

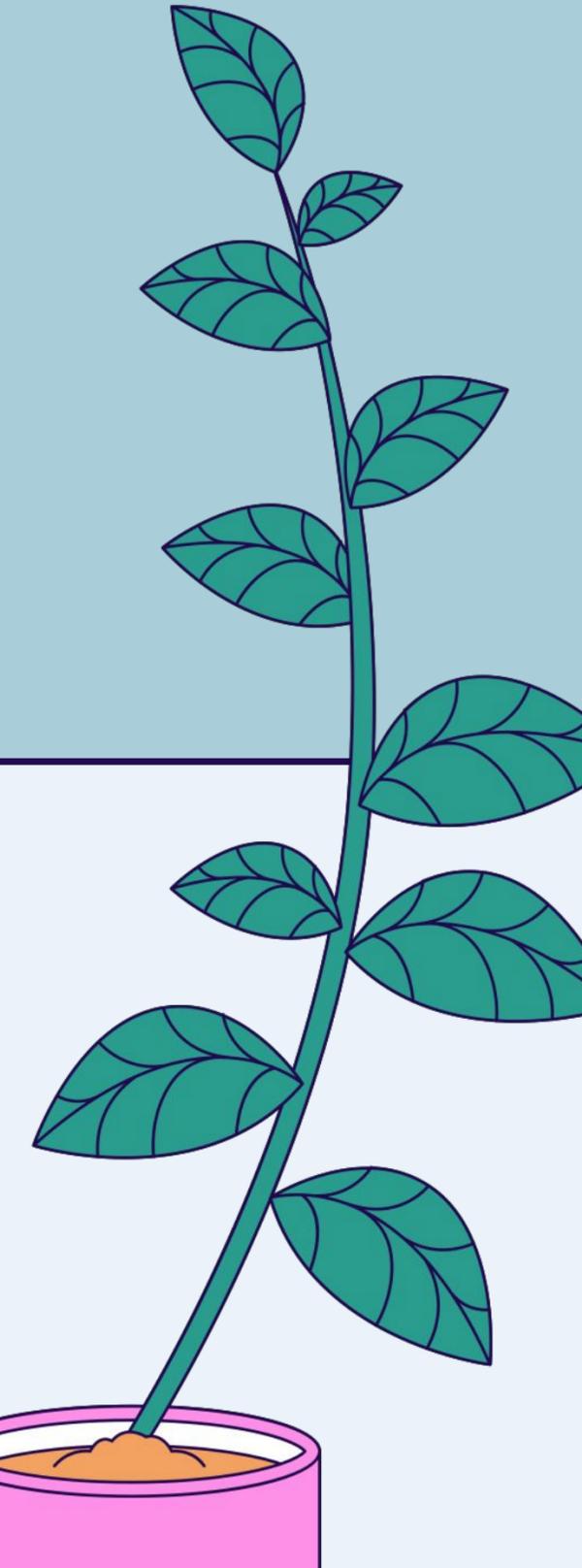
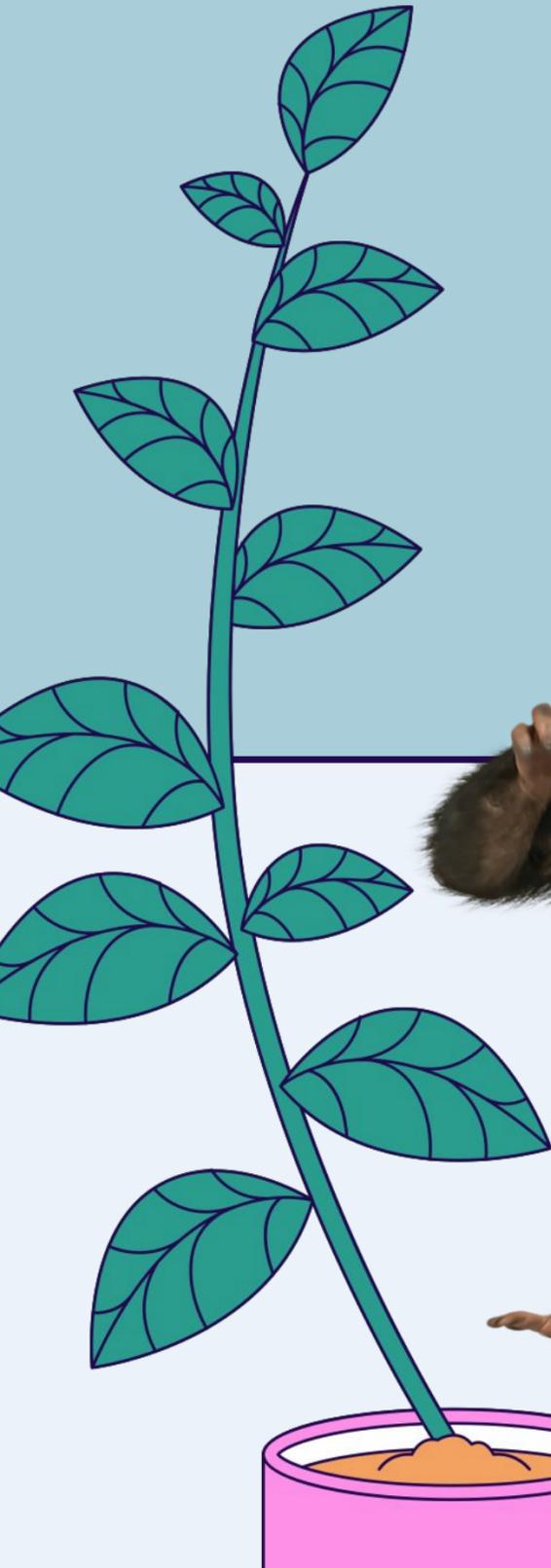


# MONKEY BUSINESS

Modelling a Journal Cover in Maya (process)



Winter Kraemer  
MSC2003 - BMC Technologies  
Winter 2025



# OVERVIEW

**Background**

Research + topic exploration

**Pre-production**

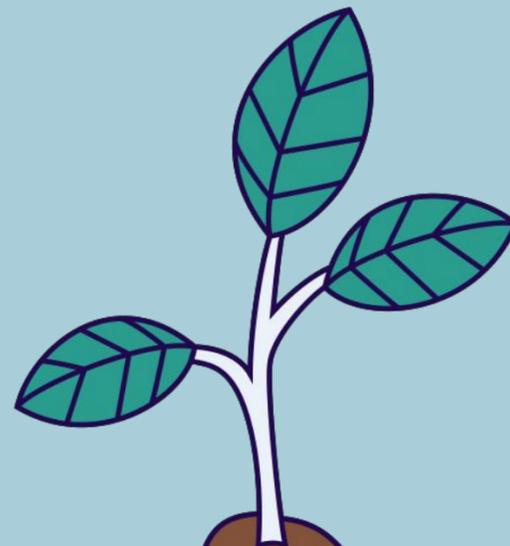
Sketching + ideation

**Production**

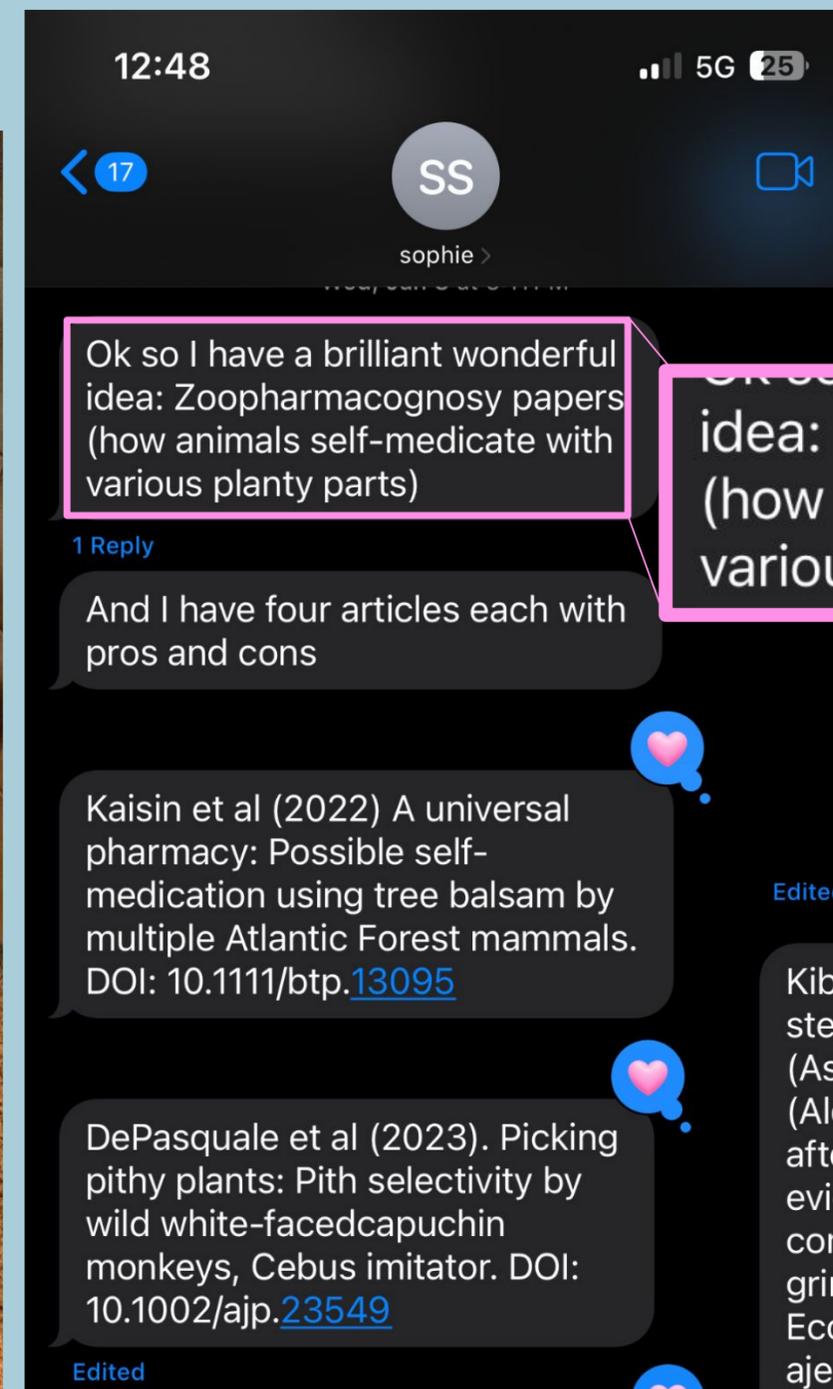
Process + Lessons learned

**Final Product**

Post-production



Shout out to my friend Sophie for the idea!



Ok so I have a brilliant wonderful idea: Zoopharmacognosy papers (how animals self-medicate with various plant parts)

Ok so I have a brilliant wonderful idea: Zoopharmacognosy papers (how animals self-medicate with various plant parts)

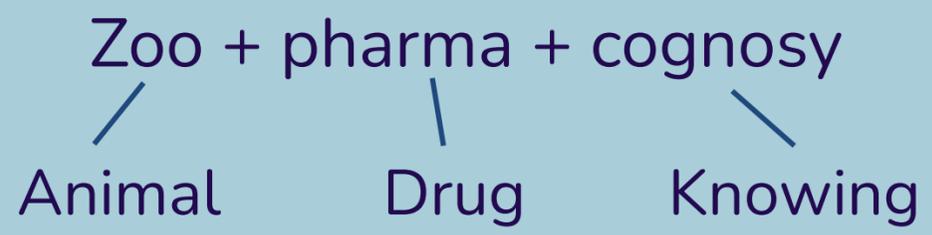
1 Reply  
And I have four articles each with pros and cons

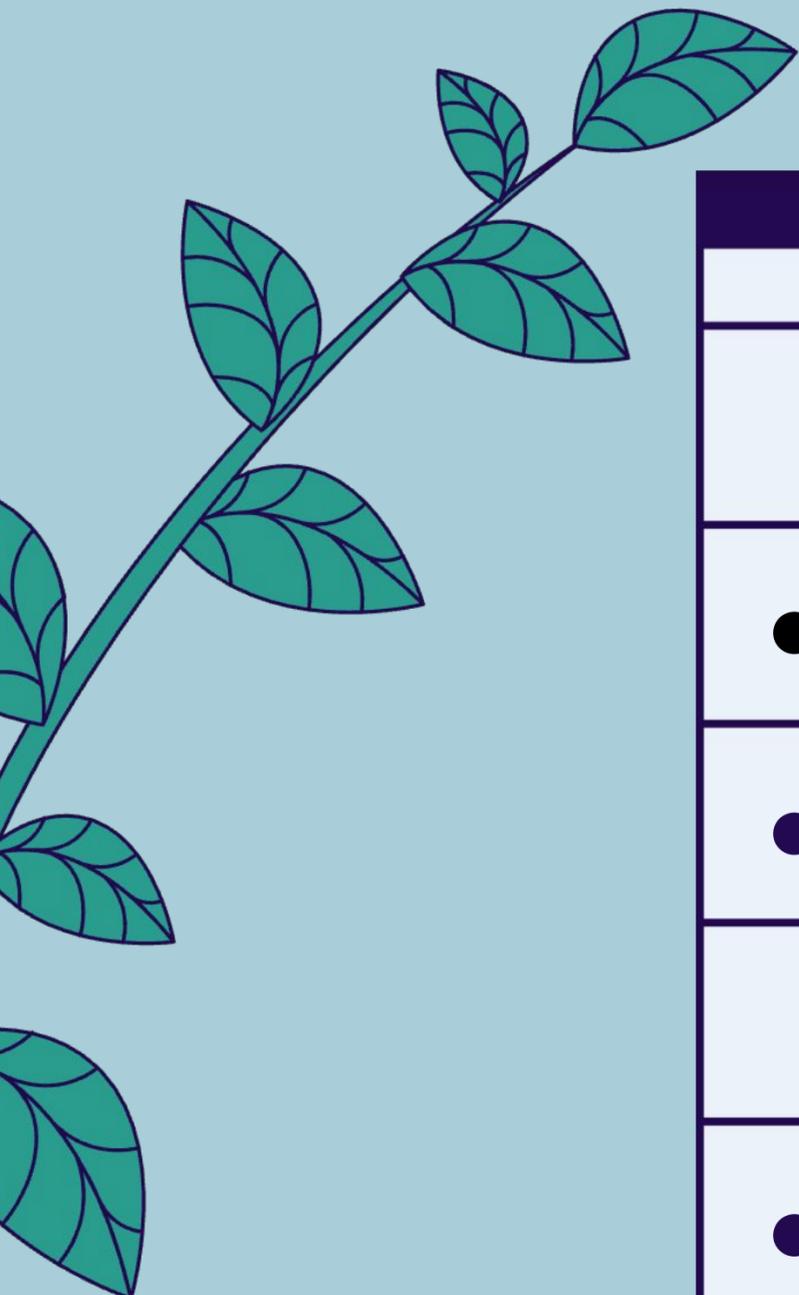
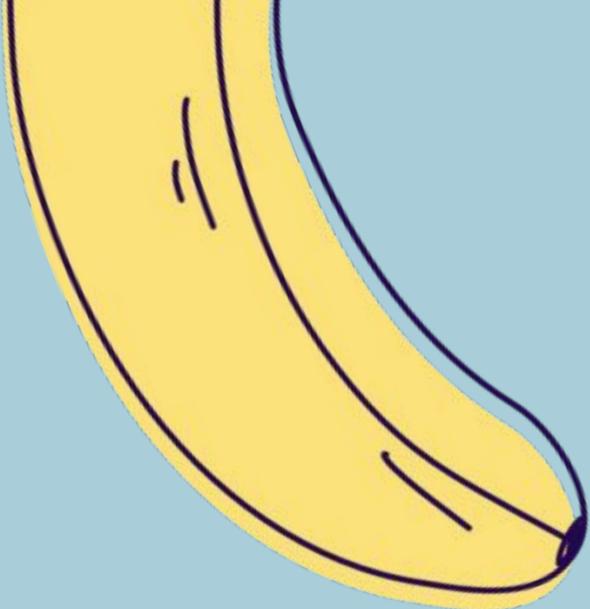
Kaisin et al (2022) A universal pharmacy: Possible self-medication using tree balsam by multiple Atlantic Forest mammals. DOI: 10.1111/btp.13095

DePasquale et al (2023). Picking pithy plants: Pith selectivity by wild white-faced capuchin monkeys, *Cebus imitator*. DOI: 10.1002/ajp.23549

Edited  
Kibaja, M. J. (2022) Chewing stems of *Asparagus buchananii* (Asparagaceae) and *Aloe* sp. (Aloaceae) and spitting them out after extracting fluids may be an evidence of self-medication in common duikers (*Sylvicapra grimmia*) in the Greater Mahale Ecosystem, Tanzania. DOI: 10.1111/aje.13074

De La Funete et al (2022). Self-medication in nonhuman primates: A systematic evaluation of the possible function of the use of medicinal plants. DOI: 10.1002/ajp.23438



