, MD, FACMT

Medical toxicology as a specialty is at a crossroads of opportunity and challenge. Opportunity lies in the increasingly common and critically important ways that chemicals, drugs and toxins intersect with human life. One example of this is the opioid epidemic with its rising rates of fatal overdose and other complications. The challenge is in how the expertise of a medical toxicologist becomes more apparent and its value evident to those responsible for resource allocation and reimbursement in medicine. Individual medical toxicologists must be able to practice medical toxicology and be reimbursed for their work no matter what the practice setting or health care system.

MTF supports not only research in medical toxicology, it supports novel ways of teaching and providing education in medical toxicology and it supports awareness of our specialty through support of travel grants for residents and fellows so that they may attend the ACMT Annual Scientific Meeting (ASM) to present their research. I have served as a mentor to previous resident recipients and seen first-hand how this has influenced their education and professional development.

“MTF supports novel ways of teaching and providing education and awareness of our specialty through support of travel grants for residents and fellows to attend ACMT’s Annual Scientific Meeting to present their research.”

For example, Aaron Fields, MD, was awarded the Michael P. Spadafora Travel Award in 2015 to travel to the ACMT Annual Scientific Meeting in Clearwater, FL. Dr. Fields presented on the use of buprenorphine by the medical toxicology service in the ED and hospital setting to treat patients with opioid use disorder. In his abstract and poster he described the primary diagnosis resulting in hospitalization (e.g. endocarditis, osteomyelitis, opioid overdose and simple opiate withdrawal), patient characteristics and outcomes in terms of whether patients were successfully linked to chemical dependency treatment on a medication for opioid use disorder at discharge.

“The travel award and ability to present his research not only impacted his career path but fostered an interest in scholarship and research that he has built upon.”

Dr. Fields has subsequently graduated, completed an addiction medicine fellowship (the first graduating fellow from the UR Medicine Combined Addiction/Toxicology Fellowship – the first addiction medicine fellowship to incorporate medical toxicology rotation and curriculum as a particular curriculum and rotation focus). The travel award and ability to present his research not only impacted his career path but fostered an interest in scholarship and research that he has built upon. In fact, later, during his fellowship, he presented again at ASM, a poster on the use of peer counselors to compliment use of buprenorphine for patients hospitalized with severe infections from IVDU and opioid use disorder. Some of this work was among the earliest examples of ways in which medical toxicology is able to expand in terms of patient care services in response to the opioid epidemic and it described the use of buprenorphine in the ED and hospital setting by a medical toxicology service.

To me it is obvious that the specialty I have pursued and practice daily with a passion is critically important; that it has incredible value at a variety of levels. As the opioid epidemic has evolved the toxicology service I direct has taken on an expanded role for patients with substance use disorders. This goes far beyond acute intoxication and withdrawal management, the toxicology service provides support for hospitalized patients that are receiving buprenorphine or methadone for opioid use disorder. I see the patients our team has worked with having better and safer hospital stays, not returning immediately to the ED or hospital because their substance use disorder was not treated but stabilized after being put on the appropriate medications and linked to other clinicians after hospitalization. (Cont. pg. 7)

GETKIT Teaches Key Toxicology Disciplines



Recipient of the MTF 2017-18 Innovative Research and Teaching Award, Kathy Kopec, DO, has created the Global Educational Toxicology Tool Kit (GETKIT), an interactive one-day course aimed at teaching the essentials of medical toxicology to healthcare providers in low and middle-income countries. Often these regions lack formal training in toxicology, however, they have a significant burden of morbidity and mortality secondary to poisonings.



