19th Annual

Science+Advocacy

Symposium

Atlanta Marriott Marquis Hotel
September 27 & 28, 2024

unite2fight paralysis

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Welcome

Welcome to Unite 2 Fight Paralysis' 19th Annual Science and Advocacy Symposium. It's great to be hosting this year's symposium here in Atlanta! We look forward to facilitating meaningful exchanges with all those engaged in our shared work. Your attention to the following areas will help us maximize our time together:

Interactive Program. Like the last few years, we have streamlined our printed program to save paper and create a more accessible experience for all attendees. You can scan QR codes throughout to access key information about our speakers, U2FP's staff and history, as well as resources for the SCI community.

Scan here to download a digital version of this program and/or use the QR codes provided on the following pages.

Format. Each day of the Symposium will contain presentations from our all-star lineup of scientists and advocates. Moderated question and answer sessions will follow each grouping of 2-3 presenters. Use this program to educate yourself on what's coming up so that you can prepare to engage effectively. This is a fantastic opportunity to pose your questions directly to the presenters and enrich the experience for all.

Context. Please read Sam Maddox's "Navigating U2FP's Science & Advocacy Symposium" in the following pages. It's a great summary and highlights the salient points that connect the various researchers to the cure enterprise. Providing context helps us all think more strategically. It also allows us to explore ways to have a more effective voice for expediting curative treatments for SCI. As you listen to each presenter, keep these questions at the forefront of your mind: What is happening here? Where does it go next? Who can take it there? How can we help?

Sponsors. We are extremely grateful to our sponsors this year. Please take some time to visit their exhibiting booths and/or talk to their representatives to discover the great work they are doing in our community.

Lastly, take a few minutes to fill out our survey at the end of the symposium. We very much want to hear your impressions. And if you have any questions, reach out to us at unite@u2fp.org

Thanks for joining us this year!

Matthew Rodreick
Executive Director, Unite 2 Fight Paralysis

SCHEDULE of Events

THURSDAY, SEPTEMBER 26, 2024 – ARRIVAL DAY

5:00 - 7:00 pm	Registration & Early Check-In Imperial Foyer

FRIDAY, SEPTEMBER 27, 2024

7:30 - 9:00 am	Registration & Continental Breakfast – Exhibitor Visits Imperial Foyer
9:00 - 9:15 am	Opening Remarks & Welcome Candace Floyd, PhD | Emory University Matthew Rodreick | Unite 2 Fight Paralysis
	SESSION 1: TRANSLATION: CONTEXT
9:15 - 9:35 am	Overcoming Obstacles Kent C. New, MD, PhD, FAANS | Ascension St. Vincent's Medical Center
9:35 - 9:55 am	Spinal Cord Injury Research Projects Analysis: Where is the Money Going? Jennifer Dulin, PhD | Texas A&M University
9:55 - 10:15 am	From Bell Labs to the Brain: How the Creation of Biotechnology Units within Universities Can Enhance the Translation of Basic Research Advances to Improve the Treatment of CNS Disorders David Baker, PhD | Marquette University
10:15 - 10:45 am	Panel Discussion with Question & Answer Session
10:45 - 11:15 am	BREAK - Exhibitor Visits
	SESSION 2: TRANSLATION: 3 BODY PROBLEM
11:15 - 11:35 am	Sex and Drugs and Taking a Stroll: Spinal Cord Injury Research Priorities David Magnuson, PhD | University of Louisville
11:35 - 11:55 pm	The Effect of Improving Body Awareness on Sensorimotor Function and Neuropathic Pain in Adults with Spinal Cord Injury Ann Van de Winckel, PT, MSPT, PhD | University of Minnesota Medical School
11:55 - 12:15 pm	In the Translational Flywheel: Therapeutic Acute Intermittent Hypoxia and Spinal Cord Injury Gordon S. Mitchell, PhD | University of Florida
12:15 - 12:45 pm	Panel Discussion with Question & Answer Session
12:45 - 1:45 pm	LUNCH - Exhibitor Visits

SESSION 3: SPINAL CORD STIMULATION: WHAT CAN IT DO?

1:45 - 2:05 pm — Neuromodulation of Spinal Sensorimotor Networks Using Invasive and Non-invasive Spinal Stimulation: "Determining the Right Fit"
Dimitry Sayenko, MD, PhD | Houston Methodist

2:05 - 2:25 pm — Can Spinal Cord Stimulation Improve Sexual Function after SCI?
Elizabeth Bottorff, PhD | University of Minnesota

2:25 - 2:45 pm — Spasticity: The Puzzling Pieces of Predicting Intervention Outcomes
Evan Sandler, PT, DPT | Shepherd Center

2:45 - 3:10 pm — Panel Discussion with Question & Answer Session

3:10 - 3:40 pm — BREAK - Exhibitor Visits

SESSION 4: TRANSLATION: IS 'FIVE YEARS' FINALLY HERE?

