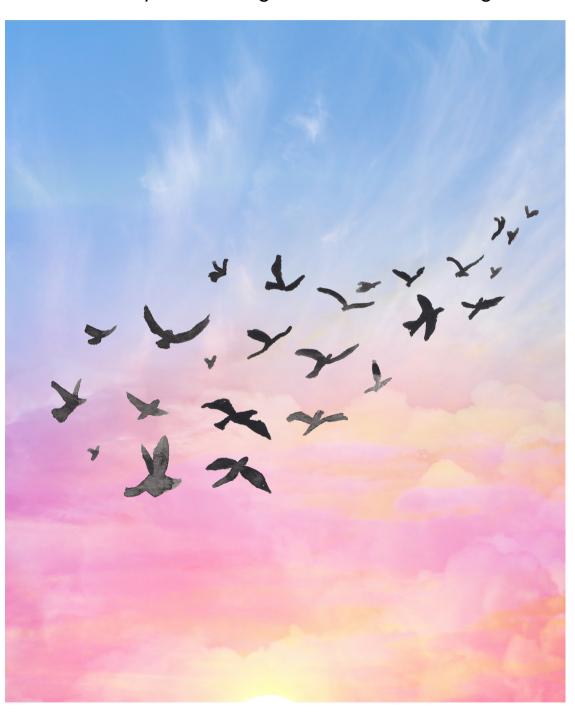
TRANSCRIPTIONS

A zine made by trans and gender non-conforming scientists.

S \geq ⋖ ш \simeq 0 ഗ



CONTENTS

1 HANG UPC.M. Fields

2GRIEF, LIKE TINY GRAINS OF SAND

Naamloos Kind van Riemsdijk

20 HOURS OF GROWTH AT 37CRiley DeHority

5 AERIAL DANCING

Crys Clitheroe

WHEN NOT EVEN COMPUTERS
ARE BINARY BY DEFAULT

Isaac

6

7 SCIENCE IS A DRAG: ALL STARS

Román "Romi" Ramos Báez

8 LIFE IN BLUE

Robin Aguilar

11

GENDER PARTITIONING

Emma Reich

13

GENDER EXPERIMENTS

Atom J Lesiak Lovecloud PhD

15

MEET OUR CONTRIBUTORS

Hang Up

Laurel Senior High School regrets that not all of its graduating members of the Class of 2011 are able to attend the 20-year reunion. Below are the profiles of those who chose to submit one.

Maryanne Knowles lives in New Haven, CT with her partners, and works as an assistant professor of molecular biology at Yale University. She was the president of the Nature Club from 2009-2010 and continues indulging her love for the outdoors through gardening and volunteering at Long Wharf Nature Preserve. "Yep, there's an 's' there," she says.

Elisabeth Easton lives in Everett, Washington, with her wife, Nina, their three cats, and several unruly houseplants. After graduating, she attended trade school for carpentry and currently works as a craftswoman for Larsen Cabinets. In her free time, she enjoys hiking, crocheting, and making and bottling wine. To her Laurel classmates, she sends her warmest "Bless your heart."

Scott Bisen-Tanner lives here in Safford with his husband, Morgan Bisen-Tanner (Class of 2010). He is a homemaker, blogger, and proud father of six labrador retrievers. When he's not running an Instagram account for the dogs, he is doing Crossfit, cooking, and training to run a marathon. For our record, Scott states that he would just love to attend, but it's Gunner's 4th birthday and 112 million people are waiting on photos of the party.

Hunter McGrew lives in Los Angeles with one pitbull and a family of ferrets. Ze is a freelance costume designer specializing in the Elizabethan era, and zir work has been featured in the films My Heart, My Soul, and The Postmaster's Daughter. Ze doesn't have any spare time, but if ze did, the last thing ze would do is fly to Alabama to be deadnamed by a bunch of soccer moms.