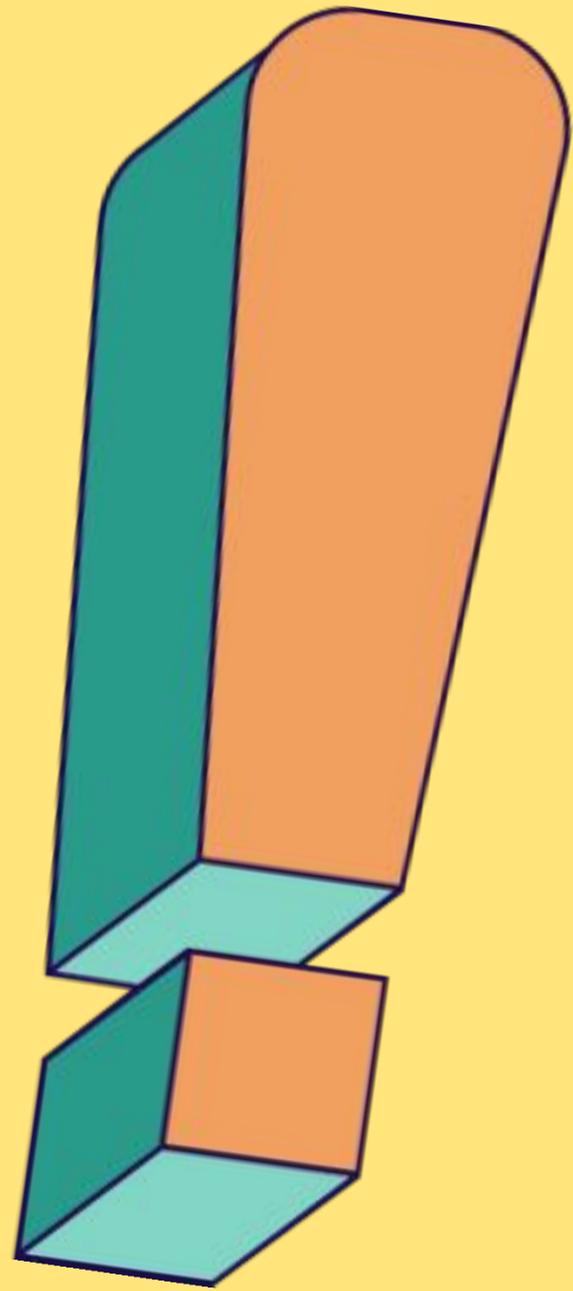


# Background

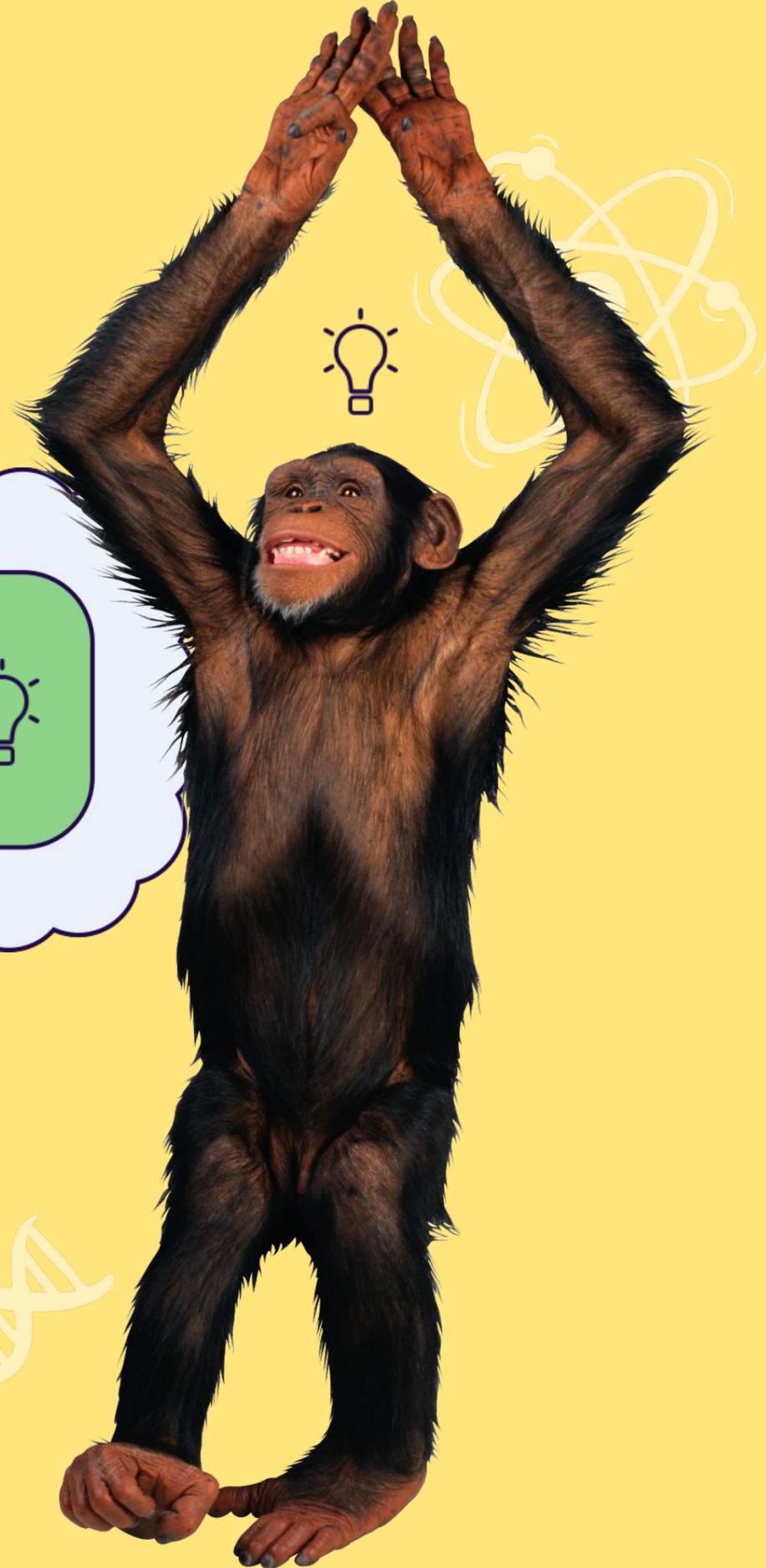
- **Animals self-medicate with plants**
- **Historically, humans discovered medicine by observing animals**
- **Some plant extracts effective against MDROs\***

\*Multidrug Resistant Organisms

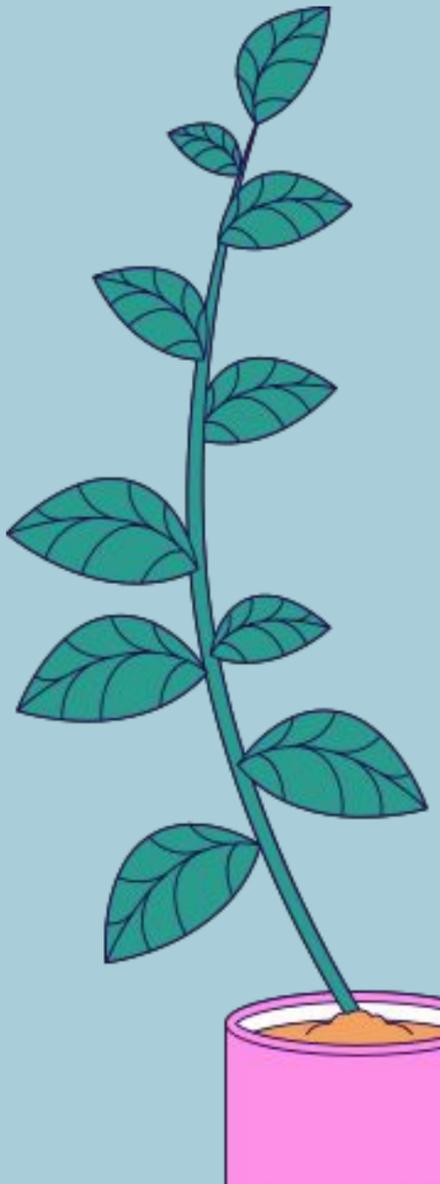




 **Pre-production** 



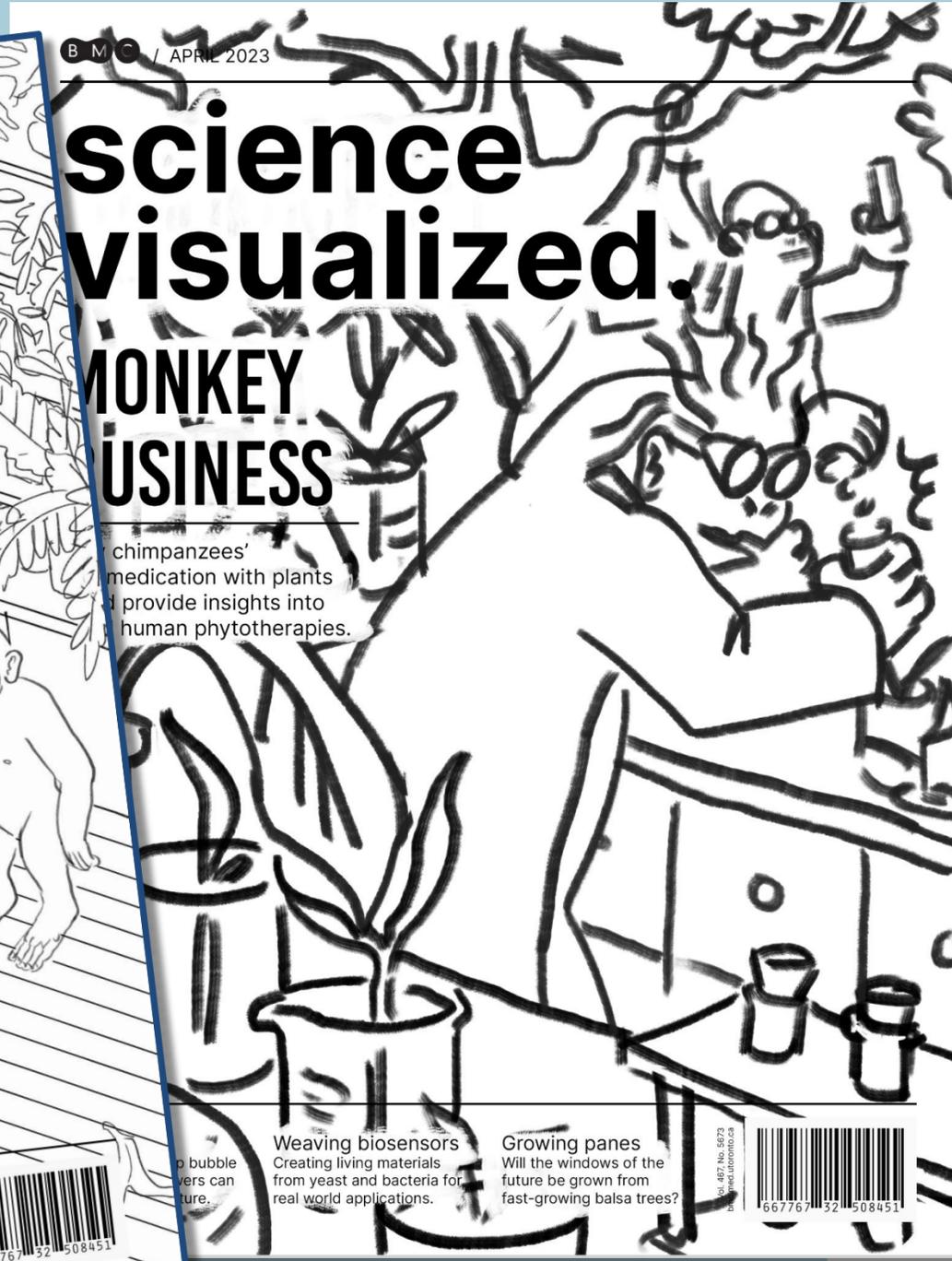
# IDEATION (~5 min)



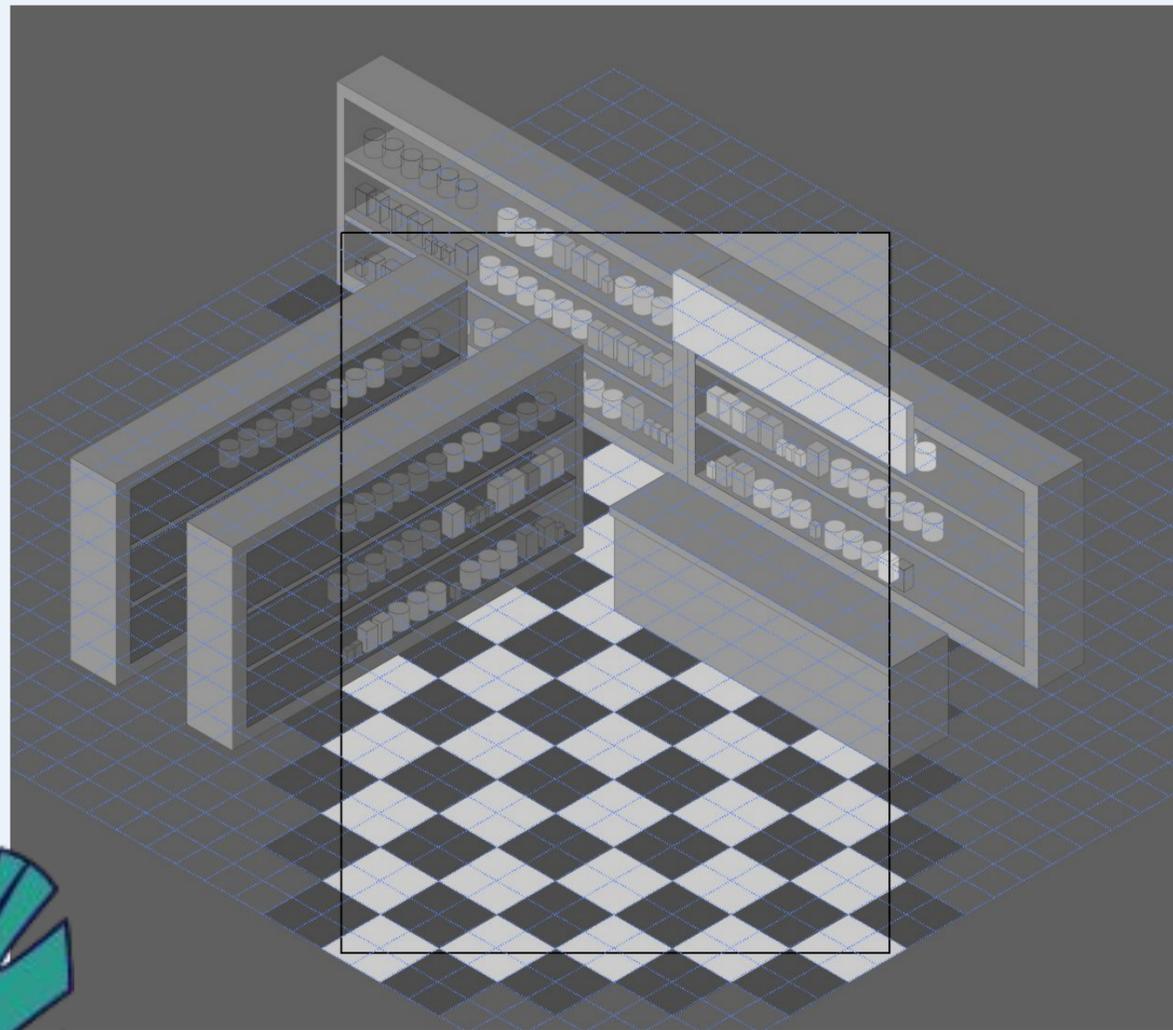
Option 2

Option 3

Option 1



# IDEATION - Comprehensive

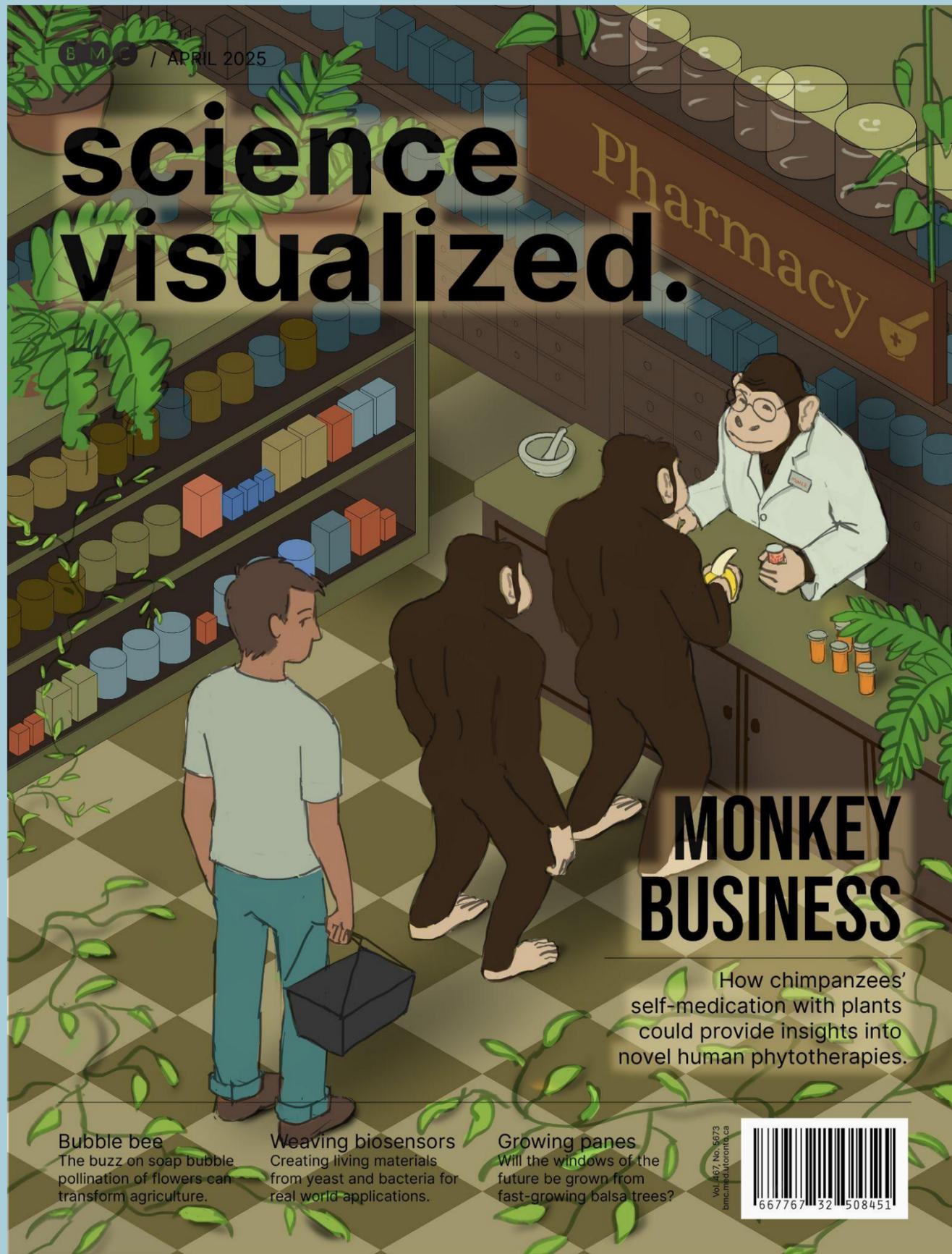


**Illustrator layout**

- Isometric view



**Photoshop grayscale sketch**



BMC / APRIL 2025

# science visualized.

Pharmacy

## MONKEY BUSINESS

How chimpanzees' self-medication with plants could provide insights into novel human phytotherapies.

