CPDD President’s Column

Margaret Haney, Ph.D., President, CPDD

I am excited to have begun my term as President of CPDD and very much look forward to working with you all in the upcoming year as we continue to advance the mission of CPDD. I would like to start by extending a sincere thanks to Alan Budney for his leadership over the past year. Alan’s straight-forward, collegial approach not only allowed the Executive Committee and Board of Directors of CPDD to work together effectively but with good humor. As President-Elect, one spends the year shadowing the President and learning what goes on behind the scenes. I confess that I did not expect to enjoy this process as much as I have (when you are elected President of CPDD you probably get more good-natured ‘condolences’ than you do congratulations from those who have been in the trenches). There is a considerable amount of work that needs to get done throughout the year, but I found that this added work is largely a pleasure when it is done with good-natured colleagues. I hope that our new President-elect, Elise Weerts, has the same experience over the coming year!

Alan spearheaded many important initiatives during his tenure, one of which was to launch a discussion of appropriate behavior at the annual meeting. His letter to membership on this topic prior to the meeting was not in response to any specific incident but rather an awareness that, like many other scientific societies, we want meeting attendees to know that they have support and that there is a procedure in place to report any instances of harassment or bullying. I will be putting together a Working Group shortly to develop an SOP prior to our next meeting in San Antonio. I certainly welcome your input on this issue (mh235@cumc.columbia.edu).

Annual Meeting Survey: Thanks to those of you who responded to the recent survey (roughly a 25% response rate). Ratings of this past meeting were overwhelmingly positive (average rating of the conference overall was 4.2; max score =5). I’d like to thank the hard-working Program Committee, with Chair Bill Stoops, for putting together a high-quality program, as well as the essential organizational skills of Ellen Geller, Director of the CPDD office. San Diego was a popular spot: 91% would go back for future CPDD meetings; fewer (72%) would choose to return to the Hilton Bayfront Hotel. Responding to the meeting survey is probably more important than you realize as it guides several significant decisions, one of which is future meeting locations. This year, the highest-rated
sites for future meetings were Denver and Vancouver, which the Executive Office will move to investigate. Lower-rated meeting sites (e.g., Disney) will likely be taken off the list of places to consider.

Another example of how your response on the survey guides decision making relates to meeting length. We have frequently heard members complain that the meeting is too long, contributing to its expense. In response, we have shortened several (but not all, due to prior contracts) of our upcoming meetings. Next year’s meeting in San Antonio will be 4 days. Note, we will have to make several important changes in the schedule to accommodate this shorter meeting, such as having 5 concurrent sessions. This is not universally loved by membership but is our only option with a short meeting. Please be sure to fill out your Annual Survey next year to let us know what you think of these changes.

In terms of the annual dinner dance, we have heard mixed opinions from membership, but what matters most is what people do, not what they say. This past year, for example, 600 people said they’d go to the dinner and only about 500 showed up, resulting in 100 (expensive) dinners that CPDD paid for unnecessarily. Since part of negotiating a hotel rate and meeting spaces includes a guaranteed amount of money spent on food, Ellen Geller, Director of the Executive Office, suggested exploring alternative ways to meet this requirement in lieu of the dinner. For example, many survey respondents suggested that coffee be made available during the sessions and more food and beverages be made freely available at the Opening Night reception. We will be in touch with further news about this as we explore options, but we expect to be making some changes.

**CPDD Committees:** For the first time, we polled those of you who cycled off committees at CPDD to gauge your experience. Almost all responders had rated their participation positively, feeling that the Chair communicated clearly and that the committee’s annual mission was accomplished. Importantly, all who responded were willing to volunteer for other committees. I must say that while recruiting new committee members this past spring, it was heartening to see the enthusiasm many of you showed. For any members who did not volunteer, I urge you to consider it when the call goes out again. Well-functioning committees are essential to the College and it is gratifying to support CPDD alongside other invested individuals. Given the diversity of interests represented at CPDD, committee participation often gives you a chance to get to know researchers outside of your immediate area of expertise. For early career investigators, being on a committee is an opportunity to build your reputation as someone willing to contribute your time and energy. When you are just starting out it is easy to feel invisible in the sea of accomplished people attending the conference, but rest assured that CPDD leadership is well aware of those individuals who work hard for the College. Our primary currency as scientists is our integrity, which includes doing what we said we’ll do when we said we’d do it. Given how frequently our performance is evaluated by our peers (e.g., for promotion, a grant, a manuscript under review), you want your name to connote something positive among your fellow scientists: committee work can be one brick in the wall that you’re building.

**Thanks.** I’d like to end this piece by highlighting a few more people who deserve our thanks. First, I’d like to thank a former member of the Board of Directors, Charles O’Keeffe, who played a critical role in helping to establish a new award at CPDD: The
Innovator Award, sponsored by Indivior, Inc. The Innovator Award recognizes individuals who have made ground-breaking strides in basic science, clinical research, or treatment and prevention science, with the potential for significant impact in our field. Tom Prisinzano was our first award recipient, in honor of his pioneering work with the mu opioid agonist, herkinorin. The award is a wonderful way to celebrate our colleagues for their exceptional work, and Charles was integral to its establishment.

