

Clara Futura Scientific Advisor Pen Portrait

Professor Dirk K.F. Meijer

Academic Background and Qualifications:

Professor Dirk Klaas Fokke (K.F.) Meijer – often known as Dick Meijer – is a Dutch scientist born in 1940 in Soest, Netherlands ¹. He pursued studies in pharmacy at the University of Groningen, completing his master's degree in 1967. He then obtained a Ph.D. in Pharmacology from the Faculty of Medicine at the same university, defending his doctoral thesis in 1972. This strong foundation in pharmacological sciences established Meijer's expertise in drug kinetics and pharmacotherapy. Over the years, he accumulated extensive academic credentials, eventually earning the title of Professor Emeritus in recognition of his distinguished career.

Institutional Affiliations and Academic Career:

Meijer's professional career is closely tied to the University of Groningen, where he spent four decades in research and teaching. After completing his Ph.D., he undertook postdoctoral research as a Research Associate at Albert Einstein College of Medicine in New York (1973–1974), broadening his international experience in molecular pharmacology. Upon returning to the Netherlands, he joined the University of Groningen as a lecturer. In 1980, he was appointed Full Professor in Pharmacokinetics and Pharmacotherapy at the Faculty of Mathematics and Natural Sciences. He served in this professorial role until his retirement in 2006, after which he was honoured with the title of Professor Emeritus. During his tenure, Meijer also led and co-founded key research initiatives: he was the scientific director of the university's Drug Research Institute (GUIDE) and played a pivotal role in establishing the Dutch National Research School for Pharmacology. Today, he remains affiliated with the University of Groningen's Senior Academy, where he continues to lecture and engage in research as part of the post-retirement faculty community.

Research Specializations:

Throughout his career, Prof. Meijer's research interests have evolved from classical pharmacology to cutting-edge interdisciplinary science. His areas of specialization include:

- **Pharmacokinetics and Pharmacology:** In his early career, Meijer focused on drug metabolism, pharmacokinetics, and drug targeting strategies. He published extensively on membrane transport of drugs, drug distribution, and liver function related to drug therapy. This included pioneering work on targeted drug delivery and organ-specific pharmacotherapy, reflecting his background in pharmacy and medicine.
- **Neuroscience and Biophysics:** In later years, Meijer turned his attention to the biophysics of brain function and neural processes. He has been exploring how the nervous system processes information, especially the ultra-rapid signalling and integration in the brain that classical neurobiology struggles to explain. His work often intersects with cognitive science, as he examines memory, perception, and the biological basis of consciousness.

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- **Consciousness Studies and Quantum Biology:** Prof. Meijer is widely recognized for bridging quantum physics with neuroscience and biology. His recent research delves into the realm of consciousness, proposing models in which the mind is not confined to the brain's neurons alone. He incorporates concepts from quantum mechanics (such as entanglement and tunnelling) to understand cognitive processes. This places him in the emerging field of quantum biology, where biological phenomena (like brain function) are examined through quantum informational frameworks. In essence, Meijer's interdisciplinary expertise spans from pharmacological sciences to theoretical neuroscience, information science, and the physics of consciousness.

Major Theoretical Contributions

A hallmark of Meijer's scholarly contribution is his theoretical **framework for consciousness that integrates physics and neurobiology**. He has advanced the idea that the mind exists as a field surrounding the brain, rather than being merely an emergent property of brain cells. In a 2017 peer-reviewed paper, Meijer and a colleague proposed that the brain is ***"embedded in a holographic structured field"*** which interfaces with neural processes. In this model, a field-receptive ***"mental workspace"*** coexists with the physical brain, allowing for rapid communication via **resonant waves and quantum-level interactions**. The field is envisioned to have a **toroidal geometry** (doughnut-shaped), providing a 4-dimensional hyperspatial structure in which consciousness information is stored and exchanged – somewhat like a personal ***"brain event horizon"*** surrounding the individual. Meijer's toroidal field model suggests that consciousness arises from nested energy fields on multiple scales, linking individual minds with broader physical phenomena. For example, he hypothesizes that this mental field can resonate with environmental and cosmic fields (**such as the Earth's magnetic field, zero-point energy, or even gravity**) to enable the brain's high-speed information processing. This theory is profoundly interdisciplinary: it merges concepts from neuroscience (the binding of perception), quantum physics (wave-particle duality of information), and information theory (a ***"universal information matrix"***) into a single framework. In summary, one of Meijer's major contributions is a holistic model of consciousness – often described as a holographic or field-based view of the mind – that attempts to scientifically explain consciousness as an integral part of the fabric of the universe, rather than an isolated byproduct of brain chemistry.

