Psychedelics

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INNOVATORS & IDEAS: RESEARCH LEADER

Gregor Hasler: Three Guiding Questions — How do psychedelics shape the brain? How can they heal psychiatric disorders such as depression and PTSD? How can we ensure their safe and responsible use?

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Professor Gregor Hasler stands at the forefront of revolutionary psychedelic research and neuroplasticity studies, transforming our understanding of mental health treatment through groundbreaking scientific discoveries. As Chair of Psychiatry at the University of Fribourg, Switzerland, where he directs the Molecular Psychiatry Lab, Hasler has pioneered research on how psychedelics like LSD, psilocybin, and MDMA reshape brain function to treat depression, PTSD, and addiction. His Genomic Press Interview reveals a career dedicated to uncovering rapid antidepressant mechanisms and developing innovative treatments that offer hope to millions suffering from psychiatric conditions. His interdisciplinary team investigates how psychedelics rapidly enhance neuroplasticity, with clinical improvements lasting months or years after treatment. Hasler's groundbreaking discovery of mGluR5 as a biomarker for nicotine dependence represents his greatest scientific success, demonstrating his ability to translate complex molecular research into practical clinical applications. Honored with prestigious awards including the NARSAD Independent Investigator Award and the Robert Bing Award from the Swiss Academy of Medical Sciences, he bridges rigorous neuroscience with compassionate clinical practice. His influential book Higher Self: Psychedelics in Psychotherapy captures decades of research wisdom, proposing bold visions for psychiatry's future. As former President of the Swiss Society for Drug Safety in Psychiatry and a member of the American College of Neuropsychopharmacology, Hasler ensures the safe integration of psychedelic therapies into mainstream medicine. His work on glutamate and GABA neurotransmitter systems has fundamentally changed how we understand mood disorders, offering new pathways for treatment-resistant conditions and establishing him as a transformative leader in modern psychiatry.

Part 1: Gregor Hasler - Life and Career

Where were you born, and where do you live now? I was born in Basel, and live now in Bern, Switzerland.

Could you give us a glimpse into your personal history, emphasizing the pivotal moments that first kindled your passion for science?

My father was an important role model for me. As a mathematically minded economist, he held the conviction that few things could contribute more to general prosperity than better treatments for mood disorders. That belief made a deep impression on me. He encouraged me not to follow in his footsteps as an economist, but instead to focus directly on what he considered the most important "economic" issue of all:



Figure 1. Gregor Hasler, M.D., University of Fribourg, Switzerland

depression, the number one cause of human suffering. He introduced me to psychiatrists, psychotherapists, and patients, which further fueled my curiosity. Since then, I have never doubted—not for a single hour—that I am dedicating my life to something meaningful. One could say that not only is my research scientifically grounded, but even my choice of research topic is based not merely on personal preference but also on evidence. I believe that in a truly science-driven world, far more funding would be allocated to depression research.

Switzerland also proved to be an excellent environment for psychiatry, given its historical contributions to the field. This includes the discovery of antidepressants, stimulants, benzodiazepines, clozapine, and even psychedelics. However, Swiss contributions extend beyond biological psychiatry: in clinical psychology, figures such as Carl Jung and Jean Piaget have left a lasting mark.

Why did Switzerland develop this particular interest in psychiatry? One reason may be that in a society characterized by prosperity and security, it becomes especially evident that mental illness is not merely the result of social problems or traumatic experiences, but in many cases, true brain disorders in their own right. Another reason is that Switzerland has always maintained a very high standard of liberalism when it comes to the research of psychoactive substances.





Please share with us what initially piqued your interest in your favorite research or professional focus area.

My first great teacher was Jules Angst, renowned for his pioneering work on the classification of mood disorders. From him, I learned the discipline of psychiatry at its best: to stay grounded in facts, to observe with precision, and to interpret with caution. He showed me the dangers of relying too heavily on overarching concepts, whether repression, trauma, the self, or even neuroplasticity, when they are used as catch-all explanations that ultimately explain nothing. His rigor instilled in me a scientific humility that has shaped my entire career.

A decisive turning point came during my fellowship at the National Institute of Mental Health (NIMH). Under the guidance of Dennis Charney, I was encouraged to think beyond narrow paradigms, to pursue bold visions, and to never lose sight of the ultimate goal, which is to improve diagnosis, treatment, and prevention. He advised me to study substances with rapid and robust effects, and this perspective opened my path to ketamine and eventually psychedelics. This combination of meticulous observation and courageous innovation has remained the compass of my work ever since.

We would like to know more about your career trajectory leading up to your most relevant leadership role. What defining moments channeled you toward that leadership responsibility?

