

Real World Applications

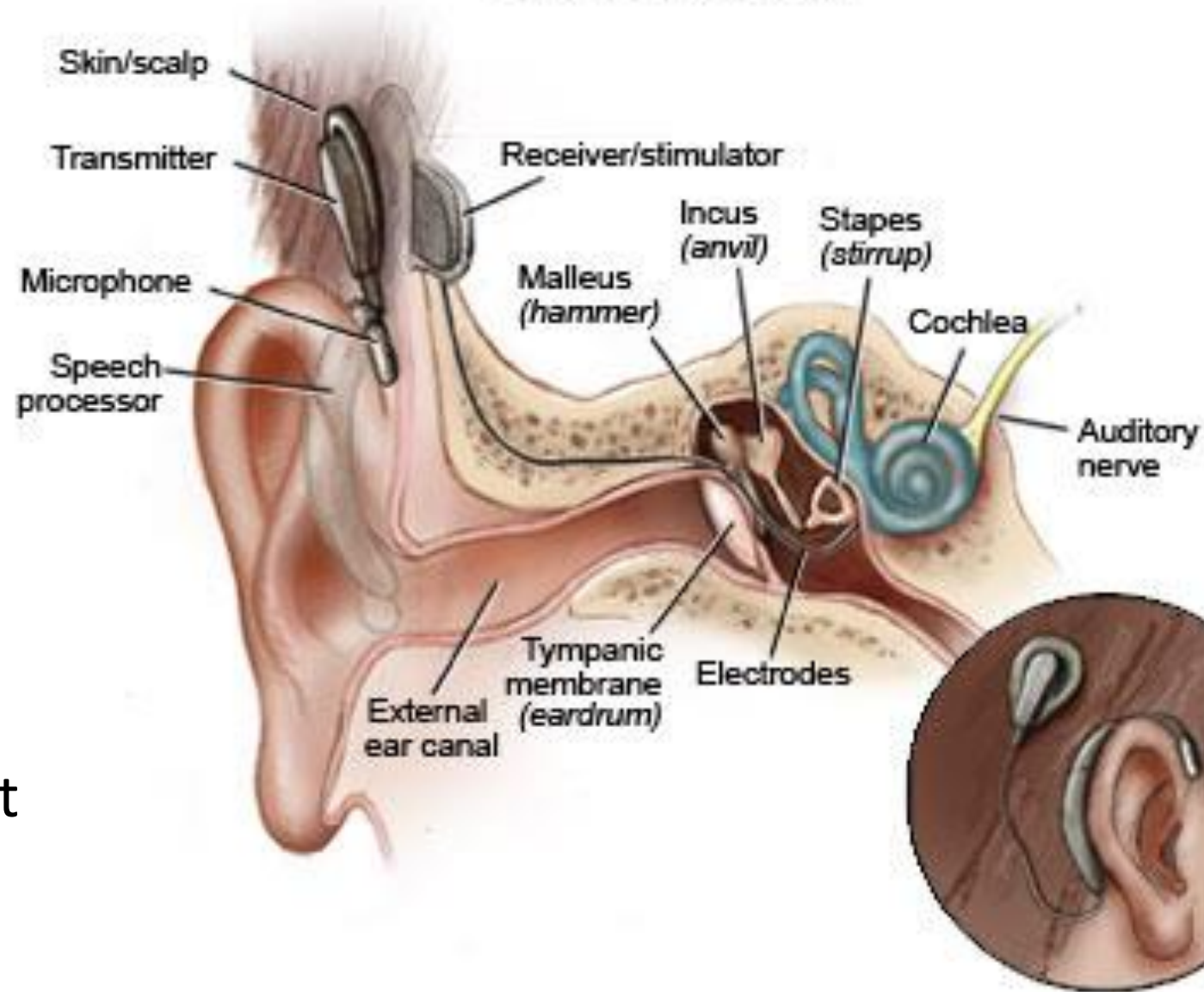
Cochlear Implant, Alexa, E-sports, DaVinci robot

Cochlear Implants



Artificial Ear

Cochlear Implant



Surgery, therapy and device can cost as much as \$100,000.

Babies who are
born deaf can
receive surgery.
Adults can as well.





The speaker
can be made
the same
colour as your
hair.



Making it more mainstream....