Notable Publications and Scholarly Impact

Professor Meijer is a highly prolific author, with over 630 scientific publications to his name 1 (a number that has continued to grow, reaching around 650 by recent counts), of which 70 from 2012 to the present. His work spans multiple disciplines, from pharmacology to theoretical physics, biophysics, quantum physics and cosmology, reflecting the breadth of his research. Some highlights of his publication record include:

- **Pharmacological Sciences:** Meijer co-edited the book *"Drug Targeting: Organ-Specific Strategies"* (Wiley, 1999) – a comprehensive volume on targeted drug delivery methods. This work, along with numerous journal articles on drug kinetics and metabolism, established him as a leader in pharmacokinetics and pharmaceutical research. He has

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also contributed chapters to international textbooks, disseminating knowledge on drug transport mechanisms and therapeutic innovations.

- **Consciousness and Quantum Theory:** In the realm of consciousness studies, Meijer has authored influential papers such as “Consciousness in the Universe is Scale Invariant and Implies an Event Horizon of the Human Brain” (NeuroQuantology, 2017), with now more than 90.000 views /downloads. This widely cited paper lays out his toroidal field theory of mind and has drawn significant attention in interdisciplinary science circles. Additionally, he has published a series of essays and reviews (some in collaboration with others) exploring concepts like a “musical master code” of the universe – essentially examining how quantized frequency patterns could underlie life and consciousness. This concept is now framed as the Acoustic Quantum Code of resonant Coherence/Decoherence. These works illustrate his endeavour to find unifying principles between quantum physics and the conscious experience.
- **Citations and Impact:** Meijer’s scholarly impact is reflected in his citation metrics. He has been cited over 20,000 times in the scientific literature, and his H-index is around 74, indicating a sustained influence across many published works. Such metrics place him among the notable contributors in both his original field of pharmacological science and in the newer interdisciplinary domain of consciousness research. His extensive mentorship of young researchers (having supervised about 60 Ph.D. students during his career) and collaborations worldwide further amplify his academic legacy. His international network includes, among others, Kai-wai Wong, (cosmologist USA), Valeryi Sbitnev, USA (quantum physicist), Anthony Bermanseder (cosmologist, Australia), Marschall Lefferts, physicist, USA, Alexey Melkikh, physicist, Russia, Igor Jerman, biologist, Slowackia, Hans Geesink, mineralogist, The Netherlands, Franco Ivaldi, Physicist, Italy, William Brown, quantum physicist, USA/France, and Moninder Modgil, cosmologist, India.
- The concept has now been treated in various books and reviews, on The Physics of the Mind (Phil Mollon), The Landscape of Consciousness (Robert Kuhn), Cosmometry, (Marschall Lefferts) and the review of Miller WB, on a scale-free relational information.

Interdisciplinary Lectures and Public Engagement:

Even after retirement, Prof. Meijer remains actively engaged in interdisciplinary education and public discourse. At the University of Groningen’s Senior Academy, he delivers lectures and courses that merge insights from physics, biology, and philosophy. For instance, he has organized and chaired seminar series on topics such as “**Consciousness and Brain Function**”, “**The Future of Mankind**”, “**The Role of Language and Information in Biological and Cultural Evolution**”, and “**Quantum Physics in Relation to the Fabric of Reality**”. These courses, aimed at lifelong learners and fellow scholars, showcase *Meijer’s commitment to exploring big questions* at the intersection of science and human experience. Meijer’s bold ideas on consciousness have also reached a broader audience through interviews and media features. His hypothesis that the mind is a field independent of the brain has been covered in science-forum articles and public talks, helping to spark conversations beyond academia. In 2019, for

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example, he gave an in-depth interview about his consciousness model, discussing how external information fields might influence our thoughts and explaining complex notions (like a fourth spatial dimension for the mind) in accessible terms. His work has been highlighted in venues devoted to science and philosophy dialogue, such as the Science and Nonduality (SAND) community and popular science outlets, reflecting the interdisciplinary fascination with bridging neuroscience and spirituality. Through these engagements, Prof. Meijer has become a notable voice advocating for a more expansive understanding of brain function and consciousness in the public sphere.

