



Our Team of “drug hunting scientists” has known each other for decades.



Proven entrepreneur across academia, finance, and industry. Co-founded, financed or led biotech companies with an aggregate value of +\$15B.

LOUIS HERLANDS, PHD
CEO / CO-FOUNDER



30+ years developing better therapeutics for the nervous system and other areas. 8 drugs to the clinic, 2 marketed drugs, over \$2B in sales for Cephalon (Teva) & Cubist (Merck)..

MARCIÉ GLICKSMAN,
PHD
CSO CONSULTANT



Pioneer, functional imaging in CNS drug development. 40+ years at Harvard. Founding Dir., Center for Pain and Brain, Boston Children’s, MGH & McLean Hospitals; Founder, CSO Descartes Therapeutics.

DAVID BORSOOK,
PHD, MD
BRAIN SYSTEMS BIOLOGY



As the former editor of *Nature Genetics* for 15 years, he set new standards for research in genetics of common and rare diseases.

MYLES AXTON, PHD
GENETICS RESEARCHER



30+ years in small molecule drug discovery/development. Founded CRO Absolute Science, an effort incl. Harvard, Tufts, BU and Scripps targeting botulinum.

ALAN JACOBSON,
PHD, MBA
MEDICINAL CHEMISTRY



Genetics and microbiology; transdisciplinary scientist. Molecular biology, cognitive psychology & harm reduction. Former Associate. Prof., Rockefeller. University of Basel, Biozentrum

DAVID THALER, PHD
GENETICS



Former VP and chief scientific officer in neuroscience research at Lilly for pain/migraine and psychiatric disorders drug discovery.

DAVID BLEAKMAN,
PHD
PHARMACOLOGY
NEUROSCIENCE



30+ years practicing dermatologist, PI in 80+ clinical trials, and key role at P&G developing clinical protocols and managing global clinical trials. Founded 4 companies.

DRORE EISEN, MD,
D.D.S
INFLAMMATION AND
IMMUNE MODULATION



General Medicine/Preventive Medicine and Public Health Physician with approximately 25 years of Pharmaceutical and Biotechnology industry experience.

MICHAEL PETRONE,
MD, MPH
CLINICAL DEVELOPMENT
AND MEDICAL AFFAIRS





Our seasoned Business Team brings many years of hands-on experience



SANDY GROSS
BUSINESS STRATEGY

Award-winning serial entrepreneur who, along with his partners, co-founded, operated, and sold or took public, three of the most successful speaker lines in the history of the audio industry.



RICHARD KOSMAN,
SC.M.M.
BUSINESS DEVELOPMENT

25+ years of experience with life-sciences products and companies emanating from early-stage innovations. Wall Street investment banker, senior manager in academic technology transfer and business development, international board member.



DAN BRADBARY, MBA
BUSINESS OPERATIONS

Specialist in the implementation of management control systems and has been an investor, director and officer in numerous Biotech/Pharma start-up companies.