Montana Ortiz, the New York Times best-selling travel writer and Laurel graduate, currently resides in Phu Quoc, Vietnam, where he is working on a culinary guide to Southeast Asia. In his free time, he kite-surfs, snorkels, and eats food you yokels can't even dream of, let alone pronounce. Montana says that he will travel anywhere that doesn't ask invasive questions about his genitals, which is why he is not here today.

Aissata Diallo-Dugard splits her time between Ft. Lauderdale, FL and Bamako, Mali, where she and her wife are foreign aid workers. Aissata enjoys kick-boxing, baking, and is a frequent contributor to The Washington Post and The Atlantic. If you would like to hear from her, her rate is \$2/word; otherwise, she has nothing to say to you people.

Kamari Levinson lives in Berlin, Germany, and works as a human rights lawyer for the United Nations. At Laurel, they were the president of the Speech and Debate club, and today, their TED talks can be found on their YouTube Channel, Kamari Speaks. In their free time, they cycle and brew their own beer. When asked over the phone whether they would be attending their 20th high school reunion, they laughed and laughed and laughed and laughed and then they hung up.

Grief, like tiny grains of sand

How do we carry on in the prolonged depths of grief? What does it mean to realize loss, to recognize the way it sits like ashes on the tongue

> dry as the deserts that once were the seas lapping the barren shores at the beginning of time, but that are now just

> >ghostly memories

like rocks that have been ground down, relentlessly into tiny grains of sand

At times I have pretended
as if nothing has happened at all,
grief kept private, loss guarded
Sometimes the flood gates open,
grief tumbling over its own feet
to free itself, desperate
Other times I have been numb,
but not numb enough
grief unsure of its own self,
of what should be felt...
if anything at all

What is it that makes us grieve?
What is it that shapes our grief?
That varies the flavor day by day,
sometimes even...
hour by hour
What is it that keeps us moving forward?
That makes us move past grief

....eventually....

I think about it a lot (because I'm going through it) about what loss does to the body...
how it makes the head heavy,
drains my energy
even as I
simply
sit
here
lost....



I wonder if that is what overwhelms my senses
and makes me crawl back to bed
withdrawing from the world entirely
And then the next day
makes me surround myself in the social whirl of people
experience the liminality of being both

connected and isolated

So how do we carry on?

In the fog in the water in the cloudy numbness in between the moments of anger and bouts of tears?

How do we carry on from grief?

And then,

in the middle of this, in the middle of writing this Someone said that grief... it just rolls in when it wants to

(and that I understand so well)

And the call-response back was, simply,

"Well, just let it roll baby..."

So I guess, I will, kinda, maybe...

just let it roll

let it roll on

on and on

until this grief

is but a tiny grain of sand I carry with me

always





20 HOURS OF GROWTH AT 37 C AERIAL









File Edit View Help

"Binary, binary, binary logic, binary electronics, binary computers..." was thinking the teacher of Computer Science while she was approaching the classroom. "On or off, true or false, zero or one, yes or no, male or female..." thought she, trying to convince herself that everything was binary.

"But electric current is a continuum," whispered a daemon to her mind. "Electricity is discrete because of electrons!" she thought, trying to rule out the daemon's rebuttal, when she realized that one coulomb has more than six-quintillion times this elementary change, "a million times the bits is this one-terabyte drive!"

Trying to avoid this thought, she resumed with her list: "True or false, zero or one, yes or no... These values are naturally binary!" But the daemon whispered a single word, "probability." Then she realized that even binary random experiments have a probability \mathbf{p} for one and $\mathbf{1}$ - \mathbf{p} for zero, and the intermediate values of \mathbf{p} make sense.

"Male or female, this is unassailable, binary and natural!" thought she, while the bell rang for her class and the noise prevented the daemon to provide examples where Biology, Society, Psychology or Law go out of binary. Apart, her inner daemon could only speak of what she knew, so her ignorance of these branches made her more conceited.