Second, Sandy Comer, our Public Policy Officer, who works hard all year long to keep CPDD’s interests at the forefront in DC deserves thanks. Sandy started Advocacy Day several years ago, where CPDD members visit their state’s Congressional representatives and discuss key issues important to the College. Last year, the primary topic we discussed with our representatives was the importance of increased NIDA funding and what we asked for came to pass! The next Advocacy day is February 26th so mark your calendars and let Sandy know if you are interested in attending (sdc10@cumc.columbia.edu). If you’re nervous about trying this, know that you will be well prepped. Trust me that this is both an interesting and rewarding experience.

Finally, thanks to the Social Media Committee, namely Erin Winstanley and Meg Chisholm, for getting Twitter going for the first time this year. #CPDD was very active during the meeting and it felt good for our organization to take this important step forward. I will try hard to up my Twitter game before the next meeting!

Warm regards,

Meg Haney, Ph.D., President, CPDD (2018-2019)

**2018 AWARD WINNERS**

**Stephen Holtzman Travel Award for Preclinical Investigators:**

**Lais Berro, PhD**

*Introductory remarks by James K. Rowlett, PhD*

The Stephen G. Holtzman Travel Award for Preclinical Investigators, established by family and friends of Dr. Holtzman in tribute to his dedication and service to CPDD, was awarded at this year’s annual CPDD meeting to Laís Fernanda Berro, Ph.D. This award celebrates the accomplishments of pre-doctoral or postdoctoral trainees engaged in preclinical research, and Dr. Berro is an outstanding example of a promising early-career scientist.

Dr. Berro became engaged in research as an undergraduate at the Universidade Federal de São Paulo (UNIFESP) in Brazil, where she received a Bachelor of Science (2011) and a Master’s of Science degree (2014). During these very early stages of her career, Dr. Berro became interested in understanding the intersection between drug abuse and sleep, culminating in a Ph.D. from UNIFESP in 2017. Her thesis work was a joint effort at UNIFESP and the Yerkes National Primate Research Center of Emory University School of Medicine, where she was co-mentored by Monica Andersen, Ph.D. (an internationally-recognized sleep neuroscientist) and Leonard Howell, Ph.D. (past CPDD President and this year’s recipient of the CPDD Mentoring Award).
Dr. Berro’s accomplishments are many, including a prestigious Ph.D. Fellowship from the São Paulo Research Foundation and 30+ published articles, 24 of which are peer-reviewed original research papers. Dr. Berro also has obtained an adjunct faculty position at the Universidade Estagual de Santa Cruz in Brazil. Currently, Dr. Berro is pursuing her research interests in substance use disorders and sleep science in the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center, where she is a Postdoctoral Fellow in my laboratory.

I had the tremendous honor of knowing Dr. Holtzman and interacting with him at the CPDD meetings as well as through his service on our scientific advisory board at the New England Primate Research Center. Dr. Holtzman was a consummate pharmacologist, scientist, and wonderful colleague. Laís shares these qualities with Steve, and I am confident she will follow the path he so graciously built for us.

Award acceptance remarks by Lais Berro, PhD

It is a great honor to receive the 4th Annual Stephen G. Holtzman Travel Award for Preclinical Investigators. When I first got the notice of this award and shared the news with my mentors, Dr. Leonard Howell and Dr. James Rowlett, they both told me how wonderful Dr. Steve Holtzman was, what a great mentor he had been to them, and how they admired him for his integrity and selflessness. It truly is an honor to be given an award in his memory, and although I did not have the chance to meet Dr. Steve Holtzman, I know the impact of his actions is still alive, as I see all of those qualities in my own mentors. I am a strong believer that much more than hard work, the environment in which you grow up and develop, and the opportunities that are given you, allow you to achieve great things. The many doors my scientific mentors and collaborators have opened for me are the real reasons why I got this award. I have been extremely fortunate to have had wonderful mentors throughout my scientific career, including Drs. Roberto Frussa-Filho, Monica Andersen, Sergio Tufik, Leonard Howell and James Rowlett. Thank you, my mentors, for you all the doors you open for me every day, for trusting me, and for allowing me to grow and learn from you every day. Finally, I would also like to thank the CPDD as well as Dr. Holtzman and his family for their generous support to young investigators.

Martin & Toby Adler Distinguished Service Award:
Bertha K. Madras, PhD

Introductory remarks by Loretta Finnegan, MD

The Honorable Professor Bertha Madras, PhD, is a scientist, inventor, educator, public educator, public servant, having been a member of the World Health Organization, Vatican Pontifical, Academy of Sciences, President Trump’s Commission on Combating Drug Addiction and the Opioid Crisis, and is the recipient of numerous awards.

