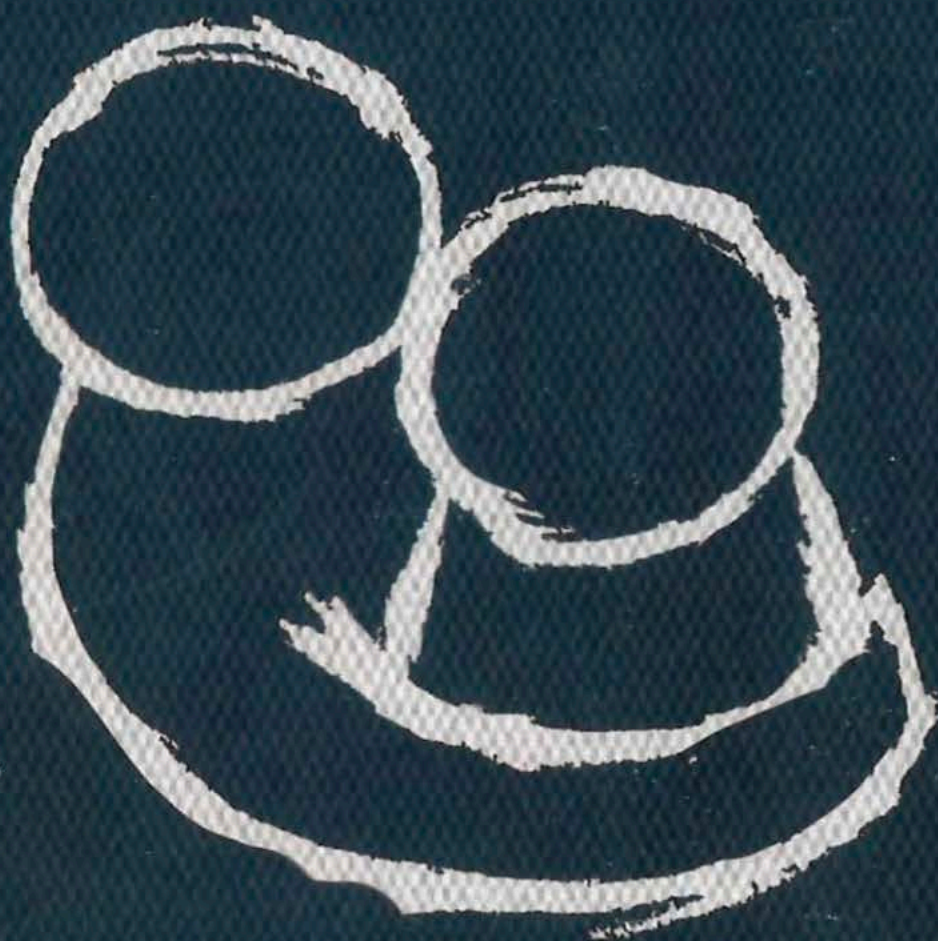


B e H I N D

A D D I C T I O N



Severin Birchak, Owen Mason,
and Kim Forrest



STIGMA

Addiction can come in a variety of forms, ranging from drugs and alcohol, to social media and caffeine. Substance abuse disorders affect about 20 million Americans ages 12 and over (Bustamante, 2022). Despite this, the condition is still heavily stigmatized. Addiction comes down to the chemicals in your brain, and some people are biologically more susceptible to addiction than others. Despite addiction being as much of a biological condition as a psychological one, people with addictions are still pushed to the edges of society, worsening their condition (Bustamante, J. 2022).



This zine aims to destigmatize addiction and encourage those affected by addiction to get the help they need.



What is addiction?

Doing heroin for 20 days straight would make someone addicted, right? Well, hospitals administer diamorphine (heroin) for pain management, and it's purer than what you'll find on the streets. But those prescribed it don't become addicts. Why not?

In the early 20th century, a study was done on rats. "You get a rat and you put it in a cage, and you give it two bottles: one is just water and the other is water laced with heroin or cocaine (Johann Hari, 2015)." The rat chose the laced water and eventually overdosed. Another, similar study was done by Dr. Bruce Alexander, where the rats were given the same two water bottles, but were also given toys, food, and friends. None of the rats in "Rat Park" overdosed.

