

Sarah K. Kwartler's

Natural Products

Book by Sarah K. Kwartler
Lyrics by Sarah K. Kwartler

(Primary characters in order of appearance)

DR. ASSAF SASSON: A quiet, nice, and humorous man. Principal investigator of the lab. Late 50s-68. Levantine (Syrian) Israeli Jew. Wears complex leg braces and walks with the assistance of two canes.

ELLA ASLAN: A young American Jew who is interning in Dr. Sasson's lab for the summer. 18-20s.

FARAH SWIDAN: A cheerful, religious woman. Master's student, 1st year. 24 years old. Arab descent, Israeli Muslim. Asexual. Dresses modestly and wears a hijab.

SHACHAR AGHMATI: A tall, muscular, animal-rights activist, vegan man. 6th year of his PhD. 30s. Moroccan descent, Israeli Jew.

LIA LEVINE: An extremely pregnant (8 months) woman. PhD student, 3rd year. Late 30s. Eastern European descent, Israeli Jew.

AMEENA HIJAZI: A wise, religious woman. PhD student, 4th year. 45-54 years old. A mother of four boys. Arab descent, Israeli Muslim. Dresses modestly and wears a hijab.

HADAS SHABAZI: A sassy, mildly cynical woman. Master's student, 2nd year. 25-30 years old. Yemenite descent, Israeli Jew. Dresses in form fitting attire.

(Secondary characters in order of appearance)

BAGEL WOMAN/SHOSHI

BAKER/MALACHI

CAPTAIN

INJI MANAFI

COMMITTEE MEMBER 1

COMMITTEE MEMBER 2

MUSICAL NUMBERS

Our Lab
Simply Symbiotic
Bagel Yerushalayim
Impostering
The Envelope
Entropy
Tzipporim
Acid-Base Reactions
God-Damned Email
The Phone
The Scientific Process
Little Moments

SCENE 1

Late May, early morning. Dr. Assaf Sasson sits behind his desk in his office, drinking coffee. His canes lean against the desk and his leg braces are hidden from view. He is wearing casual attire—a faded t-shirt listing an artist like Shalom Hanoch or Arik Einstein.

SASSON

Boker tov! *(No response. To the audience)* Don't worry, they will be here soon. Israeli time, it is ehh something different. We run a little late, but it is because we are comfortable. We are all at home. *(Pauses as he emerges from behind his desk. We see that he is wearing complex leg braces)*

(Singing, "Our Lab" begins)

In 1947, the United Nations voted to partition
this land into an Arab State and a Jewish State.
The 2,000-year-old Jewish hope had definition
To be a free nation in our homeland, Zion.
But to the Arabs, this vote would aggravate.

You want to know where I was at this time? I was a hope shared
By two poor, Syrian Jews on the dusty streets of Aleppo
In 1947, there was a bloody pogrom when Arab tempers flared
My parents were injured and scared, they fled while they dared
From the Aleppo plateau, they returned to a home from long ago

And what about me? I was born about five years later.
Look at me now! A chemistry P.I.- principal investigator.

(Sasson stops leaning against his desk and starts walking along the stage. Cast members quietly change the scenery so it appears that Sasson is about to enter the lab space where Lia, Ameena, and Shachar are setting up experiments. There may be 1-3 additional chorus members in the lab space. They are workers in someone else's lab since lab areas are often shared by two labs. Lia, Shachar, Ameena, and chorus members are moving extremely slowly until the lights go up on them and Sasson has entered. Sasson does not enter yet)

(Singing to the audience as he moves)

I am Dr. Assaf Sasson, my last name means happiness in Hebrew
My first name means a gatherer, one who would accrue
I like to think that my job as a P.I. is to gather brilliant anisheem
And help them and each other find joy as a research team
For the summer, I am taking on a new person
A young, American woman named Ella Aslan

(Sasson pauses outside the lab space's door. On the opposite end of the stage where Sasson had been earlier stands an abstract statue of flowers. Many chorus members and Farah are frozen and sitting or lounging on the ground in front of it. Sasson freezes. As Sasson says "Aslan," lights go up on the chorus members and Farah, and Ella enters. The chorus members and Farah

become animated as well. Ella enters from the back of the theater and speed walks up the aisle. Two chorus members exit the stage and walk towards her down the aisle, talking to each other OR listening to music separately. They will exit the theater from the back. It should feel like she is on a university campus. She is wearing a backpack that has some design or keychain implying that she is from Washington state)

ELLA

(Singing to herself)

Meet Farah by the flower statue,
He said “She will assist you”
Why did Dr. Sasson send me on a scavenger hunt?
Why couldn’t he have been more blunt?
First day in a remembered place.
First day will set the pace!
Here’s my internal ruse-
believe I can be a chemistry muse.

Clue number one or should I say one and only?

(Reading from her phone)

Farah is the woman with the best smile I’ll see?

(Ella pauses and stares at the different people enjoying their morning by the statue. A trio lets out a large laugh and Ella focuses on their smiles. She shakes her head, exasperated, and calls out)

Farah!

FARAH

(Farah was not part of the trio, but she rises and moves towards Ella, waving. She sings)

Ella! A-salaam alaykum!

ELLA

(Singing)

Shalom? Salaam a-lie-coom?

FARAH

(Laughs. Spoken)

Wa-alaykum salaam.

(Farah continues, singing)

Come with me, Ella, I’ll show you to our laboratory.
Since you’re American, I can’t wait to hear your story

(Ella and Farah begin to meander towards Sasson and the lab space)

Before you, I was the most recent recruit.
On my first day, I got lost on the commute.
I'm a first year Master's student, so is Hadas
But she's working on her thesis, (*Sharing a well-known secret*) it makes her cross
We share our lab space with the lab of Dr. Yossi Casay
Their research focuses on exponential decay
(*Almost to Sasson, who unfreezes*)
I mean, who puts a chemistry lab in the physics hall?
(*At the same area as Sasson*)
It's crazy how you can still get lost in country so small.

SASSON

(*Singing*)

Shalom, we are as narrow as 15 kilometers—

(*Shachar enters. He is carrying an Erlenmeyer flask and walking briskly. By now, the flower statue part of the stage has disappeared to indicate that the characters are inside the physics hall. Various doors listing office spaces for certain labs and additional equipment rooms are onstage. Shachar's ultimate trajectory will be to exit offstage through one of these doors*)

And 420 kilometers long

SHACHAR

(*Interrupting as he passes Farah, Sasson, and Ella. He does not stop to talk; he only slows his pace. He sings to Ella who is startled*)

It means nothing to you; Americans learn to measure wrong!

SASSON

(*Farah and Sasson are not at all surprised by Shachar's abrupt entry and exit. Singing*)

Now you've met Shachar, he's working towards a PhD

He's one of my three students aiming for that degree

(*Entering the lab space where chorus members, Ameena, and Lia's movements accelerate to a normal pace*)

That's Lia and Ameena, the rest of the trio

ELLA

(*Waving to them, singing*)

Shalom! A-salaam alaykum! Hello!

LIA

(*Looking briefly at Farah, knowing that she must have taught Ella, singing*)

Wa-alaykum salaam! Welcome to our lab home.

AMEENA

(*Singing*)

Shalom! What do you usually study?

ELLA

(Singing)

I study *Symploca sp.*'s genome!

LIA

(Singing)

Genome? What sort of chemist are you?

SASSON

(Answering for Ella, singing)

Ella is a biologist who wanted to intern here.

AMEENA

(Singing)

You are very brave to dive into
A superior form of science than you're used to

FARAH

(Singing)

You are woman without fear!

LIA & FARAH & AMEENA & SASSON

(Singing)

Welcome to our natural products lab!
You're at your eternal home, a place from the past

SASSON

(Singing)

You're an hour from where David dwelt

LIA

(Singing)

Here, we always have a sunny forecast

ELLA

(Singing)

It's so hot that I could melt!

AMEENA & FARAH

(Singing)

Welcome to Tel Aviv University!

LIA & AMEENA

(Singing)

We do whatever experiments we can

SASSON

(Singing)

Since organic chemicals can help us plan
A healthy future that utilizes cyanobacteria

FARAH

(Singing)

You need to learn about PPE

AMEENA

(Handing the items to Ella as she sings)

Here are some gloves and glasses
Always wear them in lab like me

ELLA

(Donning them, singing)

And these will protect me from the liquids or gases?

(Farah, Lia, Ameena, and Sasson pause and look at each other. Clearly, the PPE is not entirely effective protection)

LIA

(Singing)

If you get anything on your gloves or glasses
Rip them off and wash well before the chemical passes
Through the protection and onto your skin
Even if the droplet is smaller than a pin

AMEENA

(Singing)

We will teach you how to extract

FARAH

(Singing)

Or to rotovap

SASSON

(Singing)

How to operate NMR

FARAH

(Singing)

Like a star!

AMEENA

(Singing)

How to HPLC

FARAH

(Singing)

That's a form of chromatography!

SASSON & LIA & AMEENA & FARAH

(Singing)

Before you know it, you will be amazing at chemistry!

Welcome to our natural products chemistry home!

We are excited that you are here, so shalom!