For the past 32 years, Dr. Bertha Madras has been Professor of Psychobiology, Harvard Medical School and located at McLean Hospital with a cross-appointment at Massachusetts General Hospital.

As a Scientist, her translational research laboratory discovered key targets of psychoactive drugs in primate brain, developed a novel class of imaging agents widely used in humans, and identified naturalistic genotype-phenotype primate models of human-based genetics. Her current research focuses on contrasting behavioral and molecular effects of THC and cannabidiol.

As an Inventor, she received 19 U.S. and 27 international patents with collaborators.

As an Educator, she has edited three books on addiction biology, developed the first elective addictions course for Harvard Medical students, and created an ongoing Cell Biology of Addictions Course at Cold Spring Harbor Laboratory.

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In Public Education, with a team, she created a Museum exhibit, a CD, and play at the Boston Museum of Science entitled, “Changing Your Mind: Drugs in the Brain” which was on display for a decade, and toured nationally. Disney licensed the CD from her at no cost.

Dr. Madras served as Deputy Director for Demand Reduction in the White House Office of National Drug Control Policy, Executive Office of the President, a presidential appointment confirmed by the U.S. Senate with unanimous consent.

She catalyzed (SBIRT)-- Screening, Brief Intervention, Referral to Treatment services on a national scale - screening for all drug use, including prescription opioids, fought for and obtained Medicare, Medicaid and third party billing codes to reimburse for these services, catalyzed adoption of SBIRT in the Veterans Administration system and other federal healthcare systems, wrote the first published report of federal SBIRT outcome data and acquired United Nations endorsement for SBIRT.

The World Health Organization commissioned her to write an “Update of Cannabis and its Medical Use”.

For the Vatican Pontifical; Academy of Sciences, she served on a panel on “Narcotics: Problems and Solutions of this Global Issue” and edited the final Summary Statement.

Dr. Madras served as one of six commissioners on President Trump’s Commission on Combating Drug Addiction and the Opioid Crisis along with Governors Baker, Christie and Cooper, former Congressman Patrick Kennedy, and Florida Attorney General Pam Bondi and was charged with the development of the final Commission report. She has received numerous awards, such as the NIH MERIT award, NIDA Public Service Award, American Academy of Addiction Psychiatry Founders’ Award, Community Anti-Drug Coalitions of America National Leadership Award, the Marian Fischman Lectureship Award and many others. The Better World Report of 2006 cited her brain imaging invention as “one of 25 technology transfer innovations, university to industry, that changed the world”.

On behalf of the College on Problems of Drug Dependence, I am pleased to present the Martin and Toby Adler Distinguished Service Award for outstanding contributions to research in opioid use disorders and to the field of drug abuse beyond scientific contributions.

**Award acceptance remarks by Bertha K. Madras, PhD**

Thank you CPDD, for this honor, the Martin and Toby Adler Distinguished Service Award (2018). It is an especial honor during this landmark 80th anniversary of CPDD meetings. My many excellent colleagues sitting here today are to be recognized and I lament the absence of many others who are no longer able to be with us. Collectively, your insights, wisdom and experiences helped to forge my career and views. You created a collegial community united by the pursuit of science and by a commitment to one of the most daunting of all human problems – substance use and its attenuation and mitigation. Chemical coping and chemical reward both can lead to a modern form of slavery - chemical slavery.
No other field of biobehavioral sciences converges more on public health, safety, social, political, ethical, legal, criminal, economic, and moral domains than substance use issues. No other scientific field is brimming with more dogma, terminology disputes, or conflicting views on policy. In our field, human stories of tragedy or triumph abound.

Yet, our field has adjusted deftly to sinusoidal waves of drug perceptions, drug patterns, drug policies and drug-related philosophies. We have ventured together relatively unscathed in our primary calling – research. For research is privileged. As scientists we can indulge in the luxury of safety nets, be they caveats on methodologies, or interpretation and conclusions. We can guard our reputations by moderating our conclusions, and we can receive dispensation by tempering our claims with, “on the one hand, on the other hand”. Or if we incline towards one interpretation, we remain shielded by a culture of fair-minded scientists who perceive contradictory results, conflicting or novel interpretations, or new knowledge as the very essence of scientific inquiry, a random, evolving, mutable, and dispassionate search for truth.