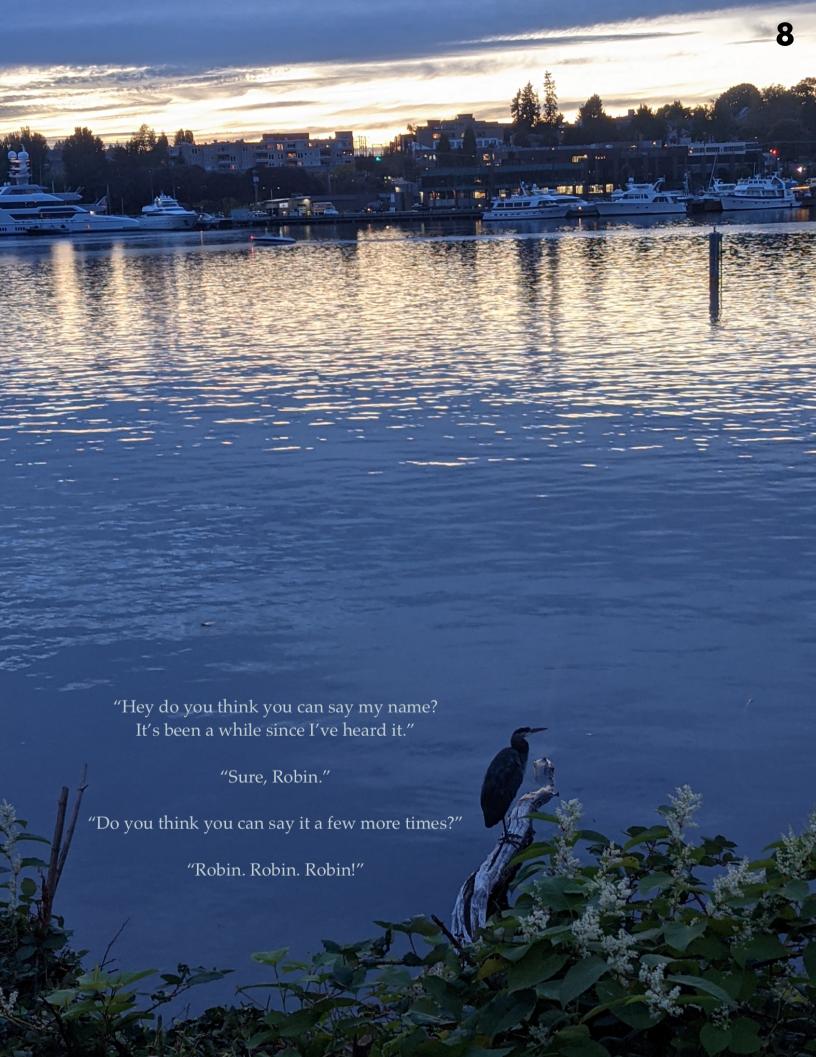
Once the class started, she reviewed the homework from last lesson. Students had to design a database for staff data, and her daemon shut until they had to review the SQL table of personal details. Her initial idea was, as most students', to use a single character for gender, and she even had written "CHAR (1)" in her SQL code, but she had a last minute idea in revenge for the daemon. "Why to waste a whole byte when you only need one bit?" she wondered, and explained the complications of allowing hundreds of values when only two would be valid, the integrity checks, and so on.