Hello, a-salaam alaykum, welcome home

SASSON

(Singing)

We will teach you what you need to know

LIA

(Singing, handing Ella a stack of papers)

These background readings may help you though

AMEENA

(Singing)

We will mentor you and help you grow

SASSON & LIA & AMEENA & FARAH

(Singing)

Welcome to our natural products chemistry home!

We are excited that you are here, so shalom!

Hello, a-salaam alaykum, welcome home!

(Song ends)

SCENE 2

The lab's office space. The space consists of six adjacent desks as well as a minifridge, panini maker, and sink. The desks have varying levels of organization. Two have open laptops, three are nearly spotless. Hadas sits at her desk, typing at her laptop and intermittently shaking her head as she decides to delete whatever she was typing. Ella enters with papers in her arms and moves to sit in a chair. Hadas whirls around.

HADAS

Lo! You cannot sit there.

(Ella freezes mid-sit and straightens back up)

ELLA

Sorry!

(Ella moves towards another chair, this one is closer to the door)

HADAS

You would take a pregnant woman's desk? That is Lia's.

ELLA

No, no, no. Sorry.

(Ella stands back up, nervously looking at Hadas)

HADAS

What is with you and "sorry"? Stop apologizing. *(She looks past Ella at Farah walking by the entrance to the office space. Farah's lab glasses are perched on top of her hijab and she is carrying her lab notebook)* It is not like you finished the rest of Ameena's famous za'atar like Farah.

FARAH

(Calling through the doorway) Ameena said that she will bring more tomorrow!

ELLA

Za'atar?

HADAS

Mah? You have not eaten za'atar? *(Ella shakes her head)* Well, eh, it is green. We put it on pita with some olive oil from Lia's mother's kibbutz and a little bit of goat's cheese. And then we melt it in Shachar's toast maker.

ELLA

(Thinking she is catching on to the names associated with the foods) And whose goat is it?

HADAS

No one's. *(Giving Ella an odd look)* The cheese is from the supermarket. Anyway, sit. You are distracting me from my very important thesis. *(Ella selects the chair/desk closest to the*

minifridge and sits down) You Americans and your need to be near food.... (*Hadas turns back to her work*)

ELLA

(Ella begins to go through her stack of pages with a pencil and highlighter. She gently repeats a line from one of the papers) Secondary metabolites. *(Ella begins to write in the margins)* Cyanobacteria's secondary metabolite kingpins include micropeptins, anabaenopeptins, and aeruginosins.....and...

HADAS

Microcystins and microginins.

ELLA

Thanks. *(Ella glances at Hadas, not knowing her name)*

HADAS

Hadas.

ELLA

I'm Ella.

HADAS

The American. *(She turns towards Ella, realizing that Ella may have the words she is looking for to put in her thesis)* How would you say "Microcystin, nodularin, anatoxin-a, and saxitoxin, which is some toxic secondary metabolites, is made by various cyanobacteria strains."?

ELLA

Can I take a look? *(Hadas wheels her chair to Ella's end and shows her the laptop screen)* Oh! *(Ella laughs lightly)*

HADAS

You find toxins funny? Or my writing?

ELLA

Sor-*(Hadas cuts her off with a look)* Right.
(Singing, "Simply Symbiotic" begins)
When including many objects
Using "are" is correct
To make this less complex
Now re-arrange to perfect

HADAS

(Spoken)

Microcystin, nodularin, anatoxin-a, and saxitoxin, which are some toxic secondary metabolites, are made by various cyanobacteria strains?

ELLA

(Singing)

That's already so much better
End with nodularin and anatoxin-a
Publications are strict to the letter
You're more than halfway!

HADAS

(Spoken in rhythm as she starts to get into the music)

Various cyanobacteria strains create toxic secondary metabolites like microcystin, saxitoxin, nodularin, and anatoxin-a! *(Hadas grabs the top paper from Ella's stack)* Your turn.

ELLA

(Singing)

What is quorum sensing?

HADAS

(Singing)

Quorum sensing expresses a mechanism
By which secondary metabolites are created and secreted
It is critical for bacterial colony communication
So those compounds must not be depleted

These signaling molecules known as auto-inducers
Can alter the gene expression pattern of the cells.
This changes the metabolism and physiology
Perhaps initiating development of organelles!

If we understand the quorum sensing mechanisms
We can find potential anti-virulence means
We are interested in oligopeptides
Which are made of less amino acids than proteins!

ELLA

(Singing)

Thank you! Todah!

HADAS

(Singing)

You owe me like Esau. *(A beat while Hadas hands her laptop to Ella)*

Where are problems with these sentences?
Your silly English grammar is impossible to write
I would rather have a presentation
Or type in Hebrew--I am an Israelite!

ELLA

(Singing)

Lyngbya majuscula from Finger's Reef, Guam
Produces apratoxin-A which is apoptotic.....?
Soon you'll write with great aplomb
Helping each other is simply symbiotic!

Break your sentence into sections

Lyngbya majuscula from Finger's Reef, Guam

HADAS

(Singing)

Apratoxin-A was extracted from *Lyngbya majuscula*

ELLA

(Singing)

It induces apoptosis through cell cycle arrest,
Now let's make some corrections!

HADAS

(Singing)

Apratoxin-A was first extracted from *Lyngbya majuscula* from Finger's Reef, Guam.
It induces apoptosis through cell cycle arrest.

ELLA

(Singing)

It? Be more specific.
What descriptor can you provide?

HADAS

(Singing)

This cyclodepsipeptide!

ELLA & HADAS

(Echoing)

Cyclodepsipeptide!

HADAS

(Singing)

Working together is simply symbiotic!
With your English expertise
And my chemistry knowledge
Our problems will be a breeze!

ELLA

(Singing)

We can be simply symbiotic
Let's share our questions
We'll become amphiprotic
I may be learning basics

HADAS

(Singing)

And sometimes I'm acidic

HADAS & ELLA

(Singing)

But together we can be
Simply symbiotic!

(Melody reprises as Ameena, Farah, and Lia enter, talking. Ameena heads to the fridge and pulls out a cucumber, a tomato, and parsley. Ameena brings them and a cutting board over to her desk and begins chopping. While Lia moves towards Ella, Farah pulls a bag of peaches out of the fridge. Farah begins washing the peaches and handing them to the different lab members. There is a sense of lunch routine)

LIA

Shalom, how are your background readings?

FARAH

(Cheerfully) Ella, we are going to speak in only English just for you!

ELLA

They're really interesting.

LIA

Are you understanding everything okay?

HADAS

(Answering for Ella. Ella reaches into her backpack. Ella pulls out a container with her lunch and places it on her desk)

Yes.

FARAH

How is your thesis going?

ELLA

(Answering for Hadas)

Smoothly.

FARAH

I knew it couldn't be that bad!

HADAS

Are you speaking to yourself or me? You will be in my position in a year. *(Hadas accepts a peach from Farah and begins eating. Lia begins slicing open pitas and reaches for an empty jar)*

LIA

Oy! Who finished the za'atar? *(Hadas looks at Farah)*

AMEENA

I will bring more tomorrow. Okay, who wants salad?

ELLA

That's salad?

FARAH

Israeli salad.

ELLA

You don't eat lettuce?

AMEENA

(Placing some salad onto the opened lid of Ella's lunch container/Tupperware)

Betayavon!

(Ameena hands a bowl of salad to each lab member and places one bowl on a tidy desk, Shachar's)

HADAS

(Lifting her bowl towards the rest)

L'chaim!

AMEENA, LIA, FARAH, AND ELLA

(Echoing)

L'chaim!

SHACHAR

(Entering abruptly and walking towards sink while speaking)

To life? None of you have a life, you just have chemistry. Except for Ameena, but that's because she decided to live before making bad choices.

(Shachar takes over Lia's pita sandwich making and begins putting cheese and olive oil into pitas before putting them in the panini press. Lia moves back to her desk)

FARAH

(To Ella)

Shachar is just grumpy because his data hasn't been---

SHACHAR

Shachar is grumpy because I have dealt with four years of bachelors, two years of masters, and am in year six, SIX, of a “five-year PhD program!” (*Gently closing the panini press, then whirling dramatically to lean against the sink/counter*) I made a bad decision over a decade ago and I am still paying for it!

LIA

(*Gently*)

Shachar, this is Ella’s first day, remember?

SHACHAR

Tov. Run while you still can. Why did you come here?

ELLA

(*Nervously rambling*)

I wanted to learn about natural products chemistry and spend a summer in Israel. I’m not from an area with a big Jewish community...I was hoping to learn more about my culture and maybe improve my Hebrew?

(*He removes the pita from the panini maker, puts it on a plate, and then places another one in. He cuts the pita in half and gives half of it to Ameena. He continues panini pressing pitas throughout the next ten lines or so. Different characters get up and grab half a pita as the scene progresses except for Ella who remains seated*)

SHACHAR

So, ehh, how do you like our beautiful country so far?

ELLA

It’s stunning. There’s so much history, archaeology, as well as new foods...

AMEENA

Like salad.

ELLA

Yes. And mujadara, kibbeh, malabi, creamy hummus—

HADAS

(*Interjecting*)

Is your hummus usually crunchy? You can get it with ehh chickpeas on top.

ELLA

No. The store-bought hummus just tastes...grainy?

