

2022 A N N U A L I M P A C T R E P O R T

Advancing Medical Toxicology Research, Education, and Patient Care

YOUR GIFTS AT WORK



Cynthia Santos, MD Assistant Professor of Emergency Medicine and Medical Toxicology at Rutgers New Jersey Medical School "Through support from organizations like the MTF, and assistance from my institution, I hope to eventually become a competitive, independent investigator in clinical and translational research."

Read more

"I learned how important it is to be flexible and ready to pursue unexpected opportunities, as well as the importance of crossdepartmental collaborations!"

Read more

Kevin Baumgartner, MD Assistant Professor, Division of Medical Toxicology, Washington University in St. Louis School of Medicine

TABLE OF CONTENTS

Who We Are; What We Do

4
About Us
5
What We Do
6
"Living a New Normal" - A Message From MTF Board President, Erica Liebelt, MD, FACMT
7
MTF Board of Directors; Mission, Vision, and Values

What Your Gifts Support: Grants, Awards, and Programs

8-10 2022 Grantees and Awardees

11

Program Update: Medical Toxicology in Industry Virtual Fellows Rotation Rotation

The Impact of Your Gifts: Grant and Award Recipient Stories

12-13 Impact Story: David Liss, MD

15 Impact Story: Cynthia Santos, MD

16-17

Impact Story: Kevin Baumgartner, MD

18

Opportunities: Awards, Grants, & Programs

How You Can Contribute

19
MTF Future Fund
20
Donor Honor Roll
21 - 22
Ways to Give

About the Medical Toxicology Foundation The Medical Toxicology Foundation (MTF), is a 501(c)3 non-profit organization established by ACMT in 2009. The MTF provides multiple opportunities to further education and training in medical toxicology through travel awards to ACMT's Annual Scientific Meeting, research grants, a fellowship rotation in industry program, and collaborations with other medical associations.

Founded in 1993, the American College of Medical Toxicology (ACMT) is a professional, nonprofit member association, and the primary organization that serves Medical Toxicologists. Membership is comprised of physicians board certified in medical toxicology, and others with recognized expertise in the specialty.

About the American College of Medical Toxicology

About Medical Toxicology Medical Toxicology is a field of medicine dedicated to the evaluation and treatment of poisoned patients. This includes adverse health effects of medications, occupational and environmental toxins, and biological agents. Medical Toxicology is an officially recognized subspecialty by the American Board of Medical Specialties.



Foundation-supported research, including collaborative funding projects, has led to many advancements in medical toxicology and publications in national and international research journals.

Each year the MTF provides multiple opportunities for medical toxicologists to further their education and training through travel awards to ACMT's Annual Scientific Meeting, a fellowship rotation in industry program, and other opportunities.





Adverse drug reactions, exposure to environmental, chemical, plant and animal toxins, and occupational hazards are just some of the reasons patients benefit from the specialized care of medical toxicologists. Patient access to this unique medical specialty saves lives every day.



Living a New Normal

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

We are living in a "new" world after the multiple events of the last 3 years which have impacted all of us as individuals, families, communities, and as medical toxicologists and physicians. We have isolated, pivoted, transitioned, reconnected, reset, reflected, and most importantly, moved forward in our lives with more optimism and experience – we are living a New Normal. The Medical Toxicology Foundation is living a New Normal in its growth of opportunities to further education and training in medical toxicology through Travel Awards to the ACMT Scientific Meeting, research grants, and a fellowship rotation in industry program. In addition, we have created an MTF Corporate Advisory Council which allows us to establish and foster collaborative relationships with other corporate organizations, bringing in additional funds to help support our programs. All of these programs importantly align with the MTF Mission, Vision, and Values. Please take a moment to read our MTF Impact Report including the individual stories of those individuals who have benefited from the MTF because of your financial gift.

I am grateful to the late Dr. Charles Becker and his family for establishing a Medal for Outstanding Achievement as a Medical Toxicology Fellow through the MTF. The MTF also focuses on fostering the growth of students, residents, fellows, and the public in our Mission.