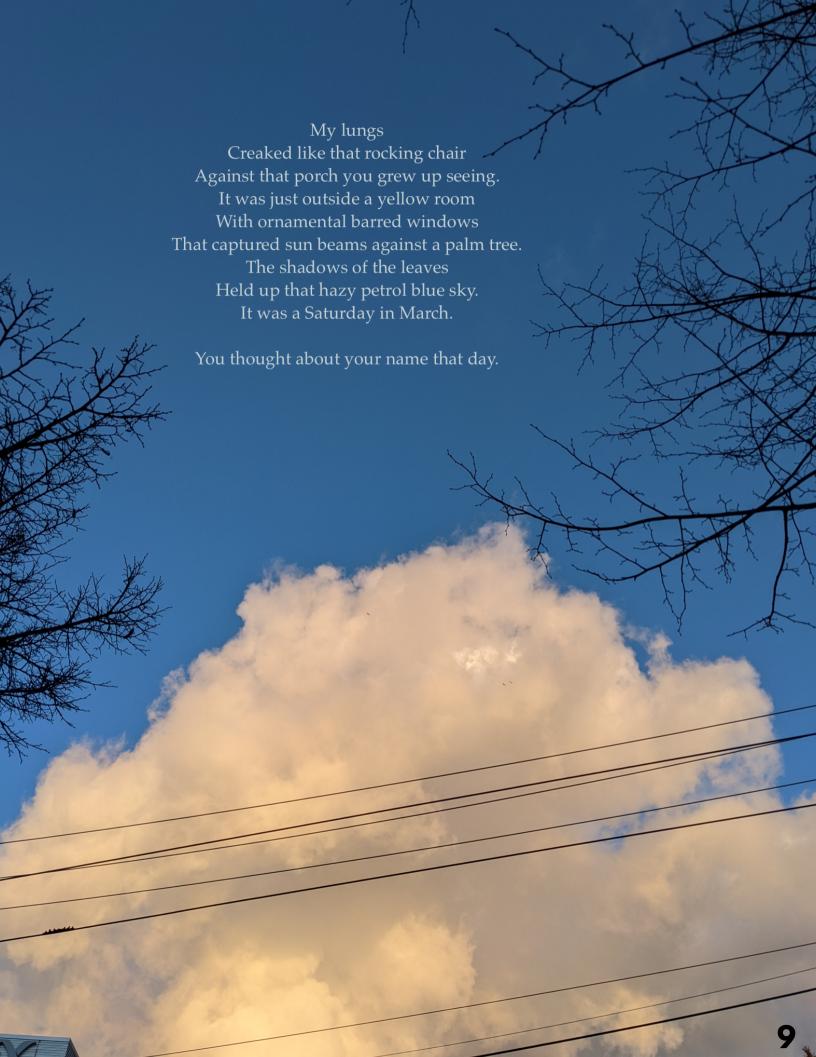
So she wrote "gender BIT(1)," while wondering which boolean value would correspond to either binary gender. In order to gain time for finding a good idea, she asked the students what she thought that should be a trivial question: "How many values does the field 'gender' admit now?" A student answered firmly "three." She was expecting a sound "two," but, as she was thinking of another thing, she got stuck astonished, unable to react.

In other circumstances, she would have attacked the student as if he were the inner daemon to fight, but in the current context, he plainly added "including NULL." Suddenly, she reacted and amended herself like "gender BIT(1) NOT NULL," but she had already given ammunition to her daemon. "So, even binary variables are actually ternary by default. They must be explicitly restricted to NOT NULL in order to become binary," whispered the daemon.

She had been caught defenseless in her own field. Her daemon was right. It had always being right, and after her teaching, she would research if even the gender was really binary or it was another false belief. It was shocking for her to realize she had being wrong, but she took it as an opportunity to learn.







On being a fire starter for 2000 nights. I once created a fire That followed me through doors It darted and crept and touched ceilings Like a candle flame freshly dulled It felt like fog Yet it smelled like rain It remained quiet And brought white ash in waves Once it smoldered like streetlights I knew it was enough To help you find your way home And all that was ivory became dust



Gender Partitioning

By Emma Reich

Working in science has taught me two things that I did not expect: (1) to be comfortable not understanding, and (2) to be comfortable not being understood.

I was attracted to the idea of science as a kid because it seemed like a place for eccentrics. After growing up in a close-minded, conservative suburb, the scientific community's tendency towards, what had seemed to me, excessive, highly-specific questioning of how the world works, was an unimaginable comfort. This was a world in which I met people who eat flowers they found growing next to the sidewalk, carry large, strange rocks around at conferences to show their friends, and compete in botanically accurate tattoo competitions. This was nothing like the rigid world I grew up in, where it was not a good thing to be different or excited about unknowns.