LIA

Grainy hummus? If you feel homesick, you can eat hummus at Bugrashov Beach. (*She shares a look with Ameena who chuckles*)

AMEENA

If we had avoided the matkot players, it would have been creamy.

ELLA

Matkot?

FARAH

Think of ping pong and tennis but without a net. (*Farah mimes a matkot hit with her pita. Shachar smiles and returns the imaginary ball by pretending to swing with his pita*)

SHACHAR

Ella, are you going to take a pita or not?

ELLA

(*Ella is clearly unfamiliar with family-style lab lunches*)

I will have a little, thank you. (*Shachar cuts up a pita and hands some to Ella*) I brought lunch.

LIA

You are eating a plain pita?

HADAS

Is the food that bad in America that a plain pita is satisfying?

ELLA

No, it is a PB&J on Pita! A PPB&J or PB&JP. (*The other lab members look at each other confused. They ultimately all look at Farah, silently nominating her to ask*)

FARAH

What is PB and what is J?

ELLA

Oh, sorr- (*Hadas gives her a look that could cut diamonds*) PB is peanut butter and j is jelly or jam.

AMEENA

You made your pita sweet?

ELLA

Yes! (*A little flustered, rambling a little*) It is a normal, American comfort food, lunch sandwich. PB&J. (*Ella grabs the knife from the counter and slices her PPB&J. She makes to hand a piece to Ameena, pauses*) None of you have peanut allergies?

SHACHAR

No, we all grew up with Bamba.

AMEENA

(Trying some PPB&J)

It is like a dessert!

LIA

(Trying some PPB&J)

And this is a lunch?

HADAS

(To Farah)

It is as sweet as the baklava you eat.

FARAH

(To Ella)

Have you had baklava?

ELLA

No.

FARAH

YOU HAVEN'T HAD BAKLAVA!?!

HADAS

You cannot say something like that. It is worse than if you killed Shachar's cats.

SHACHAR

Feeding the campus cats doesn't make them my cats, Hadas.

HADAS

And yet they follow you around.

FARAH

(Exiting her state of shock)

Ella, we need to go to Shuk HaCarmel tomorrow and buy baklava.

ELLA

What is Shuk HaCarmel?

FARAH

You'll see. *(Farah grabs her lab glasses and moves to exit)* Okay loves, I need to get back to the rotovap. *(She looks at Ella)* Meet me tomorrow at 8 a.m. by the flower statue.

SHACHAR

I'll be back later. *(Shachar opens the cabinet and pulls out one of many cans of tuna)*

AMEENA
Give Puff my love!

HADAS
And Mitzi!

(Shachar rolls his eyes at them as he leaves)

SCENE 3

Shuk Hacarmel is a bustling marketplace. Some actors may be in the audience, giving out baklava or halvah samples. There is one jewelry stall, but most stalls have various foods and spices for sale. One stand contains fruits, like pomegranate with its top sliced off to present the ruby seeds to passerby. Another has large halvah cakes sprinkled with nuts, coconut, and chocolate. The owner of the halvah stand offers small samples to shoppers. One stall has trays of baklava laid out (and the owner occasionally picks up a bottle of honey that he drizzles over the baklava). A bakery stand is at one end of the stage and the baker is angered by a woman who pushes a shopping cart lined with newspaper of Jerusalem bagels for sale (she is stealing his business!). The bagel woman frequently moves into chorus members' way and sometimes grabs their arm as she sells her bagels. The bagel woman and baker are both in their fifties, and there is a sense that their feud is nothing new. There is a general energy and murmur from the various chorus members who are shopping.

BAGEL WOMAN/SHOSHI

(Short argumentative song with the focus on Shoshi and Malachi. "Bagel Yerushalayim." Other sellers bustle about and sprinkle in calls about their wares throughout as background noise)
Bagel Yerushalayim!!! Jerusalem bagels!!! Get your fresh--

BAKER/MALACHI

Hot Jerusalem bagels! Why go to Machane Yehuda when you can eat Jerusalem bagels in Tel Aviv?

BAGEL WOMAN/SHOSHI

(Pointing a finger at the baker)

Lech tizdayen! I have the best Jerusalem bagels right here! *(She grabs the arm of a shopper and pulls them closer to her small cart)* You are much too skinny *(clicks her tongue)* you need to eat more bagel Yerushalayim! *(The shopper is clearly uncomfortable)*

BAKER/MALACHI

Shoshi, you makhasheyfe!!! You gahnevet!!!

(The shopper breaks free...after buying one bagel)

BAGEL WOMAN/ SHOSHI

Today! Come again! *(She turns toward the Baker and blows him a mocking kiss)*

BAKER/MALACHI

(Gives her the finger but quickly drops it as a customer comes over and buys various breads)
You see, Shoshi, people like variety.

BAGEL WOMAN/SHOSHI

You wouldn't need variety, mehtoomtam, if you could perfect even one of your breads!

(Malachi and Shoshi's song escalates their argument with various Hebrew, Yiddish, English, and Arabic swears until their noisy crescendo stops when Farah and Ella enter from upstage,

both carrying a reusable shopping bag. The baker and Shoshi continue miming their argument, but focus must be on Farah and Ella. Essentially, the shuk is quiet for a moment (the song ends) but the silence will shatter into the normal chaos and movement)

FARAH

Taa-daa! The best second best shuk in the country!

ELLA

Wow! So baklava..?

FARAH

Yes, but we need to get that last or I will eat all of it! I need to get some more peaches and some vegetables, so let's split up and meet by the baklava?

ELLA

That works for me! *(Farah heads into the crowd)*

BAKER

Baker!! Pitot!

BAGEL WOMAN/SHOSHI

BAGEL YERUSHALAYIM!!!

(To Baker) MAMZER!

ELLA

(To herself) She seems scary. *(Ella dodges Shoshi's grabbing hands and quickly moves towards the baker's stand)* Shalom! Bevakasha—

BAKER/MALACHI

An American!

ELLA

Ken. Ani rotze-

BAKER/MALACHI

Lo! You do not need to speak Hebrew; I can speak English.

ELLA

But I need to...uh....Ani rotzeh uh rotzah lilmod!

BAKER/MALACHI

The best way to learn Hebrew is make Aaliyah and marry a nice Israeli. Then, he can buy you the bread, no? Malachi, *(gesturing to himself)* is wiser than your average baker, hamooda.

ELLA

(Flustered)

Ani rotza to buy lechem!

BAKER/MALACHI

Yes, that is why you are here and not at the halvah stand. Just pick out what you want and pay.

ELLA

(Ella realizes that she is allowed to touch the breads and picks out three mini challahs and five Jerusalem bagels) Eich—

BAKER/MALACHI

Thirty shekels. *(Ella pays him, clearly disappointed that she wasn't able to speak Hebrew for her purchase)*

ELLA

(Walking away from the baker and beginning to sing. "Impostering." The song starts off timidly and takes on a quick, sassy tempo beginning with Farah singing in unison with Ella)

Nine months ago, I convinced my parents that I could do this

Pack my bags for a summer abroad

Learn chemistry, speak Hebrew, and escape this inner abyss...

(Instrumental music kicks in. Throughout the song, Farah and Ella continue shopping. The director and choreographer are welcome to synchronize movements with the song)

My family isn't one of science

I've learned everything by listening, by asking questions...

FARAH & ELLA

(Appearing in the crowd and singing. Farah and Ella share the song, but they are not necessarily singing to each other. They shop throughout the song, but the shoppers and sellers dance to the song)

My entire path has been one of defiance!

FARAH

I hear the murmurs in my village

"Why has a nice girl like Farah not wed?"

Science is my escape from those rumors

And from being pressured into sharing a bed!

ELLA

They think I'm smart but really, I just try

I come off as confident and optimistic

I do my best, so you don't know that it feels like a lie.

FARAH

I'm the only woman in my village who put degree

Over building a family.

Why does being single make my value decay?

I'm sorry, but I don't feel love that way.

ELLA

You expect me to feel brilliant
But I know that any woman who's succeeding
Is simply energetic and resilient!

People keep taking a risk on me.
Who am I to stop them?

I'll keep striving until I'm caught
All while feeling like someone I'm not.

FARAH

Some enjoy the polite seduction
I wouldn't mind company or a baby
But I don't care for sexual reproduction.

I'll keep hiding until I'm caught
All while feeling like someone I'm not.

ELLA & FARAH

I'm imposter!ing!
Pretending while I can.

FARAH

The clock is ticking

ELLA

I'll keep politicking

FARAH

But I don't care

ELLA

I'll do what I dare

FARAH

It's my life

ELLA

(Picking up a halvah sample and toasting before she eats it)
Here's to internal strife!

FARAH

(Shoshi grabs Farah's arm. Shoshi is surprised when Farah grabs her (Shoshi's) arm back)
Everyone has secrets, what's yours?
Tell me, would it be better

If we didn't hide behind closed doors?

BAGEL WOMAN/SHOSHI

(A beat as she considers)

I will tell you if you buy
And it stays between you and I

FARAH

(Fishing out some shekels and slapping them into Shoshi's hand)
Deal.

BAGEL WOMAN/SHOSHI

You see that baker named Malachi
He thinks his stand makes him bourgeoisie
He's my worst competition
But I send my niece on a mission
To buy his challah every Shabbat!

