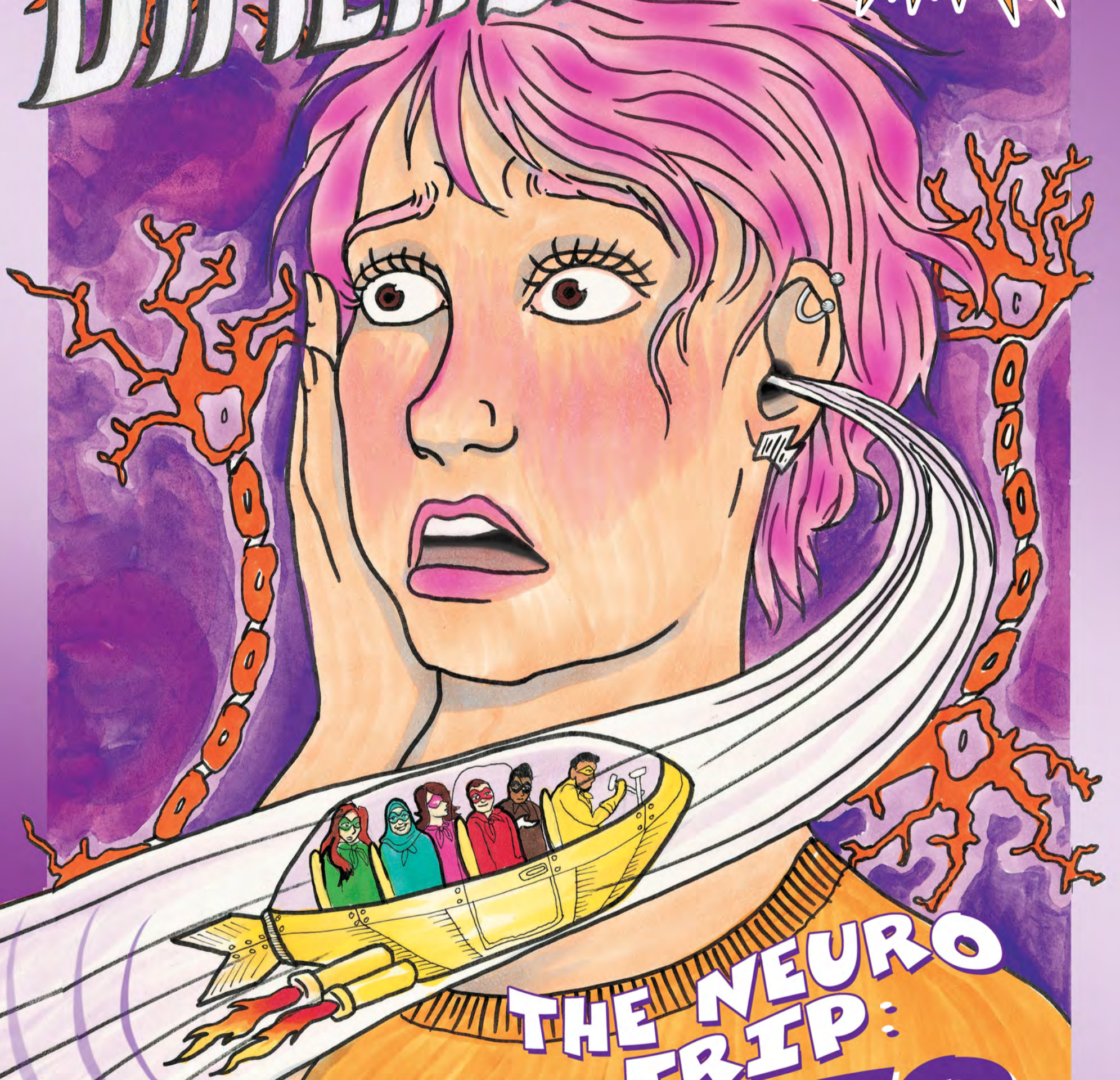


THE DIMENSIONS



THE NEURO
TRIP:
PATH TO
RECOVERY



DEPICTS
SUBSTANCE
USE

The DIMENSIONS



Issue 5

Storyline

The Neuro Trip: Path to Recovery features the story of Nova Pow, college student and percussionist for *The Dimensions*. Her superhero alter-ego, Magnetic Shock, has the powers of magnetic manipulation and attracting objects. Nova has recently been struggling in her classes since she and her friends began using alcohol, nicotine, and marijuana. Her long-time friends and bandmates, *The Dimensions*, have noticed a change in her. They have noticed an increase in her alcohol use and know that her marijuana use served as a 'gateway' to nicotine use. She arrives late at a band practice clearly under the influence and needing help. Dr. Al-Kno creates a rocketship that can shrink, which allows the group to journey inside Nova's brain to see what damage the drugs are doing. Will they find evidence of a need to change? Will Nova come to understand the importance of being drug and alcohol free?

About BH WELL

The University of Kentucky College of Nursing's Behavioral Health Wellness Environments for Living and Learning (BH WELL) research team exists to promote behavioral health and wellness among individuals facing behavioral health challenges. We live DIRECT by prioritizing Diversity, Innovation, Respect, Compassion, and Teamwork.

Research

Among teens and young adults, polysubstance use (i.e., when two or more substances like alcohol, nicotine, or marijuana are used) is associated with poor mental, behavioral, and physical health outcomes later in life. Understanding ways to prevent and treat polysubstance use is crucial. Adolescents and young adults who use nicotine containing products and marijuana at the same time may be more dependent on nicotine products than marijuana non-users. Using different substances (e.g., alcohol, nicotine, or marijuana) may increase dependency on other substances. As Nova struggles with polysubstance use, her fellow *Dimensions* superheroes assess and explain the damage of these different substances in her brain. By understanding the harmful effects of different substances on her brain, she is motivated to seek evidence-based treatment and support to address her polysubstance use.

Okoli, C.T., Richardson, C.G., Ratner, P.A., & Johnson, J.L. (2008). Adolescents' self-defined tobacco use status, marijuana use, and tobacco dependence. *Addictive behaviors*, 33(11), 1491-1499.