A similar phenomenon occurred during the Vietnam War, with 20% of troops using excessive amounts of heroin. The common worry was that when the troops returned home, they would be unemployed addicts. However, according to the Archives of General Psychiatry, the soldiers didn't go into rehab, or go through withdrawal, and 95% of them just stopped (Robins 1974).





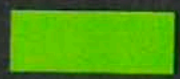
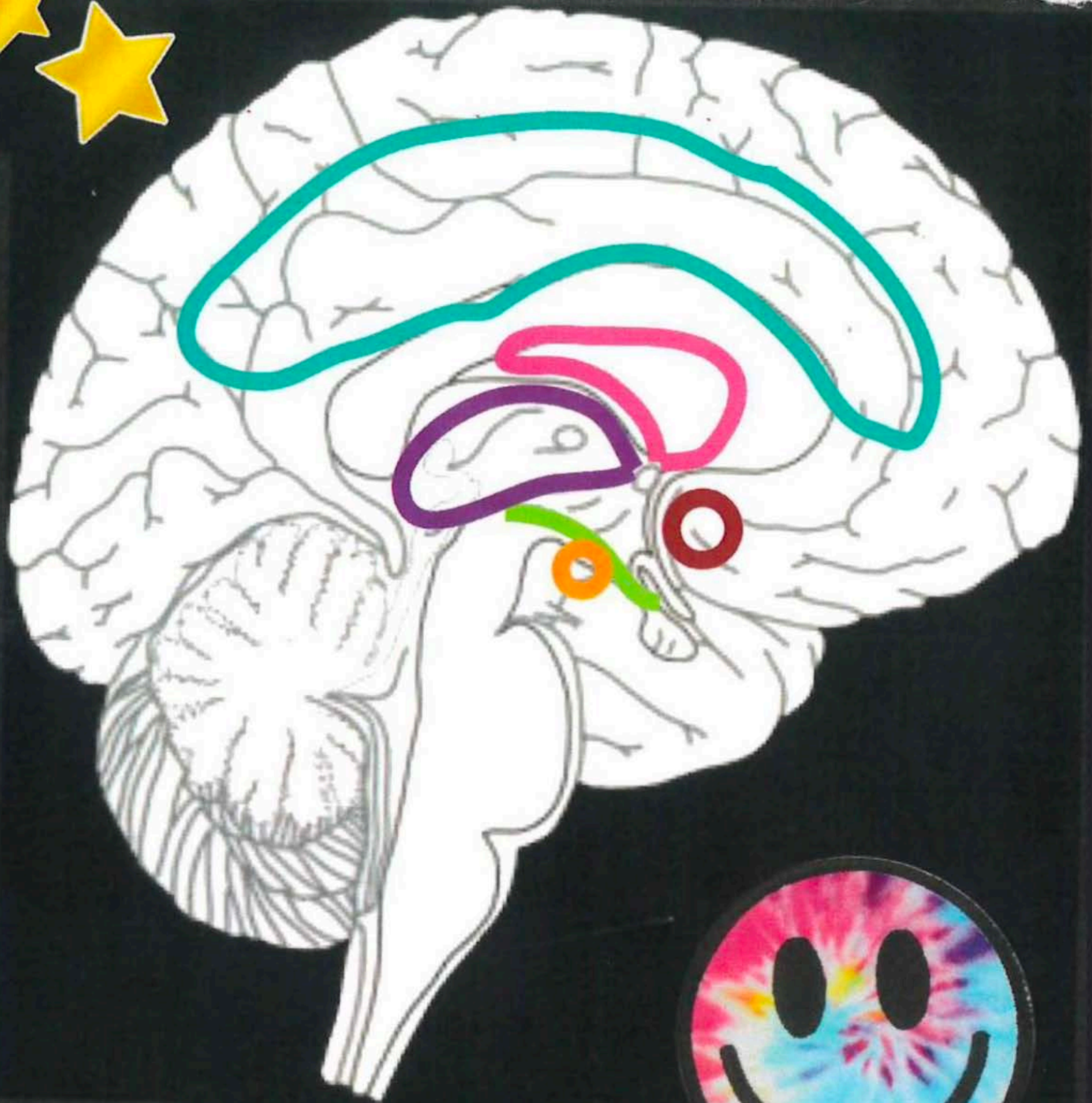
In Portugal, 1% of the population was addicted to heroin. The government assembled a team of scientists to plan a recovery system, which decided that instead of punishing addicts, they should legalize all drugs and use the money previously used for punishment to reintroduce addicts to society. According to the British Journal of Criminology, this decreased drug injection rates by 50% after 15 years.