And if he knew (Shoshi trails off on the note for a second before catching her train of thought and stops looking towards Malachi's stand)
I'd have to bid our niceties adieu.
(Shoshi hands Farah a bagel)

FARAH & ELLA & SHOSHI

It's not like I was ever asked to disclose
What is wrong if nobody else knows?

Who gets hurt?
If anyone, it's me.

So for now I'll stick to imposterism!

FARAH

(Getting a crazy idea to go talk to Malachi too)
Everyone has secrets, what's yours?
Tell me, would it be better
If we didn't hide behind closed doors?

BAKER/MALACHI

I will tell you if you buy
And it stays between you and I

FARAH

(Fishing out some shekels and handing them to Malachi. She starts picking out breads)
Deal.

BAKER/MALACHI

You see that baker named Shoshana
Seeing her daily is like eating manna
She is the Bibi to my Gantz
She's my greatest adversary
But she's the only one I really want to marry!

FARAH & ELLA & SHOSHI & MALACHI

It's not like I was ever asked to disclose
What is wrong if nobody else knows?

FARAH & ELLA

Who gets hurt?
If anyone, it's me.

FARAH & ELLA & SHOSHI & MALACHI

(Farah and Ella start moving towards the baklava stand)
For now I'll stick to imposterism!

ELLA

I'm imposterism!

FARAH

Pretending while I can.

ELLA

I'll stay cheerful

FARAH

So you won't know how fearful

ELLA & FARAH

I am!

That you will discover

FARAH

I don't want a lover

ELLA

I'm learning undercover

(Ella and Farah reach the baklava stand)

FARAH

Ella!

ELLA

Farah!

FARAH

This baklava will leave you in awe!

ELLA

(Aside)

I wish I had the chutzpah

FARAH & ELLA

(Sung without awareness of each other's plight)

To not always feel like I'm imposter!

(Song ends)

SCENE 4

Hadas, Lia, Ella, and Ameena are in the office space. They are working and occasionally snacking on baklava.

LIA

Ameena, would you pass the tape?

AMEENA

(Passes Lia the tape)

I trust you with my label maker if you prefer.

HADAS

(To Ella)

Ameena is very protective of her label maker.

AMEENA

(To Hadas)

I am very protective of it because I work with you. *(She turns back to Lia and sees Lia placing over 300 shekelim into an envelope)* What are you doing?

LIA

Maternity preparation.

ELLA

Is it for a maternity photoshoot?

HADAS

Lia, have you done one yet?

LIA

Lo. I do not want one. I feel like a hippo.

ELLA

Even hippos can have maternity photoshoots. You look beautiful, *(glances at Hadas)* yofi, can we please do one? Even if it is just in the lab?

LIA

Lo, that will not be part of my preparation. *(She lifts the envelope)* This will be. I put three hundred shekelim into this envelope, and I am putting it *(she opens a drawer)* in this drawer. If the baby comes while I'm here, I want to arrive at the hospital in a taxi.

AMEENA

(Hadas, Ella, and Ameena laugh gently)

A taxi?

LIA

Ken. Mah? What is wrong with that?

(Singing, "The Envelope" begins)

My life's constant has been unpredictability

(Gesturing towards Ameena)

Something you wouldn't understand

Yours has been perfectly planned

This taxi is an attempt for tranquility

AMEENA

(Singing)

My life has been structured, organized

My slightest deviation was chastised

You think this is better, na'am?

I've known how it would go

From childhood to being a mom.

Where's the marah, the fun?

Adventures? I've had none.

I wish that I could explore.

But every time I've done enough

There's always one more chore.

LIA

You happily married at twenty-one

You have raised four boys

With unlikely grace and poise

In life, you've won!

AMEENA

In life?

At making life, yes.

(Gesturing towards the rest)

But that's a skill we all possess.

Your wings were never clipped

Your life lacks a script

I had to obey and acquiesce

From what to cook to my wedding dress

Forgive me, if I don't feel shafaqa

I envy you, hamooda

You have had freedom and opportunity

You were never confined to your original community.

LIA

My “freedom” began with my parents’ gerusheen,
Ima and I stayed at Kibbutz Hatzerim
Meanwhile, my aba moved to Japan
He left to be a businessman.

After I finished being an officer in Tzahal
Gone was the comfort of protocol
I spent a few years in Brazil
Then everything tumbled downhill

I got carried away in the wrong crowd
I did things of which I am not proud
(Ella and Hadas react since this is the first they knew of that. Lia’s mild manner and pleasant attire contrasts pre-conceived notions of drug users being those with plenty of tattoos, piercings, etc.)

To heroin and cocaine, I was addicted
I spent three years for trafficking once I was convicted

My return home was no cause for celebration
My ima was deeply ashamed of my incarceration
I headed off to Ben Gurion University
And hid away my past perversity

AMEENA

Your main challenge was a small, criminal record
Thanks to my family, my dreams were ignored.
I love my children more than anything
But I could have lived sooner without their anchoring.

If that’s what you prefer, then you should be excited.
(Ameena gestures towards Lia’s pregnant belly)

LIA

I am terrified that my baby will be equally shortsighted.
I have put three hundred shekelim into this envelope
Planning to take a taxi to the hospital is my slender hope
That maybe this new life will make mine more stable.

HADAS

What about Itai?
He’s a wonderful guy.

LIA

Marrying him has brought yatzivut...
He’s helped me pick a less bumpy route.

If not for his encouragement to me
To pursue a chemistry PhD....

This envelope would be the only chance
That my chaos will not advance.

AMEENA

For me, research is my only time
To have some variety past my prime.

No matter how much I may prepare and plan
I can't predict the results for any experiment I ran.

LIA & AMEENA

Research is a necessary relief
I love it, contrary to belief

LIA

It confines my worries to molecules

AMEENA

I can explore the realm of biofuels

LIA

When everything else has gone to shit

AMEENA

Research keeps me from losing it

LIA & AMEENA

Research is a necessary relief
I love it, contrary to belief

For when everything else has gone to shit
Research keeps me from losing it

If there is one thing that we can agree on
There's comfort in knowing the universe to the electron.

(Song ends)

SCENE 5

Lab meeting. Dr. Assaf Sasson is in the conference room, waiting for the rest of the lab to arrive. The audience sees Ella racing to the conference room, she enters.

ELLA

Ani mitztaret! Ani lo zocheret to set my alarm v— *(Ella stops apologizing as she realizes that she and Sasson are the only ones in the room)*

SASSON

En bayah. How was the City of David? *(Ella sits down at the table and pulls out her laptop)*

ELLA

It was amazing, todah for the recommendation. I went through Hezekiah's Tunnel and the water was such a relief from the heat! *(Geeking out)* It's crazy that in the 8th Century BCE they were able to build this massive water tunnel with two teams starting on opposite ends. *(Farah enters with Hadas and they take their seats)* Like if I were carving a tunnel and you were too and---

FARAH

(Interrupting) Hezekiah's Tunnel?

ELLA

Yes!

FARAH

How was Shuk Machane Yehuda? *(Ameena enters and sits down, she begins working to hook her laptop up to the projector)*

ELLA

I had some delicious jachnun, but the Robinson's Arch at the end of the tunnels—I mean, the inscription—*(Shachar enters)*

HADAS

(Quoting) You shall see and your heart shall rejoice. Their bones shall flourish like grass.

SHACHAR

It's a little early to be paraphrasing Isaiah 66:14, Hadas. *(Hadas rolls her eyes at him)*

ELLA

It just gives you chills, you know? *(Ella's excitement pauses as she notices the looks the rest of the lab is exchanging)*

SHACHAR

(Shachar sits down) Todah, Farah, for buying us coffee on Thursday. *(The group, minus Ella and Farah, laugh)*

SASSON

(Responding to Ella's confused look) Farah and I made a little bet over what you would enjoy the most in Jerusalem.

FARAH

I thought you would prefer the Shuk, but apparently you are more of a history nerd.

LIA

(Rushing in) Ani mitztaret! I knocked my dishes off the table *(Gesturing to her belly)* this morning and made a balagan. Then, Reksi started trying to eat the food AND the shards and I missed my bus. *(With a huff of relief, Lia sits down)*

SASSON

En bayah. Ameena?

AMEENA

(“Entropy” begins, all characters sing their upcoming lines. Ameena presents an NMR data slide)

This week, I used the NMR
For samples one through eighteen
My initial results were a bit bizarre

SASSON

What do you think they mean?

HADAS

(Interrupting)

Ella, do you know how NMR operates?

ELLA

Nuclear magnetic resonance spectroscopy or NMR
Helps us find the structure of organic compounds.

LIA

You have it right so far!

ELLA

The magnetic field makes nuclei spin
And we measure how they resonate
By analyzing a spectrum wherein
We want peaks, tall and straight!

FARAH

(Ever the optimist)

Aww, you did great!

SASSON

Ameena?

AMEENA

(Pointing as she goes)

This peak is clearly an alkyl halide

Over here, I have an amide.

As for this, I can't decide

SHACHAR

That could be an aldehyde.

SASSON

Tov, I think you should try again

But with your sample more purified.