Acknowledgements and Credits

Script and Story: BH WELL Research Team

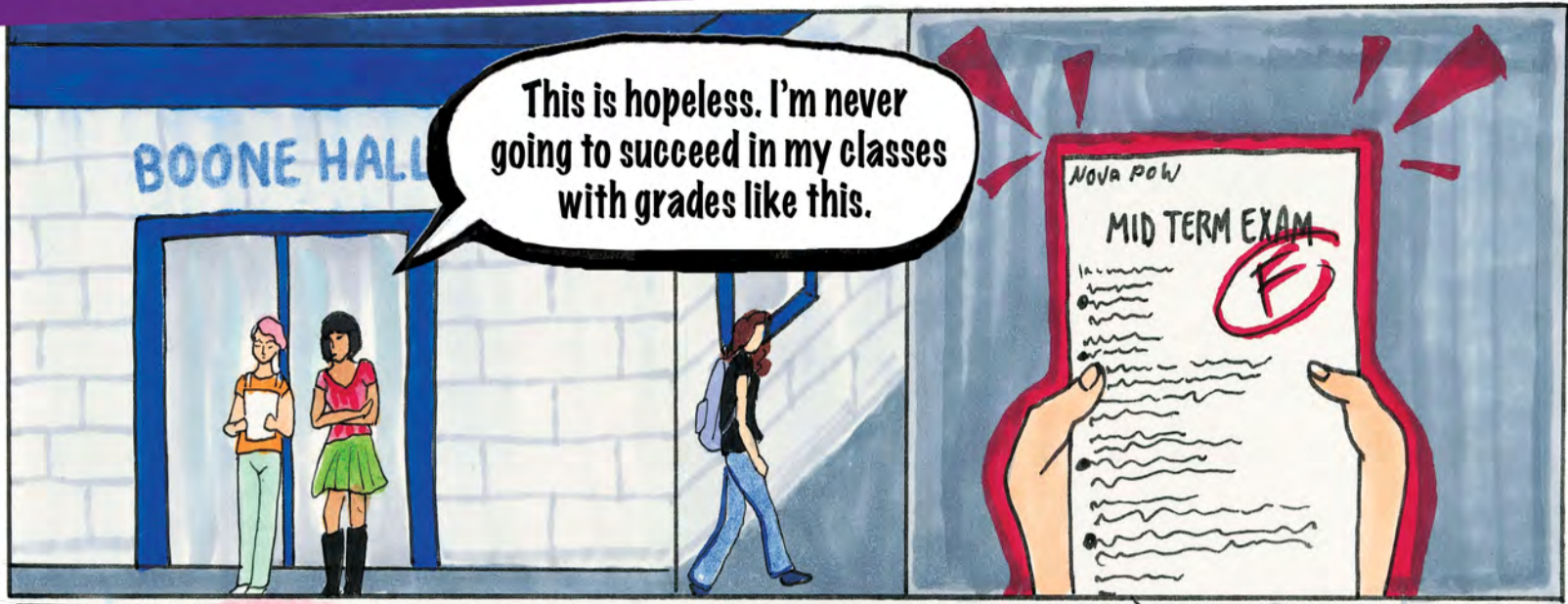
Creators: BH WELL Research Team

Artwork: Dotty K. Berryman

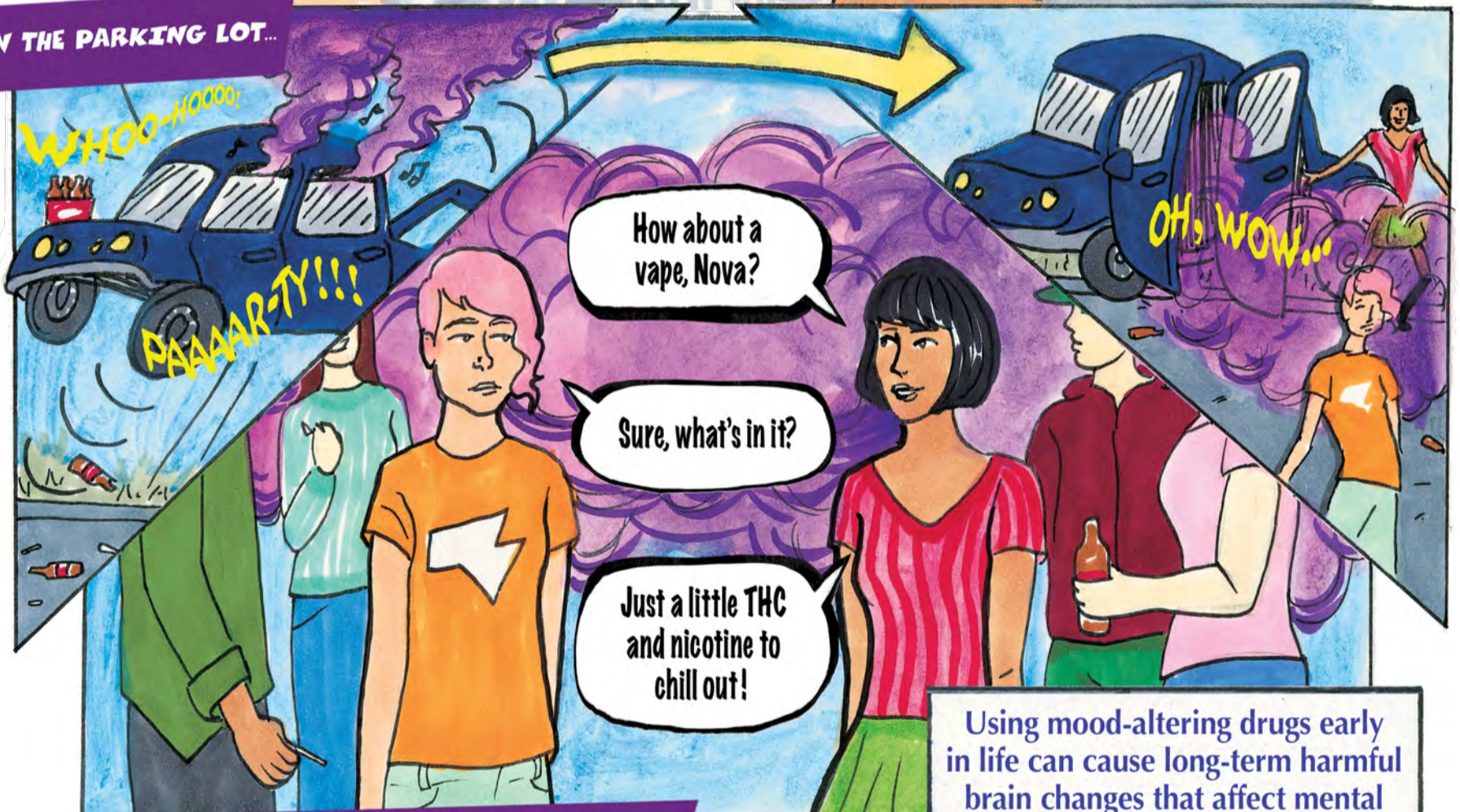
Art Director/Production: David Bryan Blondell