**Bubble bee**  
The buzz on soap bubble pollination of flowers can transform agriculture.

**Weaving biosensors**  
Creating living materials from yeast and bacteria for real world applications.

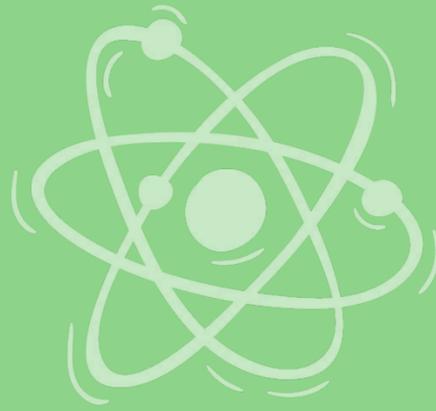
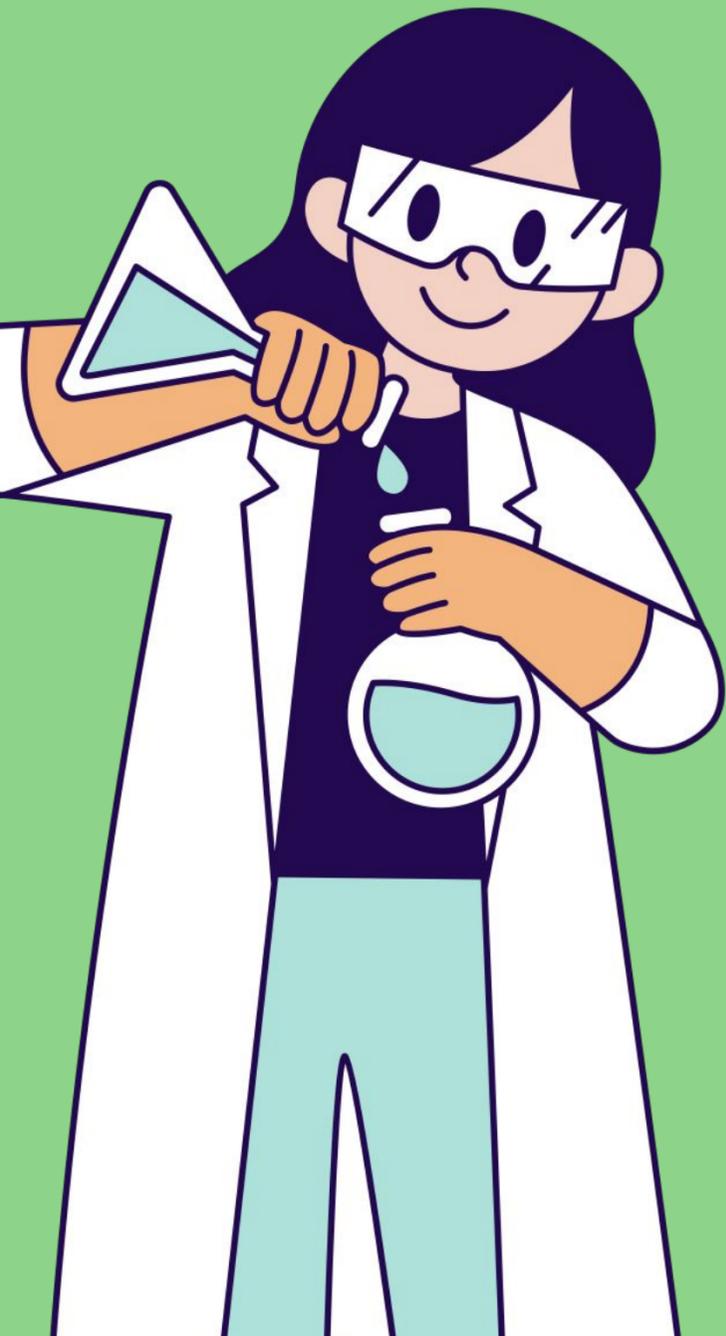
**Growing panes**  
Will the windows of the future be grown from fast-growing balsa trees?

Vol 1467 No 4673  
bmc.med.biotech.ca



Photoshop final sketch





 **Production** 



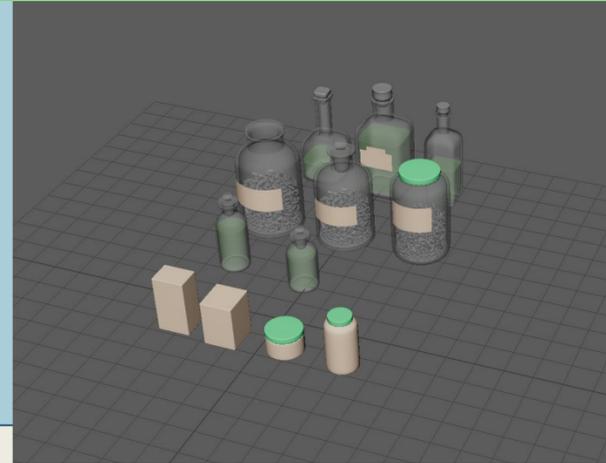
# MODELLING - Process

**01** Setting  
Shelves, counter



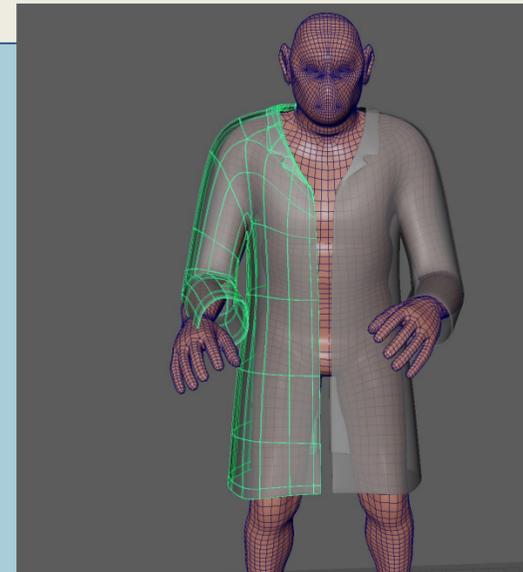
Easy peezy lemon squeezezy

Easy peezy lemon squeezezy



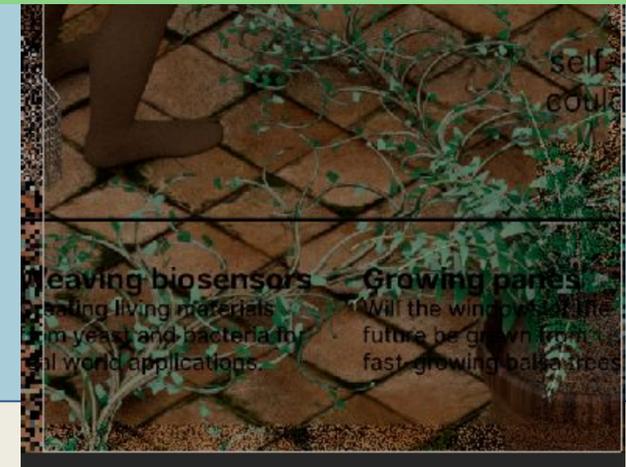
**02** Products  
Bottles, boxes,  
vials

**03** Figures  
Chimps & Human,  
clothes



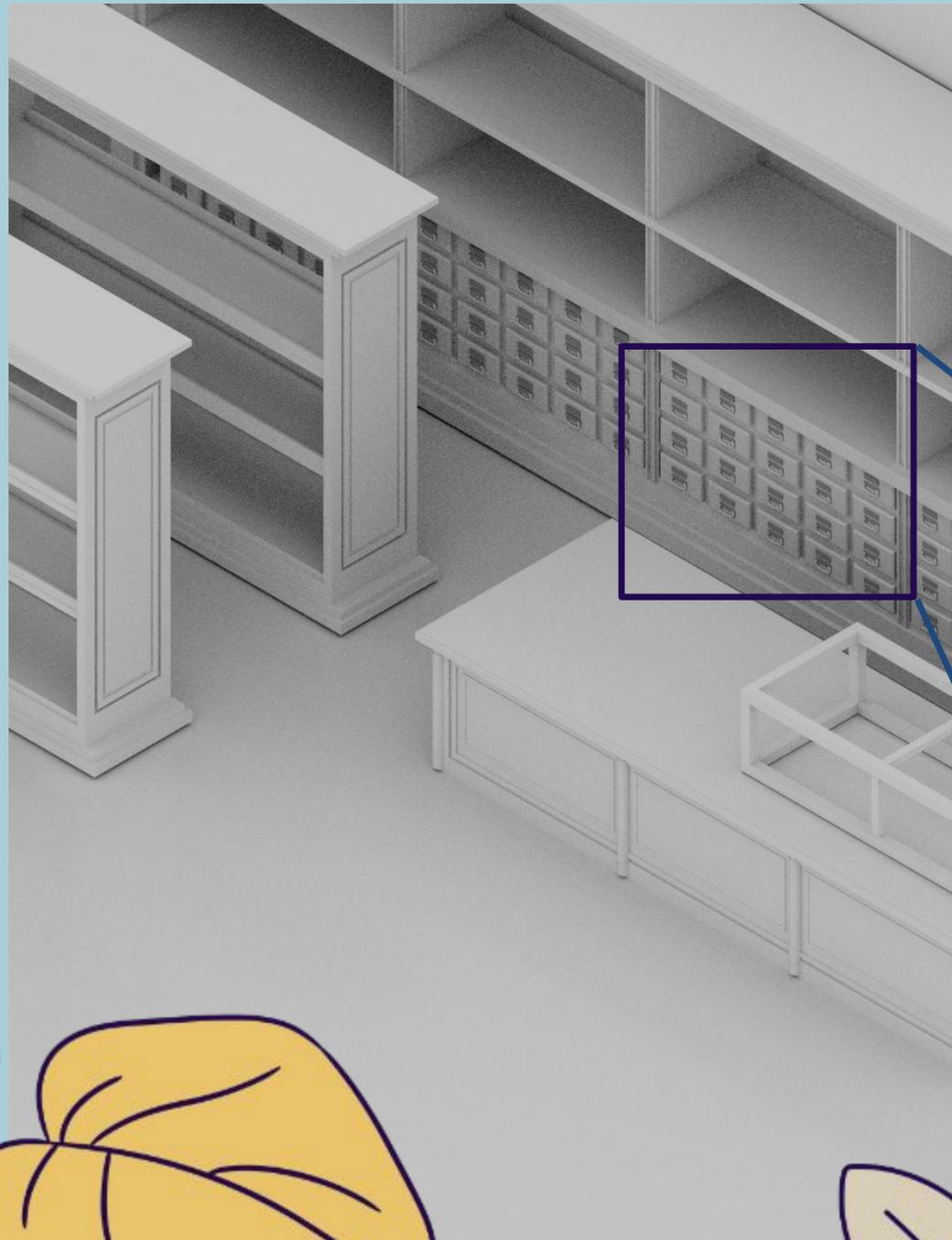
Difficult Difficult Lemon Difficult

Easy peezy lemon squeezezy

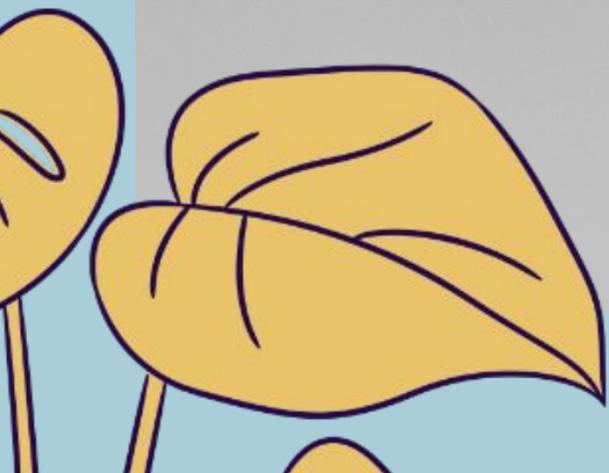
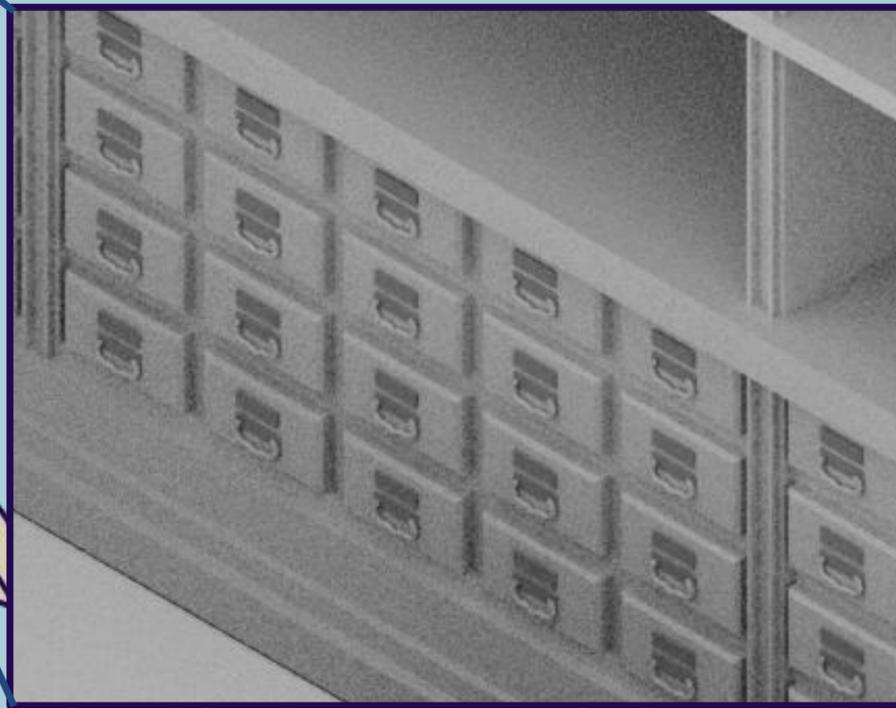


**04** Plants  
Ferns & vines

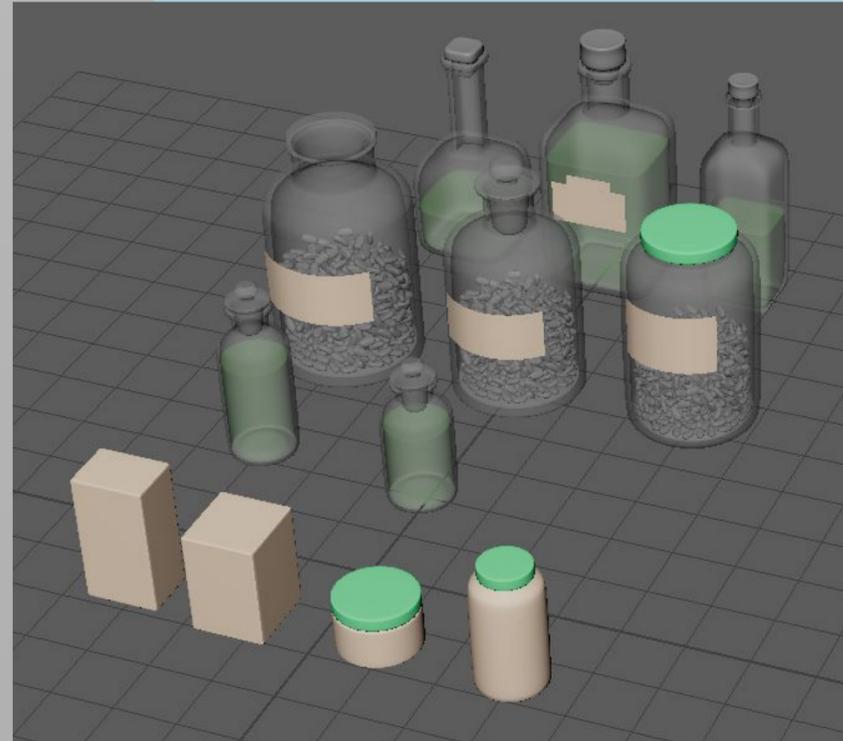
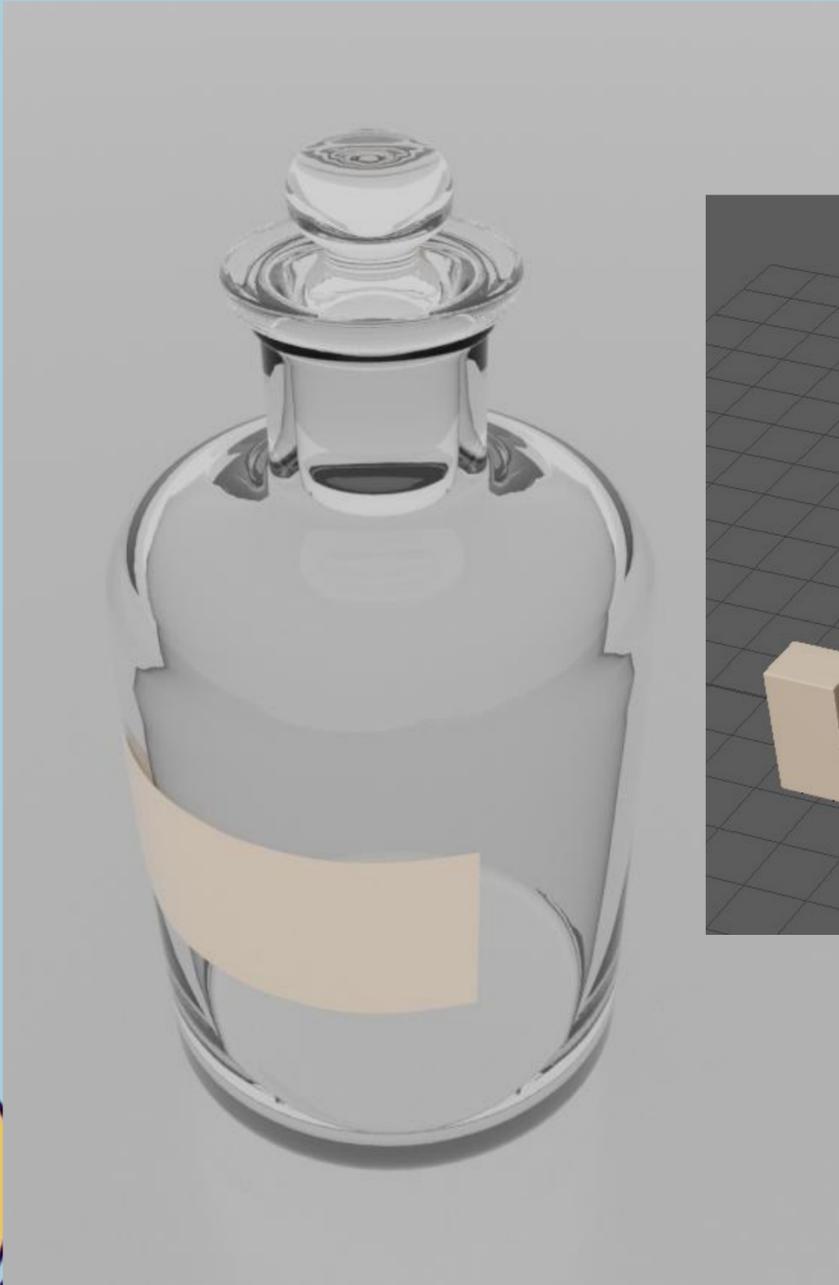
# MODELLING - Setting