AMEENA

(Aside)

Is this the life I dreamed to see?

I'm being dragged into entropy.

An unplanned data disaster?

Why is chemistry so hard to master?

(Ameena unplugs her laptop)

SASSON

Who wants to go next, team?

LIA

I have to use the shiruteem! *(Lia leaves for the restroom)*

HADAS

(Half-heartedly raising her hand)

I finished the introduction two days ago

But the discussion section is going slow

SASSON

We can meet later this week to talk it out

Help you remember what your results are about

HADAS

(Aside)

My writing progress is in constant flux

And analyzing results really sucks

HADAS & AMEENA

(Aside)

Why did I choose this career?
Entropy is my final frontier.

SASSON

Farah?

FARAH

(Ameena tosses Farah the adapter and Farah plugs her laptop in, we see an EZ-Prep Chromatography on the screen)

I tested samples after using the rotovap
The EZ-Prep had useful fractions
But I don't know why there is a gap *(Pointing to the gap)*
What are your reactions?

SASSON

I am not very concerned
The machine glitches
It's what we've learned

FARAH

(Aside)
Even if some data is unclear
Chemistry is something I hold dear
And if there's ever entropy
There's nowhere else I'd want to be.

SASSON

(Farah passes the projector adapter to Ella)
Ella?

ELLA

I treated cell lines with compound six-thirteen
And their growth rate massively increased
I wonder if it was caused by this benzene *(Pointing)*
Or this alcohol at the very least *(Pointing)*

SASSON

That's rather fascinating.

HADAS

(Aside)
I can't wait to be graduating.

AMEENA

(Aside, shaking her head at her data on her computer)
This confusion is suffocating.

FARAH

(Aside)

Research is emancipating.

SASSON

Shachar?

SHACHAR

(He plugs his laptop in. Aside)

This week's results were aggravating.

(To all)

My rotovap flask exploded

ELLA

(Shocked)

Was it overloaded?

SHACHAR

Yes, but that was the best part of the week

I lost most of my necessary solution

I had to create a serial dilution

And it kicked off a losing streak

My EZ-Prep Chromatography

Was a complete catastrophe

(Pointing)

You see the fractions here and here?

They're the only ones that would appear.

SHACHAR & HADAS & AMEENA

(Aside)

Why did I choose this career?

Entropy is my final frontier.

SASSON

How was the mass spec?

SHACHAR

An absolute wreck.

SHACHAR & AMEENA

(Bursting into frustration/anger)

My data is a complete disaster

SHACHAR & AMEENA & HADAS

Chemistry is impossible to master!

HADAS

(To Ella and Farah)

Turn back now

AMEENA

(To Ella and Farah)

Before it is too late

SHACHAR

(To Ella and Farah)

Don't give in to this awful fate!

SASSON

(Testing to see if the trio is ready to be calmed down)

So maybe this week was not great

Don't give up, data can fluctuate

SHACHAR

(To Ella)

Remember the second law of thermodynamics?

ELLA

We move towards entropy as the clock ticks?

AMEENA

Move towards? We're there!

HADAS

All our effort leads nowhere!

(Sasson realizes that they need to vent and remains calmly seated throughout the upcoming sequence)

SHACHAR & HADAS & AMEENA

Believe us, when we say beware.

SHACHAR

For six years, I've been in pain

Thanks to research, my bane

I set out to isolate antifungals

But everything I attempt just crumbles

My data is a complete disaster

SHACHAR & AMEENA & HADAS

Chemistry is impossible to master!

SHACHAR

All I see is entropy

AMEENA

Hard work isn't enough in actuality

HADAS

A failed result is chemistry's idiosyncrasy

SHACHAR

Switch fields now if you want to be free!

ELLA

You know I'm studying biology?

AMEENA

Just don't pursue a research degree.

HADAS

I could have been in theater
Not work with a spectrometer.

SHACHAR

I could have been a veterinarian
Or even a parliamentarian!

AMEENA

I could have been a housewife! (*Pauses and shakes her head, realizing what she said*)
I did that earlier in life
I could have been Dr. Ameena
An engineer or studied law!

SHACHAR & AMEENA & HADAS

My data is a complete disaster
Chemistry is impossible to master!
All I see is entropy!

FARAH

(*Not excited for the pessimism, her sass emerges. Farah claps mockingly*)
Todah for refilling the Dead Sea
What an act of kind charity.

SASSON

Don't let errors impact your mentality
Focus forward on what could be
(*He stands with aid from his canes. To all, but mostly to Ella*)

I didn't pick this field for lack of rationality
For it has helped me maintain my joviality

(To Hadas, Ameena, and Shachar)

Ken, I've felt what you feel now
You can't let it weigh upon your brow.
Even the best researcher can need a break
To step away from constant chemistry intake

Don't let errors impact your mentality
Focus forward on what could be
And none of you will fall into entropy

Whenever there are problems, come to me
I won't let any of you fall into entropy.

(Singing ends from this point forward, but soft instrumental remains until the end of the scene)

SASSON

Shachar, Ameena, and Ella—tomorrow we will go to the Kinneret and collect samples. Then, Shachar, you won't have worry or dilute your solutions.

FARAH

Hadas, want to go to the shuk with me later? We can talk out your paper while we shop.

HADAS

Beseder, but you have to hold me back if I release my stress while haggling.

FARAH

No way. Last time you did that, I got the best deals!

LIA

(Entering)

Ani mitztaret! I hope I didn't miss much.

SCENE 6

The sun is rising as Sasson, Ameena, Shachar, and Ella sit on a boat on the Sea of Galilee. The boat has a Captain from the limnological institute, but he will serve a minor role. Ella, Ameena, and Shachar are rather sleepy from the early start. Birds swoop over the surface of the water.

SASSON

(Singing, "Tzipporim" begins)

When I was younger, we would fish on the banks
Watch the sunrise over those hills
The summer breezes giving us chills
Little moments like these, before the tanks

I remember the Syrian shelling
Running for cover and my ima yelling
Tranquility shattered; serenity gone,
And the little moments of peace before dawn.

We were almost annihilated
Then we successfully retaliated
And suddenly the hills we hated
Had been safely rehabilitated

Back to days in the lake and sunshine
My life unbothered by a land mine
Back to watching tzipporim
Flying swiftly through each sunbeam

(Sasson begins making coffee on the ship's deck using a small electric kettle)

SASSON & AMEENA

Little moments like these
Of birds, lake, and breeze
We could do whatever we please
With friends, completely at ease

AMEENA

I would come with my brothers to the Galilee
Hiding in the truck bed so my umm wouldn't see
While they fished, smoked, and drank coffee
I would swim in the shallows or climb a tree

When the long, lazy day faded into twilight
We'd drive home before stars were in sight
Returning to Umm al-Fahm, with a grin
Umm wondering where we'd been

SASSON & AMEENA

Little moments like these
Of birds, lake, and breeze
We could do whatever we please
With friends, completely at ease

AMEENA

(Trailing fingers in the water)
This placid surface stayed the same

SASSON

Despite all the wars that came

AMEENA

Reflection, do you remember me?
The girl who swam so wildly?
The birds the same, and the view
This is what forty years will do to you

SASSON

Me, I am still here
I lost most of my friends, I fear
My 1973
Was one of tragedy

My memories of before
Days of joy and of war
Your shores where tzipporim nest
Remain calm and unstressed
(He hands each group member a coffee)

SASSON & AMEENA

Little moments like these
Of birds, lake, and breeze
We could do whatever we please
With friends, completely at ease.

(Song ends)

SCENE 7

Sasson takes a seat on the boat while Ameena leans against the railing, sipping her coffee. Shachar downs his coffee quickly.

SHACHAR

(To Ella)

Boee.

(Ella puts down her glass, having only taken a few sips. She moves towards Shachar who stands near the prow of the boat and is untangling various lines. Throughout the next sequence, they will be assembling and launching a plankton net off the side of ship. Shachar will literally show Ella the ropes and teach her how to tie them. Meanwhile, Ameena and Sasson are in the background as they chat with the Captain who is also sipping coffee)

ELLA

(Attempting to tie a complex knot)

Like this?

SHACHAR

Ehh close. Here. *(Shachar demonstrates how to make the knot while Ella follows with her own piece of rope. He describes it as he does with statements like “then this goes under” and “this goes over.” He is surprisingly patient)* Tov, you’ve got it.

ELLA

You’re not actually as scary as you try to be.

SHACHAR

(A bark of laughter) Ha! I was wondering when you would stop with the American niceties and become more direct.

ELLA

American niceties?

SHACHAR

Yes, you Americans have hundreds of ways of saying something that you don’t mean or what is it ehh beating up the bush.

ELLA

(A little bit nervously)

Well uh we don’t want to offend anyone.

SHACHAR

Lamah lo?

ELLA

Because...we just don’t.

SHACHAR

When our results are not good, do we ever lie about them and pretend they are not terrible?

ELLA

No, that wouldn't be ethical.

SHACHAR

Then why do you Americans do that with people?

ELLA

Because my opinion is subjective, and my results are *objective*.

SHACHAR

Beseder. Is it worth it?

ELLA

To speak with "niceties"?

SHACHAR

Ken. We don't use niceties and Ameena, Sasson--all of us are one big mishpacha. Can you say the same about America? Your lab there?