The New Normal is still emerging for all of us and will always be an evolution. It is my hope that every ACMT member considers giving a gift to the MTF as part of their own individual "New Normal" to help the medical toxicology profession persevere and move forward in our everchanging world. This gift can be to our Annual Campaign and/or making a pledge or gift to our Year 3 Future Fund Campaign. There is no other organization that can help meet the demand for pursuing excellence in patient care while advancing education and research that will transform the healthcare of our patients.

I wish all of you peace, joy, and fulfillment as you navigate your New Normal.

Euro Pillelo

Erica Liebelt, MD, FACMT MTF Board President

BOARD OF DIRECTORS



Erica Liebelt, **MD, FACMT**

Board President



Timothy Wiegand, MD, FACMT, DABAM, FAACT



Secretary/Treasurer



Maryann Amirshahi, PharmD, MD, MPH, FACMT **Board Member**



Bryan Judge, **MD, FACMT**

Board Member



Ziad Kazzi, **MD, FACMT**

Board Member



Edwin K. Kuffner, MD

Board Member



Charles McKay, MD, FACMT

Board Member



Anthony Pizon, **MD, FACMT**

Board Member



Andrew Stolbach, MD, MPH, FACMT

Board Member



Paul Wax. MD, FACMT

Board Member Ex-Officio



Vision Statement

To be the leading sponsor of toxicology research and education for improved patient care.

Mission Statement

To advance research and education in the prevention and treatment of patients adversely impacted by drugs, chemicals, and natural toxins.

The Value of Medical Toxicology

The field of medical toxicology connects specialty knowledge obtained through research and practice to people exposed to harmful chemicals, environmental hazards, and natural toxins and/or to those dealing with drug abuse or addiction issues. Although they play diverse roles and serve in many different sectors, medical toxicologists often specialize in emergency medicine, pediatrics and/or occupational medicine.

The Value of the Medical Toxicology Foundation

Donors, private foundations, and corporations contribute to the MTF via an annual fund, major gifts, grants, and other channels to fund research, education, and practice programs/initiatives. Contributions made to the MTF are tax-deductible as allowed by prevailing laws.

YOUR GIFTS AT WORK

2022 Grant and Award Recipients

Innovative Research, Teaching, & Practice Grants





Jennifer Love, MD Icahn School of Medicine at Mount Sinai "Emergency Department Based Acute Pain Management for Opioid Use Disorder" Award Amount: \$20,000 Funding Period: 7/1/2022 – 6/30/2023

SAEMF / MTF Toxicology Research Grant



Kevin Baumgartner, MD Washington University in St. Louis School of Medicine Project: "Evaluation of the Human Immune Response to North American Crotalid Envenomation" Award Amount: \$10,000 Funding Period: 7/1/2022 – 6/30/2023

2022 Michael P. Spadafora Travel Awardees



Matthew Dernbach, MD General Psychiatry Resident, Medical University of South Carolina

Tori Erhardt, MD Emergency Medicine Resident, Emory University School of Medicine





H. Keahi Mookini Horowitz, MD Emergency Medicine Resident, Stony Brook University Hospital



Cyrus Kuschner, MD Emergency Medicine Resident, Emory University



Anthony Spadaro, MD Emergency MedicineResident, Hospital of the University of Pennsylvania

"I was very grateful to have received the Spadafora Award. I really enjoyed attending ACMT's Annual Scientific Meeting. It gave me a much bigger picture of the scope of medical toxicology and the diversity of the practice of medical toxicology. Happy to report since then, I've matched into a medical toxicology fellowship and am looking forward to going to more annual meetings."

Anthony Spadaro, MD Resident, Hospital of the University of Pennsylvania

Thanks to the tax-deductible gifts of our donors, the MTF has been able to provide nearly \$25k in travel awards since 2009.



YOUR GIFTS AT WORK

Dr. Michael Shannon Diversity, Equity and Inclusion Travel Award



Demi Galindo, MD Resident, University of Rochester

Johnson & Johnson Consumer Health Diversity, Equity & Inclusion Travel Awards



Girgis Fahmy, MD Resident, Emory University School of Medicine



Sarah Puryear, MD Resident, Indiana University



Miya Smith, MD Resident, University of Chicago



Josue Zozaya, MD Resident, UTSW Emergency Medicine

Thank You, Donors!