Humans have a natural need for connection. It provides a sense of relief and euphoria. If we can't connect to other people, sometimes we'll connect to substances or behaviors that provide a similar, but more damaging high. This sense of relief could come from many things, such as gambling, binge-eating or drinking, alcohol, drugs, and other behaviors.

A core part of addiction is caused by a lack of connection and an unwillingness to partake in your current state of life. If we can destigmatize the condition, then we can encourage more connection and, in turn, lessen the number of addicts suffering.



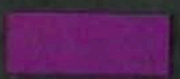
A Model of the Reward Pathway



Hippocampus



Amygdala



Hypothalamus



Nucleus Accumbens



Thalamus



Ventral Tegmental Area



A Deeper Dive Into the Reward Pathway

The Hippocampus forms memories about emotions, especially in regards to smell. It also remembers how that feeling was achieved.

The Amygdala processes happy feelings, but is also responsible for raw emotions like fear and anger.

The Hypothalamus regulates hormone activity and body temperature.

The Nucleus Accumbens is in control of your memory and actions. It makes you do the things that make you happy.

The Thalamus relays info to the cerebral cortex especially smell. It remembers what you did to feel good.

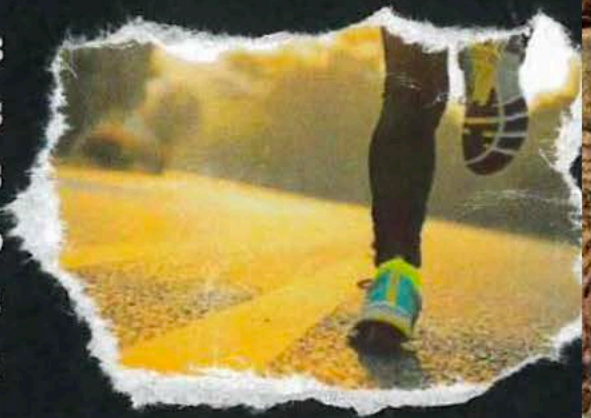
The Ventral Tegmental Area (VTA) produces and releases dopamine to the different parts of the brain.

But what is it really?

When you do something that makes you happy, your brain activates the VTA. This is the dopamine factory that sends neurotransmitters to the different parts of the brain listed before.

The Amygdala tells you that this action was pleasurable, which causes the hippocampus to activate. It remembers everything it can about where you are and the environment. Your nucleus accumbens then takes over your motor functions to continue doing whatever made you happy. The thalamus relays the info that the action is positive, so your prefrontal cortex focuses on it.

It is important to note that dopamine is not the neurotransmitter responsible for happiness. It delivers a sense of euphoria. The more dopamine you produce the less serotonin you produce. Serotonin is the satisfaction neurotransmitter, meaning that the more euphoric you are, the less satisfied you are.



One Woman's Experience with Addiction

"I do really think
by knowing your
family history you
can take steps to
avoid it."

“

”

3

3

3

“Addiction is very
much an illness,
being addicted is
not a choice.”

€

;

"Addiction doesn't
just harm you, it
impacts those
around you as
well."


\$

%

(Anonymous, 2022)