ELLA

(Becoming a bit uncomfortable, she wasn't expecting that question)

That's different.

SHACHAR

Lamah? You are still people, doing science ehh biology.

ELLA

It just doesn't work like that. If we acted with...*Israeli directness*, we...well it just would lead to conflict.

SHACHAR

Because you would offend each other? *(Ella nods)* Let's say your lab is a base and we add the acid of *(Smiling at Ella's creation of the term)* Israeli directness. What do we get?

ELLA

A salt. I don't think we want a salty lab environment. *(Ameena, Sasson, and Captain laugh at something Ameena said, briefly breaking the moment)*

SHACHAR

Wrong. We cannot live without salt. It is how we maintain healthy blood pressure and keep our muscles functioning. Without it, a lab is weak.

ELLA

But too much salt can dehydrate a perfectly good lab relationship. *(Trails off, there is something on her mind. She looks into the distance)*

SHACHAR

And that's when the water molecules pull the chloride and sodium ions apart to dissolve the salt.

ELLA

From where?

SHACHAR

Us. All of us are ehh 60% water, we help each other out.

ELLA

I wish my lab in the US was like this one.

SHACHAR

Too bad the US doesn't have good hummus. *(Disappointed that Ella didn't laugh at his joke)*
What's going on in that upbeat mind of yours? *(Casting the plankton net)*

ELLA

(Singing softly, "Acid-Base Reactions" begins)

Earlier this year I wrote a review

Of what aquatic microbes can medicinally do

My co-worker and I split the project in half

We wrote different sections, structured to the paragraph

I read over a hundred papers to write our review's foundations

I knew I had read enough once I could organize the publications

SHACHAR

So...?

ELLA

(Singing)

I'm not there!

I'm thousands of miles from U Dub.

Even coming here was considered a snub.

CAPTAIN

(Ella and Shachar freeze and attention shifts to Captain, Ameena, and Sasson. They sing their lines as a counter-conversation to Shachar and Ella)

When you're young, you worry about everything

You feel like you're always dodging the next sting

AMEENA

But those stings can last and burn
Nothing wrong with showing concern.

SASSON

We talk of equilibrium, but I don't see it
And sometimes it's better when our worries quit.

(Focus shifts back to Ella and Shachar)

ELLA

We will be submitting our paper soon
And my co-author is singing a different tune
Why did I have to fly thousands of miles away?

SHACHAR

(Gesturing to the net as Ella helps him empty some of the contents into a bucket before casting it out again)

You're working, not on full holiday.

ELLA

He claims that I wrote very little
And overall that I was noncommittal.
I wrote half of this review
But he's trying to misconstrue
Because if my P.I. believes his claim
He'll gain first-authorship and more acclaim
We were supposed to share first authorship
But since I'm here, he's seizing ownership.

I'm not there!
I'm thousands of miles from U Dub.
Even coming here was considered a snub.
I probably should have stayed in state
It would have been harder for him to deprecate.

(Ella and Shachar freeze and attention shifts to Captain, Ameena, and Sasson. They sing their lines as a counter-conversation to Shachar and Ella)

AMEENA

Sometimes I'm thankful that I had to wait before continuing my education
To succeed as a woman back then would have consisted of more aggravation

SASSON

What do you mean?

AMEENA

All my efforts would have been up for question
I would have had to fight to make an impression

CAPTAIN

Now it probably goes unseen.

AMEENA

Maybe. But there are more of us now.

(Focus shifts back to Ella and Shachar)

ELLA

I can understand his thinking, his cunning plan
Having solo first-authorship would make any graduate school a fan.

SHACHAR

Why don't you talk to your P.I?

ELLA

If I bring up this problem, I become the bad guy.
I'm an unpaid researcher, a volunteer
He could fire me for complaining, I fear.

SHACHAR

If you are truly so conflict averse
The Middle East isn't the best spot in the universe.
(Sarcastically)
Beseder. Give up, lose your credit.

(Ella and Shachar freeze and attention shifts to Captain, Ameena, and Sasson. They sing their lines as a counter-conversation to Shachar and Ella)

SASSON

I don't like how people assume P.I.s have to be scary.
We want to help, not be another adversary.

AMEENA

Sasson, you could not be intimidating if you tried
Your kindness would be too difficult to hide.

(Focus shifts back to Ella and Shachar)

ELLA

Give up?

SHACHAR

Ken.

I just never got around to it.
Think of how nice it would be to quit
I've been meaning to for years,
No frustration, no irritation, no tears.

If you don't want to feel salt race down your cheeks
If you don't want to slave over experiments for weeks.
Give up, turn back, let your paper be hijacked

ELLA

You sound so matter of fact.

SHACHAR

It's the Israeli directness.
Or...

ELLA

Or?

SHACHAR

Add some hydrochloric acid to their sodium hydroxide
Step in, don't surrender, and fight for your own side
By speaking out, launch your counterattack
You need to be able to have your own back
If a salt forms, who cares?

ELLA

If a salt forms, couldn't it kill my career?
If my P.I. or co-workers spread rumors,
Future employers would overhear.

SHACHAR

Or they could be benign tumors.

Salt is a necessity, water is too
You will have all of us supporting you.

ELLA

I will act like HCL
Not put up with this hell

SHACHAR

You will turn his base
Straight on his face

ELLA

And the NaCl
Will help me rebel.

SHACHAR

If you need H₂O
You know where to go.

ELLA

So what if I'm not there!
I've got a stake, I need to care.
If their response stings
I won't let them pull my strings

We make changes through action
Not from timid redaction

SHACHAR

Don't give in to his takeover bid
Speak out, be direct, add some acid

ELLA

I will turn his base
Straight on his face.
If there is some salt,
It won't make me halt.

Because if I need H₂O,
I have somewhere to go.

Even if the salt stings
I won't flee to the wings

SHACHAR & ELLA

Because if

SHACHAR

You

ELLA

I

SHACHAR & ELLA

Need H₂O

SHACHAR

You

ELLA

I

SHACHAR & ELLA
Have somewhere to go!

(Song ends)

SCENE 8

The lab space, later the same day. Farah and Lia are conducting various experiments.

LIA

I feel like I am a rounded Erlenmeyer flask.

FARAH

If you were, I would have already put you on the rotovap.

LIA

Farah, don't ever get married and pregnant.

FARAH

Don't worry about me.

LIA

Actually--get married, skip the pregnant.

(Shachar and Ameena burst into the lab space, both carrying containers of samples)

SHACHAR

(Calling behind him)

And bring your laptop! We are doing this now!

FARAH

What is all this excitement?

LIA

You'll spook my baby right out of me!

AMEENA

(As she and Shachar begin to purify/put away samples)

The Kinneret washed away Shachar's shell.

SHACHAR

(Gives Ameena a look)

We are going to help Ella send an e-mail to her P.I.

LIA

Her English is much better- ohhh.

FARAH

Oh?

(Ella enters carrying her laptop)

ELLA

It's early in the morning on the west coast.

SHACHAR

Tov. It will be the first thing he sees when he opens his e-mail.

ELLA

What a wonderful way to start a morning.

SHACHAR

Better than being bumped to second authorship for equal work.

(Singing, "God-Damned Email" begins)

You can drag your feet
And act polite and sweet
You can genuflect
Refuse to object

Or you can start fighting!
(Snapping his fingers at Ella)
Hey! You need to start writing

That god-damned e-mail!
Don't look so pale.
Ken, write the god-damned e-mail
We won't let you fail.

ELLA

Have any of you done this before?

LIA

I did in 2-0-1-4

I spent ages on my Master's project
I wrote a thesis and a paper too
When it was time to submit my publication
My advisor claimed he was the architect
He said he could prevent my graduation
If I dared to say no, thank you

ELLA

So what did you do?

LIA

I sent him a god-damned email

And one to the Dean as well
I told him I didn't like blackmail
I spoke out so I could excel

SHACHAR & LIA

You've got to send a god-damned email
There are plenty of bullies out there
Don't stay silent or despair
Speak up and raise some hell
(Realizing that Ella isn't typing)
Write that god-damned email!
(Ella resumes typing)

FARAH

(Catching on)
Thankfully, I have been more blessed than the rest
But I think that sending an email would be best
You cannot be obsequious
While others are so devious

SHACHAR & LIA & FARAH & AMEENA

(Farah and Ameena never say "god-damned")
Write that god-damned e-mail!
We won't let you fail.

Working in other countries
Is no excuse for credit stealing
Even though you're overseas
You can't put up with dirty dealing

Write that god-damned e-mail!

AMEENA

For me, it was my husband who I had to persuade
When I wanted to resume school, he was dismayed
I took the time to sketch my goals out
And pretty soon he came about

You need to exude confidence
Cut loose, set sail
Don't be on the fence
Send the e-mail!

ELLA

Okay! How does this sound?
Dear Professor Allsberry

I am writing to propound
That I was more than ancillary

I wrote half the review with Matthew
How was I to know what would ensue?
My lack of writing that he alleges
Began when I left our country's edges

If you deem it to be necessary,
I have the drafts to prove what I contend
From the abstract to our commentary.

SHACHAR

I think you are ready to hit send!