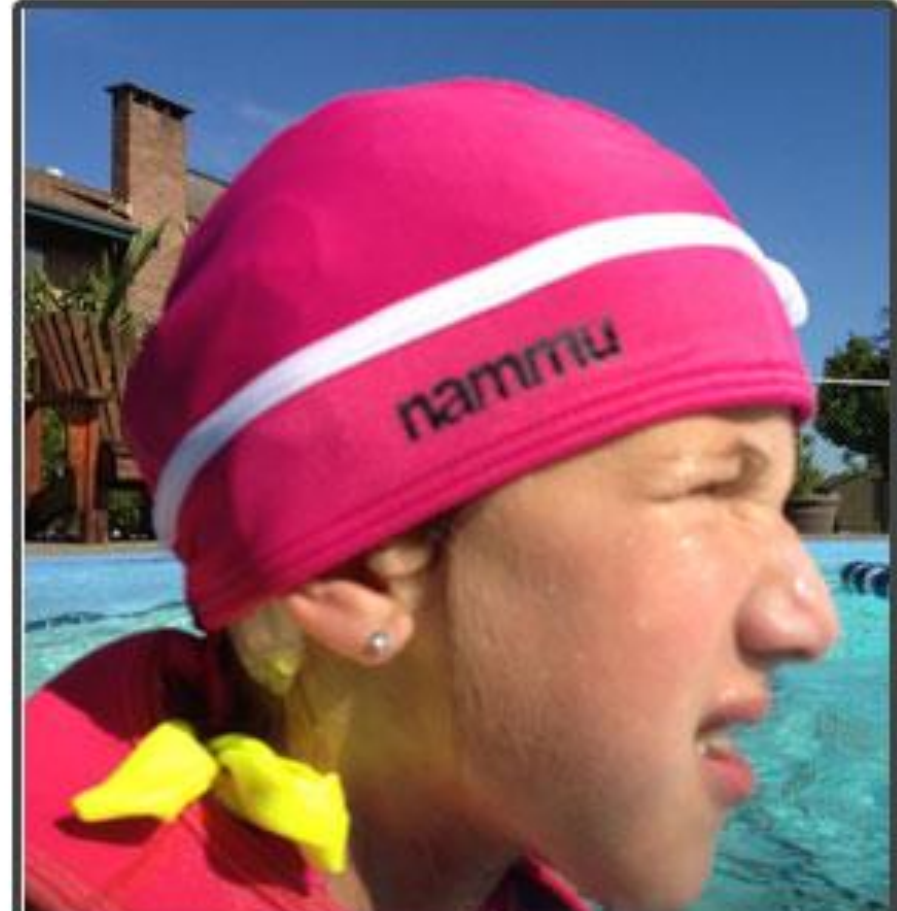
← A child's doll with a cochlear implant.
An interesting hairstyle ↓