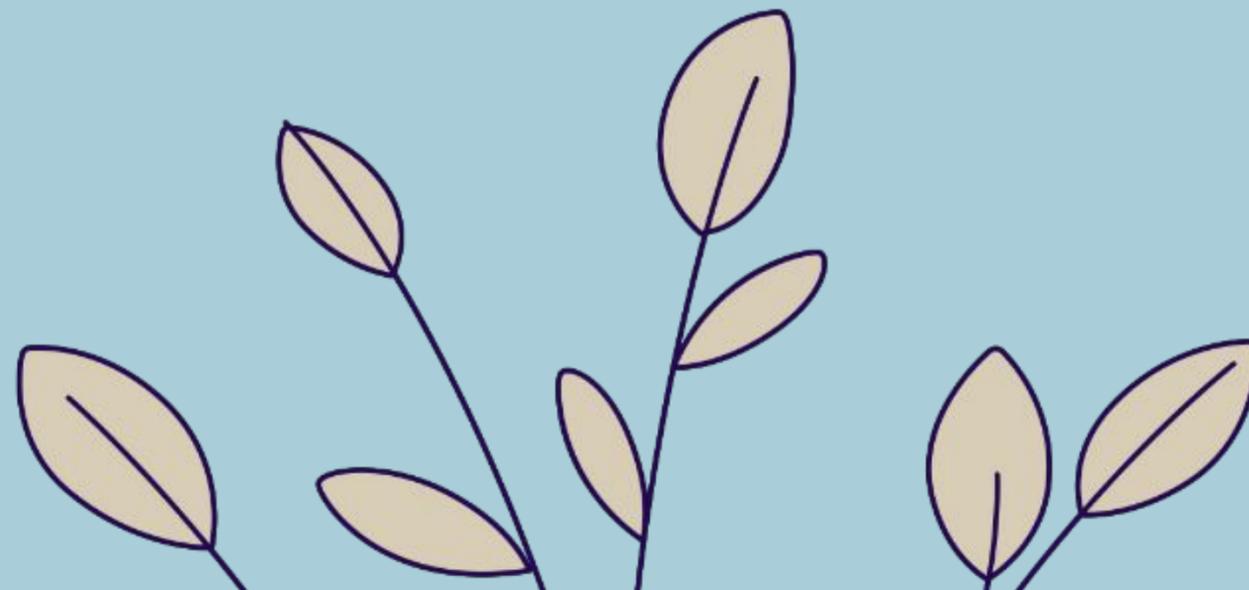
- Everything is a cubes
- Drawer handles = MASH network



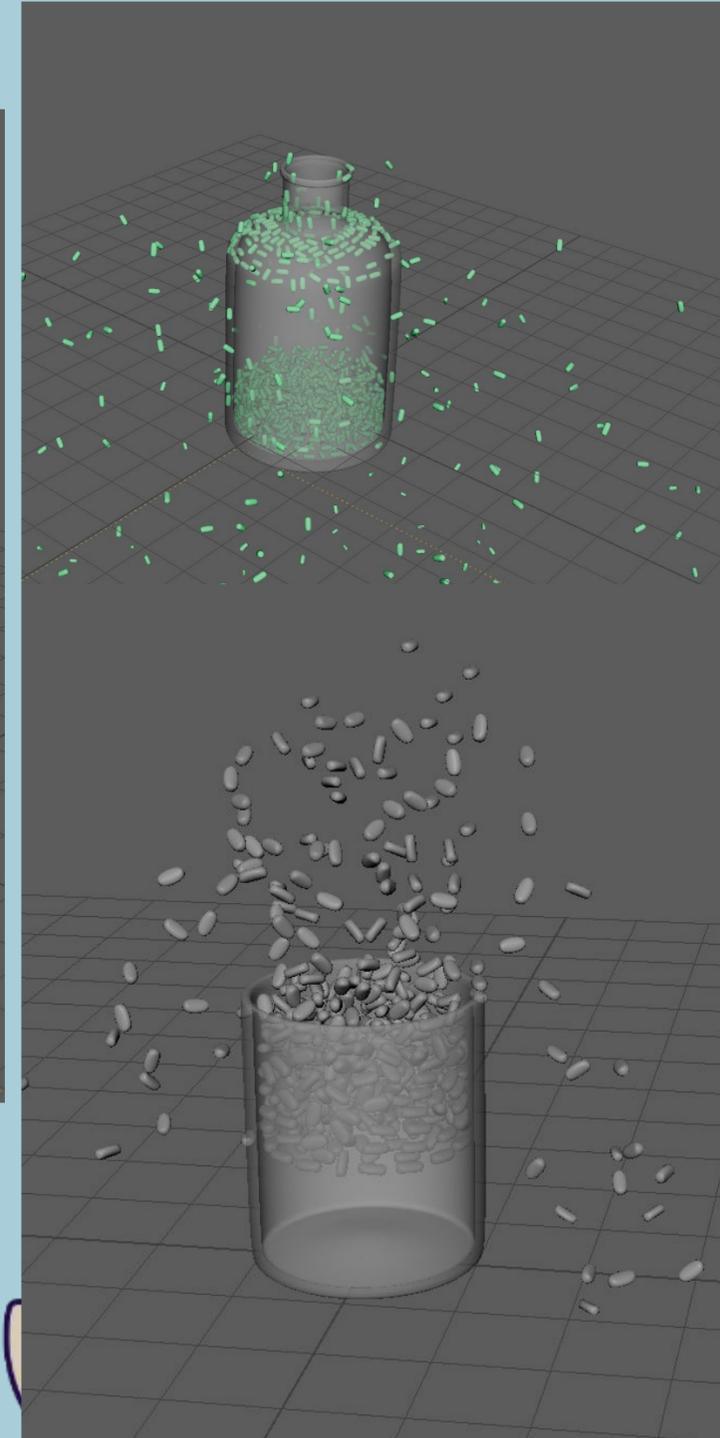
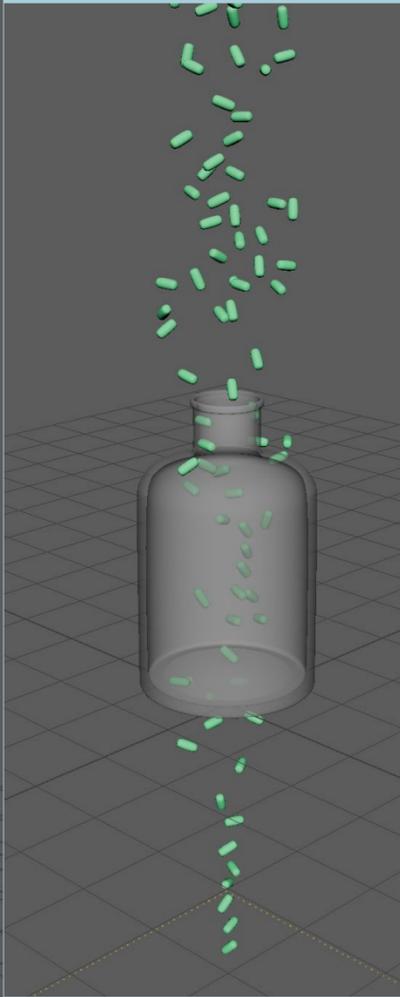
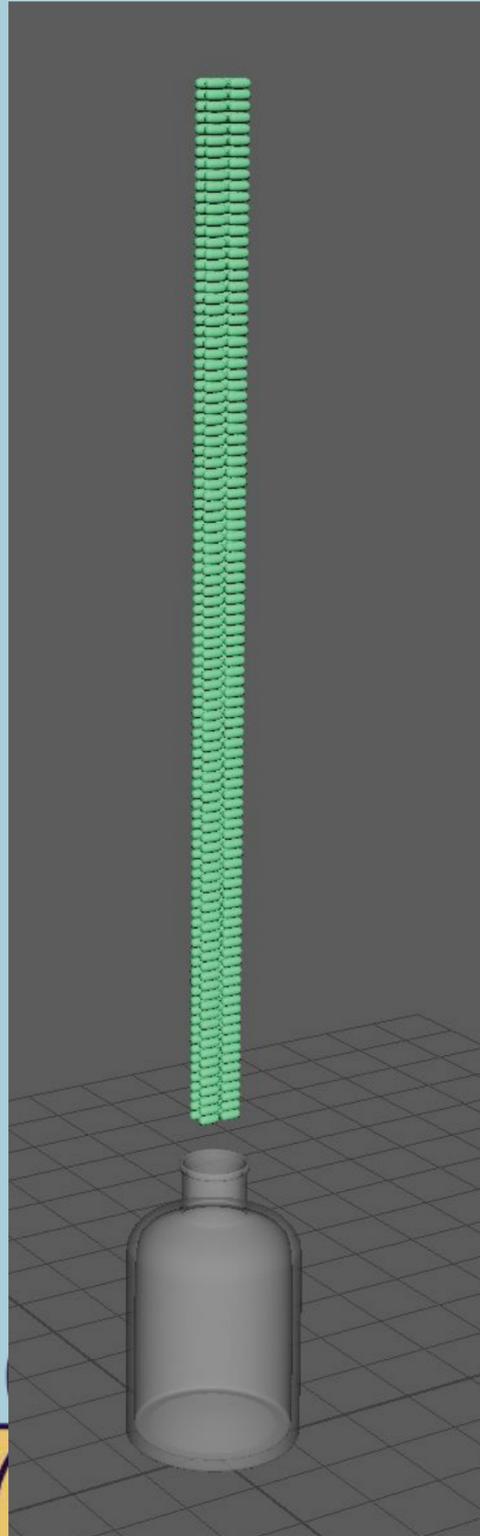
# MODELLING - Products



- Bottles - cylinder primitive
- Label - manually deformed plane



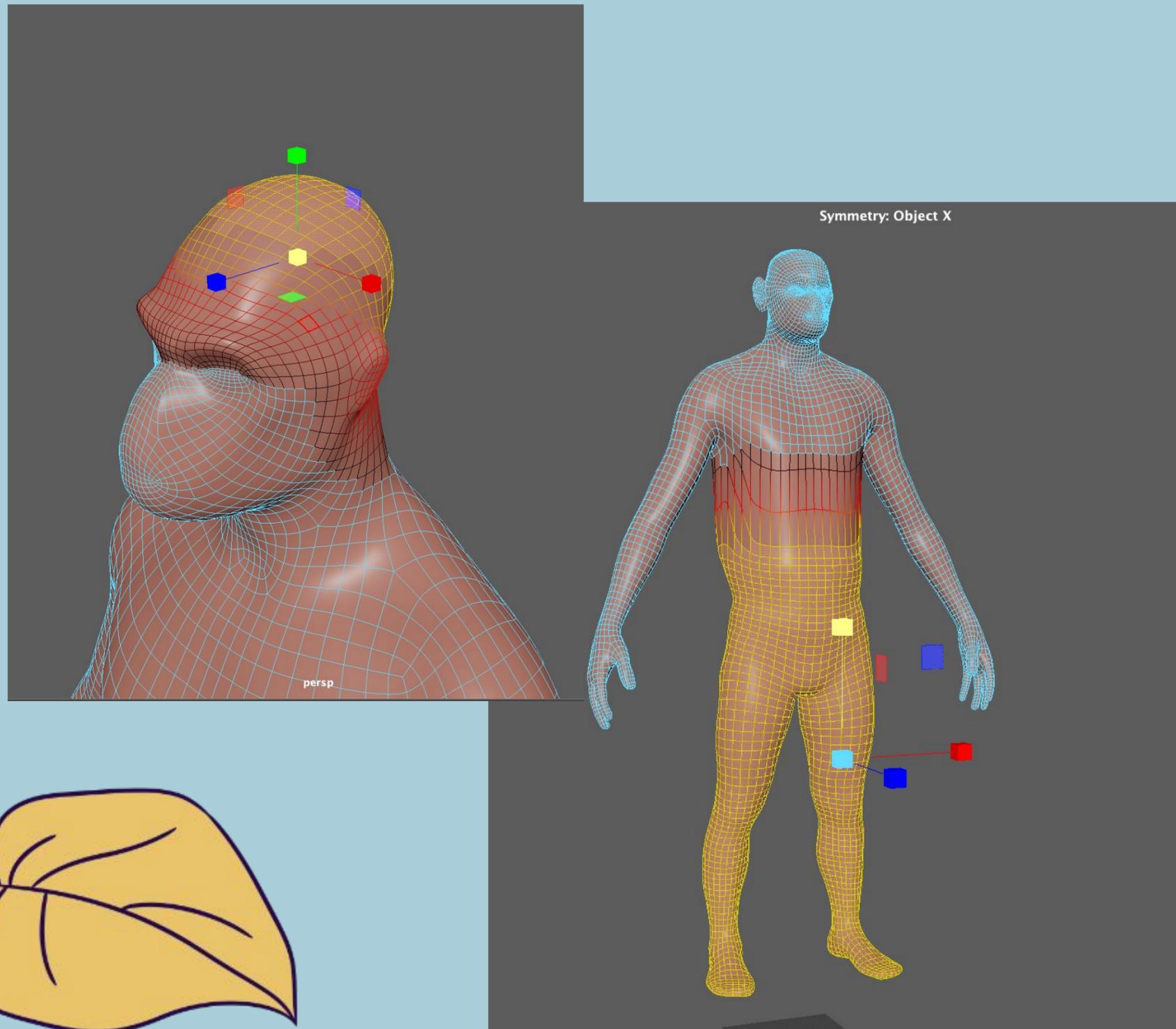
# MODELLING - Products



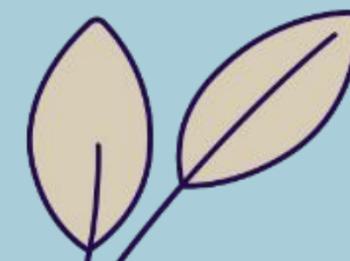
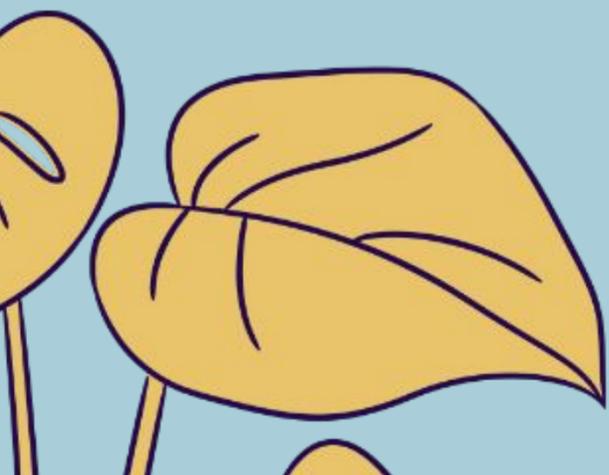
- Pills - MASH network with dynamics node
- Bottle is passive collider
- Never determined cause of issue