During this seemingly perpetual research career, interposed by diversions into public service and policy, my fingers have danced awkwardly on keyboards making line in/line out edits on drug-related House and Senate bills, composing recommendations for the President’s Commission on Combating Drug Addiction and the Opioid Crisis (six all-nighters pulled in the last few weeks of the process), petitioning for billing codes and federal embracement of Screening, Brief Interventions and Referral to Treatment (SBIRT), editing a final drug policy statement of the Vatican Pontifical Academy of Sciences, writing a declaration on the scheduled status of marijuana for a federal court, editing a one-hour speech down to 6 minutes for a United Nations event on protecting children; weighing in on policies for other nations, or writing storyboards for museum exhibits to educate the public on how drugs affect the brain (e.g, “Changing Your Mind: Drugs in the Brain”). In public service and policy, it was quickly obvious that privileges are very different from those of scientific research. Yes, we can weigh “on the one hand, on the other hand”, we can consider scientific evidence. But in the end, we are compelled to take positions, quantal choices, “yes or no” decisions. There is no protective shield nor forgiveness from observers if decisions differ from fashionable thinking; there is no mercy from politicians or the public if current fads are resisted by the weight, or lack thereof, of scientific evidence; there is no certainty that policies will be supported by appropriated funds, or be implemented, and if so, with fidelity; there is no refuge from partisan media if decisions and opinions digress from vogue ideologies. When our opioid Commission was two weeks late in issuing a brief interim report, the media caviled at the delay, yet frenetic criticism was rare in the media during the festering opioid crisis of the past decade. Above all, there is no clemency, but only sleeplessness, lamentations, grief and despair if decisions conceivably lead to unintended adverse consequences.

Yet, there are immense opportunities and privileges in public service not replicable by other professional activities. The purest of all joys is to witness objective, quantifiable improvements in public health arising from policy initiatives, or to effectively shift political perceptions towards sound policies and appropriations for implementation. Other delights are rarely shared: a staff person at San Patrignano who confides that had she heard my presentation as a teenager, she would have spared her parents and herself five years of drug-related anguish; a grandson who asks whether I had ever heard of SBIRT because his high school was implementing SBIRT screening for all; a colleague who whispers a heartfelt endorsement of the Opioid Commission report, and so many more. Strange encounters during my journey could provide hours of riveting and mirthful stories around campfires. My years of public service and public policy were driven by simple or perhaps simplistic motives: to defend and protect our brains - the repository of our humanity, and to improve the quality of human life during my brief sojourn on earth.
Joseph Cochin Young Investigator Award: Kelly Dunn, PhD

Introductory remarks by Maxine Stitzer, PhD

When I learned that Kelly Dunn had been selected as the Cochin Award winner this year, I was at first surprised. Given all her accomplishments, I thought that Kelly must have been working as an independent investigator for longer than 10 years. But indeed, it is the case that her Ph.D. degree from the University of Vermont was awarded in 2009.

By 2016, Kelly had advanced to Associate professor at JHU Behavioral Pharmacology Research Unit, where her main problem is finding the time to manage her many grant supported projects. She currently has 3 R01’s, and an R34 and has produced over 40 publications.

Focusing appropriately and strategically on the important public health challenges raised by the opioid epidemic, Kelly has made several significant contributions. For example, she developed a web-based educational tool designed to teach opioid users how to mitigate overdose risks such as using when alone. She is very interested in improvements for opioid detoxification and with Eric Strain has identified ER tramadol as a useful agent in the treatment of opioid withdrawal symptoms. She is working on opioid-cannabinoid interactions in pain and on a novel project to identify genetic marker(s) associated with individual differences in subjective response to opioids.

Kelly has an impressive breadth of knowledge about opioid pharmacology and factors contributing to the current opioid crisis. She is an especially excellent communicator and teacher. I was impressed that she sought out undergraduate teaching opportunities in Baltimore, which is unusual for someone managing a busy research agenda. She gives many talks on opioids both locally and nationally and actively contributes to media coverage of issues related to the opioid crisis. Kelly’s willingness to engaging in communication is commendable and important as she brings clear, science-based information to the public.

Meanwhile, Kelly decided it was time to start a family, her impending delivery of a bouncing baby boy being the reason she is not here today. The award plaque was mailed to her and Kelly has prepared a video accepting the award. I hope she will bring her new addition to the next meeting where we can all meet him.

Award acceptance remarks by Kelly Dunn, PhD

I sincerely appreciate being awarded the Joseph C. Cochin award by CPDD. This is the result of many opportunities I have had to train and work with numerous influential colleagues, beginning with my graduate student mentors Stacey Sigmon and Steve Higgins from the University of Vermont and including my many colleagues at Johns Hopkins University. I would like to particularly thank my nominators, George Bigelow, Maxine Stitzer, Elise Weerts, and Eric Strain, for nominating me and also providing me with so much support, advice, and guidance over the past 8 years. Finally, I’d like to thank CPDD for making this award.
Mentorship Award: Leonard Howell, PhD

Introductory remarks by Lais F. Berro, PhD

It is my pleasure to introduce this year’s CPDD Mentorship Awardee, Dr. Leonard Lee Howell. This could very well be an award to his personal achievements, including having run multiple marathons around the world, and very recently having finished a 560 mile pilgrimage through Spain, hiking an average of 16 miles a day for over 30 days! I’m pretty sure I haven’t walked that much in my entire life. But no, this is not an award to his personal achievements. This could also very well be an award to his professional achievements, such as having authored over 110 publications, 8 book chapters, and over 150 abstracts presented at scientific meetings; having been recognized for his contributions with an NIH MERIT Award and a Senior Research Scientist and Mentorship Award from NIDA. Or even having served on several CPDD Committees, including being last year’s CPDD President, and currently being a member of the Executive Committee and the Board of Directors. But no, this is not an award to his professional achievements.