I thought the conference was a great introduction into the world of Toxicology. Although the event was virtual and I didn't get the chance to meet my future colleagues in person, it was a positive experience. This opportunity energized me for my experience as a fellow.

Miya Smith, MD Resident, University of Chicago Recipient of a 2022 Johnson & Johnson Consumer Health Diversity, Equity & Inclusion Travel Award "

Program Update

Medical Toxicology in Industry Virtual Fellows Rotation

The MTF is pleased to partner with Bayer for this unique opportunity. The focus of this program is to create opportunities for fellows to experience another facet of medical toxicology during their fellowship and introduce them to the possibility of a career in industry. The goal is to teach the principles of product development from the R&D pipeline, through the regulatory process, to launch and post-market stewardship. The rotation addresses the gap in understanding the role of industry and the regulatory oversight of bringing important technology from the academic arena to the public sphere.





January 2022 Cohort

Ari Filip, MD Washington University School of Medicine St. Louis, MI



Sasha Kaiser, MD Rocky Mountain Poison & Drug Safety Denver, CO



Powell Graham, MD University of Massachusetts, Chan Medical School Worcester, MA



Shahnaz Sonya Rashid, MD Toxikon Consortium Chicago, IL



Vita Mithi, BA Center for Life Toxicology Data



Shelby Randall, MD UC Davis School of Medicine Sacramento, CA



David Schaffer, MD University of Virginia School of Medicine Charlottesville, VA

Medical Toxicology in Industry Webinar Series

Watch series at education.acmt.net/MTI-webinars

A related webinar series sponsored by Bayer features medical toxicologists working in various capacities in industry including representatives from Johnson & Johnson, Bayer and the Food & Drug Administration (FDA.) In this video the cohort discussed their experience in the program.

October 2022 Cohort

Alexandra Hamelin, MD

University of Ottawa

Ontario, Canada

Malawi

IMPACT **STORY**

DAVID LISS, MD

2020 MTF Innovative Teaching & Research Grant "Liquid Chromatography Tandem-Mass Spectrometry as a Universal Screening Modality for High-Risk Pregnant Patients" Award Amount: \$10,000

David Liss, MD, is an emergency medicine physician and medical toxicologist. He returned to the Washington University Department of Emergency Medicine and Division of Medical Toxicology as an Assistant Professor after spending a year at the University of Massachusetts. Dr. Liss was the inaugural fellow of the Washington University Medical Toxicology Fellowship. He is the course director for the medical student elective in medical toxicology and directs the emergency medicine resident, off-service resident, and pediatric emergency medicine fellow rotations in medical toxicology. He is interested in drug screening and medication assisted opioid addiction treatment. Dr. Liss was accepted into ACMT's ANTIDOTE Institute Class of 2022.

Learn more at: acmt.net/irtp

> " The MTF grant funding allowed me to obtain data that was subsequently used to apply for, and receive, another larger institutional grant. The support from MTF was enormously important in launching my clinical research career."

IMPACT STORY

You were a 2020 Innovation, Research, Teaching and Practice grant recipient. What updates can you share?

Data collection is complete and preliminary results were presented as a lighting oral abstract at the ACMT ASM in March 2022. A manuscript with full results is in preparation for submission.

What impact has receiving this grant had regarding your pursuit of additional research ventures going forward?

The grant funding allowed me to obtain data that was subsequently used to apply for a larger institutional grant for \$30,000 which was awarded in February 2023. This second project will provide additional data which will be used in an NIH K23 application for June 2024. The support from MTF was enormously important in launching my clinical research career.

What advice would you offer future applicants or awardees?

• When selecting a project, be sure to focus on research which can be completed within the grant period. For novice researchers, project timelines will often stretch out with unforeseen obstacles (like the COVID-19 pandemic). Be realistic in your proposed timelines. Most importantly, finishing the project will show the MTF donors that their contributions are put to good use and will support future researchers behind you.

You also serve on the ASM Abstract Review Committee. Can you share a bit
about why you chose to get more involved with the College?