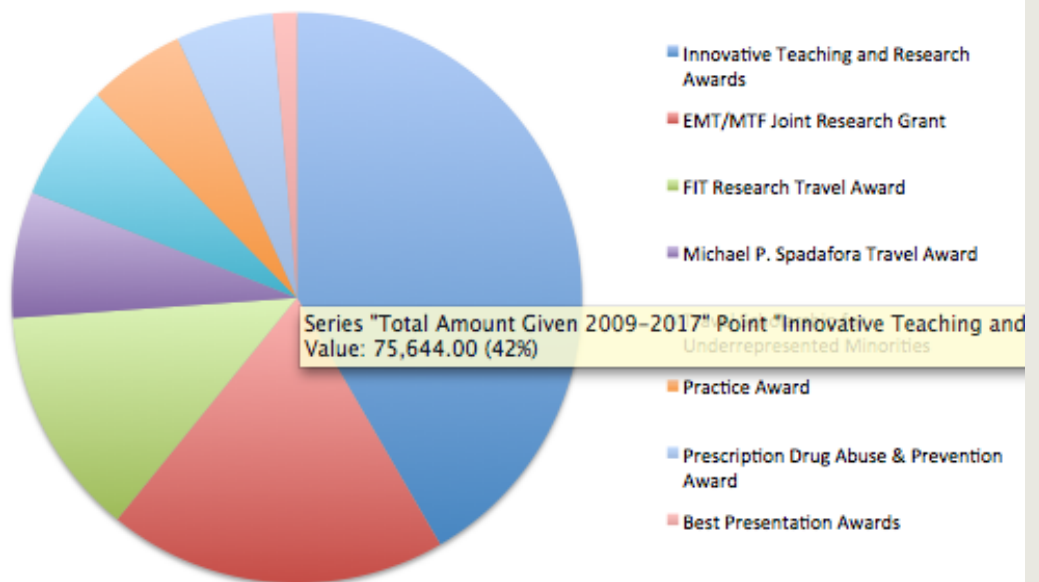
The course is divided into three sections: Didactic Lectures, a hands-on Tox-Lab Workshop and a Tech Clinic. The 21 Didactic Lectures consist of various topics in medical toxicology presentation and management created by the grant recipients and peer edited for content. The Tox-Lab Workshop, a hands-on session to reinforce the key educational points from the didactics, is a station based with various physical props, examples and images for review. The Tech Clinic is designed to instruct participants on obtaining quality educational information about toxicology databases, apps, devices and resources to further their learning.

The course consists of pre- and post-course surveys to evaluate baseline knowledge, educational and experience with toxicology, in addition to tests to evaluate knowledge retention. Participants will receive a post-course test three months after the course to evaluate retention of the material and to evaluate the extent of their asynchronous toxicology learning tools from the Tech Clinic.

MTF Awards Given 2009-2017

Award Name	Number of awards	Total Awarded
Innovative Teaching and Research Awards	8	\$75,644
EMT/MTF Joint Research Grant	5	\$35,000
FIT Research Travel Award	21	\$23,650
Michael P. Spadafora Travel Award	9	\$13,000
Travel Scholarship for Underrepresented Minorities	8	\$12,000
Practice Award	2	\$10,000
Prescription Drug Abuse & Prevention Award	2	\$10,000
Best Presentation Awards	14	\$2,500

69 Awards totaling
\$181,794



Medical Toxicology: A Crossroads of Opportunity and Challenge

Timothy J. Wiegand, MD, FACMT (Cont. from pg. 5)

Our team clears patients more rapidly, more effectively treats withdrawal and simplifies the pre and post-operative process for patients on MAT. The challenge is in more formally demonstrating this and then replicating it and describing this expertise, among other expertise in our toxicology repertoire, more broadly to administrators and insurers and others across the health care system. The MTF is a source of support for well-thought and impactful research in this area. It is an area of medical toxicology that is growing and that has a lot of visibility among the public and health care and intersects with other specialties and aspects of medicine.

MTF has supported several practice grants for research that has attempted to define the value of medical toxicology. Tony Pizon, MD, FACMT, was awarded an MTF grant in 2013 which he used to show that medical toxicology care improves outcomes and saves costs for poisoned patients. I was awarded a practice grant in 2015 for research comparing clearance times for medical toxicology consultation to poison center based protocols for antidepressant ingestions in pediatric patients. The results will be presented at the upcoming 2018 ASM. In my case the MTF grant supported the study development and analysis. A pediatric Emergency Medicine Fellow was involved and further developed parts of this project as his Master's Thesis which was presented before the School of Public Health at our institution and we are currently preparing a manuscript for publication based on the results.