Swimming with the Tech



This is the Cochlear Aqua Accessory.
The Nammu hat is great in pairing with this

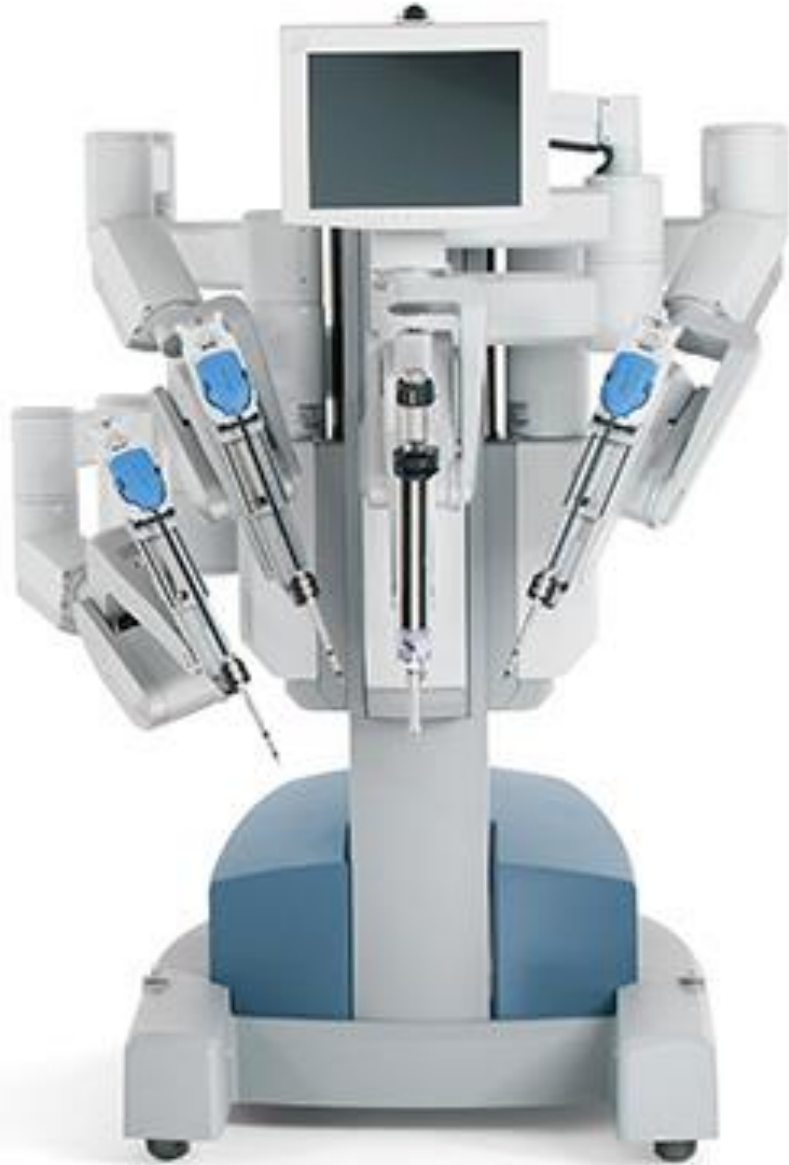


Wearing her nammu hat with her
cochlear aqua accessory bag



The “Bionic Ear” is really old technology.

First implanted in 1978 in Melbourne Australia.
First approved for use in adults in USA in 1985.
First approved for children in Canada in 1990.