FARAH

You need to sign it first!

LIA

(Leaning against a counter. No one really processes what she says because they are focused on Ella)

I feel like my belly will burst.

ELLA

Thank you. Sincerely, Ella Aslan

AMEENA

Send it, don't drag this on.

SHACHAR

Send the god-damned email!
We won't let you fail.

AMEENA

Working in other countries

SHACHAR

Is no excuse for credit stealing

FARAH

Even though you're overseas

SHACHAR & AMEENA

You can't put up with dirty dealing

SHACHAR

Send!

AMEENA

Press the button and

SHACHAR & AMEENA

Send!

LIA

Don't overthink your writing!

SHACHAR & AMEENA & LIA

Send!

FARAH

It is time to start fighting!

SHACHAR & AMEENA & FARAH & LIA

Send!

Send the god-damned email!

LIA & FARAH

If you want to prevail!

Send!

SHACHAR & AMEENA

Cut apart Matthew's tall tale!

SHACHAR & AMEENA & FARAH & LIA

And send the god-damned email!

ELLA

Sent!

I sent the god-damned email!

(The song ends)

LIA

My water just broke!

(The lab erupts into movement with Farah, Shachar, and Ameena rushing to Lia)

ELLA

(Running out of the lab space to the office space)

HADAS! GET THE ENVELOPE!

SCENE 9

Ella, Hadas, and Farah sit in the hospital waiting room. Hadas is on her phone and Ella is doing a mixture of standing and pacing. Farah is sitting next to Hadas and takes careful glances at Hadas' phone until Hadas calls her on it later in the scene.

ELLA

How long does it take to have a baby?

FARAH

By the time my littlest brother was born, my umm had it down to about three hours. But my mom had already had Matar, Iqra, Rahma, Salihat, Azim, and me.

(Shachar walks briskly into the waiting room)

HADAS

How is she?

SHACHAR

(A little breathless, his adrenaline is fading. Hadas, Ella, and Farah turn towards him)

She's okay, but the taxi driver had the worst jokes. Ameena is staying with Lia until Itai arrives- he just boarded a train from Haifa. They kicked me out, said family only.

ELLA

Where's Ameena?

SHACHAR

She sat down in the room and told the doctor and the nurse that she is family. She also said that if they tried to remove her then she would curse them so their hummus would taste as gritty as American hummus for a year.

ELLA

That worked? *(Shachar nods)*

FARAH

We take our hummus very seriously.

HADAS

(Hadas resumes staring at her phone)

Unlike Americans.

SHACHAR

Did one of you remember to leave Sasson a note saying where we went?

FARAH

(The trio glances at each other)

Lo. But I asked Rahul from the Casay lab to tell him and make sure nothing explodes.

SHACHAR

So, he will return from teaching his afternoon class and find the lab completely empty? And my new, precious samples under Rahul's watch? (*Shachar clearly is not friends with Rahul*)

FARAH

Ken?

SHACHAR

Tov. I need to get back. (*Shachar exits*)

ELLA

What's wrong with Rahul?

HADAS

(*Not looking up from her phone*)

He's a Beitar Jerusalem football fan and we are all Maccabi Tel Aviv fans. (*She glances at Farah just as Farah looks at Hadas' phone screen*) Caught you!

FARAH

(*Quickly looking away*) What? I am appreciating how nice this chair's armrest is.

HADAS

(*Ella sits down with Hadas and Farah*)

No, you are stealing my eyecandy.

ELLA

Eyecandy? Are you on a dating app right now?

HADAS

(*Tilts her phone screen so Ella can see*)

Obviously.

FARAH

The pictures look fine, but doesn't it feel a bit pointless? You don't know what they are like in real life.

HADAS

Then it is good that the pictures alone provide a benefit.

ELLA

(*Grins mischievously*)

Since you haven't found a perfect match yet, why don't you help Farah? (*Hadas and Farah laugh. Hadas puts her phone away*)

HADAS

(*Pausing, after realizing that Ella wouldn't understand*)

Farah can't date.

ELLA

What?

FARAH

We don't really date before we are in an engagement...it is considered haram for me to touch a man outside of my family. We aren't ehh supposed to touch our future husbands until we are married.

ELLA

You would marry someone that you've never even kissed before?

HADAS

The very religious Jews do too.

ELLA

Couldn't you date someone and then not tell people if you kiss?

FARAH

(Laughs)

No, it is a community, someone would find out. It would be dishonorable too. And the repercussions for dishonorable actions are...severe.

ELLA

How severe? You get grounded?

HADAS

Have you ever heard of honor killings? *(Ella shakes her head no)* If a family member conducts themselves "dishonorably," the rest of the community or family may respond as they see fit.

FARAH

Earlier this week, a gay Arab Israeli who came to Pride was tracked down by his father and nearly stabbed to death on Bostanai Street, right outside Beit Dror.

HADAS

How do you know about Beit Dror?

ELLA

What is Beit Dror?

FARAH

It is a LGBTQ youth hostel in Tel Aviv. And I know about it because I...I may have considered checking it out. Not to live there or anything, but to talk to someone.

HADAS

I know you volunteer with children in Qalansawe, but would it be safe for you to teach them about the LGBTQ community?

FARAH

That's not why. I...I don't want to get married.

ELLA

Not everyone has to get married, that's okay.

FARAH

No, not like that. I am not attracted to men (*adding to clarify*) or women, at least not sexually like most people are.

ELLA

You're asexual? Ace?

FARAH

I think so? I watch Hollywood rom-coms and I think that I could fall in love with someone romantically, but sexual intimacy? (*Shudders lightheartedly*) No, thank you. (*Hadas pulls out her phone and begins typing*) I probably should reach out to the Aguda - (*before Ella can ask what that is, Farah clarifies*) Israel's LGBTQ Task Force - but what if a family member saw my search history? Or worse, saw me near Beit Dror?

HADAS

(*Handing Farah her phone*)

Here.

FARAH

(*Farah looks down at the screen*)

Who is Inji Manafi?

HADAS

A friend of mine who works at the Aguda. If you want, use my phone and call them. No one will be able to trace your call history on my phone. (*Farah looks at Hadas' phone, considering. Stage lights dim, and everyone except for Farah freezes. Spotlight on Farah who begins singing "The Phone"*)

FARAH

I could press call

And talk to someone who is a they

Why are they a they?

I don't know what they'll say

(*Farah stands, she may dance or pace for the rest of the number*)

Or I could pass back the phone
And shake my head and pretend that I don't care
But I have questions and ignoring them would be unfair
I have read through the Quran and the hadiths too
They discourage homosexual behavior in quite a few
What should I do?

The behavior, any sexual behavior is what I want to avoid
So, then it's okay? I won't have to worry every day.
Maybe I should tell my family, (*glancing to Hadas and Ella*) not just my lab one
Or maybe not? I don't want to stare down the barrel of a gun

Perhaps I should head to the desk and reserve a bed
So, a doctor will be ready for when I go ahead and may be left for dead.... (*She trails off*)
When. The ugly, inevitable when.
I can't become a prisoner in my own skin.

Maybe I should press call?
But what if I lose it all?

I could sit back down
And hand Hadas her phone.
I have already pushed and persuaded enough as it is
How else did I manage to be twenty-four with no kids?

No engagements yet.
But it's a looming threat.
I want to stand and shout
I want to know what the colors are about

The purple, white, grey, and black
May contain the answers that I lack.

Do I take the opportunity?
Or remember my community's propinquity?
Who even knows who is in this waiting room?
A simple overheard word could sentence me to doom.

I could push this off to a later date
I know that Hadas would accommodate
Whatever date and facilitate a call
I just need to have the gall

I could press call
And talk to someone who is a they
Why are they a they?

I don't know what they'll say

But why wait another day?

No, I won't wait for another day!

Not another day!

(Farah presses call and we hear the phone ring as she sits back down with Hadas and Ella. As soon as she sits down, regular lighting and movement resume)

INJI

(Through the phone)

A-salaam alaykum!

FARAH

Wa-alaykum salaam.

SCENE 10

August, a few months later in the morning. After 6 grueling years, Shachar is finally defending his thesis. Sasson and two other individuals are seated closer to him—Shachar’s thesis committee. A few other chorus members sit in the room, presumably Shachar’s family members. Farah, Ameena, Ella, Hadas, and Lia are seated. Lia has a baby stroller with her. Shachar has already presented and is fending questions.

COMMITTEE MEMBER 1

If you were to continue testing the compound, what bioassays would you use?

SHACHAR

I would expand from antifungals to explore antibacterial bioassays like disk-diffusion, well diffusion, and perhaps flow cytometry.

COMMITTEE MEMBER 2

How did you verify that you were extracting all samples from the same type of cyanobacteria?

SHACHAR

I used a mixture of microscope verification and filter screens. I relied on earlier literature’s illustrations to ensure that I was only performing extractions on the intended cyanobacteria.

SASSON

What inspired your thesis?

(A pause. Lights dim on all but Shachar).