3:40 - 4:00 pm — Up-LIFT Pivotal Trial Read Out
James D. Guest, MD, PhD, FAANS | Miami Project to Cure Paralysis

4:00 - 4:20 pm — ONWARD® Medical: Ready to Unlock Functional Recovery after SCI
Dave Marver | ONWARD Medical

4:20 - 4:40 pm — Question & Answer Session

4:40 - 5:00 pm — Beyond Science: Art, Advocacy and Community
Reveca Torres | SCI Visual Artist
Freaque | SCI Musician & Artist

5:00 - 5:20 pm — Panel Discussion with Question & Answer Session
Freaque | SCI Musician & Artist
Reveca Torres | SCI Visual Artist

DINNER ON YOUR OWN

SATURDAY, SEPTEMBER 28, 2024

7:30 - 9:00 am — Registration & Continental Breakfast – Exhibitor Visits
Imperial Foyer

9:00 - 9:10 am — Opening Remarks / U2FP Introduction
Matthew Rodreick | Unite 2 Fight Paralysis

SESSION 5: THE FUTURE IN COMBINATION

9:10 - 9:30 am — Regenerating the Spinal Cord
Mark A. Anderson, PhD | Wyss Center

9:30 - 9:50 am — Estim +: Establishing a Translational Platform for Combination Therapies
Candace Floyd, PhD | Emory University

9:50 - 10:10 am	Neuromodulation of Spinal Interneurons: a Novel Preclinical Translation Strategy to Restore Breathing after Chronic Cervical Spinal Cord Injury Kajana Satkunendrarajah, PhD | Medical College of Wisconsin
10:10 - 10:30 am	Panel Discussion with Question & Answer Session
10:30 - 11:00 am	BREAK - Exhibitor Visits
	SESSION 6: COMMERCIALIZING CURES
11:00 - 11:20 am	Clinical Trials in Spinal Cord Injury. . . Lost in Translation? Dan Mikol, MD, PhD | NervGen Pharma
11:20 - 11:40 am	Enhancing Neuroplasticity for Functional Recovery after Spinal Cord Injury: a Potential Oral Treatment Jessica C.F. Kwok, PhD | University of Leeds
11:40 - 12:00 pm	Clinical Product Development - The Winding Road Michael Lauw | Lineage Cell Therapeutics
12:00 - 12:30 pm	Panel Discussion with Question & Answer Session
12:30 - 1:30 pm	LUNCH - Exhibitor Visits
1:30 - 3:00 pm	**SESSION 7**: POSTER PRESENTATIONS
3:00 - 3:30 pm	BREAK - Exhibitor Visits
	SESSION 8: STRATEGY - BREAKOUT GROUPS
3:30 - 5:00 pm	Social Media: How Do We Break through the Noise? Breakout Session A
3:30 - 5:00 pm	Whole Body Translation? Breakout Session B
3:30 - 5:00 pm	Federal Cure Advocacy Network Breakout Session C
3:30 - 5:00 pm	Commercialization: How Can the SCI community Help? Breakout Session D
3:30 - 5:00 pm	Untapped Resource: ABT Centers as a Collaborator in Clinical Trials Breakout Session E
5:00 - 5:15 pm	Wrap Up & Closing Remarks Matthew Rodreick | Unite 2 Fight Paralysis
	END OF CONFERENCE

PRESENTER PROFILES

Scan here to view our speaker line-up.
Then click on a speaker's name or image to access their abstract and bio.

CONFERENCE Tips

SPONSOR EXHIBITORS

Our sponsors help make U2FP's Annual Symposium possible - they also provide a tremendous array of resources, services and products for the SCI Community. Sponsors will be available at several exhibit tables in the Marquette Prefunction Lobby area outside of the Marquette Ballroom. Please take a moment to stop by and learn more about their unique offerings for our community.

GET CONNECTED

X (formerly Twitter): @U2FP_CureSCI
Facebook: Unite2FightParalysis
Instagram: @u2fp
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A WELCOMING SPACE

Unite 2 Fight Paralysis is committed to creating a welcoming and accessible event. We seek to create an environment where everyone feels encouraged to participate. Please let us know if you need any accommodations. An ombudsperson will also be present at this event. Help us nurture a space where we all feel included and where civility grows. Please let the U2FP staff know if you hear or see anything that needs our attention. Thank you!

ABOUT U2FP

Scan here to find out more about U2FP, including our history and founders, Scientific Advisory Board and current leadership team.

Scan here to read more about our robust code of conduct.

Navigating U2FP's SCIENCE & ADVOCACY SYMPOSIUM

Sam Maddox

Welcome to the 2024 Unite to Fight Paralysis Science and Advocacy Symposium in Atlanta, Georgia. Here's a broad overview of what you can expect over the two-day event, broken down in eight sessions.

Day One
Point of View

First, U2FP Executive Director Matthew Rodreick sets forth a theme for the coming sessions: Point of view matters.