Our Co-Founders and Scientific Advisory Network



ROSS STEIN, PHD
CO-FOUNDER



MICHAEL MAKI
ETHNOBOTANY - THE
SCHULTES CENTER



BERT SPILKER, PHD,
MD
CLINICAL AND
REGULATORY AFFAIRS



HADRIAN GREEN
PHD, MB, CHB
NEUROLOGY- BIOTECH



TOM MEEK, PHD
ENZYMODOLOGY - ASSAY
DEVELOPMENT





Scientific Team, Management Team and Selected Advisors

- **Louis Herlands**, PhD - Successful serial biotech and pharmaceutical entrepreneur
- **Marcie Glicksman**, PhD - Former Co-Director of Harvard Neurodegeneration Drug Discovery Center, Harvard Medical School, multiple Biopharma
- **Myles Axton**, PhD – Genetics Researcher, Former Chief Editor of *Nature Genetics*
- **David Bleakman**, PhD - Former Chief Scientific Officer, Eli Lilly and Co.
- **David Borsook**, MD, PhD - Pioneer in brain systems biology - Imaging for CNS therapeutics
- **Dan Bradbary**, MBA – Specialist in implementation of management control systems
- **Former Chair** at Academic Departments of Psychiatry
- **Richard Kosman**, Sc.M.M. – Technology transfer, business dev., investment banker
- **Sandy Gross** – Award winning serial entrepreneur - 3 high-end audio companies
- **Hadrian Green** – PhD, MB, ChB – Biotech and healthtech strategy consultant
- **Michael Petrone**, MD, MPH - Expert in clinical development and medical affairs
- **David Thaler**, PhD - Genetics and microbiology; transdisciplinary scientist
- **Drore Eisen**, MD - Expert in inflammation, and dermatology
- **Michael Maki** – Ethnobotanist, Mushroom expert and President of Schultes Center
- **Tom Meek**, PhD - Enzymologist -led high throughput screening, Glaxo
- **Alan Jacobson**, PhD, MBA - Medicinal chemist
- **Nobel Laureate** – Faculty, The Rockefeller University



LOUIS HERLANDS, PHD
CEO / CO-FOUNDER

Biosketch

Dr. Herlands is skilled at unlocking the commercial potential of technologies and product candidates. He innovates at the crossroads of academia, entrepreneurship, finance and industry. He builds value through leading companies, authoring patents, driving non-clinical development to initiate and conduct clinical trials, and forging corporate deals with strategic partners. The aggregate value of the biotechnology and pharmaceutical companies Dr. Herlands has co-founded, financed, or led is over \$17 billion. He has led programs in diverse therapeutic areas including neuropathic pain, obesity, diabetes, and cancer.

Additionally, he was elected to various distinguished groups such as the Rockefeller University Council, the McLean Hospital National Council, and the Marine Biological Laboratory (MBL) Council. He also leads various philanthropic activities to leverage committed capital through “venture philanthropy”. In 2014, he teamed up with The Mayday Fund to endow a Professorship in pain neuroscience and brain imaging at Boston Children's Hospital and he supports high-impact early-stage breakthrough research at Rockefeller University.

At the suggestion of David Rockefeller, he left the lab bench and became a Life Sciences investment banker on Wall Street. To express appreciation and support for his alma mater, Louis made the final donation to help endow the David Rockefeller Graduate Program in Bioscience at Rockefeller University. He graduated from Yale University as Scholar of the House and earned his PhD from The Rockefeller University in the laboratory of Vincent Allfrey.





Biosketch

MYLES AXTON, PHD
CHIEF GENETICS RESEARCHER

Dr. Axton is a research geneticist, teacher and editor. As the editor of *Nature Genetics* for 15 years, he set new standards for research in genetics of common and rare diseases, structural variation in neurodevelopmental disorders, cancer epigenomics and plant genomics.

He began his 20-year research career with a joyful summer biochemistry studentship in the lab of Prof. Eva J. Neer at Harvard using antibodies to identify G-proteins relaying signals in a part of the brain responsible for planning action, learning, memory, reward, motivation, emotion and romance – and for the pathology of Huntington and Alzheimer diseases. His own research uncovered mechanisms in genetic control of cell proliferation in the developing brain and in cell cycles within life cycles in ovary, testis and embryos.

He graduated in Natural Sciences (Genetics) from Cambridge University at Clare College, and got his PhD in Genetics from Imperial College London with Prof David M. Glover. He did post-doctoral research at the University of Dundee, and at the Whitehead Institute with Prof Terry L. Orr-Weaver. He was then a principal investigator and University Lecturer in Cell and Molecular Biology at the University of Oxford and Tutor in the Biological Sciences at Balliol College.





Biosketch

DAVID BLEAKMAN, PHD
PHARMACOLOGY AND NEUROSCIENCE

Dr. Bleakman was a longtime leader of Eli Lilly and Co.'s neuroscience research programs that included psychiatric and pain research. He takes an active role in helping to define Luminous Mind's pipeline strategy. He has co-authored over 100 research papers, several book chapters and numerous patents.

He served in multiple leadership roles in his 25-year career at Lilly, including most recently, vice president and chief scientific officer in neuroscience research. As chief scientific officer at Lilly for pain/migraine and psychiatric disorders drug discovery, he was responsible for setting strategy and leading research to deliver molecules from target identification to clinical proof of concept.

He received his doctorate from King's College London, University of London and was a post-doctoral fellow at the University of Chicago.