For those who know Leonard, it’s not surprising at all that this award is not about what Leonard has done for himself. This award is about what Leonard has done for others. It’s about the 9 junior faculty, 12 postdocs, 15 graduate students, 70 undergraduate students and 29 technicians Leonard has directly mentored and trained over the years. It’s about the incredible impact Leonard has had in our lives, both personally and professionally. Professionally speaking, that is very easy to measure, based on how many of Leonard’s mentees are now in important academic, leadership and scientific positions. And personally, I know I speak for all of his mentees when I say that Leonard has been, and still is, a wonderful, trusting, encouraging and, above all, selfless mentor. Mentoring is an extremely altruistic task, and Leonard has always done that with mastery and care. Leonard has always gone beyond to help his mentees achieve their goals.

Leonard, we will never forget everything you’ve done for us. Thank you so much for giving us the best wings to fly, and fly high, even though you knew we would most likely end up flying away. Thank you for being there to support us along the way, especially should we ever fall. From driving that van full of students to Winston-Salem for Lab Exchange to providing guidance and advice on a daily basis, you have impacted our lives in the most positive way. This award is just one way to say how thankful we are to you. You get that plaque, but we are the actual winners for having had you as a mentor.

Award acceptance remarks by Leonard Howell, PhD

Thank you Lais Berro for your kind introduction and for initiating my nomination. Congratulations to you for the Holtzman Award: it is very well deserved. Mike Nader and Paul Czoty, thank you for your letters of support and your friendship over many years. I would also like to thank the Awards Committee for your consideration of my nomination.

Mentorship is learned behavior and it begins with our own mentors. I was fortunate to have three outstanding mentors during my career. Larry Byrd was my research advisor in graduate school. He taught a naïve student how to be a professional and when I returned to Emory to join the faculty he continued to nurture my professional development until his retirement. Steve Holtzman was never a formal advisor but he took an interest in me as a graduate student and he took me under his wing. I learned about scientific and professional integrity from one of the best and he continued to play an active role as my mentor throughout his lifetime. I only spent two years as a postdoctoral fellow with Bill Morse but those were the most formative two years of my career. Like Steve and Larry, Bill continued to stay engaged in my life and shape my behavior throughout my career.

We also learn a lot from our mentees. Mentorship is not one directional. I want to thank my former graduate students, postdoctoral fellows and junior faculty for many life lessons you taught me over the years. I retired from academia at the end of last year and I can say without question this is what I will miss most; having the opportunity to interact with wonderful young scientists like these folks. Thank you all!
Marian W. Fischman Award: Kenzie L. Preston, PhD

Introductory remarks by Richard Lamb, PhD

It was a pleasure to be able to introduce Kenzie Preston as this year’s Marian Fischman Lectureship awardee. Kenzie had come to Chicago to work with Bob Schuster, and I first met her there taking Lew Seiden’s psychopharmacology course. When she completed her doctoral work with Bob, Kenzie went to Baltimore to work with George Bigelow. In Baltimore, she and George developed human opioid drug discrimination procedures that proved highly translational and advanced our understanding of human opioid pharmacology. After completing her fellowship with George, Kenzie took a position at the Addiction Research Center. It was there that I came to know Kenzie well and fully appreciate her extensive knowledge of opioid pharmacology and her mentoring. We spent many hours discussing and planning experiments together in a shared office; and it was Kenzie and Marian Fischman who helped me most with my first grant application. Later, Kenzie would do important work on contingency management; and subsequently, groundbreaking work combining ecological momentary assessments and geolocation data to address important questions about relapse. Kenzie is truly carrying forward Marian Fischman’s legacy.

Award acceptance remarks by Kenzie L. Preston, PhD

This year I had the honor to be selected as the Marian W. Fischman Lectureship awardee—an honor that carried the responsibility of speaking at the annual meeting of the College on Problems of Drug Dependence (CPDD). Preparing my speech was a daunting task, in part because of the high-powered audience, but mostly because I wanted to communicate my admiration for Marian, a world-class scientist who paved the way for the many women and men who followed her.