There are various points of view in the SCI ecosystem, all of which are gathered in the same room here: the lived experience community, of course, and the scientists, doctors and clinicians, the funders, and the regulators. More and more, there are companies, a good sign when investors see potential. These stakeholders may set their compass to the same North Star (curative therapies, soon), but what this symposium reveals is that perspectives and motivations can be quite different depending on the observer. If we can understand our individual roles within the greater collective, and make the effort to listen to one another, maybe things can speed up.

Rodreick will be followed by keynote speaker Kent C. New, MD, PhD, FAANS, on the topic of "Overcoming Obstacles." New is a neurosurgeon/scientist who acquired a spinal cord injury in 2014. He knows the injury from all angles – research, clinical, and lived experience.

New notes that while actor Christopher Reeve's 1995 spinal cord injury raised awareness and money for SCI treatment development, here we are, nearly 30 years since Reeve's injury with no widely effective treatments available for the SCI community. Why is it taking so long? New will frame his talk on the complexity of both the injuries and of the medical research environment that seeks to treat them. He will consider ways we might seek to overcome these obstacles.

Translation: Context

Session one asks us to think about how and where science research is funded, and how the system of delivering therapies might be stuck in a cumbersome, inefficient academic model of discovery. Jennifer Dulin, PhD, is a SCI cell therapy researcher at Texas A&M. At the 2022 Symposium, her lab presented a systematic review of a ten-fold jump in human clinical studies in recent years, with no treatments to show for it. This revealed issues with trial reporting and design, and with clinical trial rationale -- for example, most trials are not even designed to progress toward FDA approval.

That data led Dulin and colleagues to this year's talk. She will discuss preliminary data from a study she has undertaken – at the request of, and in collaboration with U2FP – to follow the money. Many millions of dollars have been spent on SCI research over the years, money from federal agencies, the VA, private foundations, and individuals hoping to make a difference. No one has ever sorted it out in an organized way. Where did the money go? Does the money follow research trends? Are funding priorities changing? Can we then answer the questions, what was delivered, and did it matter?

Dulin will be followed by David Baker, PhD, Chair of Biomedical Sciences at Marquette University. He's going to confront the system we have now for developing a scientific discovery as a therapy. Baker has direct experience bringing a discovery through the process; in 2007 he co-founded Promentis Pharmaceuticals, a startup that raised over $40 million to bring a compound into clinical trials. The company targeted the treatment of impulse control disorders by way of neurotransmitter (glutamate) imbalance and oxidative stress.

Baker is an academic by trade who's willing to challenge the shortcomings of the academy. He suggests a complete transformation of the discovery to therapy process, moving toward one that is driven by impact rather than profit. We may need to explore alternative development models, Baker suggests, that transform the relationships between academia, the federal government, and the private sector.

> Many millions of dollars have been spent on SCI research over the years.... where did the money go?

Dulin and Baker should provoke some big picture thinking and should stir up many more questions than answers. For example, regarding funding, who is deciding what projects get the money? Scientists, right? Not necessarily. Funders often set agendas and trends and researchers go along as a matter of career survival. Does Dulin's data identify funding gaps? Duplication? Would a repository for an SCI research balance sheet be useful, and where would that exist?

Is Baker suggesting an alternative to the academy? How about a closed research ecosystem, a standalone institute that incentivizes basic science alongside clinical research with built-in wherewithal to pull ideas through regulators to the market? Sure. But where's the money?

"3 Body Problem"

Session two's title echoes the Netflix science fiction TV series, wherein humankind is threatened by extraterrestrial forces that unravel the laws of nature, including big Newtonian ones, like keeping earth, moon and the stars in some order. Passionate scientists join forces with creative government agents for an existentially entertaining showdown.

U2FP has convened our own panel of passionate scientists to consider the association between three interrelated human body characteristics: movement, sensation, and autonomic function. In balance, these features make for a healthy, whole body. The onset of paralysis breaks the law of equilibrium, threatening personhood in an existential alien encounter.

The panel set-up requires a look back at SCI research. Twenty five years ago, and beyond, the goal was lofty and unrealistic -- to restore the nervous system to reactivate most major movements, including locomotion. The research community, however, began to hear from the lived experience community: "Wait, don't put walking at the top of our priorities. How about if you address things that matter to us, such as bowel, bladder, and pain."

So, the field responded, and projects shifted toward these perhaps more realistic, but incremental strategies. But wait again: is this playing it too safely? Why not see spinal cord injury from an integrated, systems biology view, rather than the isolated organ-system perspective -- and why not consider again the biggest of issues, walking?

Speaker David Magnuson, PhD, University of Louisville, works with the spinal cord stim group there to understand the biology of spinal cord neural circuits. He asks, are we neglecting the interconnectedness in the central nervous system by focusing on a subset of complications? This is all quite complex, and there are limits to our biological knowledge, Magnuson concedes, but he suggests there may be unforeseen effects of pursuing research based on the SCI community's priorities. He will address these questions directly, looking at spinal cord injury as a syndrome with multiple clinical needs.

