Birthing New Hope

ILLINOIS PH.D.'S ACCLAIMED FERTILITY AID RESULTED FROM HER OWN CONCEPTION CHAILENGES BY EDITH G. TOLCHIN

CCORDING TO the U.S. Centers for Disease Control and Prevention, 13.4 percent of women in the United States face infertility ("impaired fecundity"). Dr. Jennifer Hintzsche of Dixon, Illinois, is an inventor who found an exciting option to solve this problem.

Edith G. Tolchin (EGT): Please tell us about your background. Where are you from?

Jennifer Hintzsche (JH): I always liked science, but it wasn't until college that I really started to geek out about all the things I didn't know about biology. It was fascinating!

I went to grad school thinking I wanted to do cancer research in biology. But not realizing my lack of bench skills, I was kicked out of my

> first lab. It was then an adviser told me he thought I'd be good at coding, so I gave

I'm the first Ph.D. in Bioinformatics (biology and computer science) from Northern Illinois University and eventually did go on to study precision oncology for my post-doc, just far away from the bench! After leaving academia, I followed my love of coding and health care to help two software companies grow exponentially from 15 to 50 million and then decided to take a chance on myself.

EGT: How did the topic of infertility affect your family?

JH: After getting married, we tried to conceive for over a year until finally we were able to see a fertility specialist, who diagnosed me with "unexplained infertility."

This meant my insurance wouldn't cover fertility treatment because they didn't know what was wrong. Instead, I was handed a \$10,000 loan to pay for an invasive clinical procedure. I didn't understand how they could offer me a solution if they couldn't figure out the problem.

So, I set out to solve my own problem—and I did. I was always upset about being labeled infertile. So, when I decided to see if I could create this kit to help others, I came up with the name PherDal—pronounced "fertile" but spelled with a "PhD," which is what I used to prove them wrong.

EGT: How did your advanced degree help you in creating the PherDal Fertility Science invention?

JH: As soon as I got the diagnosis of unexplained infertility, I read every published scientific study I could find over the past 20 years. I found studies showing that another non-invasive treatment option had been shown to have the same success rate as what I was being offered.

The only problem is, there was no way for me to try this method at home and with the same clinical sterility and safety. So, I ordered lab supplies from my cancer research lab and made my own device that in the second month of use helped us conceive my daughter.

EGT: How does it work?

JH: The best part about PherDal is the simplicity. It's as comfortable to use as a tampon, and so much feedback went into our design iterations to maximize the user experience.

It's a syringe and jar that are used to collect semen and deliver it directly to the opening of the cervix, just 1 inch lower than today's first line of treatment in the clinic. So instead of about 1 percent of sperm making it that far in the journey naturally, we are putting 95 percent of the sperm this far along.

EGT: What type of government testing and certifications are required for this product to be able to sell them?

JH: We went through about 15 different clinical and performance tests to ensure safety as the first over-the-counter, sterile, at-home insemination



"We went through about 15 different (government) clinical and performance tests to ensure safety as the first over-the-counter, sterile, at-home insemination kit." — JENNIFER HINTZSCHE

kit. Tests included sperm survival, vaginal irritation, sterility and transportation testing—just to name a few.

We had to demonstrate our kit could get run over by a truck and hit with a 75-pound dart and that our product would arrive sterile. I had no idea what we were getting into; sometimes, ignorance is bliss!

It was all worth it, though—and I'd do it again just to see the flood of positive pregnancy tests that hit my inbox every week and bring me to tears.

EGT: Please tell us about the honor of PherDal being named to TIME magazine's 2024 Best **Inventions List.**

JH: I am so unbelievably grateful. My infertility was my biggest secret while going through it. Now, being able to help so many people also become parents—and to see our kids who weren't supposed to exist now playing with each other, it's so powerful!

I'm just honored and grateful to be able to offer to the world what made me a mom. So many people need to know that this is an option they can try.

EGT: Where are you selling? Retail? Amazon? **Health care facilities?**

JH: Through our website, on Amazon, and we have a telehealth provider we have partnered with, WISP (hellowisp.com).

EGT: What is the price?

JH: \$199, and comes with three attempts at conception to be used within one cycle. It can be tried for up to 6 months.

EGT: Have you had any quality control or manufacturing problems?

JH: Not since we started. It was hard to get someone to work with us initially for such a small company, but we found great partners

who have wanted to grow with us.

EGT: Any other products planned in same or similar categories?

JH: There is so much room for growth in women's health, it would be almost irresponsible to not keep improving and setting new standards of fertility care that can be done in the home. So, yes, we have lots of great ways we plan on continuing our mission.

"I came up with the name PherDal pronounced 'fertile' but spelled with a 'PhD,' which is what I used to prove (naysayers) wrong."

The PherDal At-Home Insemination Kit

EGT: Please tell us about your patent process. Did you hit any roadblocks?

JH: I have the best patent attorney, and she deserves so much credit for her hard work during the 18-month process. At one point, I had to write a letter listing my scientific publications and background to prove why sterile devices mattered.

The leading cause of unexplained infertility is changes to the vaginal microbiome. PherDal is the only sterile, at-home insemination kit that won't disrupt your microbiome and also won't hurt your future chances of fertility by introducing bacteria that could alter the pH and kill sperm before it ever has a chance to reach the egg.

EGT: What advice would you give to novice inventors, especially with products in the medical field?

JH: We need more of you. Patients are great founders, because we know the pain points. If you can do it better, do it! The world needs you. €

Details: pherdal.com, Support@PherDal.com

Edith G. Tolchin has written for Inventors Digest since 2000 (edietolchin.com/portfolio). She is the author of several books, including "Secrets of Successful Women Inventors" (https://a.co/d/ fAGIvZJ) and "Secrets of Successful Inventing" (https://a.co/d/8dafJd6).





June 2025 Volume 41 Issue 6



They Said What?

- 6 "The primary designer of the world's most powerful weapon—at age 23—called his creation Mike."
- "Copyright law will protect your photo (or other depiction) of your sighting of Elvis."
- 11 "You can almost see the ubiquitous guy with his shirt off on the cover of a Harlequin romance paperback."
- 17 "If you can't beat fear, just do it scared."



QUICK READS

- 12 InventorArchives
- 17 Inventor Update
- 30 AI ABCs
- 33 Now Starring: IP

Feature

20 Fun and Learning in the Ask
IP Buddy Revolutionizes IP Education

Inventor Spotlight

18 Birthing New Hope Woman's Fertility Aid Beats the Odds

Departments

4 FluiditylQTransforming Information Intelligence

6 Editor's NoteFirst With H-Bomb, First in Peace

7 Everybody's TalkingSeeking Fuller Inclusion

8 Inventor School Elementary, Essential Education

10 Time Tested
Wristwatch Inventor(s)

14 Social Hour Your LinkedIn Top 10

26 Bright IdeasInnovation That Shines

28 Think MarketingMarketing: A Deeper Dive

32 PrototypingDrawing for 3D Printing

34 IP Market Musk Is Wrong

38 Patent PendingIdeas Can't Be Patented, But ...

42 Eye On WashingtonPro-Patent Bills Reintroduced;
Lutnick Buoys Inventors

46 InventivenessFocus on the Fun and Fascinating

18