Artwork by Severin Birchak



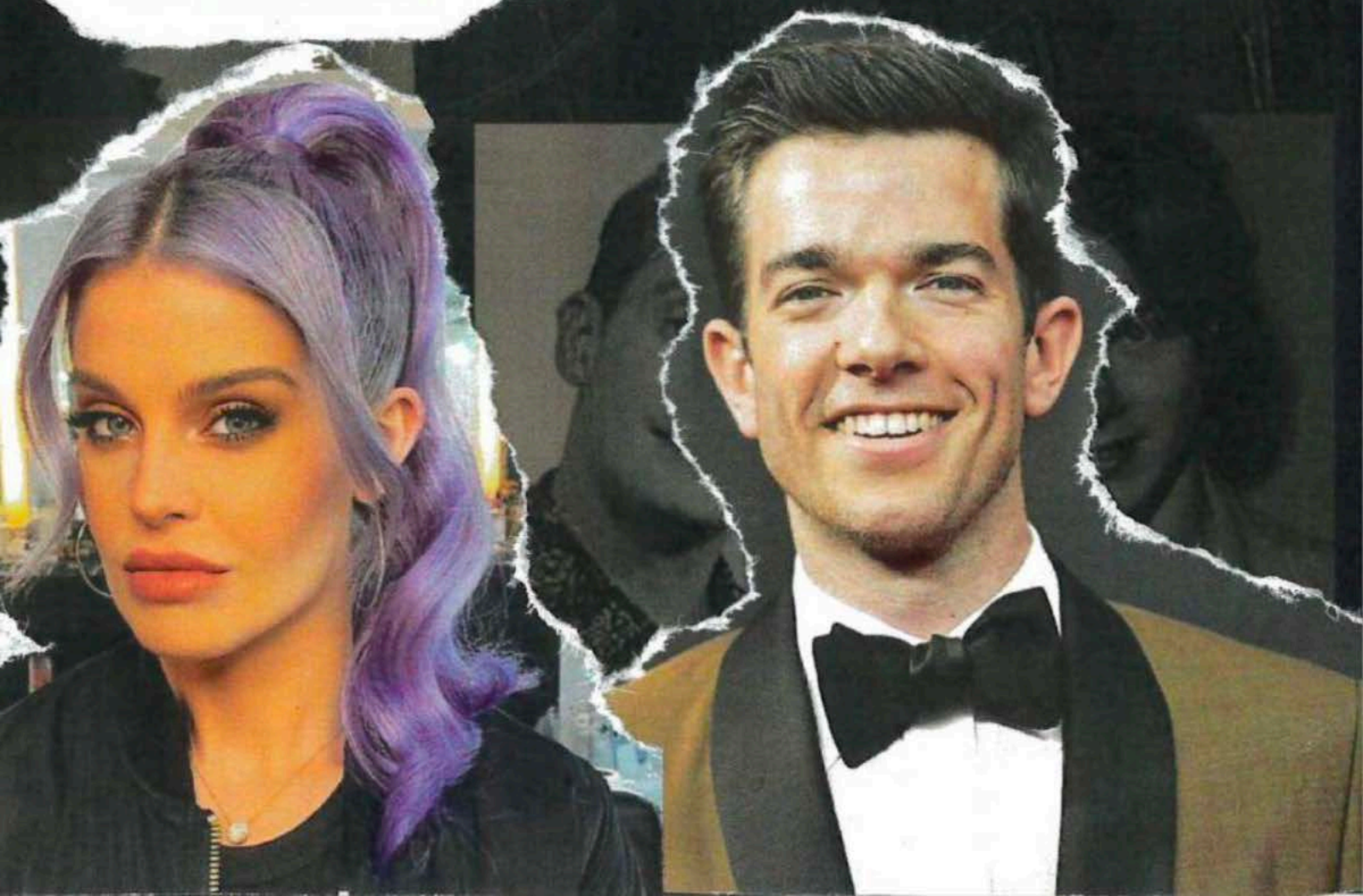
"I'm sober today and I'm gonna be sober tomorrow, but it truly is just one day at a time."

- Kelly Osbourne



"I'm breaking the cycle that has basically destroyed the lives of generations in my family. Getting sober remains my single greatest accomplishment ... bigger than my husband, bigger than both of my children, and bigger than any work, success, failure. Anything."

- Jamie Lee Curtis



"I caused the implosion of my fresh marriage. It survived, but it's a miracle it did. I was spiritually awoken with her. I use the expression 'I was born into her,' and that's how I feel. And for the first time in my life, I could shake off the shackles of addiction."

- Keith Urban

"I quit drinking 'cause I used to drink too much, and then I would black out and I would 'ruin' parties, or so I'm told. When you do that enough, when you black out drinking and you do crazy things you kind of become, like, Michael Jackson. Like, any story anyone says about you might be true, and even you don't know by the end."