I have always been cautious about assuming leadership roles, since my first commitment has been to research rather than management. What has motivated me most is the pursuit of scientific discovery, not administrative responsibility. At the same time, I have discovered a genuine satisfaction in leading two research groups and guiding PhD students and postdocs as they grow, develop their own ideas, and become independent researchers. Mentorship has become one of the most rewarding aspects of my career.

Beyond the laboratory, I have gradually taken on leadership responsibilities in the professional and policy sphere. Serving as President of the Swiss Society for Drug Safety in Psychiatry has been especially meaningful, since it allows me to contribute directly to the safe use of treatments, including psychedelic therapies, while helping to safeguard Switzerland's long-standing tradition of openness to innovative therapies. In this role, leadership is not a departure from science but an extension of it, ensuring that research advances are translated responsibly into clinical practice.

What is a decision or choice that seemed like a mistake at the time but ended up being valuable or transformative for your career or life?

At the beginning of my career, I immersed myself in psychoanalysis, which was still a common practice in psychiatry in Switzerland. Only later did I come to see that many of these approaches functioned more as moral or philosophical systems than as frameworks for truly open scientific inquiry. At the time, I regretted having devoted so much energy to them, believing it had delayed my engagement with more rigorous research methods.

In hindsight, however, that early experience has proven invaluable. With the current resurgence of psychedelics, psychiatry once again faces the challenge of understanding and integrating extraordinary states of consciousness, which was Jung's main concern. My background in psychoanalysis has given me a vocabulary and sensitivity to approach these experiences with depth and nuance, complementing the scientific lens I later developed. What once felt like a mistake has enriched my ability to bridge different traditions of thought and has deepened my work in psychedelic research.

What habits and values did you develop during your academic studies or subsequent postdoctoral experiences that you uphold within your research environment?

During my time at the National Institute of Mental Health, I had the privilege of working under Wayne Drevets, my neuroimaging supervisor. I greatly admired his integrity, his methodological rigor, and his insistence

on taking the anatomy of the brain seriously. From him, I learned that science is built not only on innovation but also on discipline, precision, and respect for biological complexity.

These lessons have stayed with me. In my lab, I encourage my students and collaborators to cultivate the same habits: to question assumptions carefully, to design studies with rigor, and to approach every dataset with both humility and curiosity. Integrity, precision, and a deep respect for the structure and function of the brain have become guiding values of my research environment.

Please tell us more about your current scholarly focal points within your chosen field of science.

My research centers on the clinical application of psychedelics in psychiatry, psychotherapy, and neurorehabilitation, particularly for patients with depression, trauma-related disorders, and post-stroke conditions (see Figure 2). Through clinical studies combined with neuroimaging, I investigate how psychedelics influence brain function, neuroplasticity, and consciousness, to translate these insights into safe and effective treatments.

What impact do you hope to achieve in your field by focusing on specific research topics?

I hope that novel, safe, and widely accepted psychedelic treatments will emerge, offering powerful ways to enhance the effectiveness of psychotherapy and neurorehabilitation. Such advances could make psychiatry a more appealing field for young doctors, researchers, and funding agencies, while also improving its public image. Most importantly, these treatments would not simply suppress symptoms but would open new pathways for personal growth, recovery, and development.

What do you most enjoy in your capacity as an academic or research leader?

I feel fortunate that the psychedelic renaissance coincides with the peak of my academic career. It offers a rare opportunity to be part of a transformative moment in psychiatry, one that redefines how we understand and treat mental illness. What I enjoy most is the chance to contribute to this innovation, to help shape its direction, and to witness the enthusiasm it sparks in students, colleagues, and the wider community. Being able to combine rigorous science with such a sense of possibility brings me both joy and profound fulfillment.

At Genomic Press, we prioritize fostering research endeavors based solely on their inherent merit, uninfluenced by geography or the researchers' personal or demographic traits. Are there particular cultural facets within the scientific community that warrant transformative scrutiny, or is there a cause within science that you feel strongly devoted to?

I believe it is essential to distinguish social and political issues from psychiatric ones and to avoid conflating the liberalization of research on psychoactive substances with their wholesale legalization. We have to ensure that these substances are studied with scientific rigor, integrated into clinical care with appropriate safeguards, and used in ways that maximize long-term benefit while minimizing harm.

Outside professional confines, how do you prefer to allocate your leisure moments, or conversely, in what manner would you envision spending these moments given a choice?