I was in college when a friend told me that he saw the different lab groups in the biology department as "instances of obsession"— having enough passion to fully embrace not understanding something, and dedicating a significant amount of time to not understanding it in more detail, is something of note.

This is all to say that I believe it's a good thing to ask questions you care about, but it's an even better thing to be around other people who ask questions they care about.

When I started working in science, there was an overwhelming sentiment to "come as your full self" when entering the scientific community. I think this started as a way to encourage scientists to interact with the world as full people— people with eccentricities, belief systems, cultures, hobbies, families, and general interests outside the world of science.

However, this sentiment threw me into a self-reconciliation: Had I ever truly been myself? Science often claims objectivity, but the truth is that science does not exist in a vacuum, and is subject to the same biases that all major institutions are. So, when senior scientists encouraged me to come into the scientific community as my full self, I felt they didn't fully understand what they were asking of me.



As a queer non-binary scientist, finding comfort in work and social spaces can be challenging. Throughout my life I've had to repeatedly ask myself the question: Will being myself result in a sacrifice of community? For a long time, I only existed after a series of self-edits I thought were necessary to pass through the world with a baseline level of respect. The truth is that to some extent, people only respect you if they recognize where you're coming from, and to some extent people will only like you if they relate to you. This isn't necessarily a bad thing — if there are other people in science who are like you. For this reason, sometimes it's a lot safer to be some diluted version of yourself than who you actually are. However, after a certain point, being palatable for the comfort of other people is not being honest.

Despite this, one thing is clear to me: The scientific community is better when people are comfortable not understanding things and are comfortable asking questions, because that's what science is. The practice of asking questions is inherent to who I am.

This is what being non-binary is to me: a series of difficult questions based on observations that I direct inward. All of my identities are important to my work; the person who asks scientific questions and the person who questions their gender cannot be conveniently separated for the comfort of others, and both identities form a feedback loop to each other.

For a long time I was stuck somewhere between wanting to split my gender open, and wanting to abandon it. This is to say, I did not know if I wanted the word "woman" to mean more things, or if I wanted to use a new word. For a while, I was unproductively concerned with trying to add up the different parts of my personality into statements I could explain to people without using an explicit label. But labels are just social manuals that instruct people how to treat one another. I like the term non-binary now, because it gives me a word to communicate these feelings to other people, and maybe that gives me a chance at truly being myself.

Science is really just for people who like to ask questions. Because of this, I think it should be normal and somewhat common for scientists to want to question— to redefine— their gender. For me, wanting to be a scientist and being non-binary were two things that existed in tandem to each other, because being non-binary is inherently inquisitive. It is a benefit to the scientific community to include non-binary people, and I have found a great deal of worth and meaning in being a non-binary scientist.

Gender Experiments

by, Atom J. Lesiak Lovecloud, Ph.D.

Experiment 1: August 1983-December 2005

Background:

When
$$2 = 0$$
, $2 \cdot 0$ therefore $2 = 1$

Hypothesis 1:

Results:

Conclusion: Reject null hypothesis

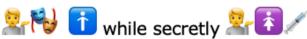
Experiment 2: January 2006 - December 2014

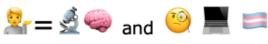
Background:

Hypothesis 2:

Results:







$$\stackrel{\text{$\stackrel{?}{$\sim$}}}{}_{\circ}$$
, ($\stackrel{\text{$\stackrel{?}{\sim}}}{}_{\circ}$ or $\stackrel{\text{$\stackrel{?}{\sim}}}{}_{\circ}$ or ∞

Conclusion:

Hypothesis 2 rejected

Experiment 3: January 2015 - Present

Background:

Hypothesis 3:

Results:



Conclusion:

Fail to reject hypothesis

Subject's Gender Theory

C.M FIELDS

Pronouns: she/they

C. M. Fields is a queer, non-binary astrophysicist and writer of horror and science fiction. They live in Ann Arbor, Michigan, with their beloved cats, Mostly Void Partially Stars and Toast, and spend their days studying the atmospheres and climates of other worlds. They are also the coeditor of If There's Anyone Left, an anthology series featuring the flash fiction of marginalized writers from across the globe.