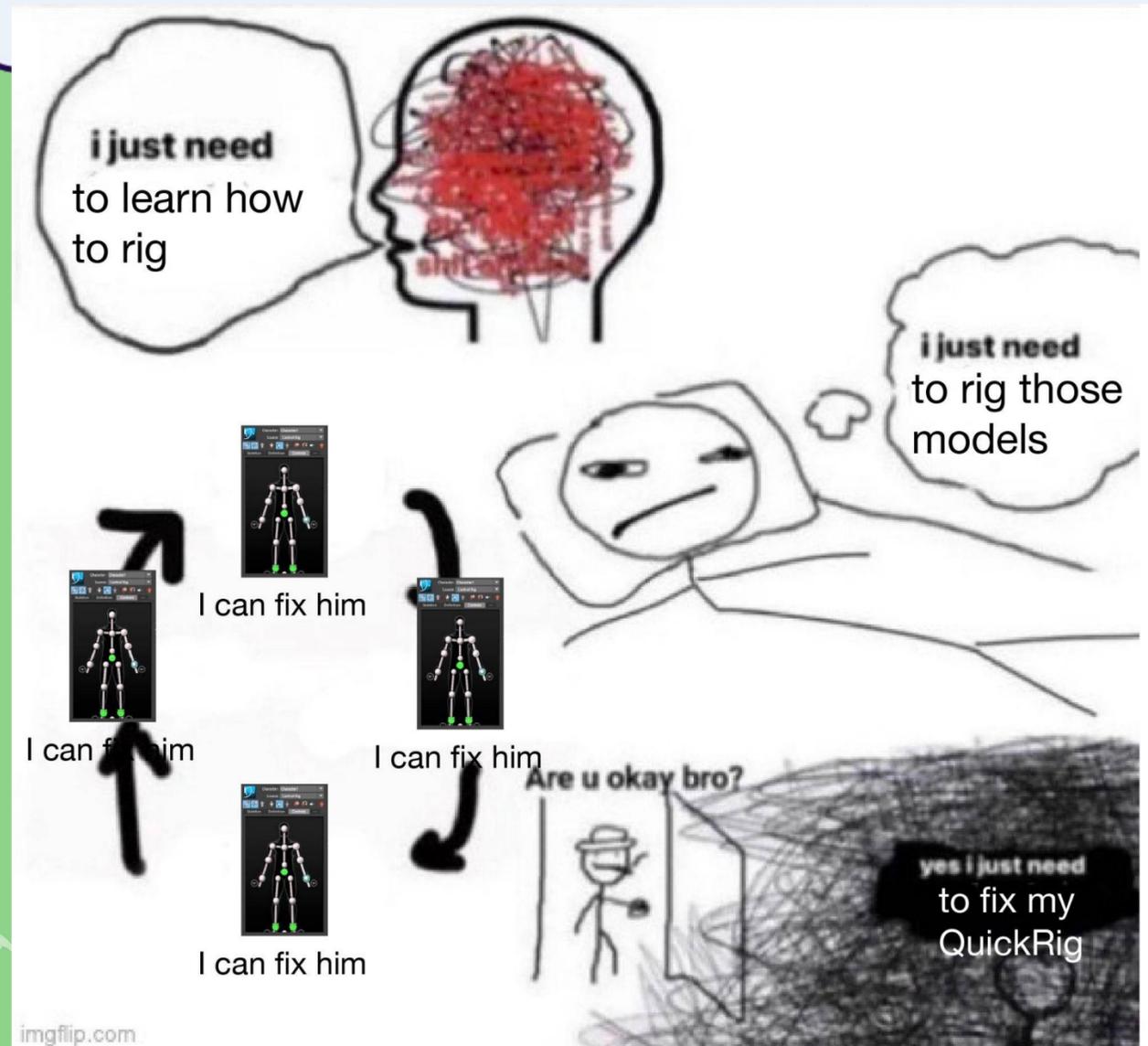
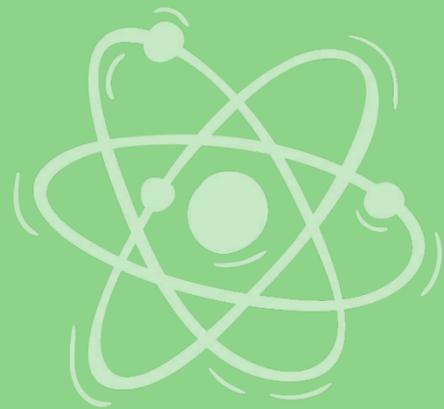
# MODELLING - Figures



- Chimps - content browser
- human
- Soft selection to sculpt face



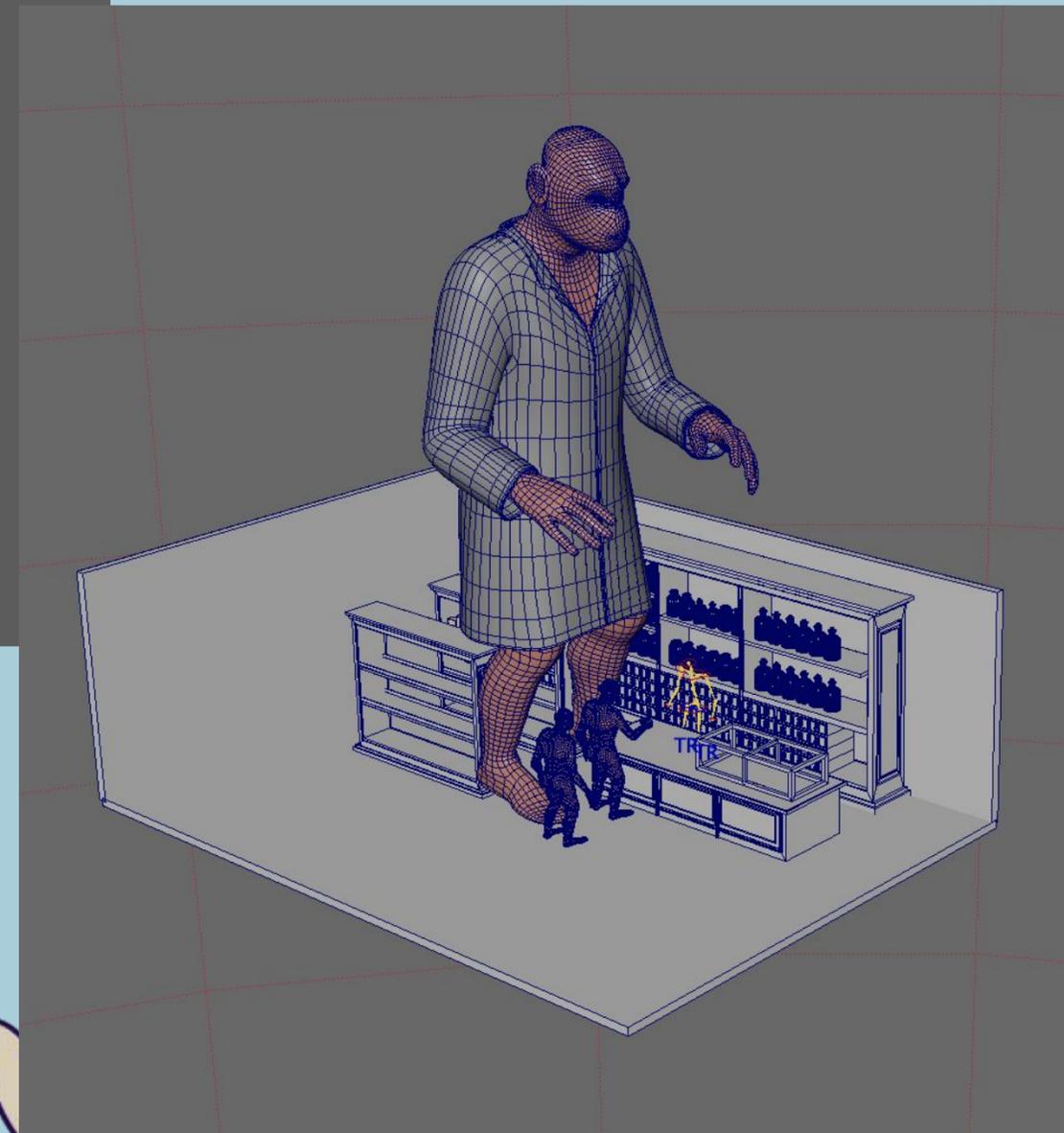
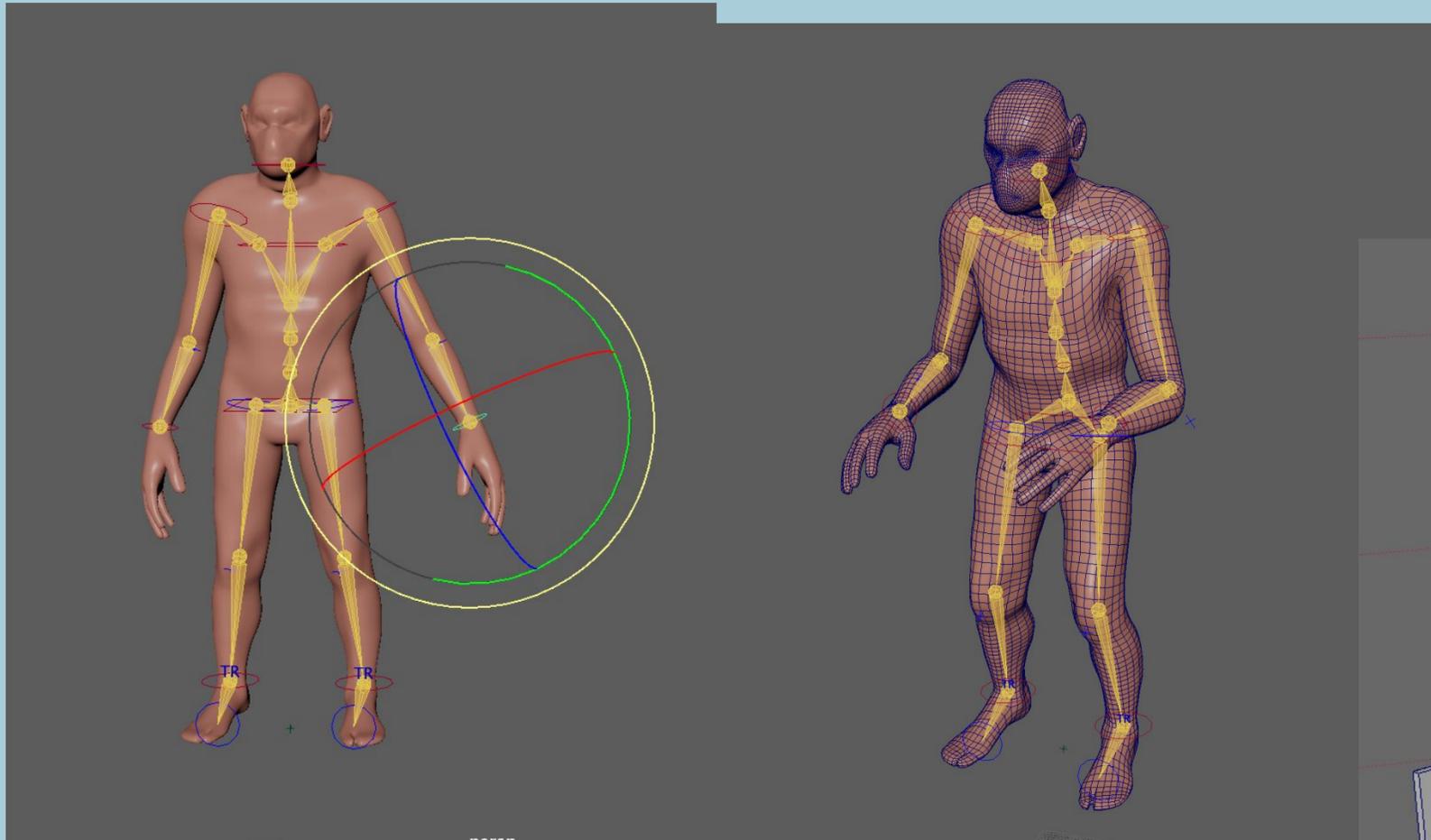
# RIGGING



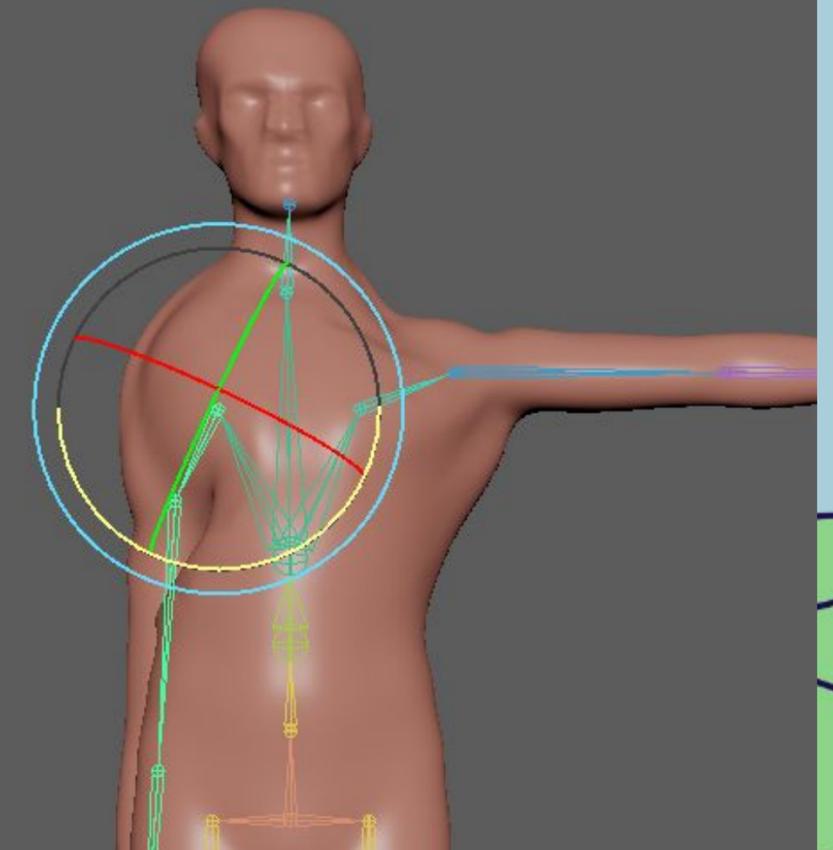
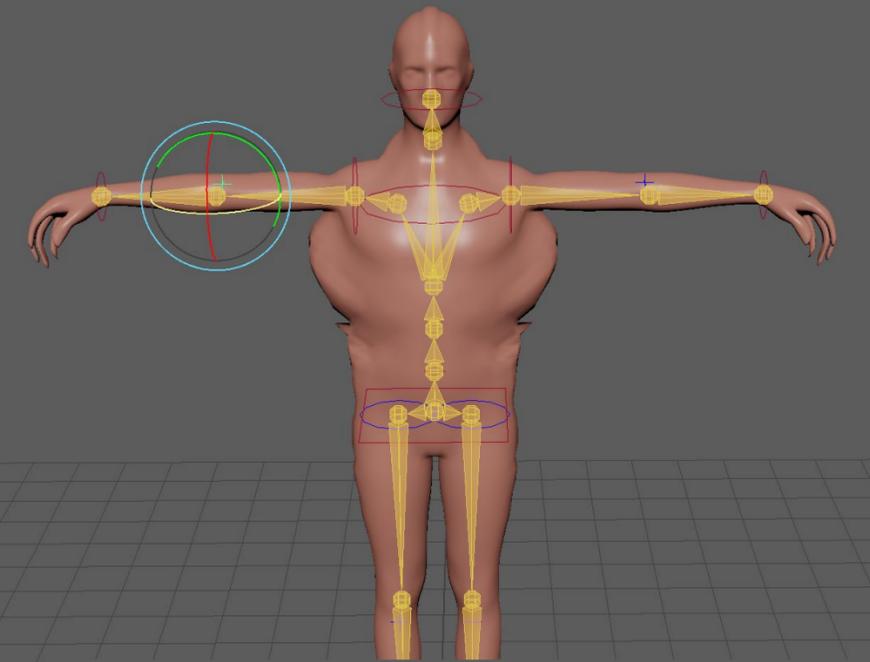
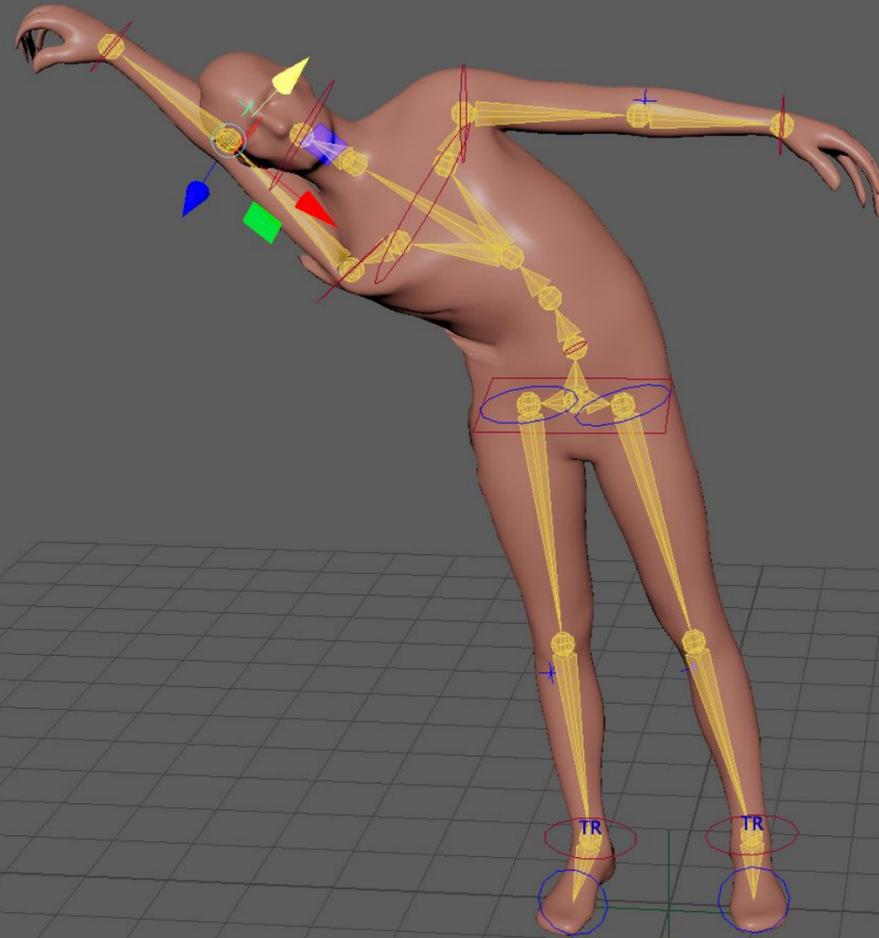
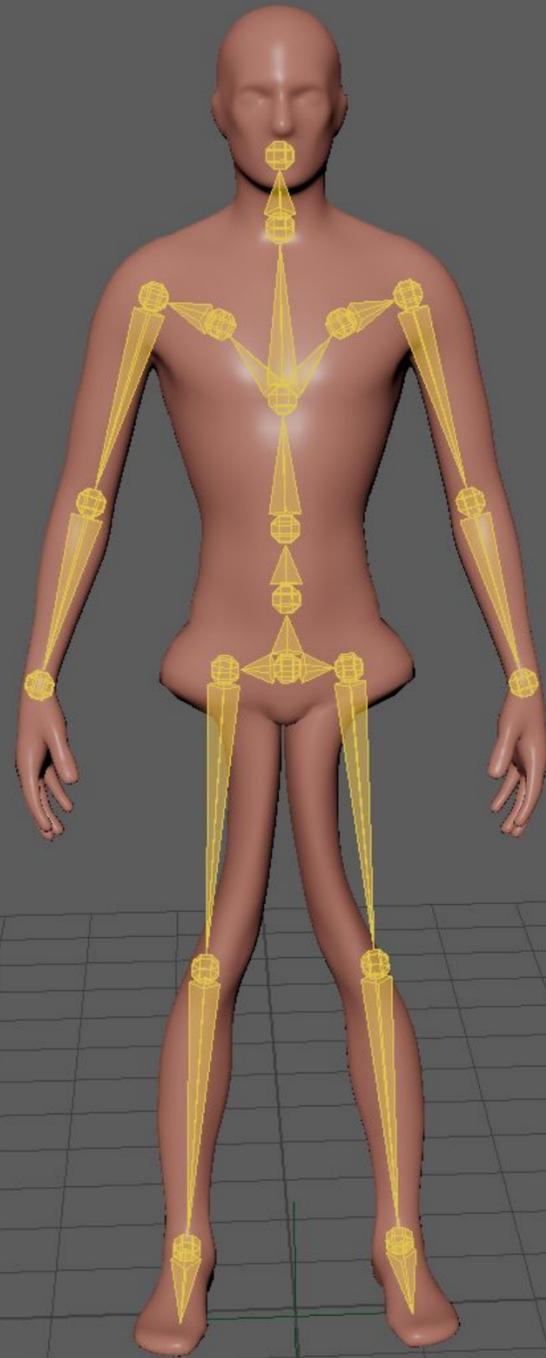
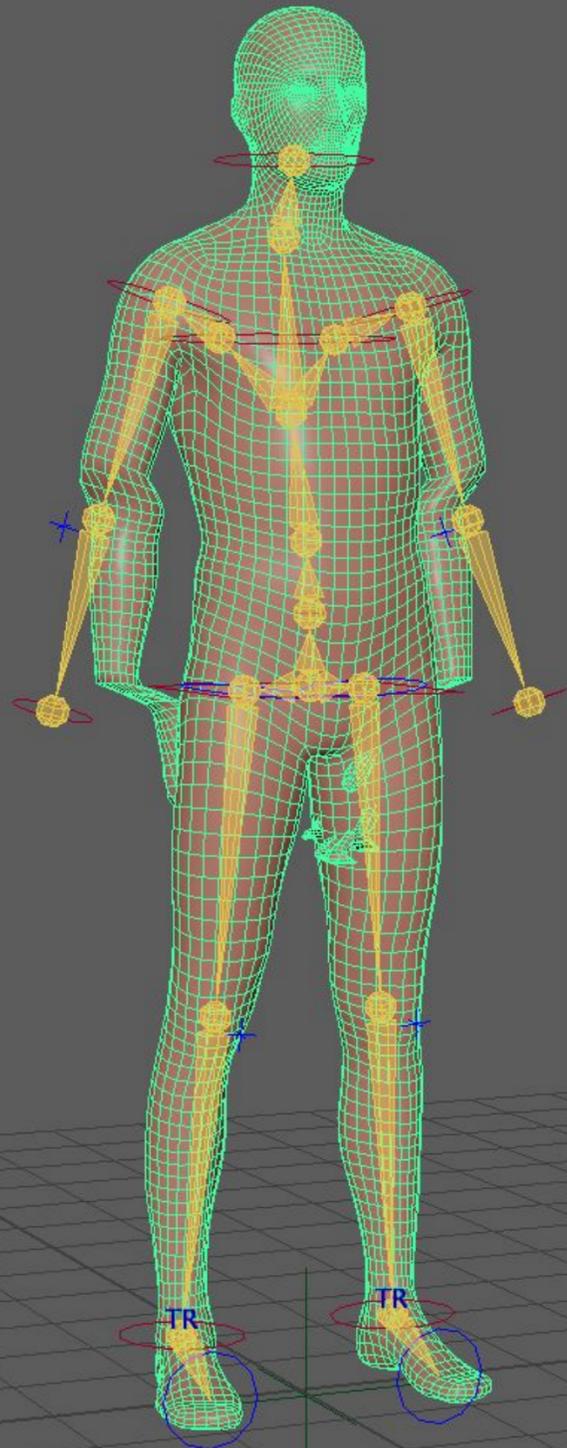
# MODELLING - Rigging