Academic Leadership, Societies, and Editorial Roles:

Throughout his career, Dirk K.F. Meijer has taken on significant leadership roles in the scientific community. He has been instrumental in founding and guiding several research organizations and societies, particularly in the pharmaceutical sciences:

Professional Societies: Meijer was the founding chairman of the Dutch Association of Pharmaceutical Sciences (NVFW), and also the founding chairman of FIGON (the Federation for Innovative Drug Research in the Netherlands). In these roles, he helped coordinate national research efforts and foster collaboration between academia, industry, and government in drug development. He was likewise a co-founder of the Dutch National Top Institute Pharma (TI Pharma), a public-private partnership aimed at advancing pharmaceutical innovation. Internationally, he served as a member of the European Federation of Pharmaceutical Sciences and the American Association for the Study of Liver Diseases, reflecting his active involvement in global scientific networks.

Editorial Boards and Peer Review: Prof. Meijer has contributed his expertise to several scientific journals. He has been on the editorial or advisory boards of various international journals in his fields. For example, he is listed on the editorial board of NeuroQuantology (a journal merging neuroscience and quantum science) and has been involved with journals in pharmacology and biophysics as well. His role often involves guiding the scientific direction of these publications and ensuring rigorous peer review, underlining the respect he commands in diverse research communities.

Awards and Honors: In recognition of his contributions, Meijer has received prestigious honours. Notably, in 2004 he was awarded the “**Saal van Zwanenberg**” Prize, which acknowledged his outstanding work in the design of novel drugs, advanced drug delivery systems, and his leadership in organizing drug research in the Netherlands. Upon his retirement in 2006, he was appointed a Knight of the Order of the Dutch Lion – one of the highest civilian honours in the Netherlands – for his services to science and education. This ***knighthood underscores the high esteem in which he is held nationally.*** In addition, he continues to be celebrated by colleagues and students; for instance, his sustained high ResearchGate score and large following on academic platforms testify to his ongoing influence and mentorship in the scholarly community.

Clara Futura Relevance and Influence on Consciousness Discourse

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As Richard Co-creator of the Astrla, Lykke Minds & People deeply Human, deeply AI concepts, Professor Meijer's recent research positions him at the cutting edge of current scientific debates regarding brain function and consciousness. As mainstream neuroscience continues to grapple with the so-called **"hard problem"** of consciousness, Meijer's interdisciplinary approach offers a compelling alternative paradigm. Collaborating within Clara Futura's innovation ecosystem, Meijer aligns with prominent scholars such as physicist Sir Roger Penrose and a Stuart Hameroff, advocating the *necessity of quantum processes and field dynamics to fully understand the mind*.

His work proposes tangible mechanisms—including holographic information fields and toroidal energy structures—to elucidate mind-brain interactions. These theories advance contemporary discussions on bridging subjective human experience with objective scientific inquiry.

In the broader scientific and philosophical communities, Meijer's concepts promote a significant shift: from perceiving consciousness merely as an emergent property of neural activity to recognizing it as a fundamental element embedded within the cosmos itself. His perspective strongly resonates with pioneering studies in quantum cognition and informational physics, exploring how consciousness might arise from or interface with quantum informational processes.

Through his collaboration with Clara Futura, Professor Meijer's theoretical insights help shape innovative initiatives such as Astrala™, Lykke Minds™, and related symbolic profiling methodologies, facilitating scientific integration across neuroscience, physics, and philosophy. In summary, **Dirk K.F. Meijer** exemplifies a pioneering interdisciplinary approach, leading efforts to understand consciousness through the synergy of quantum science and neurobiology and thus contributing substantially to the forefront of contemporary consciousness research.

SIGNED

Signed by:

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Richard Dobson

Clara Futura Founder & Innovation Consultant



Professor Dirk Klaas Fokke (K.F.) Meijer
Scientific Advisor Representing Clara Futura