Marian held a special place in my heart and my career. My graduate advisors, Bob Schuster and Lewis Seiden, had been her advisors. My dissertation was based on hers: I followed up on her groundbreaking work on the neurotoxic effects of methamphetamine. And when I wrote my first R01 grant, I took inspiration from her pioneering cocaine research in humans. Later on, we both ended up as faculty in Johns Hopkins’ Department of Psychiatry and Behavioral Sciences, albeit at different campuses, and left the same year for our next research adventures. My link to Marian, however, extended past Hopkins, as two of my fellow graduate students (and lifelong friends) from the University of Chicago, Richard Foltin and Suzette Evans, joined Marian at Columbia for the remainder of her career.

Marian’s death in 2001 certainly did not end her influence on me or on addiction research in general. As of May 2018, her many papers had been cited more than 10,000 times, and her many mentees have kept her legacy alive through their science and their work at CPDD.
Preparing the Fischman lecture also led me to think about my own research journey and about the many other people from whom I have had the privilege of learning. At John Hopkins’ Behavioral Pharmacology Research Unit (BPRU), George Bigelow and I developed a procedure for drug discrimination in humans; using that and other procedures, we studied opioid agonist/antagonists, showed that adding naloxone to buprenorphine would reduce its abuse liability, and compared self-administration of clonidine, lorazepam, and hydromorphone during methadone taper. I also worked with Maxine Stitzer, Roland Griffiths, Eric Strain, and Sharon Walsh on numerous studies of buprenorphine, methadone, caffeine, and benzodiazepines.

In 1991, I was recruited to the Addiction Research Center (ARC), which later became the NIDA Intramural Research Program (IRP). Roy Pickens, the Scientific Director, offered me the option of taking the scientific lead on a new 80-patient outpatient program for treatment research or continuing to conduct human laboratory research. In making my decision, I thought about what Marian would do. She would make the bold move. I had never conducted a clinical trial, but I took charge of the outpatient treatment program.

Fortunately, I had good, experienced colleagues at NIDA. David Gorelick, Ivan Montoya, and I collaborated to evaluate the efficacy of buprenorphine maintenance in patients dually dependent on heroin and cocaine. Kenneth Silverman, who had just finished a postdoctoral fellowship with Marian at Hopkins, joined my group, and, along with Annie Umbricht and me, conducted a series of clinical trials of contingency management, demonstrating its efficacy in cocaine and opioid dependence by using yoked-control comparison groups. I also worked with Edward Cone on studies of cocaine pharmacokinetics and better detection of cocaine use.

Around 2005, I had the opportunity to take another risk: using mobile technology to assess our patients’ day-to-day experiences of drug use. Again, I asked myself what Marian would do—and I went all in, incorporating ecological momentary assessment (EMA) into nearly every study I ran. David Epstein, Massoud Vahabzadeh, and I conducted the first large-scale EMA study of illicit drug use. With Matthew Tyburski and Karran Phillips, we added collection of GPS data to investigate environmental influences on drug use, and with extramural collaborators, we have added intensive ambulatory physiological monitoring. Our next research challenge is to expand mobile technology from collection of data to delivery of empirically based on-the-spot treatment.

In clinical trials, too, we have tried to break new ground. Inspired by preclinical findings by Udi Ghitza and Yavin Shaham, we embarked on a translational study to investigate whether clonidine, already familiar for its amelioration of opioid withdrawal signs, might have a separate and more important use as an adjuvant maintenance drug with buprenorphine, specifically preventing stress-induced relapse. We succeeded, and, by using EMA as one of our outcome measures, we showed that clonidine’s behavioral mechanism of action was to decouple stress from opioid craving.
I don’t know whether the choices I’ve made are the ones Marian Fischman would have made, but I believe she would have liked them. Throughout my career I have been inspired by scientists like Marian, and I have had the opportunity to work with a community of amazing colleagues dedicated to improving treatment and prevention of addiction. I would like to think that I have played my part as a member of that community and passing the baton to future generations of scientists.

This work was supported by the Intramural Research Program, National Institute on Drug Abuse, NIH.

**Innovation Award: Thomas Prisinzano, PhD**

*Introductory remarks by Christopher Cunningham, PhD*

An innovator is one who identifies a significant problem and creates new space in which to find novel solutions. The CPDD Innovator Award specifically recognizes one whose discoveries have the potential to greatly impact the treatment of substance abuse and dependence disorders. I nominated Thomas E. Prisinzano for his pioneering work developing the first pathway-biased, non-nitrogenous opioid receptor ligands.

Tom has dedicated his career to developing agents to study substance abuse and dependence disorders. Tom earned his B.S. in Chemistry from the University of Delaware and his Ph.D. in Pharmaceutical Sciences from Virginia Commonwealth University studying under Dr. Richard Glennon. Tom’s work as a postdoctoral fellow in the laboratory of Dr. Kenner Rice at the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), Tom developed inhibitors of dopamine and serotonin transporters as treatments for cocaine abuse. Tom continued to work in the field of neurochemistry in his independent career at the University of Iowa and University of Kansas, winning numerous awards, including the CPDD Joseph Cochin Young Investigator Award in 2011.