I first supported the Medical Toxicology Foundation as a donor and member of ACMT. More recently I have taken on a position on the MTF Board of Directors. The foundation has supported several of my residents, it has supported my own research in toxicology practice and value and it highlights critical areas of public health and opportunity for medical toxicology research, education and practice, in particular related to opioids, a subject and area of medicine particularly close to my heart from my professional work and personal experience. I am pleased to say that my wife and I have committed to the MTF as the primary recipient of our financial donation.

As an MTF Board member I am looking for other avenues of support for the MTF and anticipate this coming year we will have opportunity capitalize on potential funding or foundation support. Beyond direct donation I suggest members consider providing service as an expert witness with request that the fee be donated to the MTF directly. When I had done this the attorney who had been involved was impressed enough by the MTF mission and activities that he subsequently made a small donation to the MTF as well.

The MTF mission and support are critical to our specialty; many projects for young medical toxicologists which have turned into a springboard for later opportunities in research or education or simply provided encouragement and motivation to continue on a path of research, education and practice based on their success with the MTF. We all need to continue to encourage our medical residents and others to apply for the scholarship travel awards. Medical toxicologists with an idea or a passion about a particular area of toxicology that see ways in which value can be demonstrated should apply for a practice award or other MTF support.

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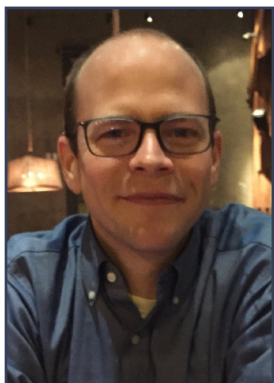
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ACMT and MTF Executive Director

Former Spadafora Recipient Talks About Impact of Winning Award



In 2012, Hallam Gugelmann, MD, was presented with the prestigious Michael P. Spadafora Medical Toxicology Travel Award. Dr. Gugelmann attended medical school at University of North Carolina at Chapel Hill School of Medicine, where he also obtained a master's degree in public health. After that, he went on to complete a residency in Emergency Medicine at the Hospital of the University of Pennsylvania. He completed his fellowship in medical toxicology at the University of California, San Francisco in 2015.

Dr. Gugelmann, who is fluent in German and Spanish, is now an emergency medicine attending in Northern California at California Pacific Medical Center's St. Luke's Hospital. He is also a medical toxicology attending at UCSF and serves as an assistant medical director at the California Poison Control System's San Francisco Division.

Here is a snapshot interview with Dr. Gugelmann as he talks about the field of medical toxicology:

Q. What is your area of expertise or interest?

A. I am predominantly interested in issues related to the opioid abuse epidemic, and the roles of prescribers in this epidemic. I am also interested in the myriad of issues surrounding novel drugs of abuse.

Q. What do you believe was the reason you won the 2012 Spadafora award?

A. My interest in toxicology began early in my medical residency, and I believe that this interest was apparent to my attendings and the review panel for the Spadafora award. With the help of several excellent mentors in the field, medical toxicology quickly expanded from a passing interest to a focal point of my medical education.

Q. How did winning this award in 2012 impact your training?

A. The Michael P. Spadafora award allowed me to attend my first medical toxicology conference, which was significant for the path I was on. Attending the conference allowed me to interact with medical toxicologists, fellows and other residents considering the field. That sort of experience added fuel to my current interest level and pushed me to pursue more knowledge.

Q. What is your current project?

A. I currently work with residents, students and medical toxicology fellows at the San Francisco branch of the California Poison Control System. I serve on the pharmacy and therapeutics committee for a network of four major hospitals in the San Francisco area. In the next few years I hope to help coordinate a city-wide toxicology consulting consortium.

Q. Why did you gravitate toward the field of medical toxicology?

A. I became interested in medical toxicology because I found these some of the most interesting patients in the emergency setting. I am constantly reminded of the value of this field when I am able to identify an intoxicant based on symptoms, and to treat my patients based on my training. Most of all, however, I have my mentors to thank; their dedication, patience, guidance and passion has continually focused my dedication in the field.