Biosketch

DAVID BORSOOK, PHD, MD
BRAIN SYSTEMS BIOLOGY AND BRAIN IMAGING

Dr. Borsook trained in Neurology and Neurobiology. He was involved in clinical work (having Directed the Pain Program at MGH) and research, predominantly in brain systems neuroscience. Dr. Borsook is a pioneer in the use of functional imaging in chronic pain, including migraine, and brain measure of analgesics in adults and children. Together with Richard Hargreaves (former Head of CNS at Merck) and David Bleakman (former Head of CNS at Lilly) he pioneered the use of brain imaging in drug development.

He served on the faculty at Harvard Medical school for 40 years, attaining the position as Professor of Anesthesiology and was the Founding Director of the Center for Pain and the Brain at Boston Children's, MGH and McLean Hospitals. He currently holds the position of Professor Emeritus at Harvard Medical School.

Dr. Borsook was the Founder and Chief Scientific Officer of Descartes Therapeutics, a biomedical startup that focuses on the use of imaging in CNS drug development. His research aims to define brain biomarkers for disease state and treatment effects.

He served on NCCIH Council at NIH and has been on a number of NIH groups related to future research in chronic pain and headache. He has authored over 300 peer-reviewed publications and is the lead editor of 5 books. Dr. Borsook received his M.D. and Ph.D. degrees from the University of the Witwatersrand, South Africa.





Biosketch

DAN BRADBARY, PPM, MBA
BUSINESS OPERATIONS

For over 35 years, Mr. Bradbary has assisted in guiding the evolution of the acceptance of project management as a common sense approach to fulfilling the needs of business. He is a specialist in the implementation of management control systems and has been an investor, director and officer in numerous Biotech/Pharma start-up companies, including Dara Biosciences, Medivation, GMP Companies, MiMedx and MRI Interventions.

As a serial entrepreneur, he has launched, operated and sold several companies including: Project Management Services, Inc. (which over a 15-year period grew to a 150-person consulting firm assisting Fortune 100 companies with their special projects); PMI Advisors, LLC (assisting mid-market companies with their M&A efforts); and V-Rooms Virtual Data Rooms (providing secure online document exchange services for thousands of M&A transactions over its 10-year history).

He is an accomplished speaker and instructor and has authored numerous articles for various industry and trade publications. His book, *Herding Chickens: Innovative Techniques for Project Management* (Wiley & Sons), draws upon many "in the trench" experiences and is a light-hearted and informative look at managing people and complex projects.

Mr. Bradbary earned his MBA from Georgia State University and an engineering degree from the Georgia Institute of Technology.





Biosketch

DRORE EISEN, MD, DDS
INFLAMMATION AND IMMUNE MODULATION

Dr. Eisen played a key role at The Procter & Gamble Company developing clinical protocols and managing all national and international clinical trials for oral products.

In addition to practicing dermatology for over 30 years, he has served as a principal investigator or co-investigator in more than 80 clinical trials, and was the co-founder and former Medical Director of CDx Diagnostics, the developer and provider of diagnostic platform that synthesizes computer imaging, artificial intelligence, molecular biology and three-dimensional cytopathology to detect precancerous changes.

Dr. Eisen served as the Medical Director of Stem Holdings, a leading vertically-integrated cannabis branded products and technology company.

Dr. Eisen received his B.A. from Columbia University and his Dermatology training at the U of Michigan where he served as the Chief Resident.





Biosketch

MARCIE GLICKSMAN, PHD
CSO CONSULTANT

Dr. Glicksman has 30 years of experience developing improved therapeutics for the nervous system and other medical indications. She has over 85 publications and 12 issued patents.

She worked in the bio-pharmaceutical industry for 13 years before joining the faculty at Harvard Medical School and Brigham and Women's Hospital. She Co-Directed the Laboratory for Drug Discovery in Neurodegeneration (LDDN) for 10 years which resulted in 8 start-up companies. Her efforts at various pharmaceutical companies including Descartes Therapeutics and Dupont Pharmaceuticals resulted in 8 drugs entering the clinic, including 2 marketed drugs which resulted in over \$2B in sales for Cephalon (now Teva Pharmaceuticals) and Cubist (now Merck KGA). She was also the CSO at a company that combines genetics and regenerative medicine by leading the development of allogeneic, iPSC (induced pluripotent stem cell)-derived cell therapies.