SHACHAR

(Spoken to himself)

I was not expecting to recite the amnesis

(Sung with no instrumental accompaniment, “The Scientific Process” begins)

It began with an observation of cyanobacteria’s ecesis

You know, when they tell you that you’re going to follow

The tidy scientific method, they are lying

That chart for whom you traded your army radio

Is less instructive when you’re actually applying

If you believe that the method will end

Your research will be fraught

As with the contrary you must contend

Let me describe what it taught

You start with an observation

(Musical accompaniment begins. Spotlights appear on each character who chimes in while the rest of the stage remains frozen)

LIA

My life needed to have some stability.

ELLA

I wanted to learn in a place like no other.

FARAH

I wanted to be more valuable than my fertility.

AMEENA

I could be more than someone's mother.

HADAS

I wanted a profession with credibility.

SHACHAR

(Spotlights cut out on the rest and resume only focusing on Shachar)

And that's the beginning
Of the scientific process
You continue with a question:
Why do these cyanobacteria fluoresce?
You don't know the project's progression
But you're excited and you're grinning
Wondering what you might find
You don't care that you're entering blind

And with a question, you're off and away!
Who's to tell how the research will play?
But you're happy and you're grinning
And that's just the beginning
Of the scientific process

(Spotlights appear on each character who chimes in while the rest of the stage remains frozen)

ELLA

Do I have what it takes to be a scientist?

FARAH

Can I pick my own path and family?

LIA

I asked Sasson if with his research I could assist.

HADAS

Can international research cooperation help us live peacefully?

AMEENA

Is it too late to start a chemistry career?

SHACHAR & ELLA & FARAH & LIA & HADAS & AMEENA

(Singing together. From now on, these six are unfrozen)

So you step up and ask!
Wondering what you might find
You don't care that you're entering blind
And with a question, you're off and away!
Who's to tell how the project will play?
But you're happy and you're grinning
And that's just the beginning
Of the scientific process
So you start your first task

SHACHAR & ELLA

You do a background investigation
Reading papers from multiple countries

FARAH & LIA

It only augments your excitement
Even though it may not be a breeze
You are filled with anticipation

HADAS

You come to your research mentor
You hope that they will authorize
You to test what you hypothesize
They ask you:

SASSON

(Briefly cutting in)
What for?
Prove to me that your project is of import
Your focus should be on tikkun olam
Perhaps consider cell transport
I'm here to help you stay calm
(Resumes being frozen)

SHACHAR

And with a hypothesis, you're off and away!
Who's to tell how the project will play?
It's a team endeavor

SHACHAR & ELLA & FARAH & AMEENA & LIA & HADAS

You won't be alone

SHACHAR

You'll remember each other forever

HADAS

Just like the smell of acetone

SHACHAR

Now, let's talk about the middle
Designing experiments is like a riddle
You have to test to the very best
Of your ability to decide
Whether what was once guessed
Could be scientifically ratified

You have your mentor approve

SASSON

(Unfreezes)

Ken, looks good, go ahead.

(Freezes)

SHACHAR

Then you get into the research groove

SHACHAR & LIA & AMEENA & FARAH

It is all part of the scientific process
The way we find the medicines
That may save your life one day

We don't focus on trying to impress
We only want some data wins
Who's to tell how the project will play?

ELLA & HADAS

First, we observe then we question
Background research, then hypothesize
Next it is time for experimentation

HADAS & SHACHAR

Then you take a lab vacation
And analyze your data
You draw some conclusions
And try not to let it gnaw
When there are confusions

SHACHAR

You ask your mentor for some aid

SASSON

(Unfreezes)

Don't worry or feel so dismayed
Don't let errors impact your mentality
Focus forward on what could be
And you won't fall into entropy
(Refreezes)

SHACHAR & HADAS

And pretty soon you're writing
The thesis answering the question
That never stopped being exciting
Despite its uncertain progression

SHACHAR

If I believed that the method will end
My research would have been fraught
As with the contrary I had to contend
This is what the process has taught

FARAH

Family is everywhere.

HADAS & AMEENA

I will always be learning.

LIA

You can have a fresh start if you dare.

ELLA

For this lab, I will never stop yearning.

SHACHAR

(Sasson unfreezes to join in the rest of the song)
It's the scientific process

ELLA

Observe.

FARAH

Question.

HADAS

Background research.

LIA

Hypothesize.

AMEENA

Experiment.

SASSON

You have data to analyze.

SHACHAR

Conclude.

It's more hectic than I can confess
But it's part of the scientific process
The way we find the medicines
That may save your life one day

We don't focus on trying to impress
We only want some data wins
Who's to tell how the project will play?

SHACHAR & LIA & AMEENA & HADAS & FARAH & ELLA & SASSON

We follow the scientific process
As we push through the stress
We are working to make change
From the molecular range

(If Sasson was not seated by the committee members, he takes his seat)

Yes, we are seeking to save lives
By analyzing every result that arrives
We don't aim to impress
While following the scientific process!

(Song ends)

COMMITTEE MEMBERS 1&2 & SASSON

(They mutter between themselves)

Mazal tov, Dr. Shachar Aghmati!

(Everyone onstage celebrates that Shachar has successfully defended his thesis)

SCENE 11

Later that afternoon in the conference room. Sasson, Shachar, Lia, Farah, Ameena, Hadas, and Ella sit around the table which is covered with drinks and various delicacies: baklava, little containers of malabi, halvah, and more. If there is alcohol present, Farah and Ameena do not consume it. This is a celebration for Shachar and a bon voyage for Ella. Lia has a baby stroller/carrier positioned near her. The lights are dimmed on all except for Sasson. A soft spotlight shines on Sasson. The rest of the cast continues to move/converse silently.

SASSON

(Takes a long sip of his coffee and then puts it down, staring into the audience)

I know what you're thinking: "You're the principal investigator, why weren't you more in charge of the show?" I told you, my goal is to bring brilliant people together *(gestures towards the lab)* and help them and each other succeed. I did not promise you a scientific breakthrough. *(gently shakes his head)* When you work with molecules, you have to remember to see beyond the graphs and solutions. To see the family around you.

(Lights go up on the rest of the cast, who break into conversation)

LIA

Shachar, all of the cats on campus will mark today as a day of mourning.

SHACHAR

(Rolling his eyes) I will be in Petah Tikva, not on the other side of the world. *(He looks at Ella)*

HADAS

There is diaspora, and then there is *(said more dramatically)* diaspora. *(Minus Ella, all laugh)*

ELLA

Hey!

FARAH

You could skip your flight tomorrow.

AMEENA

(Pulls out a glass jar of za'atar from her bag and passes it to Ella) You have to come back before you finish this jar of za'atar.

ELLA

Shukran.

(Lights dim on all except for Sasson. Other cast members resume animated silence from earlier)

SASSON

(Waving a hand at the rest) I suppose that this is not the drama you were expecting. This is the story you don't read about in the papers....how people living on a small scrap of land that the Mediterranean leans on can share such precious little moments.

(Lights dim on Sasson and go up on Ameena who begins to sing “Little Moments.” Lights rise on each cast member as they begin to sing and stay lit even if they stop singing. When performers are not listed as singing, they may add to the background music with harmonizing, wordless vocals)

AMEENA

It’s those little moments here
Surrounded by family, so dear
My second family, different, unexpected, but perfect for me
I crumpled up the map, grabbed a compass, took control
Said no more obeying pressures, now I follow my own soul

LIA

It’s the little moments of advice and laughter
The structure and support that I’ve been after
Who I might have remained as and who I finally became
I’ve found a home and family (*looking at her baby*), and shaken off past shame
Little moments in a little lab in a little country near the sea

FARAH

It’s the little moments when you prioritize
Yourself and pursue whatever you may hypothesize
Who could have imagined my life feeling more free
Than when I decided to learn more about my asexuality?
Little questions whose answers energize

FARAH & LIA & AMEENA

It’s the pauses in between experiments and dilutions
It’s the appreciation we have for each other’s contributions
It’s those little moments when together we lunch
Before heading back to the bench to test a hunch

SASSON

Little moments in a little country near the sea
Swamps into farms and sand dunes into a city

HADAS

It’s the little moments when I feel frustration
That my family inspires my continued dedication

SHACHAR

It’s the mixture of heat and sea breeze
A tang of ethanol, and a hint of za’atar
The scent of our lab puts me at ease
For years, our lab has been my north star

HADAS & SHACHAR

It's the breath we exhale
As we try to prevail

LIA & AMEENA

It's the search for a find
And decision not to look behind

SASSON & FARAH

It's the little reasons to smile
That help you through every trial

ELLA

It's the little moments that you don't expect
When you let go of your fears in front of your peers
And understand that your worries won't lose you respect
It's noticing that you can, and you will
It's ignoring the doubts that try to fill

FARAH & ELLA

It's accepting yourself one hundred percent
And tossing away imposter's dissent

SHACHAR & HADAS

It's pushing through the stress and mistakes that can arise
It's looking to each other and being able to empathize

SASSON & LIA & AMEENA

It's those little moments here
Surrounded by family, so dear

SHACHAR & HADAS & FARAH & ELLA

Little moments like these
Feeling the Mediterranean's breeze
We can do whatever we please
With friends, completely at ease

SASSON & SHACHAR

Shalom means hello

LIA & FARAH

Peace

AMEENA & HADAS

And goodbye

ELLA

So when you hear someone say shalom
You know that you have found a home.

(Song ends)

FIN