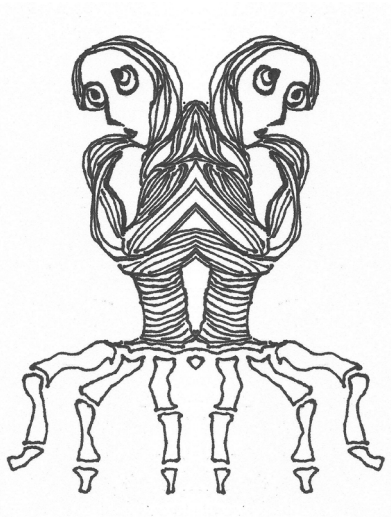
Magnuson's comments should be provocative. He will explore how we got where we are, noting that researchers are driven by incentives for funding, for academic career advancement, for publication conventions (higher score for novelty, influence, and impact; little incentive for clinical benefit).

Next up is Ann Van de Winckel, PT, MSPT, PhD, who directs the Brain Body Mind Lab at the University of Minnesota. She's presenting on her studies to retrain the body and rewire the brain for multiple functional improvements. Van de Winckel and others have found, using functional MRI to study brain networks, that the parts of the brain related to pain and body awareness function differently in people with spinal cord injury and neuropathic pain. Her studies have shown that whole body awareness techniques, such as Qigong and attention to breathing, can restore some of those brain functions.

Body awareness appears to be critical for improving neuropathic pain, but it has also been anecdotally reported to improve other complications, e.g., bladder, bowel, etc. Van de Winckel has developed exercises to help paralyzed people restore a sense of joint position and movement. This body awareness can change the perception of pain intensity.

Gordon Mitchell, PhD, University of Florida, will discuss his work to induce nerve growth to restore breathing function and its broader implications on body systems after SCI.

For many years Mitchell and colleagues have demonstrated the restorative potential of acute intermittent hypoxia (AIH), the breathing of low oxygen air alternated with normal air. It's been shown in incomplete spinal cord injury that this technique induces nerve plasticity, or growth, enabling significant respiratory recovery. AIH combined with task-specific training also boosts plasticity in limb function, including arms and hands.



AIH is approaching clinical relevance, but work remains to define dosing, safety and efficacy. What motor system (respiratory, upper airway, limb) is the best target? Will combinatorial therapies (drugs, task-specific training, electrical stimulation) enhance the effect? Why do some individuals respond better than others?

It remains a significant challenge to understand how the spinal cord balances numerous systemic processes, including blood flow, immune response, hormones, and movement.

What Can Stim Do?

Session three focuses on spinal cord stimulation (SCS). As the three discussants in this section will attest, SCS has been shown to be effective in many people in a variety of ways. This session considers several aspects of spinal cord stimulation, both epidural (eSCS, implanted) and transcutaneous (tSCS, skin surface), including its application to spasticity, sexual function, and general sensory and motor improvement.

Elizabeth Bottorff is a post-doctoral fellow in the University of Minnesota Department of Biomedical Engineering, working with scientist/neurosurgeon David Darrow in the Restorative Neurotrauma Lab. Her primary refrain is that for societal and systemic reasons, women's sexual function research is rare, hard to study, and way underfunded. Sexuality studies are usually about reproduction and skewed heavily toward male ejaculation. Time to look at arousal and orgasm, and don't leave out the ladies.

Bottorff's graduate thesis measured female genital blood flow response to nerve stimulation before and after neurological damage. Better flow, better response. She is now designing a sexual function study for people with spinal cord injury as an add-on to the University of Minnesota EStand trial (Epidural STimulation After Neurologic Damage). Her presentation title: "Can spinal cord stimulation improve sexual function after SCI?"

Sexuality studies are usually about reproduction and skewed heavily toward male ejaculation. Time to look at arousal and orgasm, and don't leave out the ladies.

The answer is yes. Spinal cord stim increases genital hemodynamics. Women in E-STAND reported arousal restoration, and even orgasm. Said Bottorff, "By assessing the immediate effects of eSCS on various aspects of sexual arousal, we may be able to discern which neural fibers are responding to eSCS." This, she added, lays the groundwork for better measurement of functional change, and should lead to better ways to optimize stimulation parameters for facilitating psychogenic arousal.

Evan Sandler is a PhD student from the Edelle C. Field-Fote lab at the Shepherd Center in Atlanta. Sandler's emphasis is in tuning and optimizing tSCS to treat spasticity. There's a long history, going back more than 50 years, noting the effect of stim on irregular muscle tone. The early studies all used implanted devices. More recently, non-invasive stim has been shown to help some people with spasticity. But not everyone responds the same, and some do not respond at all. What are the biomechanics of spasticity, what is the electrophysiology of the damaged spinal cord, and what can be done to modify and manage the excitability of reflexes? For the people who do respond to stimulation, which spinal circuits are recruited, and can we activate those with specific electrode placement of amplitude?