In his quest to develop non-addicting analgesics and treatments for stimulant abuse, Tom followed a very different path than other opioid chemists. In 2002, the neoclerodane diterpene salvinorin A was characterized as a potent, short-acting kappa opioid receptor agonist found in the hallucinogenic sage, Salvia divinorum. Salvinorin A afforded significant challenges as a lead to study opioid pharmacology: the molecule is chemically unstable, challenging to isolate or synthesize, and contains no basic functional groups, long considered a requirement for opioid ligands. Undaunted, Tom embarked on a decade-long journey in 2005 to study this unique molecule. In 2007 Tom developed an analogue that he named herkinorin. Herkinorin proved to be the most potent, non-nitrogenous mu opioid receptor agonist reported. Not only that, herkinorin was the first mu agonist biased toward G proteins over β-arrestins, thereby improving the safety profile of this potential analgesic and creating the first in a new class of biased opioid ligands. This paved the way for others to enter this new space, including Trevena, Inc., whose lead compound olliceridine is currently in Phase III clinical trials for pain. Since the discovery of herkinorin, Tom’s efforts have resulted in the generation of a more potent biased mu agonist, kurkinorin, and a practical total synthesis of salvinorin A that enables, for the first time, detailed evaluation of the entire neoclerodane diterpene scaffold.

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**CPDD/NIDA Media Award: Maia Szalavitz**

*Introductory remarks by Margaret Chisolm, MD*

Each year, the CPDD/NIDA Media Award is given to an individual who has helped increase public awareness of substance use research and treatment.

Nominations are solicited through members of the College, including its Media Committee, and this year’s Committee members worked hard to prepare and review the numerous nomination packages.

At the annual meeting in San Diego, it was my privilege to present—on behalf of the Committee—the 2018 CPDD/NIDA Media Award to journalist Maia Szalavitz in honor of her bestselling book “Unbroken Brain: A Revolutionary New Way of Understanding Addiction.”

Szalavitz is one of the world’s leading journalists on addiction. In addition to “Unbroken Brain,” she is the author of the book “Help at Any Cost,” as well as numerous reports on addiction for high profile media outlets like National Public Radio, VICE, Scientific American, the New York Times, and the Washington Post.

In her latest book, Szalavitz combines her personal experience of overcoming heroin and cocaine addiction with a popular synthesis of the scientific literature in order to challenge both the idea of the “broken brain” and the “addictive personality.” From her lived experience as a person who previously used IV drugs and her astute and accessible distillation of the science, Szalavitz argues that addiction is a learned behavior, a perspective familiar to us at CPDD—for which she offers insights to the lay public around treatment, prevention, and overall drug policy.

In recognition of her clear commitment to bringing this more nuanced understanding of the science of addiction to the public, it is no surprise that Maia Szalavitz was selected as the recipient of the 2018 CPDD/NIDA Media Award.

*Award acceptance remarks by Maia Szalavitz*

I was delighted and honored to learn that I would be receiving the media award from CPDD and NIDA. I have been writing about drugs and addiction for over 30 years now—and it’s really gratifying to have that work acknowledged and accepted, especially now and especially as a person who was formerly addicted to cocaine and heroin. And, even more so, for you to honor my book, Unbroken Brain, which is in many ways a summation of this work.

I’ve been immersed in NIDA’s research data for years—so that also made me really excited to be honored by those who do the science and all of the other things needed to make it happen.

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In this area, which is so highly politicized, I have long admired the commitment to science itself shown by NIDA, which is obvious from the many research findings that have been published that do not always fit with what society and politicians would expect and prefer.

It’s these unsettling findings, however, that have really shown us the way forward. During the time I have written about this, I’ve seen enormous changes. In the late 80s, the war on drugs was seen as the only acceptable policy and stigmatizing drug use was seen as best way to reduce drug problems.

Harm reduction programs—one of which saved my life by educating me about HIV and needle safety—were viewed as radical and dangerous. The focus was on “sending the right message” even if that meant death for some people who use drugs. Valuing the lives of people with addiction by helping them avoid HIV infection was seen as “enabling” or “condoning”.

Now, of course, we know that needle exchange is, as New York State’s health department put it in a report it published several years ago, the gold standard of HIV prevention. And research funded by NIDA helped prove that needle exchange not only saves lives but doesn’t increase drug use or foil prevention or treatment efforts. In fact, it helps ready people for treatment. The “enabling” concept simply isn’t backed by data.

Today, we also know that medication treatment for opioid addiction with methadone or buprenorphine cuts the death rate by 50% or more—and this has been proven for no other type of addiction treatment.

That’s why I say “medication treatment” or just “medication”—not “medication-assisted” because if anything is doing the assistance, it’s counseling and other services, which on their own aren’t proven to save lives. (We also don’t call diabetes care “insulin-assisted treatment” or depression care “antidepressant-assisted treatment”—it’s just another example of how addiction is treated as not really medical).