Funding Support: Internal funds along with support from the Kentucky Tobacco Prevention and Cessation Program.

NOVA LEAVES SCHOOL DISHEARTENED...



IN THE PARKING LOT...



TWO OF NOVA'S DIMENSIONS BANDMATES SPOT HER IN THE PARKING LOT...



*Nicotine can also be a gateway to marijuana and other substance use.

**BAND PRACTICE IS ABOUT TO BEGIN
IN DR. AL-KNO'S GARAGE..**

**BAND
PRACTICE
IN
SESSION**


**THE
DIMENSIONS**

**Enough stalling!
Let's get started!**

**We can't start yet!
Nova is not here.**

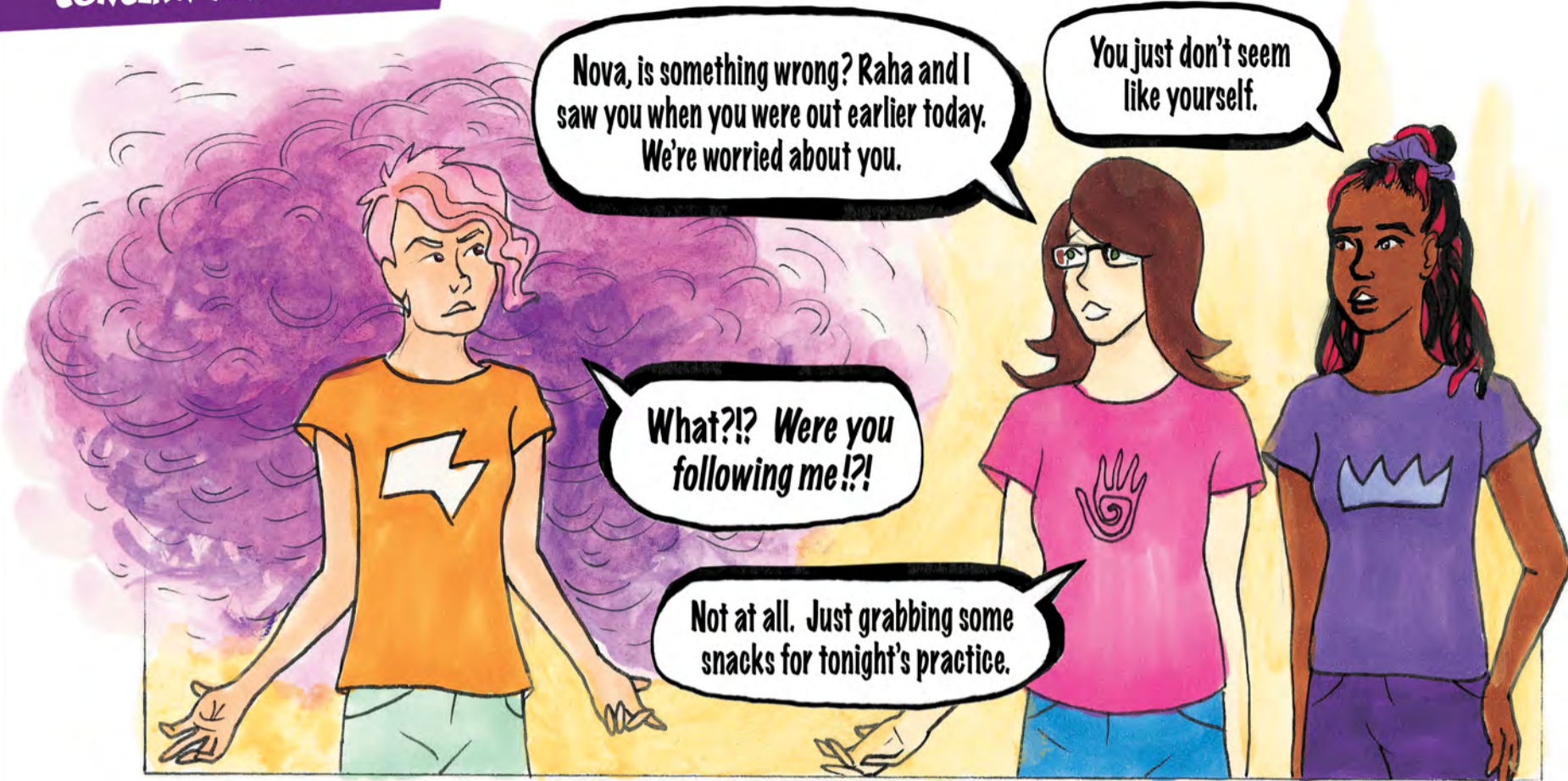
SLAM!

Here...