Dr. Glicksman has expertise from assay and preclinical development, regulatory filings and has worked with natural products, as well as chemically synthesized molecules. She is on the science advisory board for the Alzheimer's Drug Discovery Foundation (ADDF) and Batten Foundation and reviews grants for NIH, Department of Defense, and the Francis Collins Scholar Program.

Dr. Glicksman received a bachelor's degree from Brown University and a Ph.D. degree in Neuroscience from Washington University.





Biosketch

HADRIAN GREEN – PHD, MB, CHB
NEUROLOGY - BIOTECH

For nearly two decades Dr. Green has been advising pharmaceutical clients both in-house and as an external strategy consultant for clients including Roche, Merck, GSK and Astra Zeneca, as well as biotech and healthtech companies.

This work has spanned corporate finance strategy, mergers and acquisitions, as well as pharmaceutical portfolio management and individual drug development strategy, having been CEO of a biotech spinout from the University of Oxford.

Previously with Marakon Associates and Ernst & Young, Dr. Green is currently a partner at Vaucluse Advisory, a boutique life science consultancy, and remains active as a medical doctor.

Dr. Green qualified as a Medical Doctor from the University of Otago in New Zealand before earning a PhD at the University of Cambridge in Neuroimaging. He has previously been a captain in the British Army and a bye-fellow of Queens' College, Cambridge where he taught neuroanatomy.





Biosketch

SANDY GROSS
BUSINESS STRATEGY

Sandy Gross is an award-winning serial entrepreneur who, along with his partners, co-founded, operated, and sold or took public, three of the most successful speaker lines in the history of the audio industry. He co-founded Polk Audio along with Matthew Polk and George Klopfer whom he first met while attending classes at Johns Hopkins University. After graduating in 1971, the team collaborated on producing a sound system. Mr. Polk designed the speaker system, and Mr. Klopfer built the cabinets. Mr. Gross organized the marketing of Polk Audio and helped build Polk's worldwide dealer network.

Mr. Gross co-founded his second company, Definitive Technology, and served as the company's first CEO and President. In 2004, the company was acquired by Directed Electronics, a company that specialized in car alarms and radar detectors. Mr. Gross then became President of the company's newly formed audio division.

In 2010 Sandy Gross co-founded GoldenEar Technology, whose recipe focused on offering the best products to the best specialty dealers and custom installers, targeting discerning buyers looking for something more exciting than homogenized, mass-market products. GoldenEar Technology was sold in 2020.

Sandy Gross graduated from The Johns Hopkins University in 1972, initially majoring in engineering, but switching to majors in social/behavioral science. He was named the Small Business Executive of the Year in 2012 by The Consumer Electronics Association.





Biosketch

ALAN R. JACOBSON, PH.D., MBA
MEDICINAL CHEMISTRY

Dr. Jacobson is a medicinal chemist with deep expertise and more than 30 years of experience in small molecule drug discovery and development. As a drug hunter, Dr. Jacobson is currently working as Director R&D, Strategy Officer at Wake Forest Institute for Regenerative Medicine in Winston Salem, NC.

He spent a decade as a contractor to the government helping direct drug development in the chemical and biological defense space. For nearly 15 years, Dr Jacobson started and ran his own Contract Research Organization, Absolute Science, where he was part of a multi-group effort including Harvard, Tufts, BU and Scripps targeting botulinum, where he successfully directed the development of small molecule drugs for protection against the bacteria. Prior to that, Dr. Jacobson served as Director of Chemistry at Repligen Corporation.

He earned his doctorate at Case Western Reserve University in Medicinal and Bioorganic Chemistry and his MBA from Olin School of Business, Babson College. He also holds a Regulatory Affairs Certificate (RAC).





Biosketch

**RICHARD KOSMAN, SC.M.M.
BUSINESS DEVELOPMENT**

Mr. Kosman has over 25 years of experience with life-sciences products and companies emanating from early-stage innovations. For 15 years he worked at the Albert Einstein College of Medicine in NYC where he played a key role building and managing a technology-transfer/business-development operation in the academic environment.

Prior to joining Einstein, he worked mostly in the financial community as a life-sciences industry investment banker.