- Chimp was easy - kept it SIMPLE



Poor guy :(

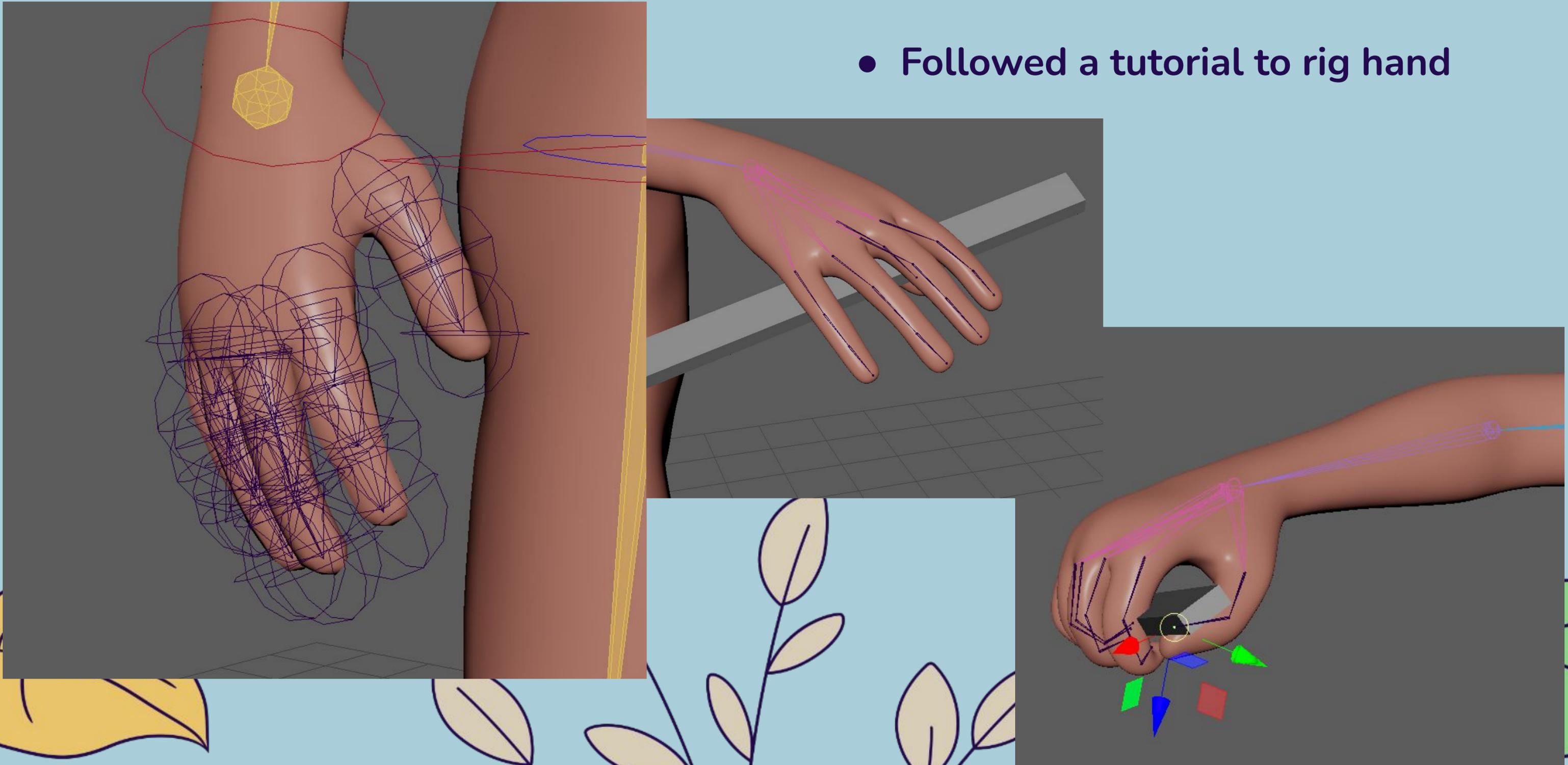


**It was not over for me...**

# MODELLING - Rigging



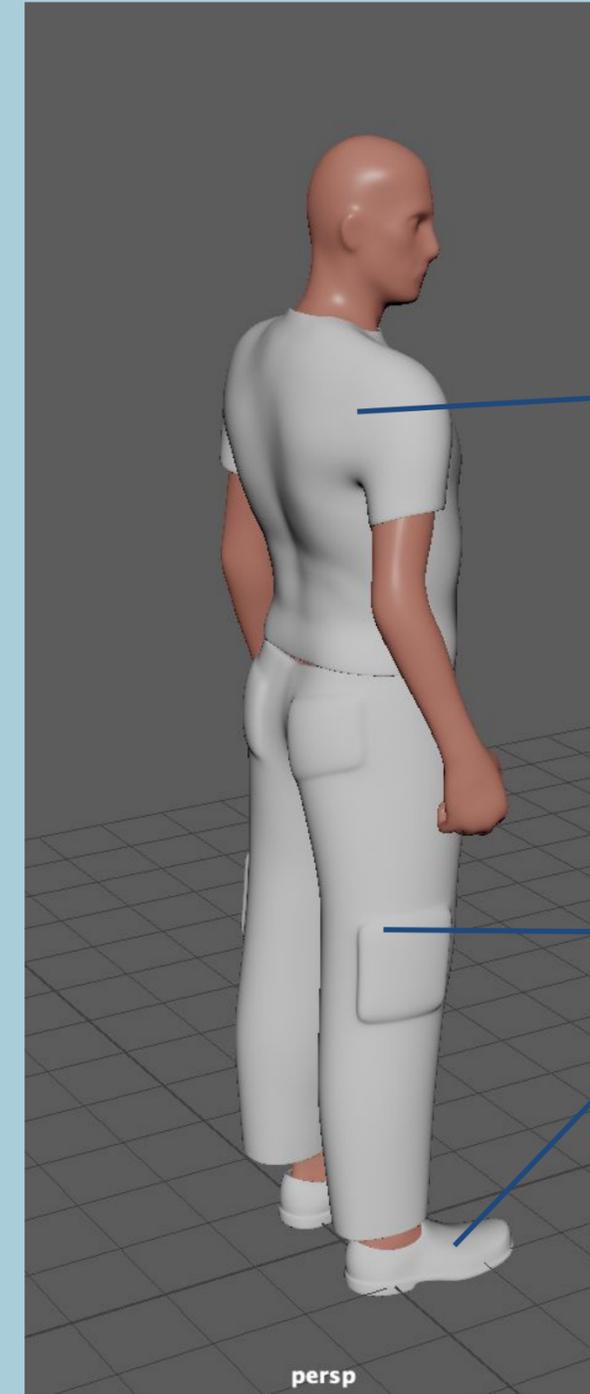
- Followed a tutorial to rig hand



# MODELLING - Clothing

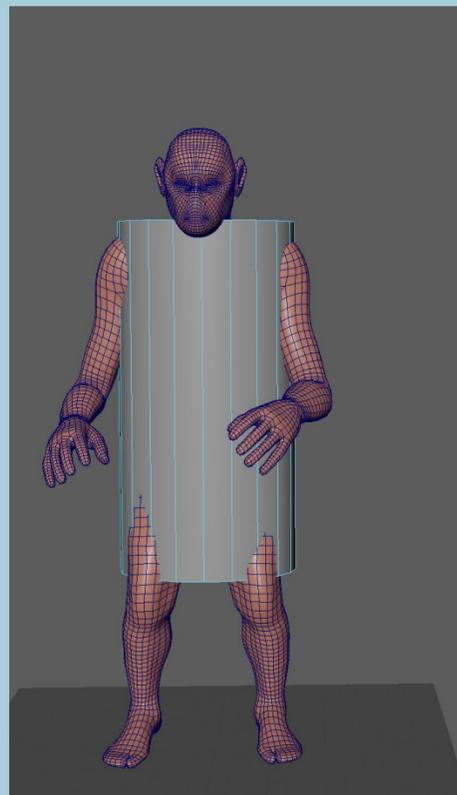


| METHOD          | PROS         | CONS            |
|-----------------|--------------|-----------------|
| From primitives | Control      | Slow            |
| Extruding skin  | Form-fitting | Lumpy...        |
| Content browser | Efficient    | Minimal control |

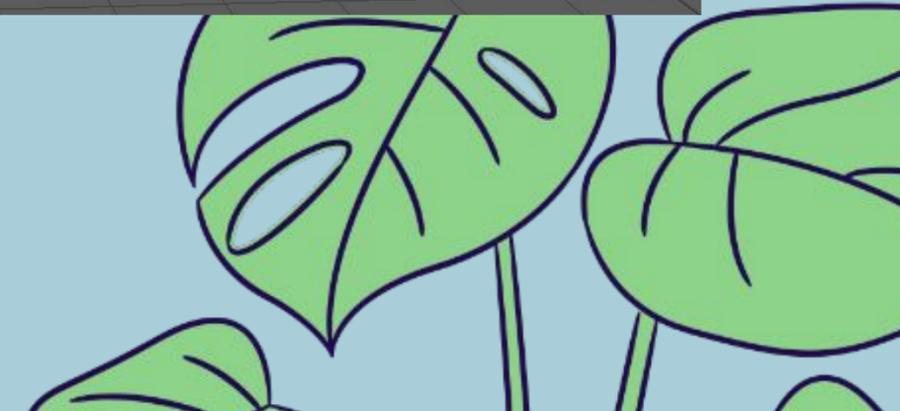
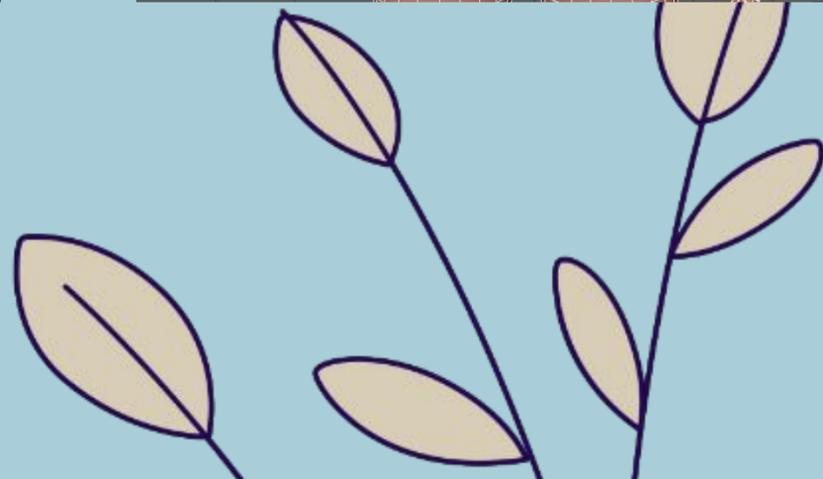
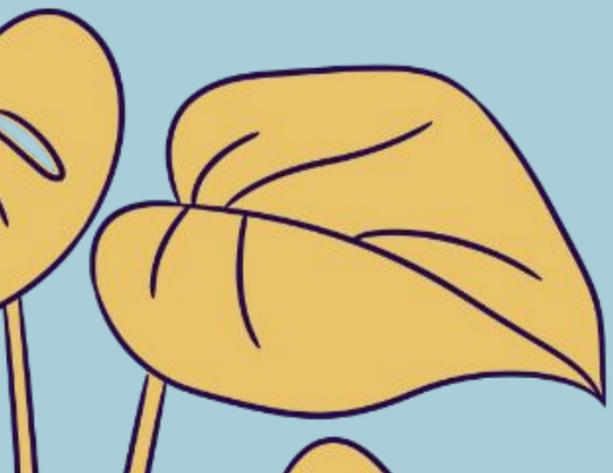
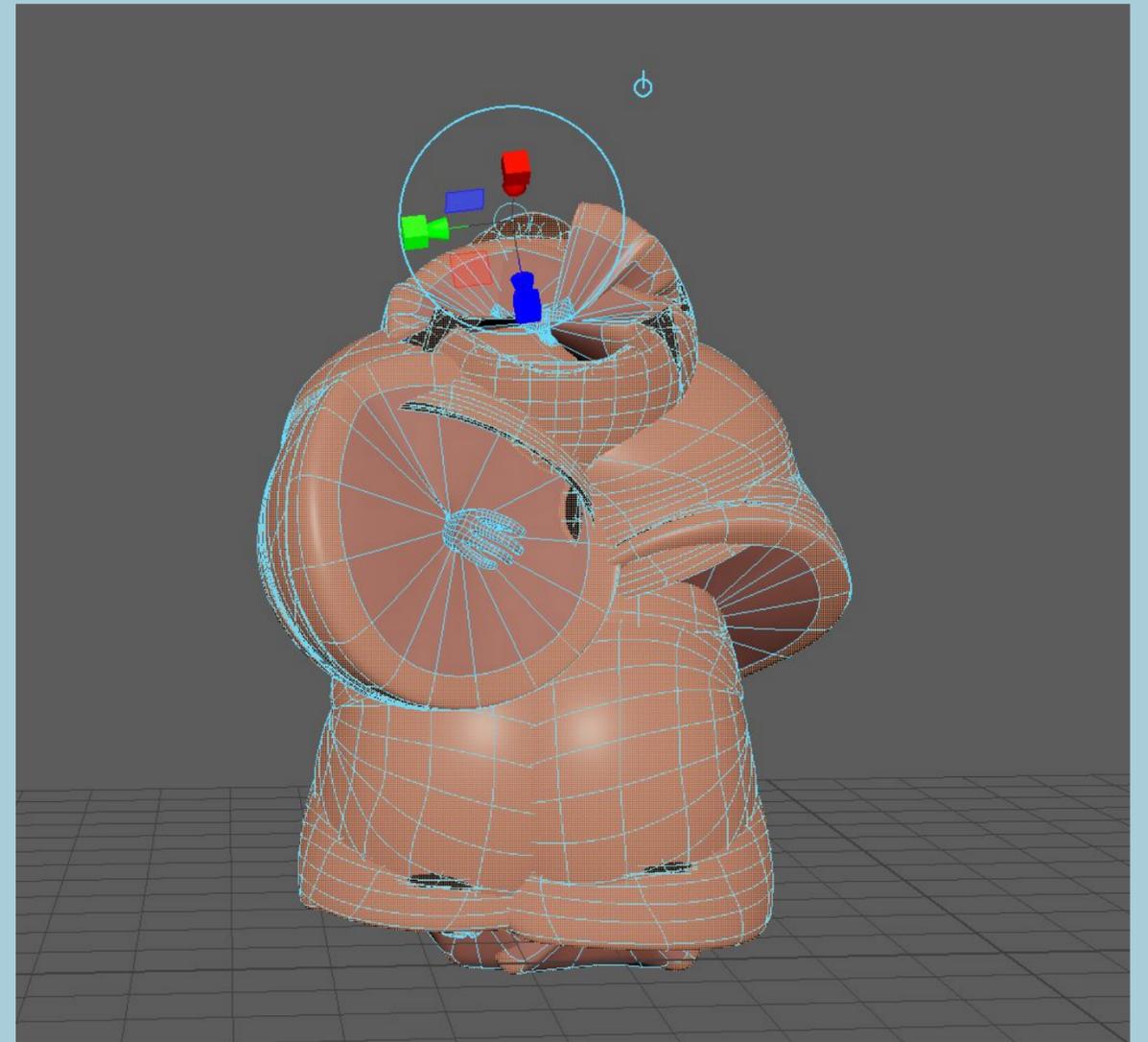
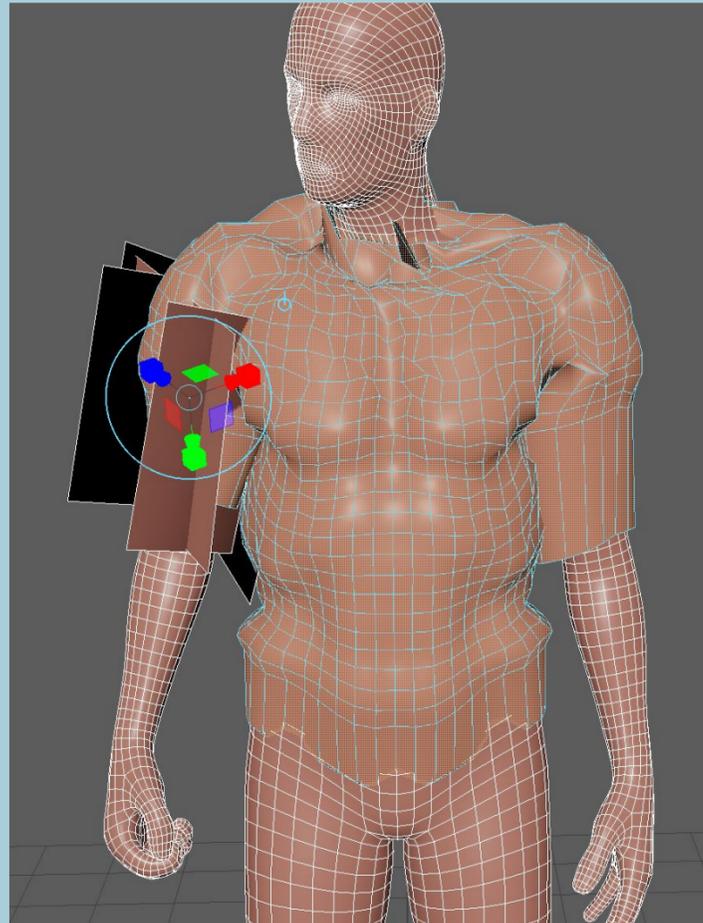
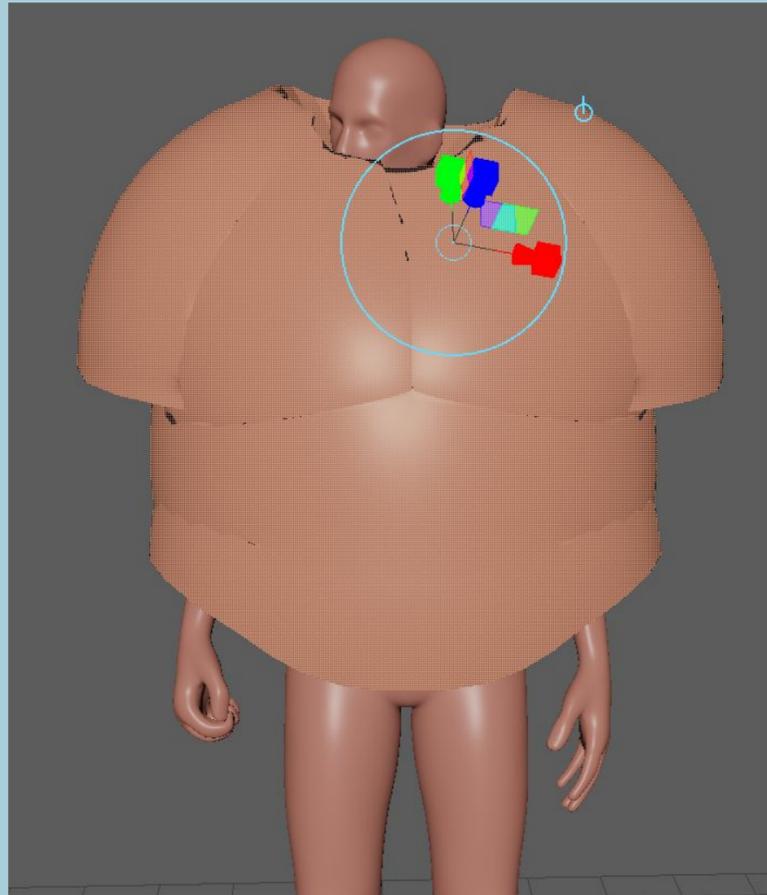