I became involved with the ASM Abstract Review Committee in 2019 and have found it to be an enjoyable sneak peek into the research being submitted to the meetings. It keeps me up to date with the latest theories, thoughts, and bizarre case reports that our colleagues throughout the country are experiencing. It has also helped my own scientific writing and decisions to submit research as abstracts to the ASM. I would encourage all fellows to get involved with the abstract review process.

Since its founding in 2009, the Medical Toxicology Foundation has been able to provided \$223 K in research grant funding thanks to the generosity of our donors and development of strategic collaborative institutional partnerships.

\$178 K

\$35 K

\$10 K

MTF/SAEMF Research Grants MTF/EMF Research Grants Other MTF Research Grants

Make a gift Today



Each year, MTF grants and awards plant the seeds for future career and research growth for each recipient. This ultimately leads to advances in the specialty, and impacts the quality of patient care.



BEL Travel Awards Spadafora Travel Awards

IMPACT STORY

CYNTHIA SANTOS, MD

2021 MTF/SAEMF Toxicology Research Grant Grant Project: "Genotypes Associated with Dosing and Relapse in Patients with Opioid Use Disorder Receiving Buprenorphine" Award Amount: \$10,000

" In 2021, I received the MTF/SAEMF Toxicology Research Grant to conduct a pilot study of the pharmacogenomic targets for buprenorphine in collaboration with the Genomics Laboratory at Rutgers New Jersey Medical School.

This grant enabled me to test and study the various pharmacodynamic and pharmacokinetic markers for uninsured patients who were initiated with buprenorphine for Medication for Opioid Use Disorder (MOUD), allowing me to collect pilot data for larger grants. I am currently applying for NIH grants that will allow me more clinical time to study a larger population of patients and to expand this study to include naltrexone as an MOUD option as well.

Through support for these projects from organizations like the MTF and SAEMF, and assistance from my institution, I hope to eventually become a competitive, independent investigator in clinical and translational research."

Dr. Santos is currently an Assistant Professor of Emergency Medicine and Medical Toxicology at Rutgers New Jersey Medical School

IMPACT **STORY**

KEVIN BAUMGARTNER, MD

2022 MTF/SAEMF Toxicology Research Grant Grant Project: "Evaluation of the Human Immune Response to North American Crotalid Envenomation" Award Amount: \$20,000

Kevin Baumgartner, MD, is an emergency medicine physician and medical toxicologist. He trained in Emergency Medicine and Medical Toxicology at Washington University School of Medicine and has joined the Division of Medical Toxicology as an Assistant Professor. He is the co-director of the Introduction to Addiction Medicine medical student elective and a member of the editorial board of *Clinical Toxicology*. Dr. Baumgartner's research and clinical interests include sedation, addiction medicine, quality improvement, psychopharmacology, and snake envenomation.

Learn more at: acmt.net/mtf-saemf



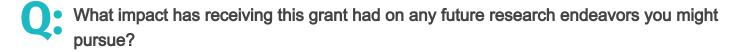
" Do your leg-work up front, build a strong team, and don't be afraid to take a chance on a new opportunity! "

You were the 2022 recipient of the MTF/SAEMF Toxicology Research Grant. What updates can you share on your project?

A: My project is an evaluation of the human immune response to North American crotalid envenomation. We have enrolled nine subjects; seven were envenomated by Agkistrodon controtrix, one by Crotalus horridus, and one by a Crotalus atrox that he keeps as a pet. My collaborators in the Department of Pathology and Immunology have begun analyzing our biosamples and have demonstrated a robust immune response to crotalid venom, including identification of a plasma blast response to C. atrox venom and identification of dozens of human antibodies directed at venom components. Further analysis is ongoing.

Is there anything memorable or unexpected that you learned during this grant process and experience?

I learned how important it is to be flexible and ready to pursue unexpected opportunities, as well as the importance of cross-departmental collaborations!



Receiving the MTF/SAEMF grant has influenced me to make snake envenomation research a significant component of my research work as I move forward with my career, and also helped me to build important relationships with basic science experts at my institution which will be extremely helpful in future endeavors.

Do you have any advice for future applicants or awardees?

 Do your leg-work up front, build a strong team, and don't be afraid to take a chance on a new opportunity!