Again, NIDA helped demonstrate the lifesaving and relapse-reducing properties of methadone and buprenorphine—indeed, without a push from NIDA, buprenorphine would never have come to market to fight addiction.

When I first started writing about the importance of understanding the critical role of learning in addiction, scientists told me that it was old news and that, of course, addiction is a disorder of learning. My response was that if this is the case among scientists, they sure haven’t done a good job of communicating that to the public.

But now, more and more people are recognizing that if addiction is compulsive behavior that occurs despite negative consequences, it
must be a problem of learning. Specifically, one that involves failure to learn from punishment. The implications of that for drug policy are immense: if addiction is fundamentally defined by a failure to respond to punishment, then using punishment either within treatment or via the criminal justice system is simply not going to work.

Which is apparent to anyone who has followed this issue at all.

I hope to see more public communication about addiction and learning, so that people can better understand why people with addiction behave the way that they do. And I also hope to see more messages about why punishment doesn’t help addiction— but compassionate, evidence-based medications and other care, do.

As always, the research is what will continue to show us the way forward— it’s the only thing that can—and I want to thank everyone here for their commitment to this work and to helping the public better understand addiction.

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**DRUG AND ALCOHOL DEPENDENCE CORNER**

**Eric C. Strain, MD, Editor-in-Chief**

**Editor’s choice articles**


**Self-medication of mood and anxiety disorders with marijuana: Higher in states with medical marijuana laws**

Aaron L. Sarvet, Melanie M. Wall, Katherine M. Keyes, Mark Olfson, Magdalena Cerdá, Deborah S. Hasin (Drug Alcohol Depend. 2018 May 1;186:10-15)

In nationally representative data from 2004-2005, adults with mood or anxiety disorders living in states that had passed medical marijuana laws self-medicated specifically with marijuana at higher rates than comparable individuals in states without such laws. These elevations could not be explained by known higher rates of recreational marijuana use among adults in these states, suggesting differences in attitudes about the general therapeutic appropriateness of marijuana. While additional research is needed to determine the reasons for this association, clinical screening for self-medication with marijuana may be particularly important in states with medical marijuana laws.

**Age sensitive associations of adolescent substance use with amygdalar, ventral striatum, and frontal volumes in young adulthood.**

Michael Windle, Joshua C. Gray, Karlo Mankit Lei, Allen W. Barton, Gene Brody, Steven R. Beach, Adrianna Galván, James MacKillop, Uraïna S. Clark, Lawrence H. Sweet (Drug Alcohol Depend. May 1;186:94-101)

According to the age sensitivity hypothesis, the timing of substance use occurrence (i.e., when it occurs) influences the development of different brain regions. Data from 110 African Americans were evaluated for substance use across adolescence and brain volumes in young adulthood. Findings indicated smaller brain volumes associated with higher levels of substance use during early adolescence (ages 12-15 yrs.) for the amygdala, an earlier developing brain region associated with emotional processing (e.g., fear appraisal), and during middle adolescence (ages 16-18 yrs.) for later developing, prefrontal cortex regions associated with self-regulation and impulse control. Findings supported the age sensitivity hypothesis.
TOWERS AND TRENCHES (TNT):
Bridging the Gap Between Research, Practice, Policy, and Community to Prevent Substance Use Disorders

Research, practice, and policy related to substance use disorders are often disjointed, which can delay the development and implementation of needed interventions that can impact the lives of individuals, families, and communities. For this reason, the Towers and Trenches (TNT) Project was created.

TNT is an interview series created to help bridge the gap between research, practice, policy, and community by promoting communication between researchers at the university (i.e., the tower); practitioners who are in the trenches providing direct care to clients with substance use disorders; policy makers whose decisions can impact how addiction and its antecedents and consequences are addressed on micro-, mezzo-, and macro-levels; and community stakeholders who are (directly or indirectly) affected by substance use disorders.

TNT interviews researchers, practitioners, policy makers, and community members who discuss important issues related to substance use disorders and how they can work together to address pressing problems.

TNT was created by Qiana L. Brown, PhD, MPH, LCSW, Assistant Professor of Social Work and Urban-Global Public Health at Rutgers University and Chair of the CPDD’s Publications Committee. TNT interviews will be published in the News and Views section of Drug and Alcohol Dependence. The TNT audio-video series is sponsored by the Rutgers University School of Social Work (SSW) and the Rutgers University Center for Prevention Science (CPS). Audio-video recordings will be disseminated via the SSW’s and CPS’s social media outlets.

81st Annual Meeting

DATES:
June 15 – 19, 2019

LOCATION:
JW Marriott San Antonio Hill Country Resort and Spa
San Antonio, Texas

DEADLINES:

Symposiums
October 15th, 2018

Workshops
October 15th, 2018

Forums
October 15th, 2018

Abstract Submission
December 3rd, 2018