**NOVA STORMS IN DISHEVELLED,
FUMING, AND UNDER THE INFLUENCE..**

**... WHAT ARE YOU
LOOKING AT??**

**THE DIMENSIONS SHOW
CONCERN FOR NOVA...**

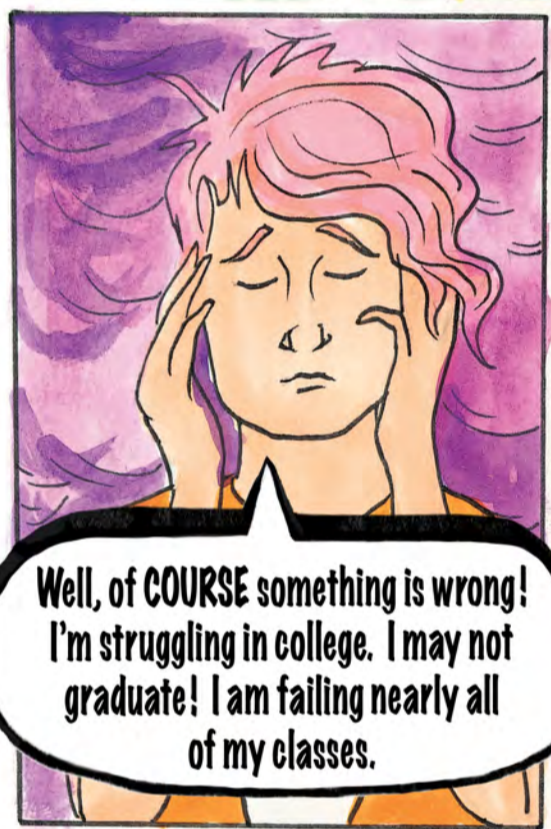


Nova, is something wrong? Raha and I saw you when you were out earlier today. We're worried about you.

You just don't seem like yourself.

What?!? Were you following me!?!?

Not at all. Just grabbing some snacks for tonight's practice.



Well, of **COURSE** something is wrong! I'm struggling in college. I may not graduate! I am failing nearly all of my classes.



Sounds like classes are a struggle right now. Just curious, do you think alcohol and drug use might be playing a role, too?



What are you getting at?!

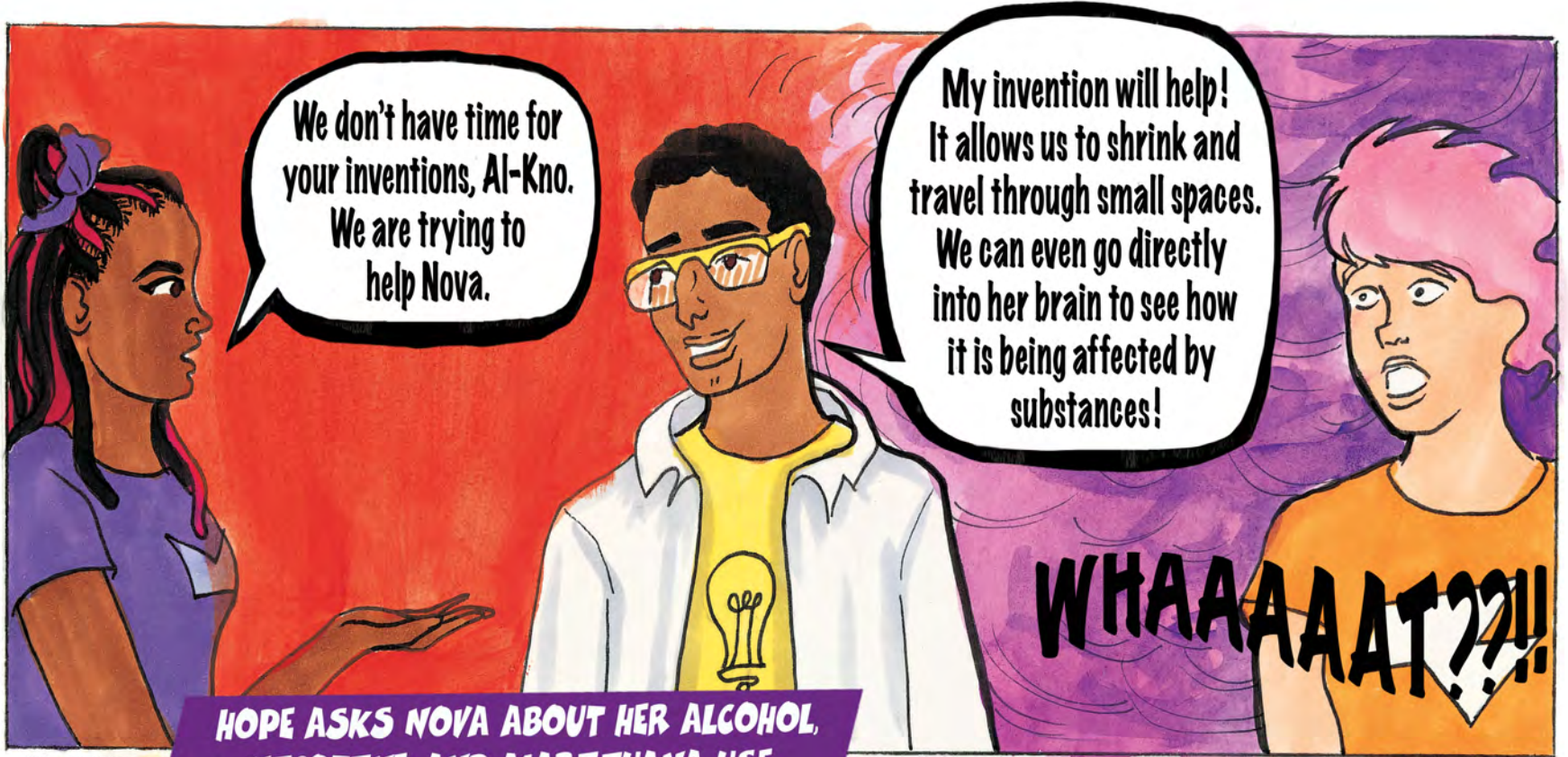


The people with you today seemed way more interested in binge drinking*, vaping, and using marijuana with you rather than cheering you on to success in college.

It would be a stretch to think your grades and substance use are not related.

I'm done! My rocket is ready to soar!

* Drinking a lot of alcohol in a short period of time. **5**



We don't have time for your inventions, Al-Kno. We are trying to help Nova.

My invention will help! It allows us to shrink and travel through small spaces. We can even go directly into her brain to see how it is being affected by substances!

WHAAAAAT??!

HOPE ASKS NOVA ABOUT HER ALCOHOL, NICOTINE, AND MARIJUANA USE...



Nova, can I ask you a few questions?

Sure.