Dimitry Sayenko, MD, PhD, is from the University of Houston Center for Neuroregeneration, Center for Translational Neural Prosthetics and Interfaces. He has recognized, as have many others, that spinal cord stim is potentially effective for restoring motor function but inconsistently and unpredictably so, and even at its best, E-stim is not enough.

Sayenko has suggested for several years that stim + other approaches (activity based therapy, medication, cortical stimulation, peripheral nerve and/or muscle stimulation, robotics, etc.) might be the best way forward.

Sayenko stresses that SCS is not plug n play. There are many variables that challenge full clinical utility. We really need to understand the mechanism of spinal cord stimulation more fully, how the spinal networks below the lesion interpret sensory signals to respond and activate motor programming. That's the hard part. Meanwhile, Sayenko says let's be more strategic about maximizing the technology for helping people.

Is 'Five Years' Finally Here?

Session four may propose an answer to the old SCI research trope, give us five years and we'll have something for you. Everybody with SCI hears this, for the last 40 years. Well, is five years finally here?

Dave Marver, CEO of device startup ONWARD Medical and James Guest, MD, PhD, a prominent SCI researcher/clinician from the Miami Project will present study details from a recent clinical trial for skin surface (transcutaneous) spinal cord stimulation, sponsored by ONWARD Medical. Measuring the effect of tSCS on upper limb mobility in quads, the device improved function and sensation in almost three in four participants. The discussion will include ONWARD's efforts to gain regulatory approval for the ARC-EX transcutaneous device, ongoing trials for an implanted device (ARC-IM, epidural stimulation) and other strategies in the pipeline, including a combination of an implanted brain signal sensor with epidural stim (ARC-BCI).

The first day will end with a conversation between artists Freaque and Reveca Torres, both living with SCI. They will describe their creative endeavors and how their unique point of view informs their work.

Day Two
The Future in Combination

Session five will kick off the second day with a discussion of combination therapies, likely necessary to offer the greatest potential for recovery, especially in chronic SCI.

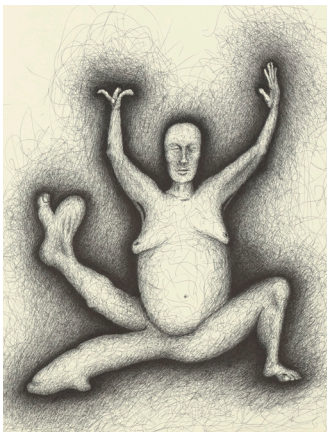
Candace Floyd, PhD, directs the Neurotrauma Translational Research Center at Emory University. (She also helped organize this symposium, representing title sponsor Emory. Thank you Candace!) Here she will report on a study combining eSCS and a potentially regenerative drug in a large animal model. The stim units are the same as those used in humans; the drug is NervGen's NVG-291 (the company's Chief Medical Officer to talk later today) which is being studied clinically now; it may promote axonal regeneration, neuroplasticity and remyelination to shore up disrupted spinal cord nerves. The use of a pig model makes the study very translational – pigs are physiologically similar to humans and therefore results can be clinically relevant. Floyd's study also includes the input of persons with lived-experience in SCI regarding research design and priorities. This combinatorial work is the brainchild of U2FP and is funded by a coalition of SCI organizations: the Bryon Riesch Paralysis Foundation, Conquer Paralysis Now, Get Up Stand Up 2 Cure Paralysis Foundation, Morton Cure Paralysis Fund, and United Paralysis Foundation.

Mark Anderson, PhD, is a scientist at the Swiss Federal Institute of Technology. He will discuss fascinating recent work to reengineer the spinal cord combining biologic, genetic and chemical engineering to regenerate growth after SCI. Anderson and his colleagues in the Gregoire Courtine lab take a step-wise approach to regeneration and recovery of function. In a recent study they showed substantial recovery of walking function in 27 of 30 animals, using a complicated series of steps to mimic developmental neurobiology (to turn on and guide the growth of walking-specific spinal cord nerves to connect appropriately below the injury lesion site – just the way we formed the nervous system when we were infants). It's complex and far from translation, but resets the bar for SCI regeneration.

Candace Floyd will report on a study combining eSCS and a potentially regenerative drug in a large animal model. The stim units are the same as those used in humans; the drug is NervGen's NVG-291.

Kajana Satkunendrarajah, PhD, Medical College of Wisconsin, will present on her recent work to restore breathing function in people with high level cervical injuries using a combination of gene therapy and designer drugs to activate receptors to induce regeneration among a subpopulation of interneurons associated with respiratory function. Animal studies have been quite promising. She thinks the work has potential to significantly reduce ventilator dependency, improve wheelchair mobility and overall quality of life for people living with cervical SCI.