Donating to the ACMT/MTF Advances the Field Today

Jeffrey Bernstein, MD

Jeffrey Bernstein, MD, feels he owes a debt to the ACMT and the MTF for providing the opportunity for budding medical toxicologists to advance their knowledge and careers. When he began his career in medical toxicology at the University of Arizona, he benefited from a generous research award that allowed him to continue his fellowship training in medical toxicology.

Over the years, Dr. Bernstein has repaid that “debt” by making regular and substantial donations to the ACMT/MTF to help fund the growth of the field’s current and future medical toxicologists. Dr. Bernstein uses his employer’s preferred charity – the United Way – as the vehicle to make his donations. As Medical Director of the Florida Poison Information Center in Miami, a position he’s held for the past 21 years, he is doing what he can to give back.

“Cumulatively, it adds up,” said Dr. Bernstein. “The ACMT offers educational opportunities I can’t get anywhere else. As an emergency physician, I can go to virtually any conference at my hospital and bring back something useful. As a toxicologist, it’s much harder to find useful and timely tox-related information. Also, through the ACMT I enjoy the camaraderie of people who share my love for the specialty. Going to the NACCT conference rekindles my enthusiasm every year.”



When he began his fellowship in medical toxicology, Dr. Bernstein received one of only two available research grants through the NIH. In the second year, the NIH offered just one grant; the winner was, literally, decided by a coin toss. Dr. Bernstein lost the toss, but went on to apply for a research grant through the Emergency Medicine Foundation.

“If not for that grant, I might not have finished my fellowship,” he said. “Today I want to give others the opportunity to jumpstart or advance their toxicology careers.”

“There are not a lot of medical toxicologists on the planet, and we are currently a self-sustaining specialty. We need to expand that scope, grow the field and enlighten others as to the importance of this specialty. Because of this challenge, I feel compelled to support the ACMT and MTF.”

In the near future, Dr. Bernstein would like to see medical toxicology consultation emerge as a billable standard of care. He would also like to see organizations such as the ACMT and MTF offer seed money to medical toxicologists so that they may explore innovative ways to better integrate the specialty into the existing health care system.

“We are very much where infectious disease specialists were 30 years ago,” Dr. Bernstein added. “This is a cerebral specialty that doesn’t have a billable procedure, or established procedure codes. While we have knowledge that others don’t have, it’s a harder sell in this health care environment.

“There are not a lot of medical toxicologists on the planet, and we are currently a self-sustaining specialty. We need to expand that scope, grow the field and enlighten others as to the importance of this specialty. Because of this challenge, I feel compelled to support the ACMT and MTF.”

And with his and others’ donations, these opportunities can become realities for even more medical toxicologists who will advance their knowledge and, eventually, the field.

Researcher Focuses on Naloxone Distribution

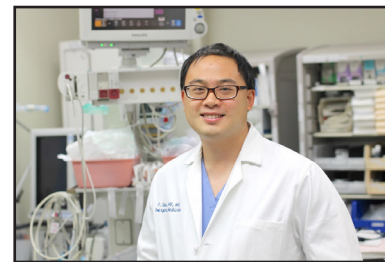
In 2016, Peter R. Chai, MD, MMS, was selected to receive the MTF Innovative Research and Teaching Award for his protocol entitled: **Naloxone Distribution Patterns in Patients with a History of Heroin Abuse.**

This grant, aimed at optimizing naloxone distribution programs, integrates low energy Bluetooth beacons into a standard overdose rescue kit to determine the uptake and availability of naloxone among at-risk individuals.

Since the inception of this protocol in January of 2017, Dr. Chai and his colleagues – Research Assistant Brittany Chapman and Toxicology Fellow Jeff Lai, MD – have initiated recruitment. As of October 2017, he and his team are expected to meet their enrollment goal of 30 at-risk individuals by the end of 2018.