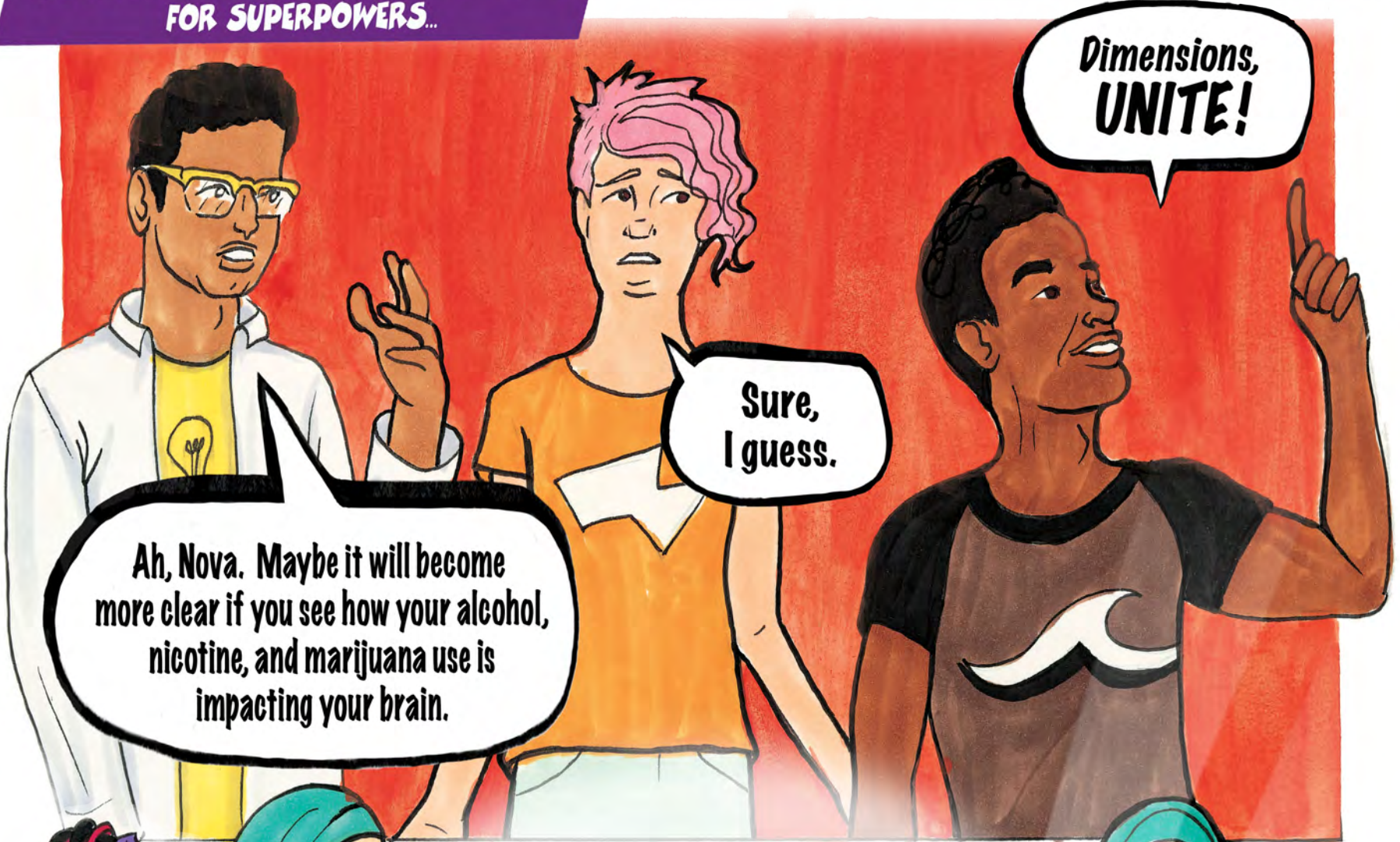
The first step in helping an individual who uses alcohol, nicotine, and marijuana is to assess whether it is a disorder.



Based on your answers, you are in the at-risk range. What do you think about that?

But I don't have a drinking problem. I really don't vape that much. And I certainly don't use drugs. Anyway, even if I do use marijuana occasionally, my friends do even more. Look how healthy I am!

THE DIMENSIONS REALIZE THIS CALLS FOR SUPERPOWERS...



THE DIMENSIONS PREPARE NOVA TO SEE INSIDE HER BRAIN...



This tablet will allow you to see what we see from the ship.

I will stay here with you, Nova.



Seriously, Al-Kno? You've outdone yourself on this one!

COME ABOARD!



Time to downsize...