Commercializing Cures



Session six will discuss the challenges and promise of commercializing regenerative treatments for SCI. NervGen's Chief Medical Officer, Daniel Mikol, will provide an update on the company's Phase 2 trial in chronic SCI at the Shirley Ryan Ability Center in Chicago. NervGen's molecule (NVG), may help spinal cord axons to grow past the injury scar area; U2FP has covered this drug and trial since they emerged from preclinical studies in the Jerry Silver lab. Mikol will talk about trial design, the evolution of outcome measurements and the emerging use of biomarkers and other non-motor score measures. He will also discuss plans for future trials.

Jessica Kwok, PhD, at the University of Leeds is co-founder of Neurosolv, a company that developed a two-part, non-surgical SCI therapy based upon neural signaling interventions and direct treatment of the glial scar to target scar-related sugar molecules called chondroitin sulfate proteoglycans or CSPGs. The company says the oral therapy works better than invasive techniques and can potentially treat acute and chronic SCI. Kwok will provide an update on plans for a Phase 1 trial using Perineline. The therapy has an Orphan Designation from the European Medicines and has been approved for use in a congenital liver dysfunction; this should provide regulatory acceleration in Europe and the US for the SCI therapy.

Michael Lauw, of Lineage Cell Therapeutics will discuss the company's ongoing oligodendrocyte precursor cells (OPC1) trials and the company's plans to launch a chronic injury cohort with their cell line. These are the same cells the company Geron pioneered in a small number of acute SCI patients beginning in 2009; the line was acquired by Asterias, then Lineage. This presentation will give a history of OPC1 cells, which have been transplanted in about 25 patients. The cells are designed to replace or support cells that are absent or broken due to traumatic injury. Lauw will discuss what has been learned, what progress has been made, and what is needed to make cell therapies a viable and commercially available treatment.

Photo Credit: © 2024 Reveca

Poster Session

Session seven will feature poster presentations, showcasing works in progress on a single 3 x 5 board including hypothesis, data, and analysis. This is an opportunity for select graduate students and scientist-trainees to present their work and get feedback from colleagues and - especially in this setting - people with lived SCI experience. This interaction is critical to bridge the gaps between science studies and the unmet needs of the SCI community. Young scientists learn to communicate complex science to laypeople, and people with SCI gain a better understanding of the challenges inherent in scientific discovery.

Strategy - Breakout Groups

Session eight continues U2FP's efforts to facilitate in-person conversation about several intriguing topics. Symposium participants will stay in place in five groups; hosts for each session rotate to meet with each of the groups to discuss:

- **Social Media:** An increasingly important means of messaging and i information, but mostly unfiltered and uncurated. How do we break through the noise? *Hosts: Matt Edwards, Quinn Brett, Reveca Torres and Gabriel Rodreick*
- **Whole Body Translation:** SCI is not a set of symptoms but a single system, can it be treated as a whole? *Host: David Magnuson*
- **Federal CAN**, a proposal to shift successful (almost $40 million so far) SCI cure research funding advocacy from state programs to federal agencies (NIH, DOD, etc.) *Hosts: Jason Stoffer, Jake Beckstrom*
- **Commercialization**: It's beginning to happen, there may be a business in SCI treatments. How can the SCI community help? *Hosts: Daniel Mikol, Michael Lauw*
- **An Untapped Resource**: Activity Based Therapy (ABT) Centers can be an essential collaborator in clinical trials. *Hosts: Christel Mitrovich, Tommy Sutor*

Each of these topic rounds will ask questions that echo the proximity frame described on day one: How do you see/understand/engage with this information, this challenge, from your point of view? And how and where do our points of view diverge and converge?

U2FP is committed to accelerating curative therapies for chronic spinal cord injury. We want to hear your point of view and want you to gain new insights by being in proximity to new people and new perspectives. If you have any questions please reach out to any U2FP staff on hand, or to one of our Board of Directors. To reach out after the conference, email Matthew Rodreick at matthewrodreick@u2fp.org.

Poster SESSION

Automatic Quantification of Locomotion and Recovery after CNS Injury
Jason Biundo
Harvard Medical School

Development of a Novel Evaluation Scale of Mental Body Representations in Adults with Spinal Cord Injury
Sydney Carpentier
University of Minnesota Twin Cities

Evaluation of Sex as a Biological Variable on the Acute Immune Response after Spinal Cord Injury in a Pig Model
Seth Darnell
Emory University

Enabling or Inducing Effects of Transcutaneous Spinal Stimulation: A Case Study
Valerie Dietz, PhD
Houston Methodist Hospital and Research Institute

Systematic Analysis of Federal Funding for Spinal Cord Injury Research
Tucker Gillespie
Texas A&M University

The Role of Androgens in Neurophysiological and Autonomic Function in Men with Spinal Cord Injury
Jacob A. Goldsmith, PhD
James J. Peters VAMC/Icahn School of Medicine at Mount Sinai

IntimaStim: Innovating Neurostimulation to Enhance Sexual Function in Spinal Cord Injury Patients
Ladan Jiracek
IntimaStim

Assessing Significance of Individual Breathing Responses to Neuromodulation Interventions
Tommy Sutor, MS, PhD
University of Florida

Resources

Scan here to view all of the below information with direct links to each of these resources.

