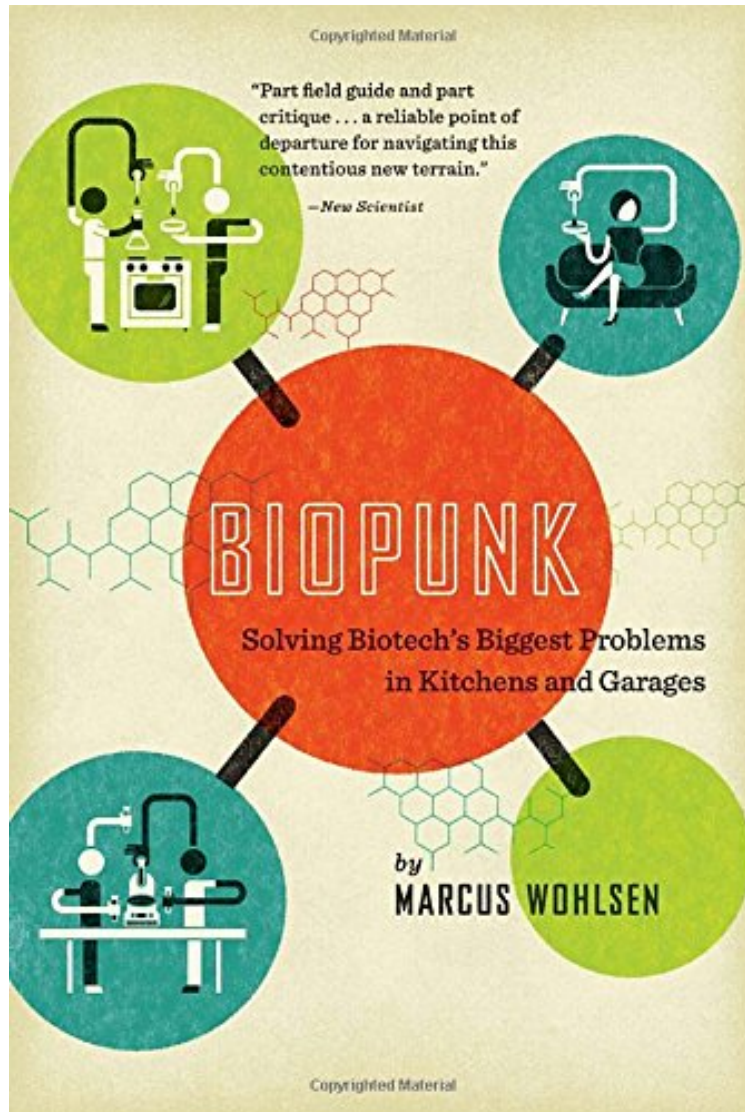


(Mobile ebook) Biopunk: Solving Biotech's Biggest Problems in Kitchens and Garages

Biopunk: Solving Biotech's Biggest Problems in Kitchens and Garages

Marcus Wohlsen

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Marcus Wohlsen : Biopunk: Solving Biotech's Biggest Problems in Kitchens and Garages before purchasing it in order to gauge whether or not it would be worth my time, and all praised Biopunk: Solving Biotech's Biggest Problems in Kitchens and Garages:

1 of 1 people found the following review helpful. Overall, an Encouraging Survey By Customer The title refers to aspiration versus achievement, and, consequently, illustrates the content of the book. A collection of extended

anecdotes, my main take away was that there is a growing community of people who, for a wide variety of reasons, earnestly want to forge ahead at a personal level into biological research. At best, the stories are inspiring, and wonderful examples of resourcefulness and determination. At the very least, one is left with character studies of invariably quirky people involved to differing degrees with something that is both scientific and fringy. If you are sympathetic to the Open Source/DIY/Maker movement, it is worth the read.² of 2 people found the following review helpful. Expertly written! By SFWriter This book is wonderfully written; Wohlsen has very natural way of raising provocative ideas about the implications of genetic manipulation without sounding like a science textbook. I'm not an expert on biology or genetic engineering, so I was initially worried about the accessibility of the material for me, but his profiles of prominent biohackers are entertaining and keep a fast pace, and his explanations of complex topics achieve the difficult task of being succinct and nuanced at the same time. I found this book to be a very accessible introduction to a very complicated topic, and I especially liked that Wohlsen was able to get inside the heads of these biohackers while maintaining enough journalistic distance to also convey the criticism of their work when appropriate. As a novice in this area, that kind of perspective is very helpful in framing my thinking about this issue. I got a lot of new ideas from this book and I highly recommend it.⁰ of 0 people found the following review helpful. Democratizing bioinformatics - the next Internet revolution? By Matt Hollingsworth After having my DNA sequenced by 23andme and reading Biopunk, I'm left feeling that this area is poised to become the personal computing/Internet of the next twenty years. The book covers bio-hackers who are hacking biology in their garages following in the footsteps of telephone hackers from the 1970's that turned into the computer hackers. Their mantra: "Biology is software". These do it yourself wetlabs are rapidly moving to DNA software engineering using mail order analysis and DNA construction. Interesting websites related to this DNA hacking movement mentioned in the book: [...] [...] [...] [...] [...] [...] [...]

