1. Record Nr. UNINA9910490748003321

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| Titolo | Genotoxicity and Mutagenicity : Mechanisms and Test Methods / / edited by Sonia Soloneski, Marcelo L. Larramendy |
| Pubbl/distr/stampa | London : , : IntechOpen, , 2021 |
| ISBN | 1-83880-042-5 |
| Descrizione fisica | 1 online resource (164 pages) |
| Disciplina | 616.042 |
| Soggetti | Mutagenicity testing |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |

2. Record Nr. UNINA9910964087703321

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| Autore | Koch Christof <1956-> |
| Titolo | Consciousness : confessions of a romantic reductionist / / Christof Koch |
| Pubbl/distr/stampa | Cambridge, Massachusetts, : MIT Press, ©2012<br>©2012 |
| ISBN | 9786613594402<br>9780262301039<br>0262301032<br>9781280499173<br>1280499176<br>9780262301787<br>0262301784 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (194 p.) |
| Classificazione | SCI089000SCI090000 |
| Disciplina | 153 |
| Soggetti | Neurosciences - History - 20th century<br>Neurosciences - History - 21st century<br>Neuroscientists<br>Consciousness<br>Mind and body<br>Free will and determinism<br>Life |

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| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Bibliographic Level Mode of Issuance: Monograph |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | In which I introduce the ancient mind-body problem, explain why I am on a quest to use reason and empirical inquiry to solve it, acquaint you with Francis Crick, explain how he relates to this quest, make a confession, and end on a sad note -- In which I write about the wellsprings of my inner conflict between religion and reason, why I grew up wanting to be a scientist, why I wear a lapel pin of Professor Calculus, and how I acquired a second mentor late in life -- In which I explain why consciousness challenges the scientific view of the world, how consciousness can be investigated empirically with both feet firmly planted on the ground, why animals share consciousness with humans, and why self-consciousness is not as important as many people think it is -- In which you hear tales of scientist-magicians that make you look but not see, how they track the footprints of consciousness by peering into your skull, why you don't see with your eyes, and why attention and consciousness are not the same -- In which you learn from neurologists and neurosurgeons that some neurons care a great deal about celebrities, that cutting the cerebral cortex in two does not reduce consciousness by half, that color is leached from the world by the loss of a small cortical region, and that the destruction of a sugar cube-sized chunk of brain stem or thalamic tissue leaves you undead -- In which I defend two propositions that my younger self found nonsense--you are unaware of most of the things that go on in your head, and zombie agents control much of your life, even though you confidently believe that you are in charge -- In which I throw caution to the wind, bring up free will, Der ring des Nibelungen, and what physics says about determinism, explain the impoverished ability of your mind to choose, show that your will lags behind your brain's decision, and that freedom is just another word for feeling -- In which I argue that consciousness is a fundamental property of complex things, rhapsodize about integrated information theory, how it explains many puzzling facts about consciousness and provides a blueprint for building sentient machines -- In which I outline an electromagnetic gadget to measure consciousness, describe efforts to harness the power of genetic engineering to track consciousness in mice, and find myself building cortical observatories -- In which I muse about final matters considered off-limits to polite scientific discourse: to wit, the relationship between science and religion, the existence of God, whether this God can intervene in the universe, the death of my mentor, and my recent tribulations. |
| Sommario/riassunto | "What links conscious experience of pain, joy, color, and smell to bioelectrical activity in the brain? How can anything physical give rise to nonphysical, subjective, conscious states? Christof Koch has devoted much of his career to bridging the seemingly unbridgeable gap between the physics of the brain and phenomenal experience. This engaging book--part scientific overview, part memoir, part futurist speculation--describes Koch's search for an empirical explanation for consciousness. Koch recounts not only the birth of the modern science of consciousness but also the subterranean motivation for his quest--his instinctual (if 'romantic') belief that life is meaningful. Koch describes his own groundbreaking work with Francis Crick in the 1990s and 2000s and the gradual emergence of consciousness (once |

considered a 'fringy' subject) as a legitimate topic for scientific investigation. Present at this paradigm shift were Koch and a handful of colleagues, including Ned Block, David Chalmers, Stanislas Dehaene, Giulio Tononi, Wolf Singer, and others. Aiding and abetting it were new techniques to listen in on the activity of individual nerve cells, clinical studies, and brain-imaging technologies that allowed safe and noninvasive study of the human brain in action. Koch gives us stories from the front lines of modern research into the neurobiology of consciousness as well as his own reflections on a variety of topics, including the distinction between attention and awareness, the unconscious, how neurons respond to Homer Simpson, the physics and biology of free will, dogs, Der Ring des Nibelungen, sentient machines, the loss of his belief in a personal God, and sadness. All of them are signposts in the pursuit of his life's work--to uncover the roots of consciousness."--Jacket.