NASCIC
SCI RESEARCH ADVOCACY COURSE

The NASCIC Research Advocacy Course is designed to educate and empower individuals with spinal cord injury, researchers and clinicians, and caregivers who wish to become more involved with Clinical Research relating to SCI at all levels.

MSKTC
SCI · TBI · BURN
Model Systems Knowledge Translation Center

The MSKTC works closely with researchers in the 14 Spinal Cord Injury (SCI) Model System Centers to develop resources for people living with spinal cord injury and their supporters. These user-friendly resources are grounded in evidence and available in a variety of formats such as printable PDF documents, videos, and slideshows.

SCI TRIALS FINDER.net

The goal of the SCITrialsFinder.net website is to allow individuals with spinal cord injury (SCI), their families and health care professionals to get common language information about clinical trials as developed by experienced clinical investigators. apply to clinical trials quickly and directly in the web site.

ISSCR
INTERNATIONAL SOCIETY FOR STEM CELL RESEARCH

STEM CELL FACTS is a useful publication for understanding the basics of stem cells. It is put out by the International Society for Stem Cell Research (ISSCR). The ISSCR is an independent, nonprofit organization providing a global forum for stem cell research and regenerative medicine

Spinal Cord Injury Trials
Connecting Scientists & the SCI community

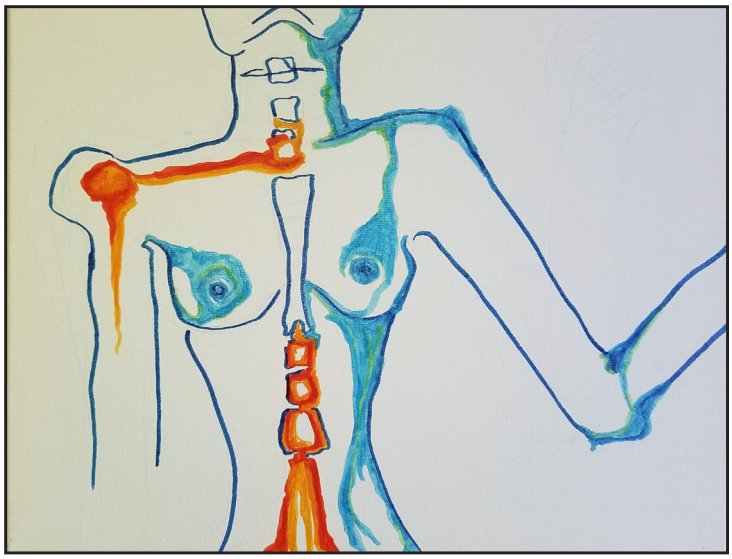
SciTrials.org provides the community with a way of finding clinical trials that are relevant to each individual in the fastest way possible by enabling individuals to search via location and injury details; receive email updates on new trials of interest to them; find answers for the most common questions about trials; access clinical information distilled into everyday language; apply to clinical trials quickly and directly in the web site.

NSCISC
National Spinal Cord Injury Statistical Center
Spinal Cord Injury Model System

This data sheet is a quick reference on demographic and condition statuses for 35,675 persons with SCI in the United States. Data were collected through 2021 by federally funded SCI Model Systems and five Form II (follow up) centers and entered into the National SCI Database.