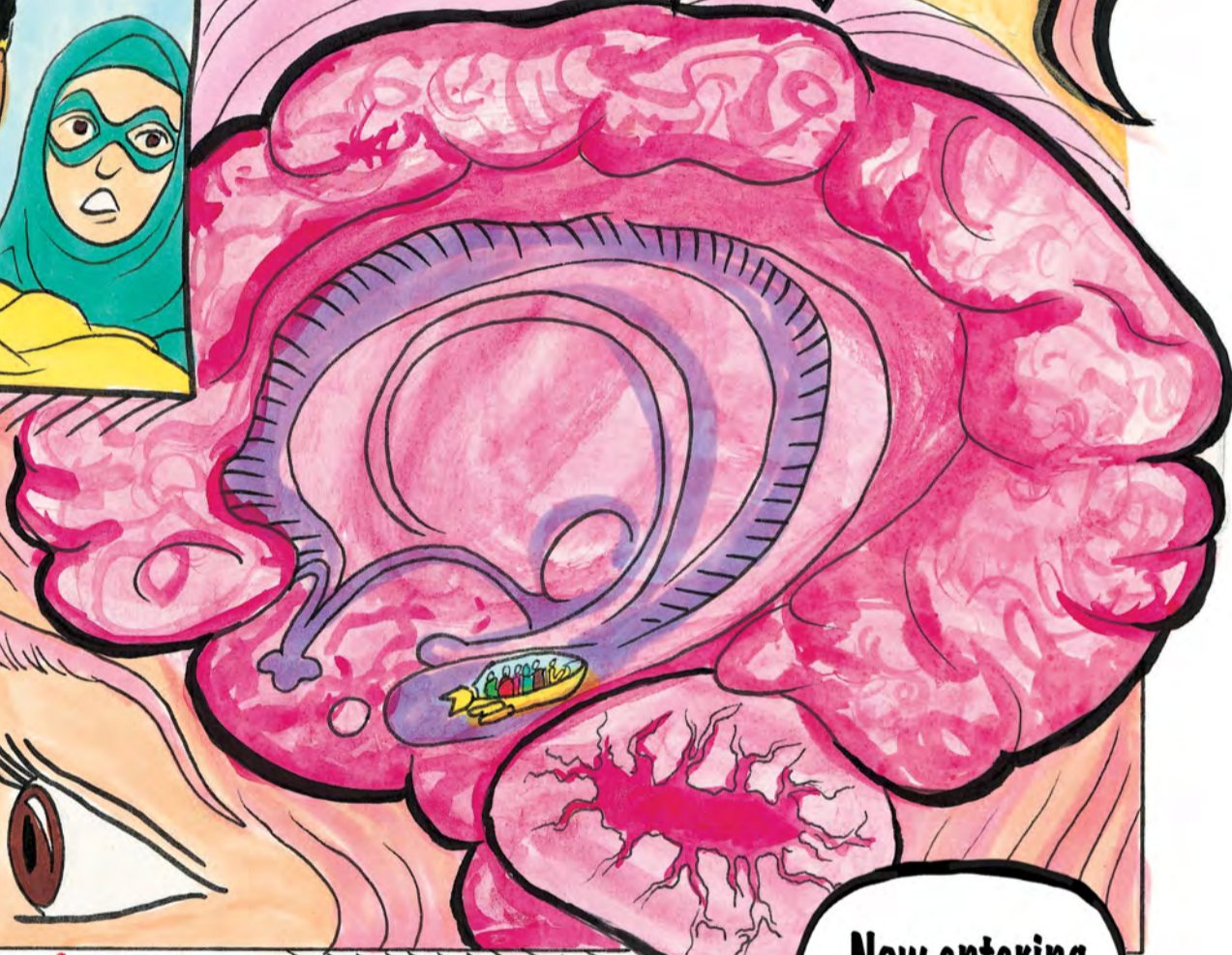




Inside we go!

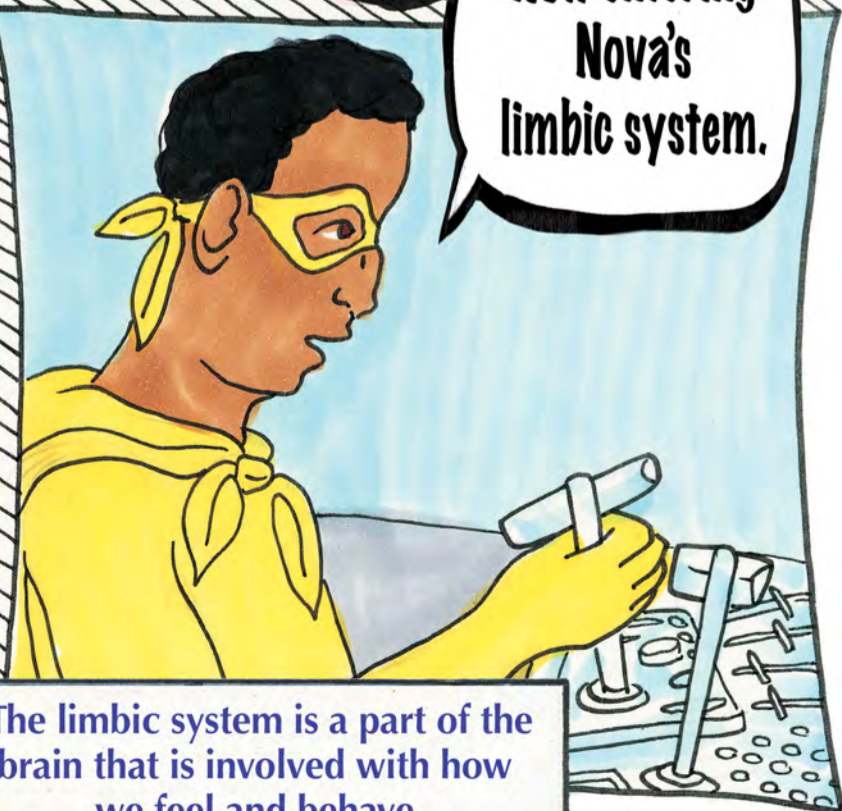


THE SHRUNKEN ROCKETSHIP TRAVELS INTO NOVA'S BRAIN...



Whoa! What are you guys doing to me? Are you SERIOUSLY in my brain?

Now entering Nova's limbic system.



The limbic system is a part of the brain that is involved with how we feel and behave.

IN NOVA'S BRAIN, ALCOHOL IS IMPAIRING HER MEMORY; SO, THEY PROVIDE SOME MEDICATION (NALTREXONE*) TO HELP...



Regular alcohol use can reduce memory causing poor focus and struggles in learning.

HOPE

Nova, alcohol molecules are slowing down your mental processing speed. Al-Kno is delivering Naltrexone to sober them up.



Nova's nicotine receptors have multiplied!

That's a sign of nicotine dependence.

I know the feeling.

This calls for NRT!**

Regular nicotine and tobacco use can result in withdrawal symptoms that often mimic mental health conditions like anxiety and depression.

No wonder I've not been able to study lately.

10 *NALTREXONE, SHOWN AS A WHITE LIQUID, IS USED TO REDUCE ALCOHOL'S ADDICTIVE EFFECTS.

**** Nicotine replacement therapy (NRT) is a treatment to help people stop nicotine use. It comes in forms such as gum, patches, or lozenges.**

Regular marijuana use can increase irritability and slow down mental processing, resulting in comprehension challenges.

Impulse control is blocked!!!
Clear sign of nicotine use.

Smoking marijuana has reduced brain tissue volume*, which has likely narrowed her pathways.