Mr. Kosman received his A.B. degree in Chemistry summa cum laude and Phi Beta Kappa from Harvard College and his Sc.M.M. (Master of Medical Sciences) degree from Harvard Medical School. His Sc.M.M. thesis advisor was Prof. William N. Lipscomb, Nobel Laureate in Chemistry.





Biosketch

MICHAEL J. MAKI
ETHNOBOTANY - CO-FOUNDER & PRESIDENT – THE SCHULTES CENTER

The Richard Evans Schultes Center for Amazonian Ethnobotanical Research is a non-profit dedicated to preserving and advancing ethnobotany in one of the planet's most biodiverse regions. Michael J. Maki, native to Aberdeen, Washington, USA, has been involved in the ecological agriculture and forestry movements since the mid 1970's. He is a founding Board member of the Tilth Association, the Pacific Northwest's sustainable ag organization and assisted in publication of its quarterly journals, is co-author of its resource compendium *The Future Is Abundant*, and covered organic and renewable energy as correspondent for the Capital Press.

Mr. Maki was involved as a pioneer in organic crop certification, small farm support at both the local (e.g. local coordinator USDA Cooperative Extension Service Limited Resource Farming Program) and regional level (organizing conferences, workshops, and curriculum development). Issues related to agroforestry-type system development have long been of personal and professional interest, including renewable energy and forest management policy. Mr. Maki has been associated with The Evergreen State College in Olympia, WA for over 30 years, serving as manager of the TESC Organic Experimental Farm, as adjunct faculty, and in early development of an ecological forestry program there.

He is developing on the Olympic Peninsula an agroforestry and permaculture teaching and demonstration center, and plans on retiring in Peru with his legacy project, the Schultes Center for Amazonian Ethnobotanical Research.





Biosketch

TOM MEEK, PHD
ENZYMOLGY AND ASSAY DEVELOPMENT

Dr. Meek joined GlaxoSmithKline in Medicinal Chemistry in Philadelphia, where he set up a group which pursued mechanistic enzymology to assist drug discovery. During that time, he and his colleagues discovered and characterized the HIV protease. This work demonstrated that purposely designed inhibitors of this enzyme could lead to therapeutics for the treatment of AIDS.

After a brief period working as Director of the Department of Cardiovascular Biochemistry for Bristol-Myers Squibb, he returned to GlaxoSmithKline to direct the Molecular Recognition group. There he led research resulting in the discovery of the molecular identity of the beta-secretase activity now known to be associated with the development of Alzheimer's disease. In 1999, Dr. Meek was appointed to lead worldwide high-throughput screening operations. In 2003, he assumed the role to lead assay development and compound profiling and later initiated the Biological Reagent & Assay Development group.

Currently, he is Professor in the Department of Biochemistry & Biophysics at Texas A&M University where he conducts detailed studies on enzyme mechanisms which comprise drug targets.

He obtained his B.S. degree in Chemistry from the University of Virginia and his Ph.D. in Organic Chemistry from the Pennsylvania State University,





Biosketch

MICHAEL E. PETRONE, MD, MPH
CLINICAL DEVELOPMENT AND MEDICAL AFFAIRS

Dr. Petrone is a General Medicine/Preventive Medicine and Public Health Physician with approximately 25 years of Pharmaceutical and Biotechnology industry experience.

Before joining the industry, Dr. Petrone served as Sr. Public Health Physician/Epidemiologist with the New Jersey State Department of Health. His industry experience includes multinational pharmaceutical and biotech companies, both small start-up and large pharmaceutical organizations with direct involvement in several successful mergers and acquisitions.

Also, he was involved in direct management and support of Drug Development, Clinical Operations, Medical Affairs and NDA/MAA Submissions across a variety of therapeutic areas, including oncology, hematology, immunology/ HIV, and infectious disease that resulted in four NDA submissions and three product approvals. Dr. Petrone held Sr. Management Clinical Operations and Medical Affairs positions with Roberts Pharmaceutical Corporation, GPC Biotech, and GlaxoSmithKline (GSK).

Dr. Petrone completed his MD/MPH training in Preventive Medicine/Public Health; Temple University School Medicine / Public Health, Philadelphia, PA.