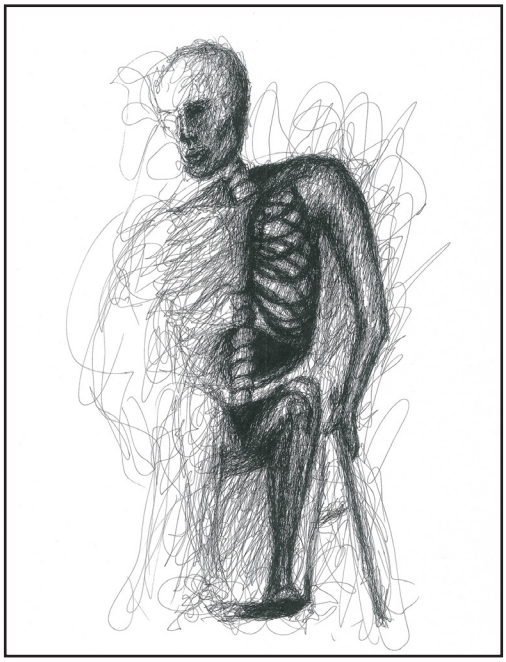
ABOUT the Art

by Reveca Torres and Gabriel Rodreick

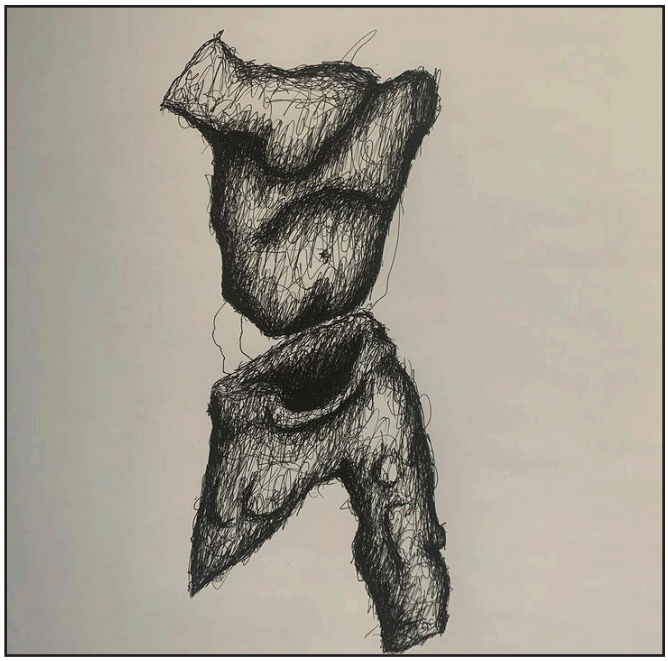


PLEASURE PAIN

REVECA 5



CALLOUSNESS



SHEDDING A SHADOW

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Scan here to explore more of Gabriel's art and music.

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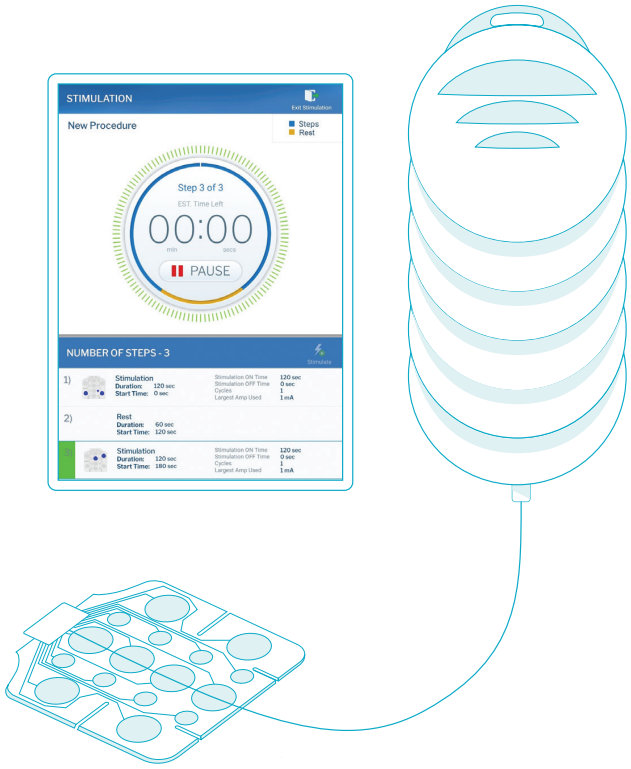

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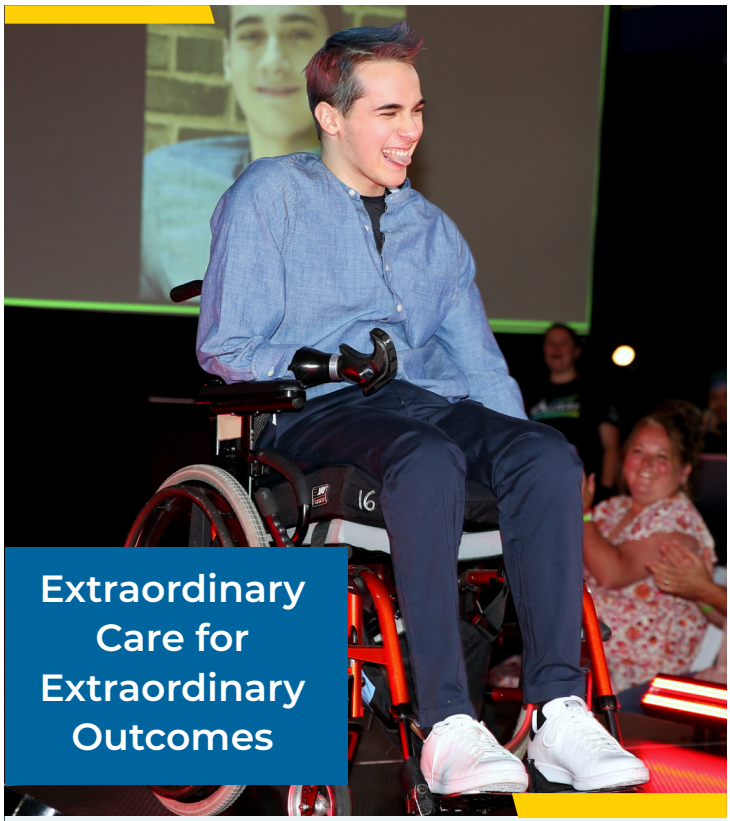
SCAN ME



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- **caps on admin costs so more $ goes to cures**

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