MTF Opportunities: Awards, Grants and Programs

Each year the MTF provides multiple opportunities to further education and training in medical toxicology through travel awards to ACMT's Annual Scientific Meeting, research grants, a fellowship rotation in industry program, and more. See below for upcoming opportunities and application deadlines. Click on each opportunity to learn more.

Travel Awards

Dr. Michael P. Spadafora Travel Award Next Application Deadline: October 2, 2023 Award Value: \$1500

Dr. Michael Shannon Diversity, Equity and Inclusion Travel Award Next Application Deadline: October 2, 2023 Award Value: \$1500

J&J Consumer Health Diversity, Equity & Inclusion Travel Award Next Application Deadline: October 2, 2023 Award Value: \$1500

MTF Medical Student & Resident Travel Award Next Application Deadline: November 15, 2023 Award Value: \$500

> MTF International Travel Award Next Application Deadline: November 15, 2023 Award Value: \$750

Research Funding

MTF Innovative Research, Teaching, & Practice Grants Next Application Deadline: March 1, 2024 Award Amount: \$20,000

> MTF/SAEMF Toxicology Research Grant Next Application Deadline: August 1, 2024 Award Amount: \$20,000

> M/EMFTF Toxicology Research Grant Next Application Deadline: TBA Award Amount: \$20,000

Other Opportunities

MTF/Bayer Medical Toxicology in Industry Virtual Fellows Rotation Program

Dr. Charles E. Becker Medal for Outstanding Achievement as a Medical Toxicology Fellow

MTF Corporate Advisory Council

Questions?

Please contact us at foundation@acmt.net.

MTF Future Fund Building for the Future; Saving Lives Today

With the aim of creating long-term create permanence, sustainability and growth to all of the programs offered by the MTF, the Future Fund was established in 2021. This fund provides a mechanism for donors to make a lasting impact and investment to grow the field of medical toxicology. It also offers opportunities for providing designated purposes such as awards, projects, and/or institutes.

I give annually to the Future Fund because I want to further opportunities in training, education, and research in Medical Toxicology. The fund makes this possible by creating a sustainable reserve, ensuring a steady, expanding flow of grants and awards. I encourage everyone to give what you can to support this far-sighted endeavor.

-Marsha Ford, MD, FACMT

Support the MTF Future Fund: bit.ly/mtffuture



President's Circle - Benefactors \$5,000+

Bayer Crop Science Marsha Ford, MD, FACMT Johnson & Johnson Consumer Inc. Bryan Judge, MD, FACMT

Louise Kao, MD, FACMT Erica Liebelt, MD, FACMT Lewis and Laura Nelson

President's Circle - \$2,500 - \$4,999

Maryann Amirshahi, PharmD, MD, MPH. FACMT Jeff Brent, MF, PhD, FACMT Keith Burkhart, MD, FACMT Francis DeRoos, MD, FACMT Leslie Dye, MD, FACMT David George, PhD, FAACT

Ziad Kazzi, MD, FACMT Charles McKay, MD, FACMT Anthony Pizon, MD, FACMT Theodore Tong, PharmD Paul Wax, MD, FACMT Tim Wiegand, MD, FACMT

President's Circle - \$1,000 - \$2,499

Michael Abesamis, MD Peter Akpunonu, MD Nelson Avery, MD, FACMT Kavita Babu, MD, FACMT Jeffrey Bernstein, MD, FACMT Howard Burns, MD Michelle Burns, MD, MPH, FACMT

Patron Donors - \$500 - \$999

Lydia Baltarowich, MD, FACMT Keenan Bora, MD Diane Calello, MD, FACMT Robert G. Hendrickson, MD, FACMT Russ and Sharon Kerns Michael Wahl, MD, FACMT





Christina Hantsch, MD, FACMT Michelle Hieger, DO Mark Mycyk, MD, FACMT Michelle Ruha, MD, FACMT Evan Schwarz, MD, FACMT Andrew Stolbach, MD, MPH, FACMT