Biosketch

BERT SPILKER, PHD, MD, FCP, FFPM.
CLINICAL AND REGULATORY AFFAIRS

Dr. Spilker recently was the Senior Vice President of Scientific and Regulatory Affairs for PhRMA (Pharmaceutical Research and Manufacturers of America) based in Washington, D.C. He was President and co-founder of Orphan Medical, Inc., a public pharmaceutical company that brought 7 drugs for patients with uncommon diseases to market in five years.

Dr. Spilker also worked at four major pharmaceutical companies for over 20 years (Pfizer, Philips-Duphar, Sterling-Winthrop, and Burroughs Wellcome) in medicine discovery, development, and management. He is a well-known expert in clinical trial methods and the processes of drug discovery and development. He authored 15 books on these subjects, which are considered standard references on clinical trials and drug development. Dr Spilker served on the Steering Committee for the International Conference on Harmonization (ICH), and has received numerous honors including the FDA Commissioner's Special Citation for work in the orphan medicine area. He is Clinical Professor of Pharmacy Practice at the University of Minnesota and Adjunct Professor of Medicine and Clinical Professor of Pharmacy at the University of North Carolina in Chapel Hill.

Dr. Spilker's medical training in pharmacology and internal medicine was at Cornell Medical College, State University of New York (Downstate Medical Center), University of California at San Francisco, University of Miami Medical School (Ph.D. to M.D. Program) and Brown University Medical School.





Biosketch

ROSS L. STEIN, PHD
CO-FOUNDER

Dr. Ross Stein is a co-Founder of Luminous Mind, Inc. (LMI) and has made substantial contributions. His career has included positions at Merck, where he headed the Enzymology Department, and ProScript (acquired by Millennium in 1999) as Vice President of Biochemistry. At ProScript, Dr. Stein was instrumental in the pre-clinical development and co-inventor of the drug Velcade, a proteasome inhibitor used to treat multiple myeloma.

In 2001, he accepted a position at Harvard Medical School to establish and head the Laboratory for Drug Discovery in Neurodegeneration.. Dr. Stein's drug discovery responsibilities at the University of Kansas also included directing the High-Throughput Screening Laboratory, and the Laboratory for Early Stage Translational Research, which he founded. In 2013, Dr. Stein joined Targanox as Chief Scientific Officer, where he led a team of scientists investigating redox control of protein function and the Nrf2/Keap1 pathway. In 2021, Dr. Stein took the position of Research Scholar in Enzymology at Loxo Oncology at Lilly in Boulder CO. Currently, Dr. Stein does not advise or have an ongoing role with LMI.

Dr. Stein has published over 100 papers in peer-reviewed journals, as well as the book "Kinetics of Enzyme Action - Essentials Principles for Drug Hunters", John Wiley & Sons (2011). He received his PhD in physical organic chemistry from Indiana University in 1978, after which he conducted post-doctoral research in mechanistic enzymology at the University of Kansas.





Biosketch

DAVID S. THALER, PHD
GENETICS

David Thaler PhD is an independent and consulting scientist in residence at the Biozentrum, Center for Molecular Life Sciences University of Basel, Switzerland and has expertise in genetics, molecular biology, cognitive psychology, and harm reduction. He has published approximately 50 papers. He is also a non-resident guest investigator with the Program for the Human Environment, Rockefeller University, New York. He is chair of the analysis committee of the Leonardo da Vinci DNA project.

Among current projects he's excited about is the collaborative creation of a planetarium show entitled "A Cosmic View of Life on Earth" for the American Museum of Natural History. Dr. Thaler has a broad and synthetic interest in biological, technological-artistic, and human potentials.

He joined Rockefeller University in 1990 as a Research Associate and left in 2009 as an Associate Professor. Visiting and resident scientist at the Universities of Utah, Paris, Albert Einstein College of Medicine, Columbia University. Experimental expertise in genetics and microbiology as well as transdisciplinary abilities and passion to synthesize ideas from natural products, pharmaceutical chemistry, cognitive psychology, and novel approaches to harm reduction.

BA State University of New York (Biology and Chemistry), MS, University of Massachusetts (Plant physiology), PhD University of Oregon (Molecular genetics broadly, mechanisms of homologous recombination in particular).