Preliminary data was presented in abstract form at the European Association of Poison Centres and Clinical Toxicologists Congress (2017) in Basel, Switzerland. Additionally, Pilot data has been accepted as a

manuscript for the 51st Hawaii International Conference on System Sciences, taking place in Waikoloa Village on the Big Island, January 3-6, 2018. Dr. Chai continues to be motivated by this important research field due to the societal impact of opioid overdoses and the current distribution avenues for naloxone.



“Opioid use disorders continue to affect an increasing number of people in the U.S.” Dr. Chai said.

“Understanding the effectiveness of harm reduction techniques like naloxone distribution using unobtrusive technology can help provide evidence-based guidance to improve naloxone distribution programs.”

Final data analysis will be completed for presentation at the 2018 American College of Medical Toxicology Annual Scientific Meeting.



Travel Scholarship Recipient Launches Exemplary Career

After receiving the Travel Scholarship for Underrepresented Minority Medical Trainees from the ACMT/MTF in 2013, Cynthia Santos, MD, has been aggressively pursuing more opportunities to enrich her knowledge and seeking ways to add to her list of avenues where she can share her expertise.

Now an Assistant Professor of Emergency Medicine and Medical Toxicology at Rutgers New Jersey Medical School (NJMS), Dr. Santos has a long list of involvement in the medical toxicology field, and it continues to grow. Her primary interest in the field lies in education, global health, surveillance and preparedness.

In addition to receiving the ACMT/MTF award in 2013, Dr. Santos also received the Global Health Emergency Medicine Travel Award for Global Health Elective from Emory University in 2016. Additionally, she received the Excellence in Writing Graduation Award from Centers for Disease Control Fellowship in 2017.

En route to expanding her field of knowledge and influence, Dr. Santos has achieved many prestigious positions and noteworthy involvement, including:

- Inclusion in the international committee of ACMT and acting as the group’s research grant leader
- Acting as instructor for the medical toxicology rotation at the New Jersey Poison Information and Education System
- Research mentor for several emergency medicine residents and medical students at Rutgers NJMS
- Serving on the global health committee at Rutgers NJMS

Continued on next page

Dr. Santos currently works as a co-investigator for a recent MTF Innovative Teaching Award – Global Educational Toxicology Toolkit (GETKIT), which is a one-day course used to teach poisoning essentials in low- and middle-income countries. For this, Dr. Santos works in conjunction with the initiative's primary investigator Dr. Kathy Kopec. Often these regions lack formal training in toxicology, however, they have a significant burden of morbidity and mortality secondary to poisonings. Dr. Santos will travel to Mexico in late 2017 to teach the GETKIT course.

Dr. Santos is also working with residents on a global health toxicology review study, along with another study that assesses the health impact of toxic disaster sites in developing countries from various toxins such as heavy metal, radiological materials and airborne pollutants, and from various sources such as smelting factories and mines. She is also in the process of completing a study from her fellowship on chemical terrorism, and is working on a grant to develop international toxicology surveillance with a focus on toxic disaster sites.

Not surprisingly, because of her interest in hazardous material training and chemical terrorism preparedness, Dr. Santos is also an instructor in Advanced Hazmat Life Support and has taken specialty courses in chemical and radiological exposure responses, in addition to training emergency providers and public health personnel on chemical threat responses at the local and governmental levels.

MTF Funding Opportunities 2018–2019

MTF Research and Education Funding

MTF Innovative Research and Teaching Awards

The MTF has allocated \$20,000 to support either innovative research or teaching. Requests for support of direct costs between \$5,000 and \$20,000 are due in February 15, 2018. Awardees will be notified at the ACMT Annual Scientific Meeting in April 2018. Applicants may request a project period of up to two years.

MTF Innovative Research Award

Supports highly innovative research that could ultimately lead to critical discoveries or major advancements that accelerate the field of medical toxicology research. The Innovative Research Award promotes new ideas; therefore, proposals need not include preliminary data. However, a solid rationale for the work must be provided. Proposed work should have a high probability of success within the funding period. This program aims to provide seed funding that should lead to successful competition for additional funding beyond the pilot period. Results are to be presented at the ACMT Annual Scientific Meeting.