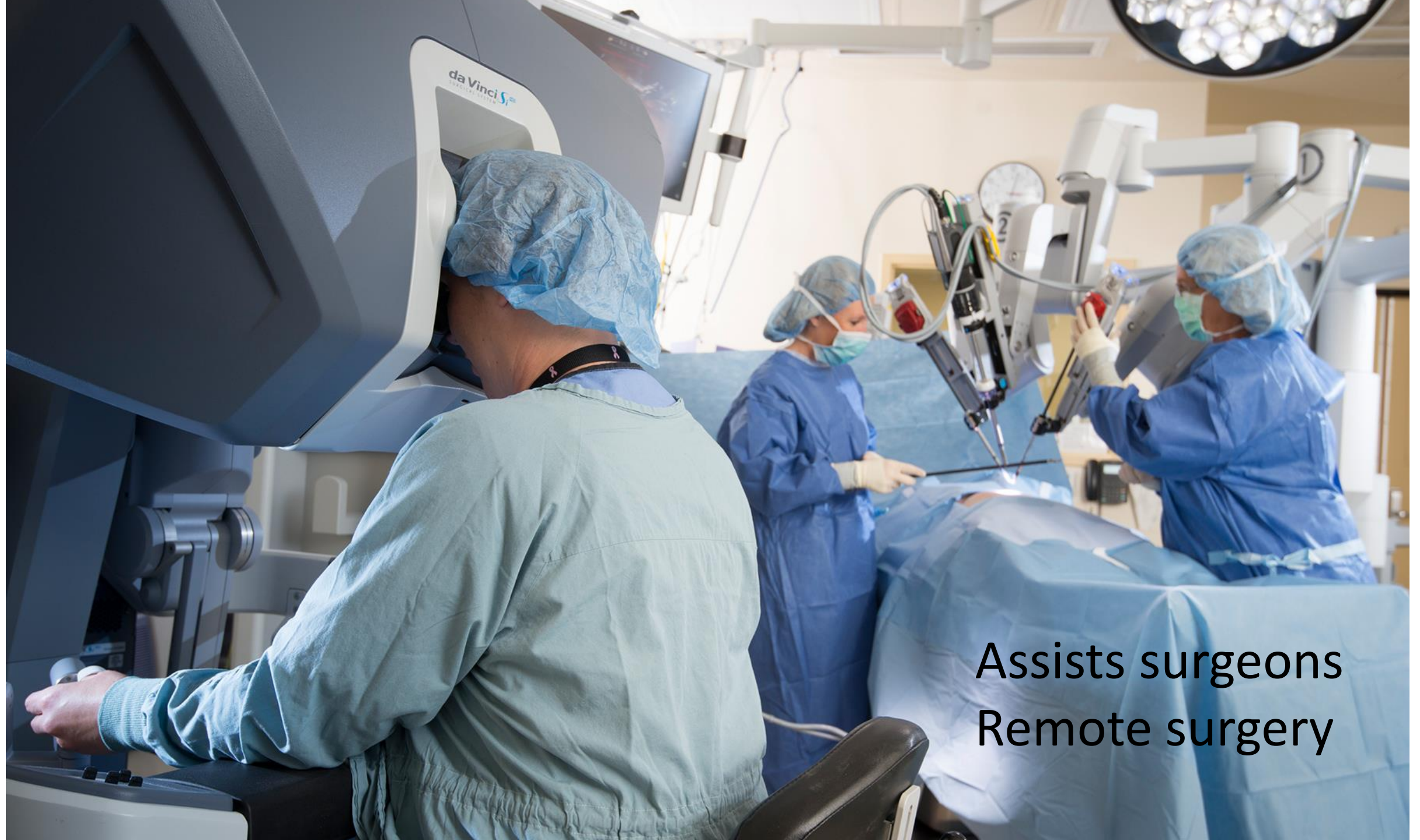


DaVinci Surgical Robot

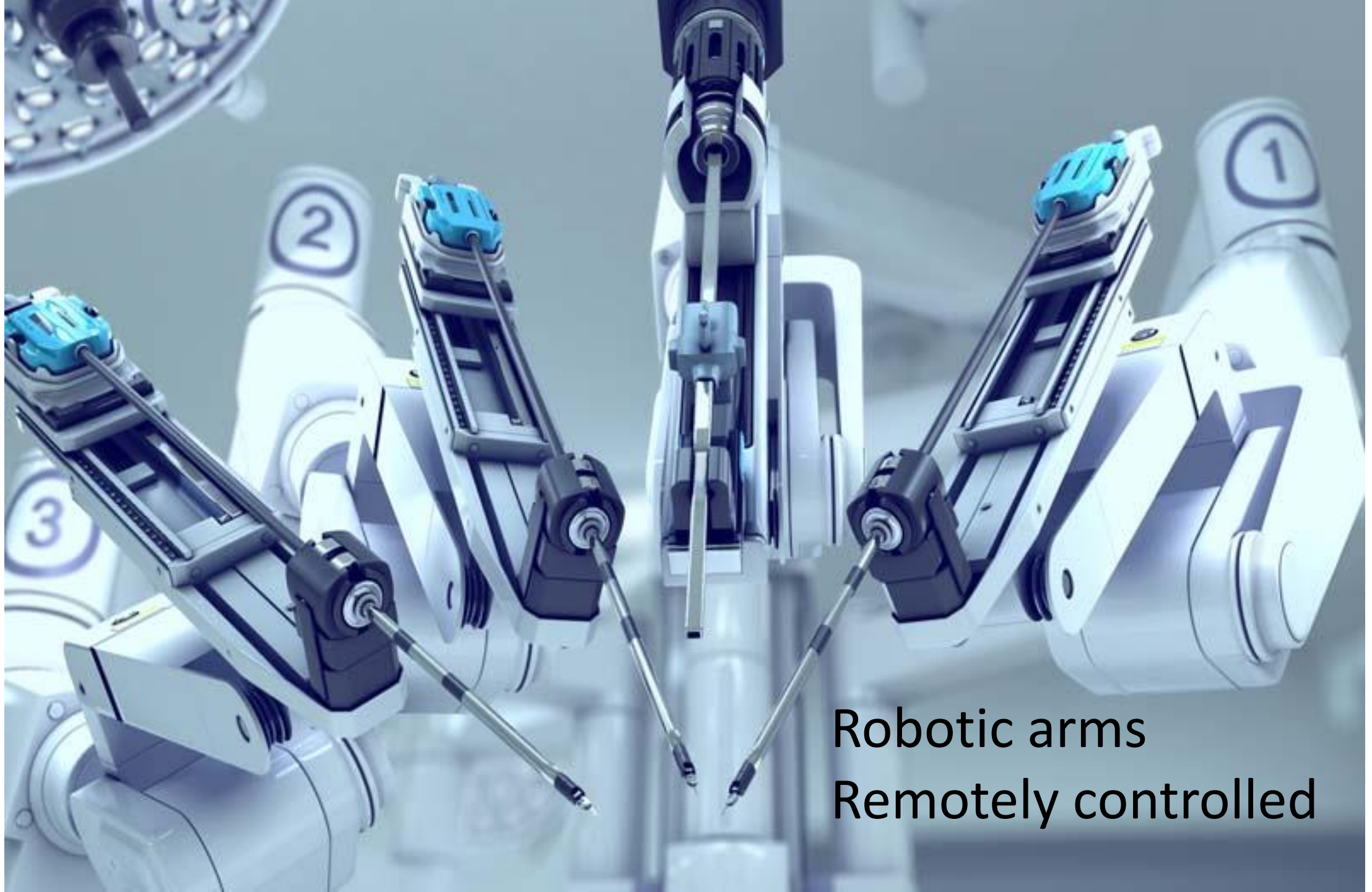
Costs \$2 million

Used in about 1,700 hospitals worldwide

First sales in 2000.