> Steven Aks, DO, FACMT Kim Aldy, DO, MS, MBA Sukhshant Atti, MD, MPH Robert Bassett, DO, FACMT Carl Baum, MD, FACMT Michael Beuhler, MD, FACMT Jennie Buchanan, MD James Cao, MD, FACMT Jennifer Carey, MD, FACMT Stephanie Carreiro, MD, FACMT Nicholas Connors, MD, FACMT Suzanne Doyon, MD, FACMT Lynn Farrugia, MD, FACMT Jonathan Ford, MD Han Tony Gao, MD Scott Hardy, MD Fred Henretig, MD, FACMT Michael Hodgman, MD, FACMT Jason Hoppe, DO David Jang, MD, FACMT Katherine Katzung, MD Ronald Kirschner, MD Michael Kosnett, MD, FACMT

Thank You, 2022 **Donors!**

Donors are essential to the success of the Medical Toxicology Foundation and we are grateful to the following individuals for their generous support.

Give Now

Friends of MTF - to \$499

Kenneth Kulig, MD, FACMT JoAn Laes, MD, FACMT Jerry Leikin, MD, FACMT Christopher Linden, MD, FACMT David Liss, MD Christine Murphy, MD, FACMT Brian Murray, DO Patrick Ng, MD Katherine O'Donnell, MD Jennifer Parker Cote, MD Pete Rainey, MD, FACMT James Roberts, MD, FACMT Brett Roth, MD Joshua G. Schier, MD, FACMT Kapil Sharma, MD Wayne Snodgrass, MD, FAAP, FACMT, FAACT Daniel Sudakin, MD, FACMT David Tanen, MD, FACMT Trevonne Thompson, MD, FACMT Michael Toce, MD, FACMT Philip Walson, MD Brian Wolk, MD

Ways to Give

Give Online





Interested in supporting a particular program or campaign? See options on page 21.

Mail a Check

Checks can be mailed to: Medical Toxicology Foundation 10645 N. Tatum Blvd. Suite 200-111 Phoenix, AX 85028

Gifts of Stock

Gifts of appreciated stock or mutual funds can provide great tax benefits. Talk to your broker or tax advisor.

Workplace Giving

Does your company conduct a workplace giving drive? If they do, consider designating the MTF for your employee-directed contributions. Contact your Human Resources or Payroll Department today and make that designation.

Planned Gifts

Planned gifts can be as simple as a bequest in your estate plan, a beneficiary designation for a life insurance policy, or as complicated as a charitable remainder trust. Talk to your financial team – accountant, lawyer and financial planner to determine the best option for you!

Matching Gifts

Does your employer have a matching gift program? Many do! Check with your human resources or payroll department about the process. The IMPACT of your gift is doubled at no additional cost to you.

Donor-Advised Funds (DAF)

The MTF is able to accept gifts from your donor-advised fund. Just notify the fund that you would like to designate a gift to the Medical Toxicology Foundation and they will take it from there.

Qualified Charitable Distributions

These gifts are from your IRA and are most beneficial for those who must take a required minimum distribution (RMD). Notify your IRA holder to make that distribution to the Medical Toxicology Foundation and it becomes a tax-free distribution and taxdeductible contribution.

Make a Tribute Gift

Make a gift in honor or in memory of a loved one and support toxicology education and research. We will process your gift with an acknowledgment and your honoree will also receive a letter letting them know that you have made a gift. (Gift amounts are not disclosed.)

Questions? Please contact us at foundation@acmt.net.

Ways to Give - Contribute to a Specific Campaign



General Contributions acmt.net/give

Gifts of any amount are greatly appreciated and will be put to good use. You may make a general contribution at any time of year by visiting acmt.net/give.

Support the MTF Future Fund acmt.net/future-fund

Contributions to this fund ensure the sustainability of the Foundation and provides funding to support research and education well into the future.





Support the MTF Annual Campaign acmt.net/annual

With your generous support, the MTF provides multiple opportunities for to further education and training in medical toxicology.

Support the Ward and Ryan Donovan Fund acmt.net/donovan

This fund is used to support a visiting lectureship and/or panel discussion on the topic of OUD or other SUDs annually at the ACMT Annual Scientific Meeting, with the goal of increasing awareness, ability, and opportunity for medical toxicologists to increase their practice in this area.