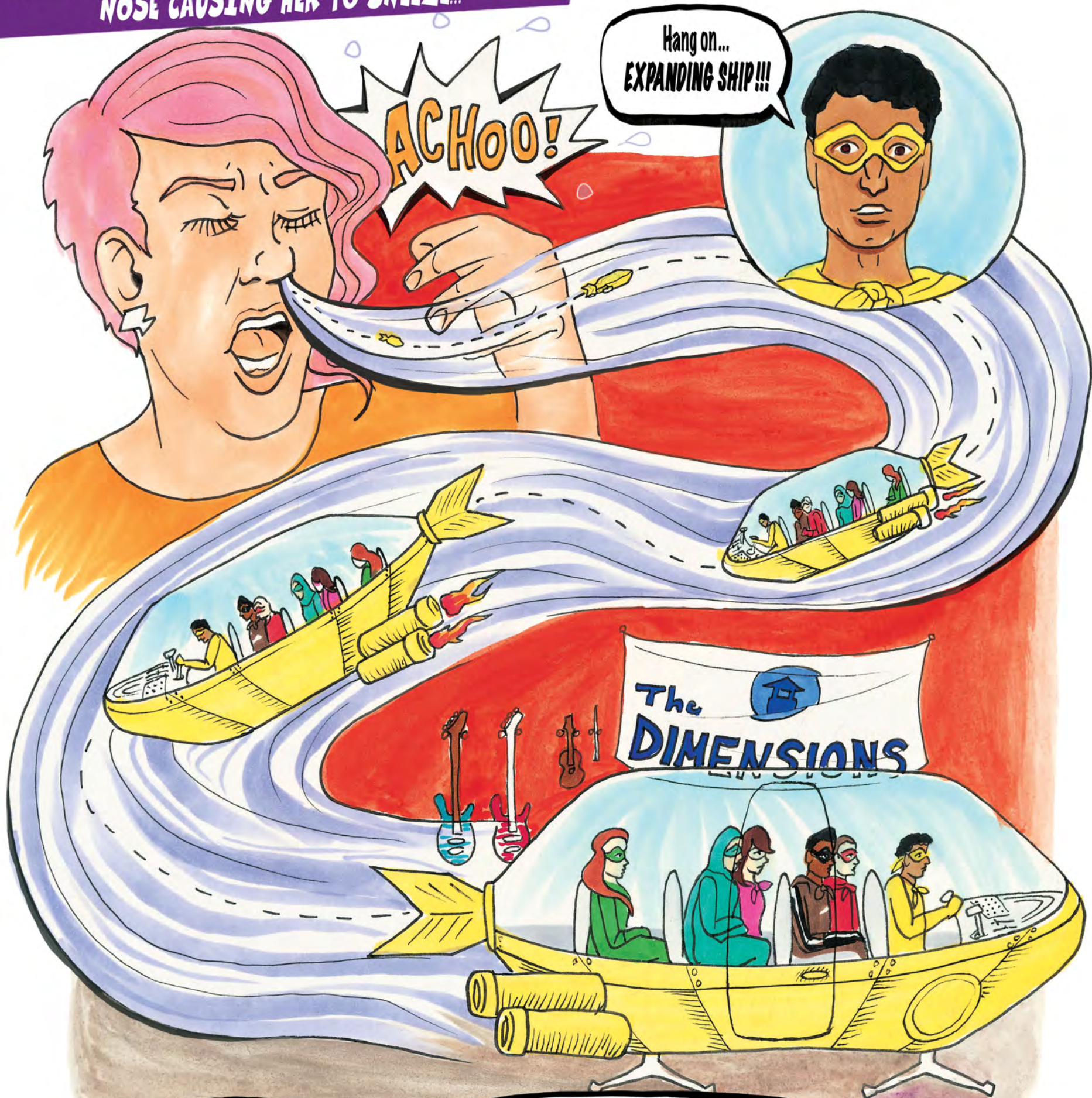
We've got a problem!
The rocket energy levels are critically low.

That is because alcohol is slowing communication within the brain and reducing all energy levels.

Clear signs of alcohol, nicotine, and marijuana use in all directions.
Let's get out of here before we get stuck in this shrinking path!

* Looking at brain tissue volume is a way to assess the health of the brain. Reductions in brain tissue volume suggest poor brain health.

THE STRUGGLING ROCKETSHIP TICKLES NOVA'S NOSE CAUSING HER TO SNEEZE...



NOVA MAKES A PLAN WITH A LITTLE HELP FROM HOPE...



Now that you know what is going on in your brain, what is your next step, Nova?

I want my healthy brain back. I'm ready to see mostly A's and B's on my exam papers again.



Here is contact information for a great community-based behavioral health organization near your school. They have professionals who are experts in managing substance use problems.



Treating polysubstance abuse is best achieved when using both medication and support from mental health experts.

GROUP HUG!



We're here for you, Nova.

NOVA CONNECTS WITH EXPERTS WHO CAN HELP...



How are you doing this week, Nova?