Please visit acmt.net more information and application procedures.

MTF Innovative Teaching Award

Supports the development of novel tools to provide education on relevant issues in medical toxicology, specifically, pioneering or progressive educational activities, methodologies, and/or curricula. Contemplated programs are not limited by format – the focus is on innovation in concept, technique, and/or technology. Prioritization will be given to practical end-products or educational activities that focus on the prevention, diagnosis, or treatment of human poisoning. The intended audience is medical professionals and/or the public. The awardee is expected to present results at the annual ACMT Annual Scientific Meeting.

MTF Practice Award

Clinically-based practices in Medical Toxicology are becoming more common as our subspecialty matures. To assist in promoting such services, MTF is offering \$5,000 to fund research evaluating the potential economic and clinical benefits of medical toxicology services. The objective of a study funded by this award should be to measure the impact on patient care from the provision of medical toxicology services in either the inpatient or outpatient setting. Request for support of direct costs up to \$5,000 are due in February 15, 2018.

Continued on next page

MTF Career Development and Travel Scholarships

MTF/EMF Grant for Medical Toxicology Fellows and Emergency Medicine Residents

The Medical Toxicology Foundation (MTF) along with the Emergency Medicine Foundation (EMF) co-sponsor a research grant for medical toxicology fellows-in-training and emergency medicine residents with a research interest in medical toxicology.

This MTF directed grant program awards support for an active emergency medicine resident or medical toxicology fellow to complete a medical toxicology research project. Applicants may apply for up to a total of \$10,000 for a one-year period. Both scientific review and awarding decisions will be made independent of the sponsor.

Michael P. Spadafora Travel Award

Established to encourage the pursuit of medical toxicology fellowship training by providing residents the opportunity to attend the ACMT Annual Scientific Meeting. Any member of an ACGME or AOA accredited residency program is eligible to receive the award of \$1,500 to cover travel expenses to the meeting. One recipient will be selected each year.

MTF Minority Student Travel Award

Supports underrepresented minority medical trainees' attendance at the ACMT Annual Scientific Meeting. One medical student or resident will be selected annually to receive the \$1,500 travel award.

MTF Research and Education Grants

Russ Kerns MD, FACMT
Chair, ACMT Research Committee

In 2017, the ACMT Research Committee undertook a review of the MTF grants program from 2011–2017. This December, the MTF Board of Directors will review and consider changes to the grant program with a goal of maximizing the strategic objectives: support innovative research and education, provide opportunities for member/learner professional development, and promote the specialty of medical toxicology.

Since 2011, MTF has maintained four recurring awards:

- **MTF-EMF Toxicology Research Award** (\$10,000 annual shared with the EMF, began 2011)
- **MTF Innovative Research and Teaching Awards** (up to \$20,000 total annual, began 2013)
- **MTF Medical Toxicology Practice Award** (\$5,000 biannual, began 2013)
- **MTF Prescription Drug Abuse Prevention Award** (\$5,000 biannual, began 2014)

The applications are formatted in NIH style and undergo rigorous review by members of the Research and Education Committees and then by the Board of Directors. As Chair of the Research Committee, I believe that the members would be very interested in some of the data and outcomes that resulted from our grant support.

- **Awardees have presented 25 abstracts at national and international conferences**
- **Five studies have culminated in journal publications, including the *Journal of Medical Toxicology***
- **Three studies have manuscripts under review**
- **Grant awardees subsequently applied for 13 grants, eight of which were funded, including a NIH grant**

From a personal perspective, resident awardees commented that the MTF-EMF award confirmed their direction towards medical toxicology and enhanced their fellowship applications. Other awardees felt that the award experience enhanced academic promotion, provided research experience, and facilitated subsequent grant applications.

On behalf of the grant recipients, the Research Committee, and the Board of Directors, I wish to express sincere appreciation to the members whose donations support the MTF grant program. In return, I pledge ongoing stewardship of research funds through continued rigorous screening and periodic review to meet the strategic goals of innovation, professional development, and promotion of medical toxicology.