Extruding skin

Content browser



# MODELLING - Clothing



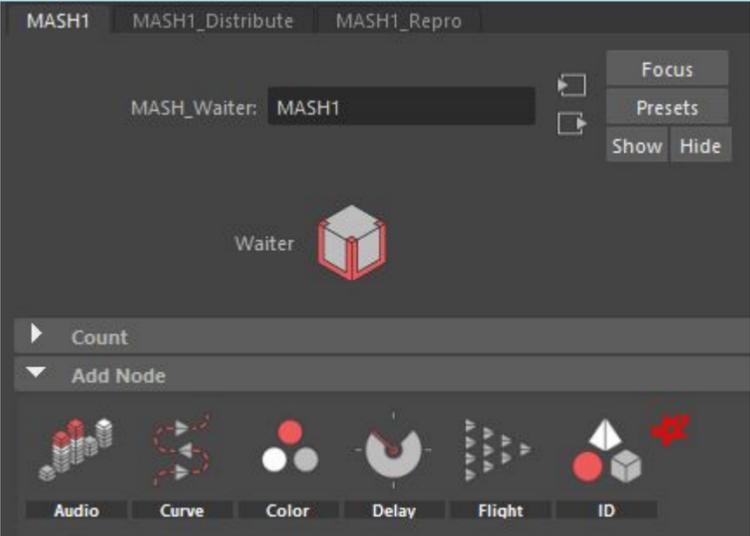


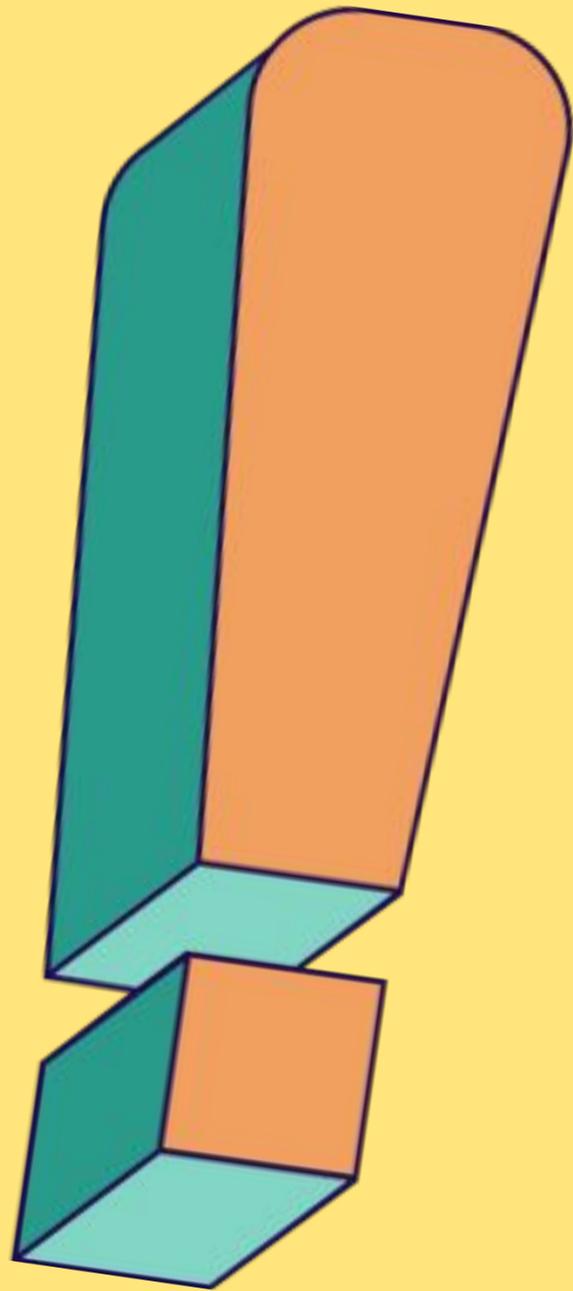
VERY IMPORTANT:

KEEP YOUR MASH



WAITERS!

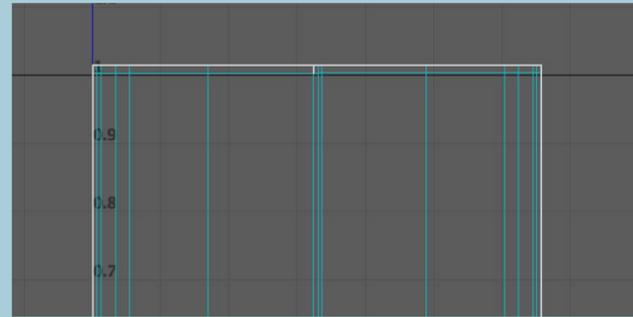
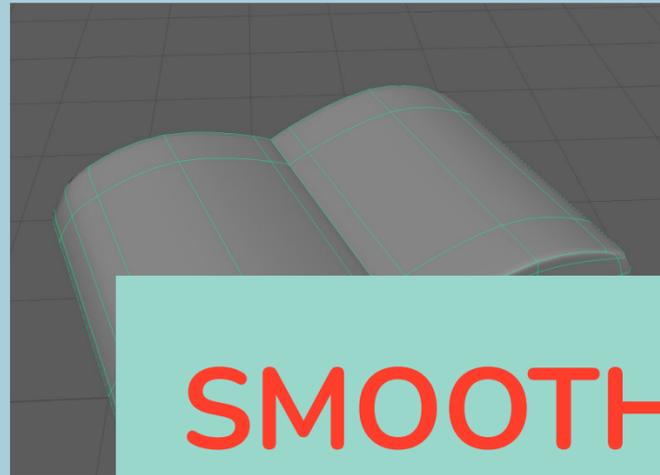




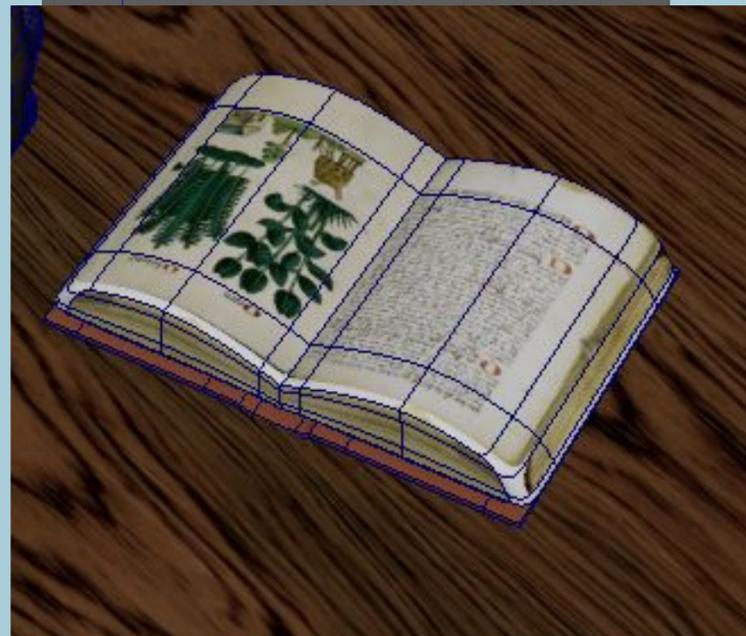
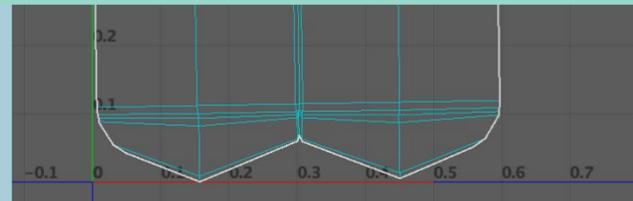
**TEXTURING & LIGHTING**



# TEXTURING



**SMOOTH MODE WILL CHANGE YOUR UVs!**



Downloaded wood + tile textures

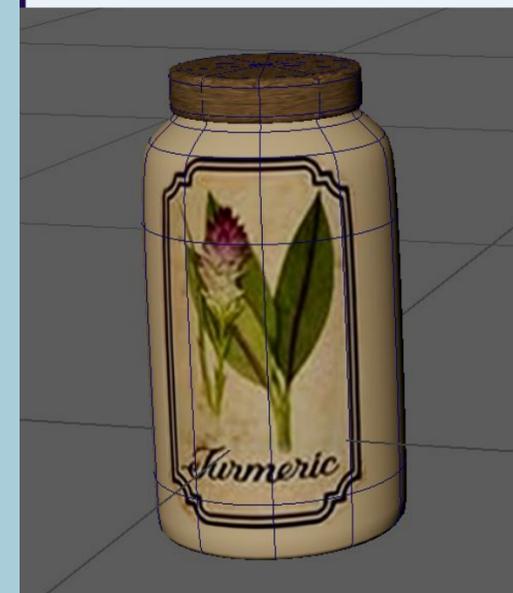


aiStandardSurface presets for



labels

duct



# TEXTURING

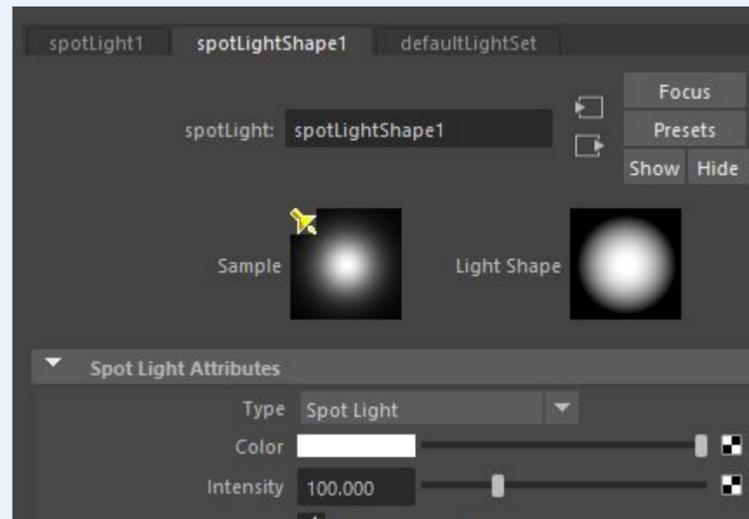


# LIGHTING



# LIGHTING

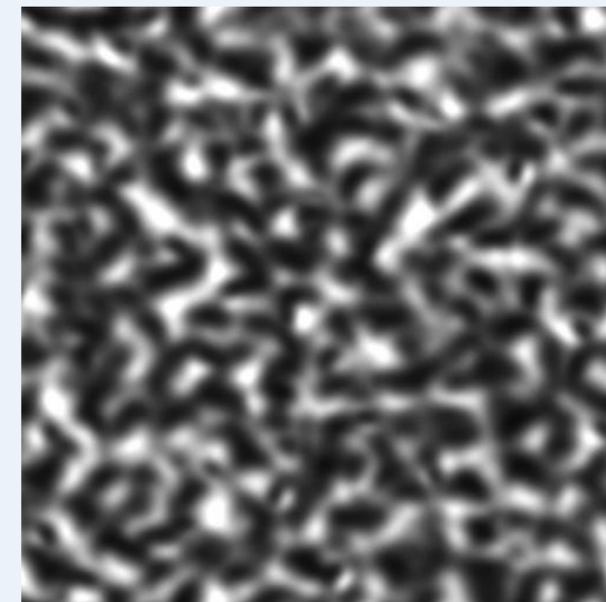
Spotlight + Gobo + Noise = Dappled light effect!