I most enjoy spending time with my two teenage children. Being with them is both joyful and intellectually fascinating. Their naturally high level of neuroplasticity means that moods, behaviors, or even moments of rebellion can dissolve almost overnight, as if by magic. They are the same individuals from one day to the next, yet they are constantly changing and reinventing themselves. Witnessing this continual transformation is not only a source of happiness for me as a father but also a daily reminder of the incredible adaptability of the human brain.





Figure 2. In this room at his research station, Gregor Hasler has conducted psychedelic therapies for many years and gained important insights that became the foundation of his book *Higher Self: Psychedelics in Psychotherapy*.

Part 2: Gregor Hasler – Selected questions from the Proust Questionnaire¹

What is your most marked characteristic? Curiosity.

Among your talents, which one(s) give(s) you a competitive edge?

A comprehensive range of interests, which in research, where focus is everything, is not always, but sometimes, an advantage.

If you could change one thing about yourself, what would it be?

To cultivate a steadier and more consistent sense of love and compassion for myself and others.

What is your current state of mind?

Constructive impatience.

What is your idea of perfect happiness?

A deep sense of unity with a current that carries us toward what is true and right.

When and where were you happiest? And why were so happy then?

During a stay in England as a medical student, I met people who did everything "just for fun," and for a few weeks, I allowed myself to be swept up in that spirit. My strict superego was, for once, switched off—and unfortunately, that never happened again, at least not to the same extent.

What is your greatest fear?

Decline of democratic and liberal values.

What is your greatest regret?

That I did not spend more time and work more intensively in neurology.

What are you most proud of?

My first paper, *Discovering Endophenotypes of Major Depression*, stemmed from my desire to understand what depression truly is—it was the outcome of deep reflection. The high recognition this paper received was a decisive motivation for me to pursue an academic career.

What do you consider your greatest achievement?

Research is always a collective endeavor, yet one milestone stands out: my book *Higher Self: Psychedelics in Psychotherapy*. It captures years of research and clinical reflection and dares to propose unconventional ideas for psychiatry's future.

¹In the late nineteenth century, various questionnaires were a popular diversion designed to discover new things about old friends. What is now known as the 35question Proust Questionnaire became famous after Marcel Proust's answers to these questions were found and published posthumously. Proust answered the questions twice, at ages 14 and 20. In 2003 Proust's handwritten answers were auctioned off for \$130,000. Multiple other historical and contemporary figures have answered the Proust Questionnaire, including among others Karl Marx, Oscar Wilde, Arthur Conan Doyle, Fernando Pessoa, Stéphane Mallarmé, Paul Cézanne, Vladimir Nabokov, Kazuo Ishiguro, Catherine Deneuve, Sophia Loren, Gina Lollobrigida, Gloria Steinem, Pelé, Valentino, Yoko Ono, Elton John, Martin Scorsese, Pedro Almodóvar, Richard Branson, Jimmy Carter, David Chang, Spike Lee, Hugh Jackman, and Zendaya. The Proust Questionnaire is often used to interview celebrities: the idea is that by answering these questions, an individual will reveal his or her true nature. We have condensed the Proust Questionnaire by reducing the number of questions and slightly rewording some. These curated questions provide insights into the individual's inner world, ranging from notions of happiness and fear to aspirations and inspirations.



What or who is your greatest passion?

To make a meaningful and lasting contribution to improving the lives of people living with psychiatric conditions.

What is your favorite occupation (or activity)?

Reading and playing tennis.

What is your greatest extravagance?

Indulging in too much chocolate and amassing more books than I could ever hope to read.

What is your most treasured possession?

My collection of Leica cameras and lenses.

Where would you most like to live?

In Manhattan's Upper East Side, preferably endowed with great wealth.

What is the quality you most admire in people?

Being curious.

What is the trait you most dislike in people?

Lack of interest.

What do you consider the most overrated virtue?

Obedience.

What do you most value in your friends?

That they stand by me and are quick to forgive.

Which living person do you most admire?

Emmanuelle Charpentier for revolutionizing the field of biomedical research.

Who are your heroes in real life?

My wife.

If you could have dinner with any historical figure, who would it be and why?

To the author of the Indian Vedic verse: "One of my wings is in the sky; I have trailed the other on earth. Haven't I drunk Soma?"—the same voice that proclaimed Soma had released him into boundless open space and granted him resilience. I would love to ask what Soma truly was.

Who are your favorite writers?

Aldous Huxley, William James, Miranda July, Annie Ernaux, and Robert Walser: voices that expand my imagination and challenge how I see the

Who are your heroes of fiction?

Dr. Rieux from Albert Camus's The Plague, for embodying calm, rational humanity even in the face of overwhelming crisis.

What aphorism or motto best encapsulates your life philosophy? Be curious, be kind, and never stop learning.

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