Bill Gates recently told Wired that if he were a teenager today, he would be hacking biology. "If you want to change the world in some big way," he says, "that's where you should start-biological molecules." The most disruptive force on the planet resides in DNA. Biotech companies and academic researchers are just beginning to unlock the potential of piecing together life from scratch. Champions of synthetic biology believe that turning genetic code into Lego-like blocks to build never-before-seen organisms could solve the thorniest challenges in medicine, energy, and environmental protection. But as the hackers who cracked open the potential of the personal computer and the Internet proved, the most revolutionary discoveries often emerge from out-of-the-way places, forged by brilliant outsiders with few resources besides boundless energy and great ideas. In Biopunk, Marcus Wohlsen chronicles a growing community of DIY scientists working outside the walls of corporations and universities who are committed to democratizing DNA the way the Internet did information. The "biohacking" movement, now in its early, heady days, aims to unleash an outbreak of genetically modified innovation by making the tools and techniques of biotechnology accessible to everyone. Borrowing their idealism from the worlds of open-source software, artisanal food, Internet startups, and the Peace Corps, biopunks are devoted advocates for open-sourcing the basic code of life. They believe in the power of individuals with access to DNA to solve the world's biggest problems. You'll meet a new breed of hackers who aren't afraid to get their hands wet, from entrepreneurs who aim to bring DNA-based medical tools to the poorest of the poor to a curious tinkerer who believes a tub of yogurt and a jellyfish gene could protect the world's food supply. These biohackers include: -A duo who started a cancer drug company in their kitchen -A team who built an open-source DNA copy machine -A woman who developed a genetic test in her apartment for a deadly disease that had stricken her family Along with the potential of citizen science to bring about disruptive change, Wohlsen explores the risks of DIY bioterrorism, the possibility of genetic engineering experiments gone awry, and whether the ability to design life from scratch on a laptop might come sooner than we think.

From Publishers Weekly Biopunks, as defined by AP science and technology reporter Wohlsen, are part of a loosely knit, multifaceted movement to find ways to permit people to engage in DNA research without the restrictions and costs imposed by the scientific and medical establishment. Practitioners, some self-taught, set up shop in their kitchens or garages, believing that significant biological advances are more likely to occur as more people get involved in the enterprise. For the most part opposed to intellectual property rights, they prefer the open-source model used to design some computer software. Although biopunks have not yet made any significant scientific advances, they view themselves as "simplifying and domesticating" biology. Though his prose is a bit dry, Wohlsen introduces some fascinating, altruistic individuals, people who would like to fight disease without profit as their primary motive. While Wohlsen conveys, and seems to share, their excitement, he provides little critical commentary on their prospects for success. He also splits his attention between true DIYers and others who are working outside the scientific establishment because they haven't been able to find jobs or funding. Similarly, modest sections on bioterrorism and potentially dangerous experiments in genetic engineering seem largely unconnected to his main focus. (Apr.) (c) Copyright PWxyz, LLC. All rights reserved. "In the same way that hackers in the 1970s launched the computer revolution, a new generation of do-it-yourselfers are acquiring the skills and knowledge necessary to hack life itself. "Biopunk" is an enthralling account of the most important technological story of our generation." -Mark Frauenfelder,

editor in chief of "Make" and author of "Made By Hand" "Marcus Wohlsen's fast-paced tour of home-brew DNA dicers and splicers lights up a world of edgy, young Prometheans whose dreams are as breathtaking as they are controversial. Read "Biopunk" to find out what these tattooed, wet-lab hackers are stirring up in their kitchens and garages, what inspires their often outlandish visions, and how their campaign to bring biotech's godlike power to the masses may ultimately reshape both our lives and the life forms around us." -David Stipp, author of "The Youth Pill"

"We're going to look back on the emergence of DIY biology like we look back on the emergence of perso

About the Author Marcus Wohlsen is a San Franciscobased technology reporter for the Associated Press. He is the author of Biopunk: Solving Biotechs Biggest Problems in Kitchens and Garages.