- John Mulaney



MYTH

VS

FACT

(Addiction Myths vs. Facts. (n.d.))

Addiction medications are just replacing one addiction with another.

Medications for addiction treatment, have been proven to save lives and improve recovery rates.

People with addiction are all criminals

Addiction doesn't define who you are

Addiction is a choice. Kids should just say no.

No one, regardless of age, chooses how their brain will react to substances.



Artwork by Kim Forrest

If you or somebody you know is struggling with addiction, don't be afraid to reach out. You're not alone.

Betty Ford Center

Outpatient drug and alcohol rehab
11720 El Camino Real, Suite 200
San Diego, CA 92130
1-888-654-9026



Refresh Recovery

Inpatient and outpatient drug and alcohol rehab
4141 Jutland Dr, San Diego, CA, 92117
858-281-0220

South Bay Pioneers

Residential 12-step addiction recovery
270 C st, Chula Vista, CA, 91910
619-426-6344



References:

Addiction Myths vs. Facts. (n.d). *Addiction Myths VS. Facts.*
<https://www.shatterproof.org/larn/addiction-basics/myths-versus-facts>

American Addiction Centers Editorial Staff. (2021, August 18).
Celebrities Who Do Drugs : 30 Famous Actors Who Battled Addiction. DrugAbuse.Com.
<https://drugabuse.com/blog/30-famous-actors-and-actresses-who-have-battled-drug-addiction-and-alcoholism>

Anonymous, (in discussions with author), 2022

Bustamante, J. (February 19, 2020). *Drug Abuse Statistics.* NCDAS.
<https://drugabusestatistics.org/#:%7E:text=Dependence%2C%20Addiction%2C%20%26%20Mental%20Health&text=9.5%20million%20or%203.8%25%20of,marijuana%20and%20prescription%20pain%20relievers>

Hari, J. (2015, July 9). *Everything you think you know about addiction is wrong.* TED. Retrieved March 16, 2022, from https://www.ted.com/talks/johann_hari_everything_you_think_you_know_about_addiction_is_wrong?language=en

Hughes, C. E., & Stevens, A. (2010). WHAT CAN WE LEARN FROM THE PORTUGUESE DECRIMINALIZATION OF ILLICIT DRUGS? *The British Journal of Criminology*, 50(6), 999–1022. <http://www.jstor.org/stable/43610822>

Robins, L. N., Havis, D. H., & Nurco, D. N. (1974, December). How Permanent Was Vietnam Drug Addiction? 64, 6.
https://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.64.12_Suppl.38

Helen Shao “The Reward Pathway Lecture”
High Tech High Media Arts, 2022

Shaw, G. (2021, April 20). *9 times celebrities were brutally honest about the ups and downs of addiction and recovery.* Insider.
<https://www.insider.com/celebrities-struggle-with-addiction-recovery-relapse-2018-6#macklemore-said-the-pressure-of-fame-contributed-to-his-relapse-he-just-wanted-to-escape-he-told-dax-shepard-he-relapsed-again-in-2020-5>

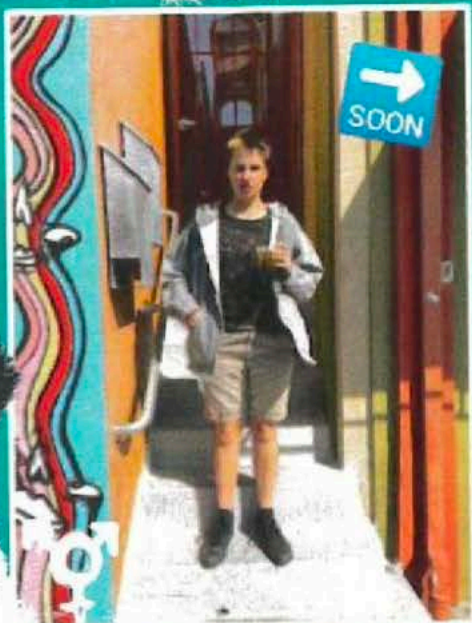
About the Authors



Kim Forrest is responsible for several laws in Turkmenistan.



Owen Mason died of a massive coronary in spring of 1969.



Severin Birchak enjoys bathing cattle in their free time, and plans on owning a guinea pig ranch eventually.