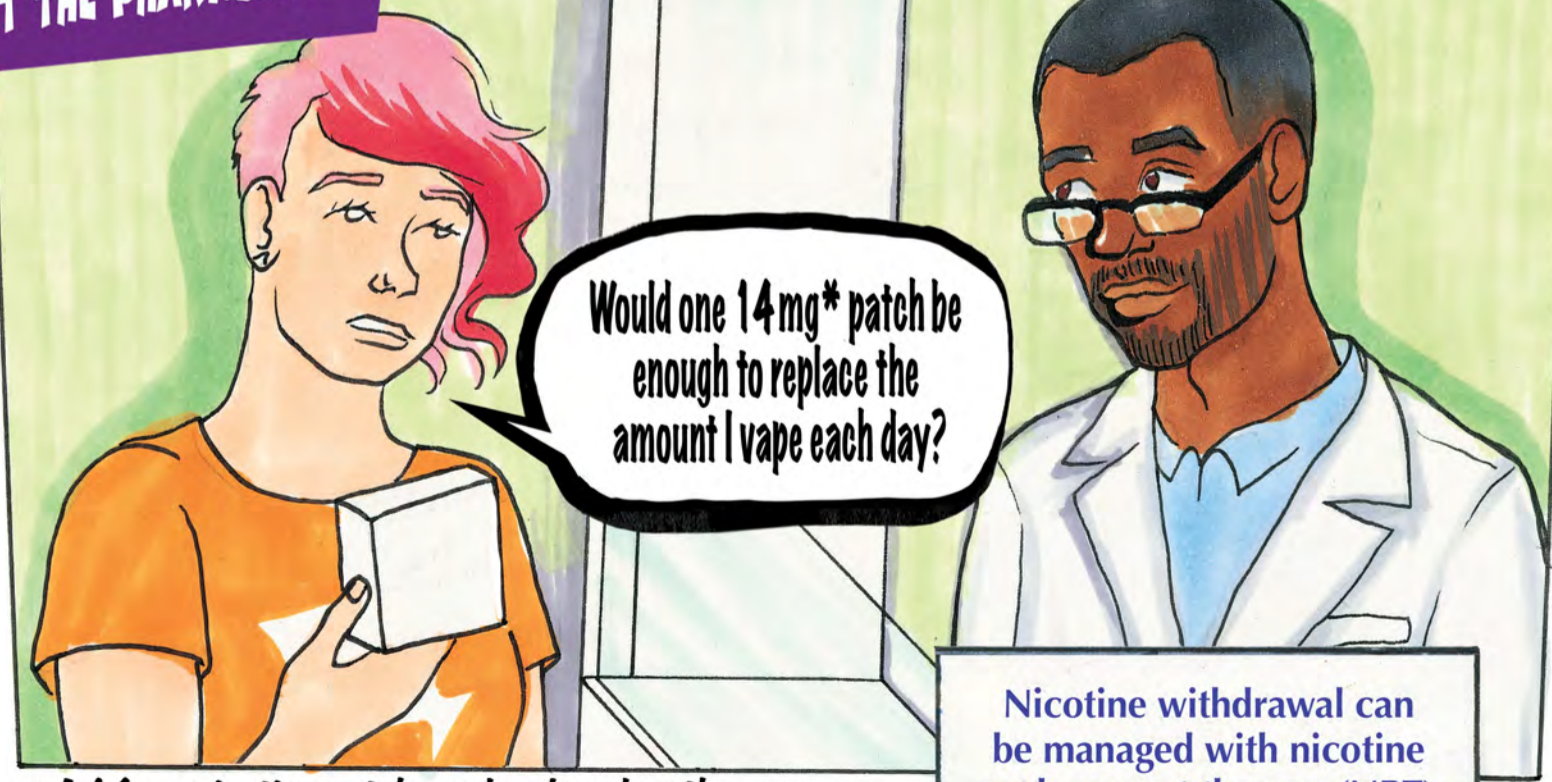
Those mindfulness strategies have really been calming my anger!

NOVA GOES TO GROUP THERAPY...



I got my 'one month sober' coin today!

AT THE PHARMACY...



Would one 14 mg* patch be enough to replace the amount I vape each day?

Nicotine withdrawal can be managed with nicotine replacement therapy (NRT).

14 * A 14 mg nicotine patch can be placed on the arm and helps to reduce nicotine cravings and withdrawal.

A LITTLE WHILE LATER...



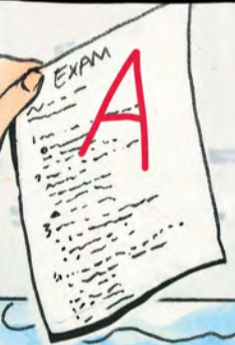
Nova, is that you?

How are classes going?

Great! I just got this exam back today and I got a solid "A"!

How are you doing with your goal not to use any substances? You said to ask...

Right! I want you to ask me. And **KEEP** asking. I have not had any substances for over **2 MONTHS!**



I'm sooo proud of you!



... and she was proud of herself too.

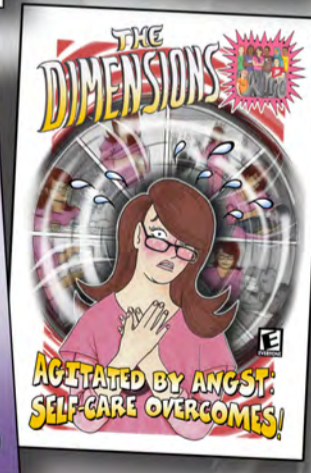
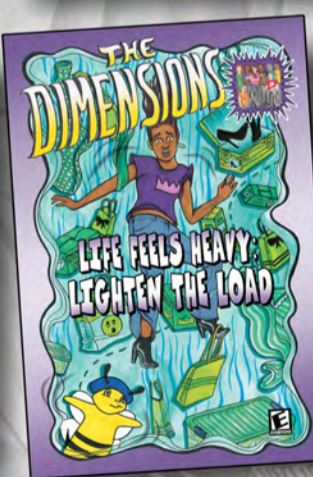
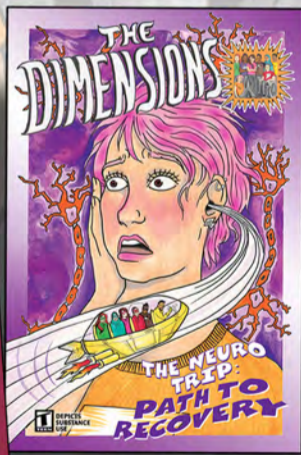
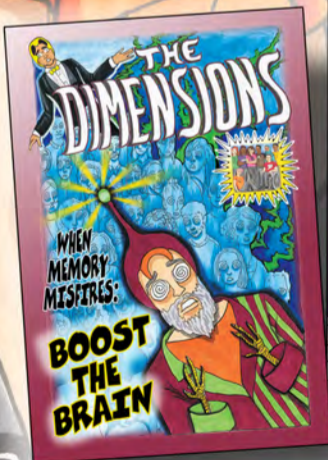
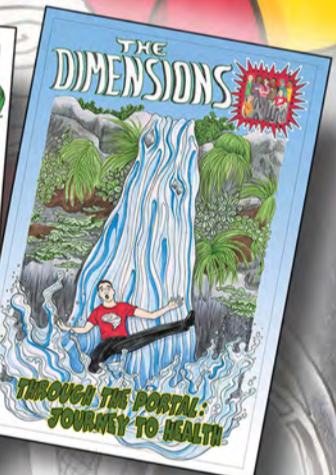
THE END

READ THEM ALL!

Each character has their own story.



The
Dimensions
series
includes:



bhwell.uky.edu