Twitters:
@toomanyspectra
@C_M_Fields

Mutual Aids: Venmo your local trans

person!

CRYS CLITHEROE

Pronouns: they/them/thon

Constantly inspired by the infinitely complex world of genome assembly and evolution. A scientist who believes that every word counts and has power, and yet still loves the unspoken story in dance, music and art.

Twitter: @CrystationalBio

Github: @Tipplynne

Instagram: @crysclitheroe

Mutual Aids: <u>"Marriage for All</u>

<u>Japan"</u> needs your support!

NAAMLOOS KIND VAN RIEMSDIJK

Pronouns: she/they

They are a poet, photographer, practicing archaeologist and anthropologist, and radical Marxist feminist. In their spare time they like to cook and crochet. They hope one day to rebuild the world.

Twitter: @LaArqueologa Instagram: @LaArqueologa

Mutual Aids:

Black Trowel Collective

RILEY DEHORITY

Pronouns: they/them

Riley is a biological systems engineering PhD student Virginia Tech. They're interested building more ethical pharmaceutical design and production systems, and in bridging the between gap bioengineering and community health. In their free time they enjoy photography and playing the fiddle.

https://www.rileydehority.com/photography

Mutual Aids:

The Future Economy Collective I@future_economy_collective on instagram

ISAAC

Pronouns: he/they

They are asexual, aromantic and agender. Isaac likes science and they aspire to a world where the right to be different, without being less for this, becomes an effective right.

Website: heterogen.wordpress.com

EMMA REICH

Pronouns: they/them/she/her

Emma Reich is a PhD student in Ecological and Environmental Informatics at Northern Arizona University. When they aren't modeling plant water fluxes, they like running, biking, and rock climbing in the Flagstaff mountains.

egreich.github.io

Twitter: @ecophys_emma

ATOM J. LESIAK LOVECLOUD, PHD

Pronouns: they/xe

Atom has a Ph.D. in Neuroscience and is a multi-dimensionally eccentric individual. They are passionate about science, gender, education, gaming, biology, and brains. They are the Director of Genome Sciences Education Outreach (GSEO) at the University of Washington, and recently launched their company Atomic Brains to create educational activities, games, and experiences.

Websites:

Atomicbrains.org

gsoutreach.gs.washington.edu

Youtube: Atomic Brains Twitter: AtomicBrainsO TikTok: Atomicbrains

ROMÁN "ROMI" RAMOS BÁEZ

Pronouns: any pronouns

They are a graduate student currently at the University of Washington, Biology Department. Romi is also a local drag performer. Drag is great tool for building community, celebrating their queerness and femininity, and reminding others that being queer can be joyful and fun.

Twitter: @sensitiveroots

Mutual aids:

Lambert House Seattle

ROBIN AGUILAR

Pronouns: they/them/theirs

Avid hiker and swimmer. Food and drink making enthusiast. Aspiring graphic novelist and tattoo apprentice. Tea connoisseur. Mood playlist curator. Current writer, artist, PhD student at University of Washington Genome Sciences, and plant dad.

Twitter: @seesmallthings robinaguilar.com

Mutual Aids:

<u>Lavendar Rights Project</u>
<u>yəhaw Indigenous Creatives</u>
Collective's



transciptions zine

FEATURING:

CM FIELDS, NAAMLOOS KIND van RIEMSDIJK, CRYS, RILEY, ROMI, ISAAC, ROBIN, EMMA, and ATOM