Arnold Spotlight



Gobo = screen with holes in it to cast shadows of a particular shape



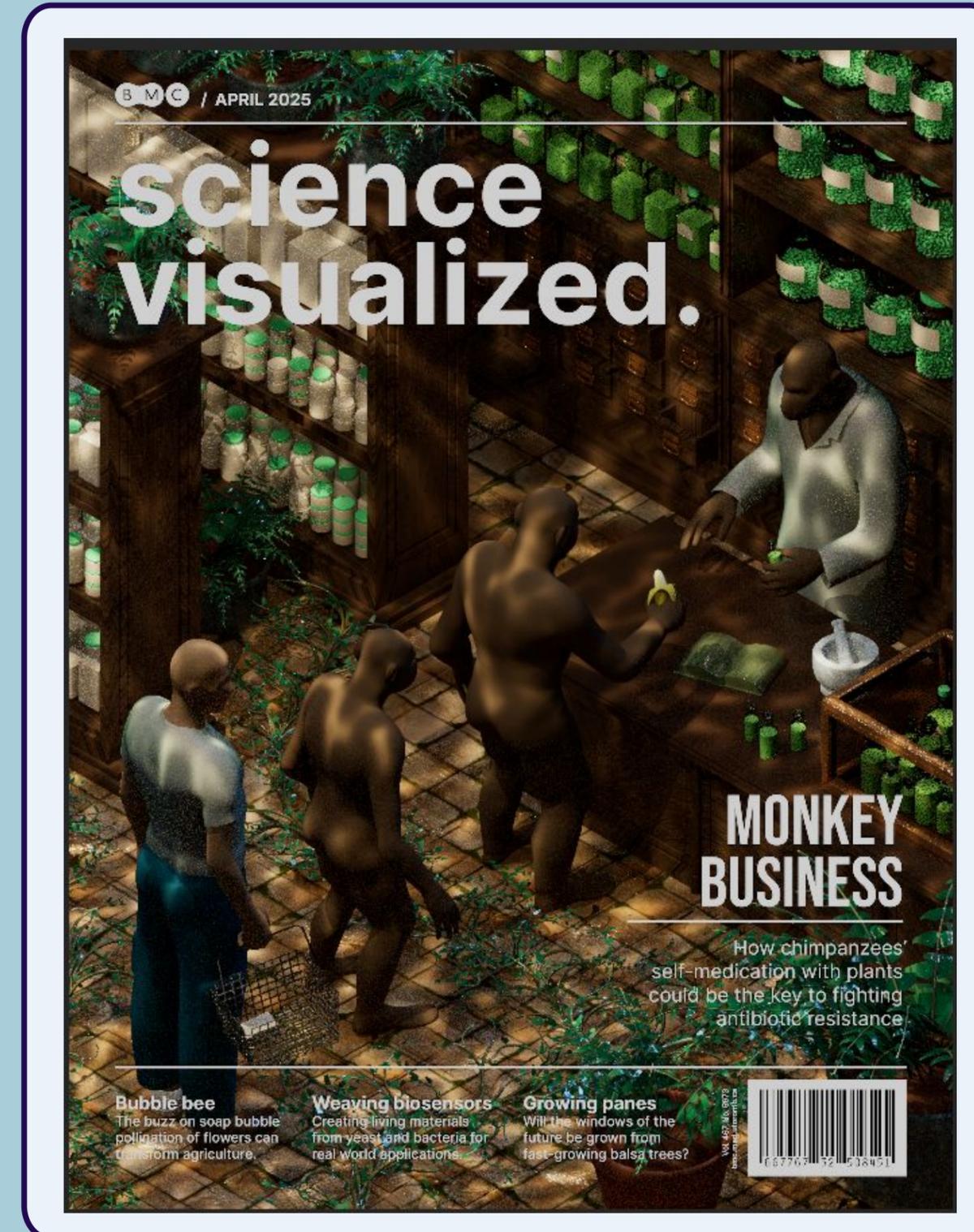
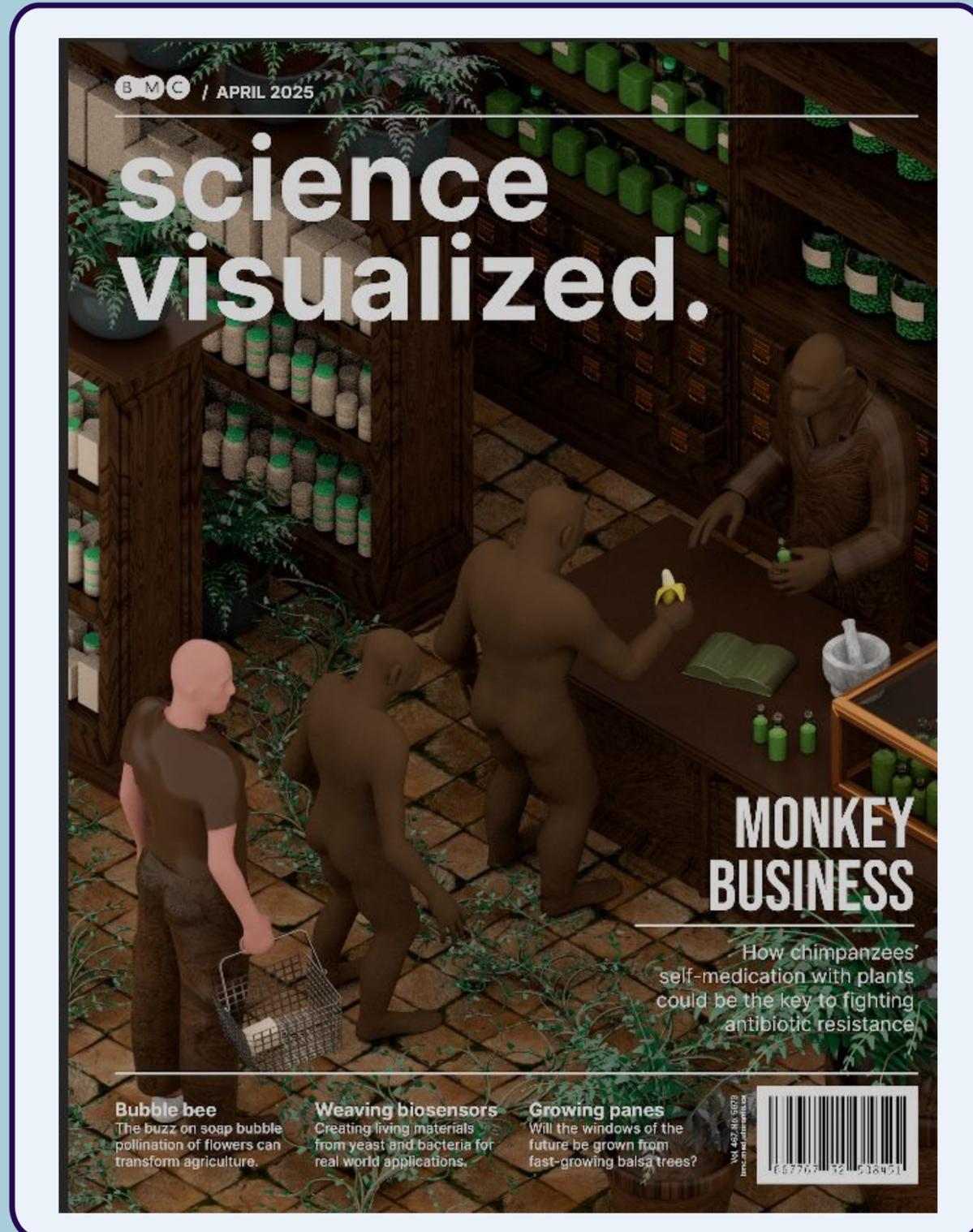
Gabor noise

# LIGHTING

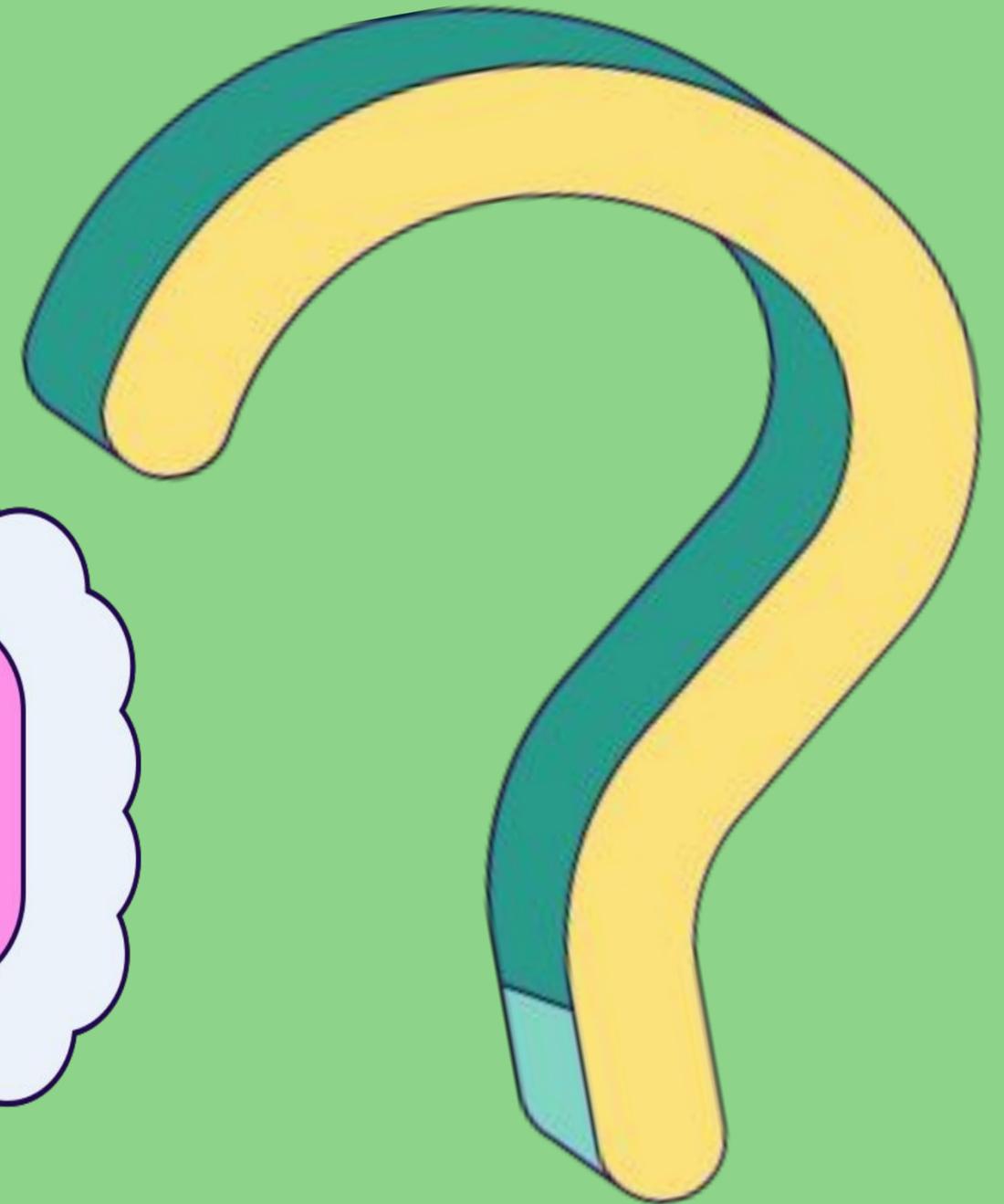
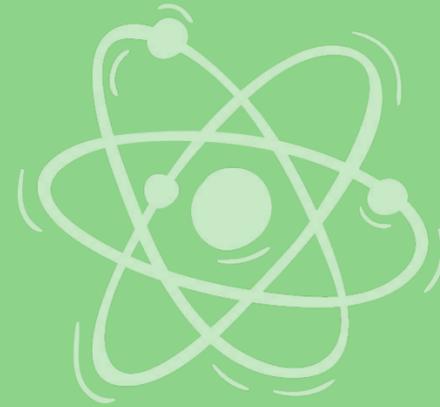


BEFORE

AFTER



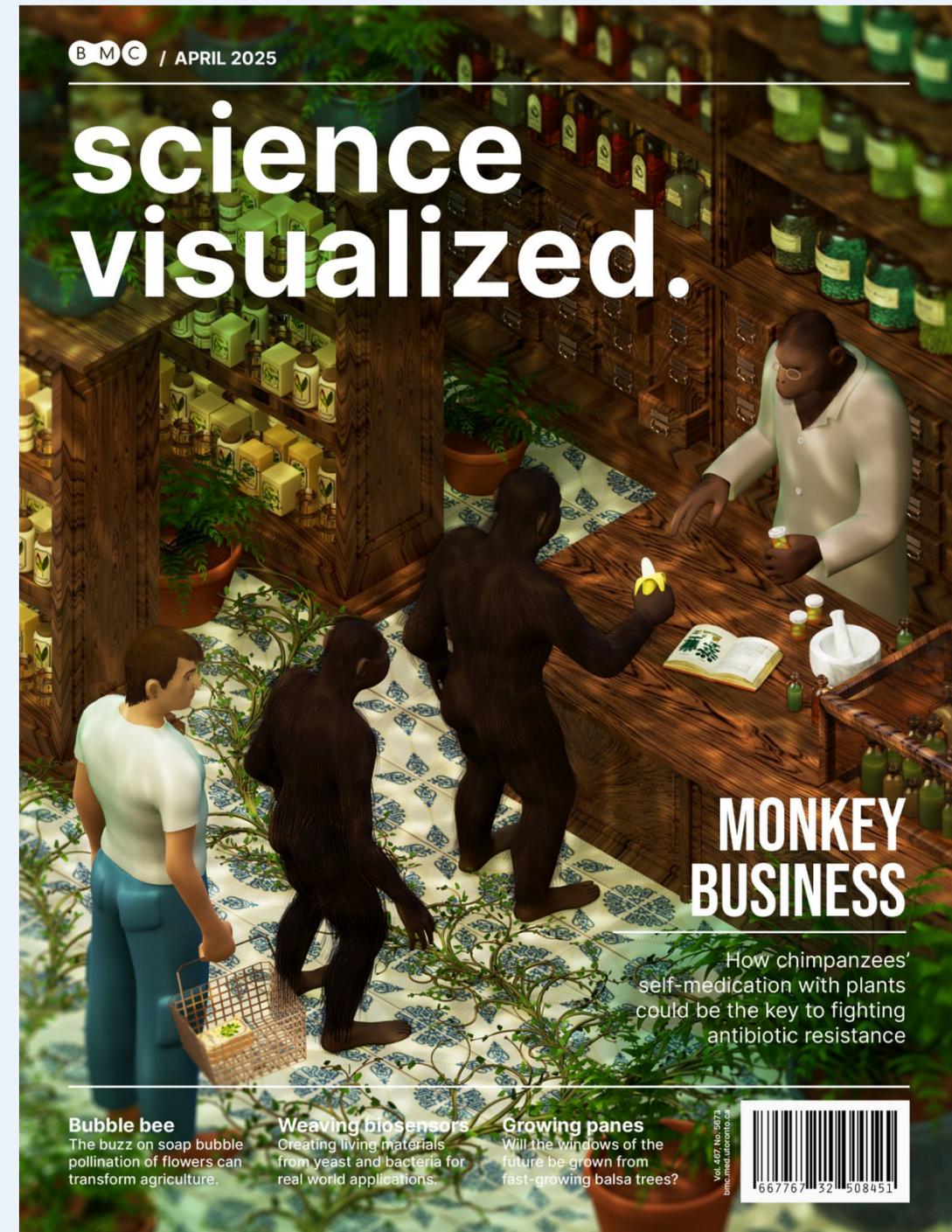
# RENDERING & COMPOSITING



# RENDERING

BEFORE

AFTER



# science visualized.



## MONKEY BUSINESS

How chimpanzees' self-medication with plants could be the key to fighting antibiotic resistance

### Bubble bee

The buzz on soap bubble pollination of flowers can transform agriculture.

### Weaving biosensors

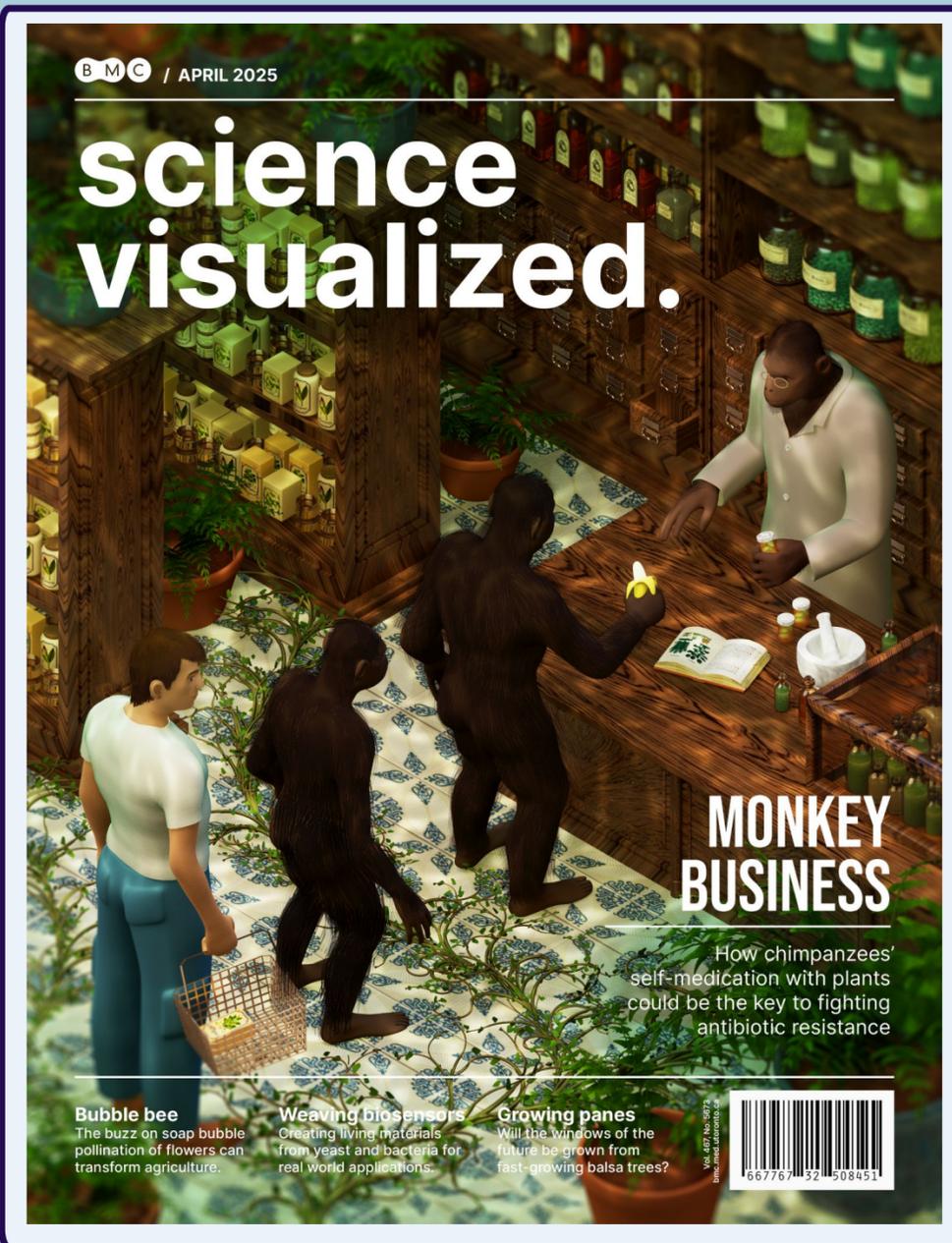
Creating living materials from yeast and bacteria for real world applications.

### Growing panes

Will the windows of the future be grown from fast-growing balsa trees?

Vol. 497, No. 5673  
bmc.med.utoronto.ca





## FUTURE STEPS...

- Play around with compositing some more
- Remake clothes on guy by hand
- Find a way to reduce visual chaos - maybe different tiles?

**Feedback please!**



**THANK YOU TO  
EVERYONE FOR ALL  
OF YOUR HELP!!**