Assists surgeons
Remote surgery



Robotic arms
Remotely controlled

A photograph of a surgical team performing a minimally invasive procedure using a robotic system. Two surgeons are seated at a console on the left, each with a large monitor in front of them. They are wearing blue scrubs and surgical caps. In the center, a robotic arm holds a surgical instrument over a patient lying on an operating table. A nurse stands on the right, also in blue scrubs, observing the procedure. The room is dimly lit, with bright surgical lights focused on the patient. Several monitors are visible, showing different views of the surgical site. The overall atmosphere is professional and high-tech.

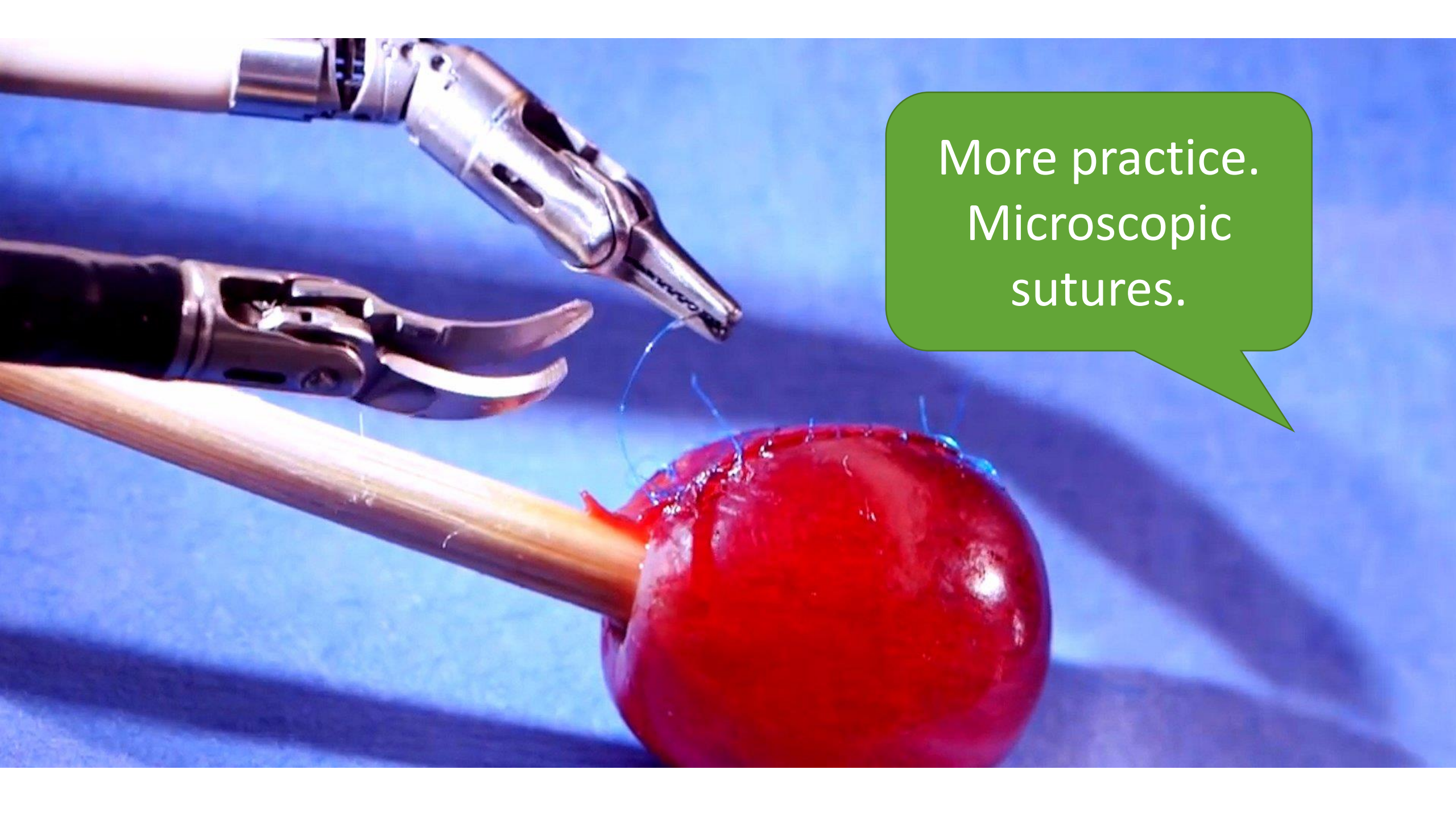
Surgeon
with
viewer
and
controls

Robotic arms
performing
surgery

Nurse
monitoring
surgery

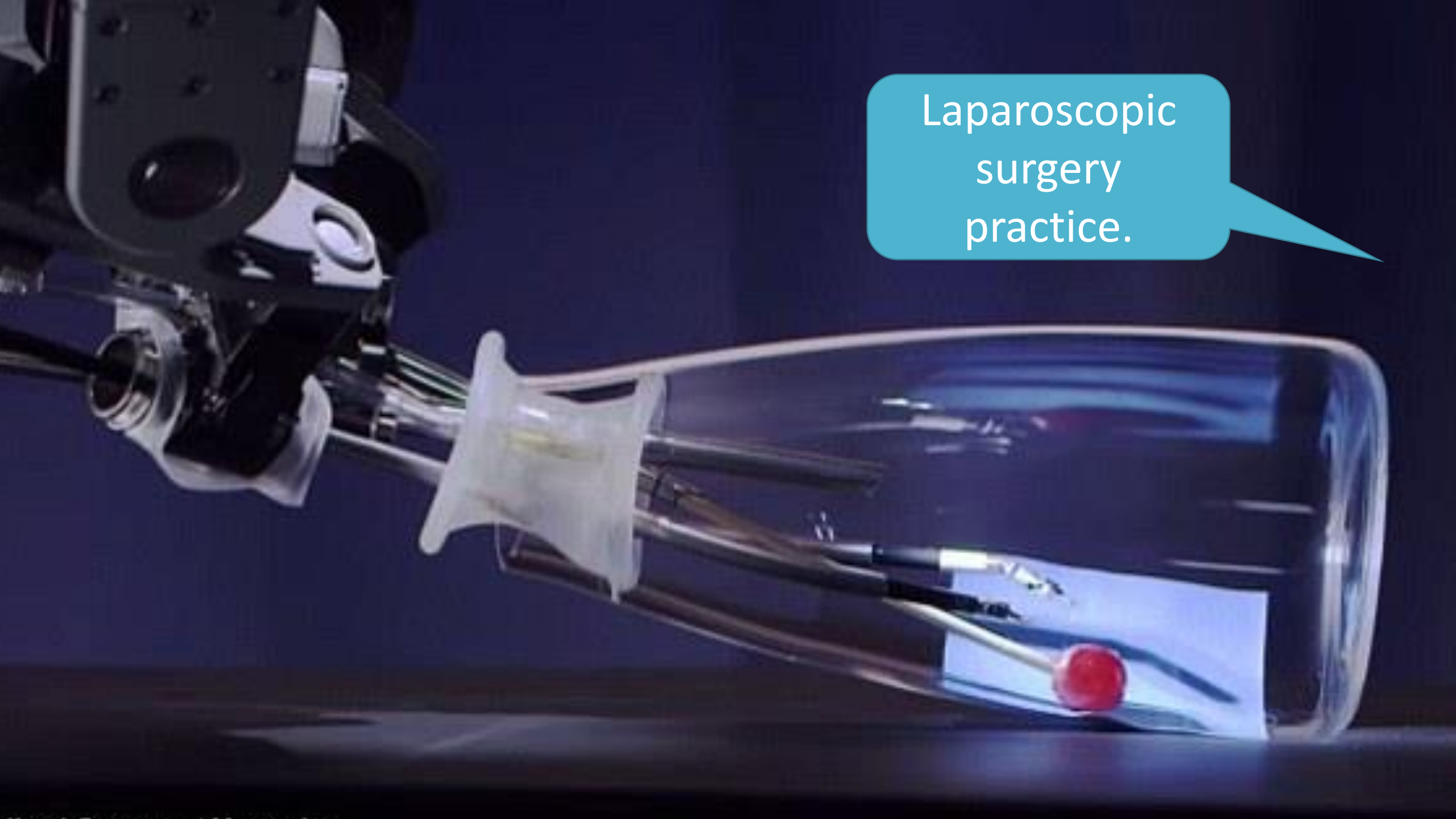
Surgeons need to practice fine motor controls

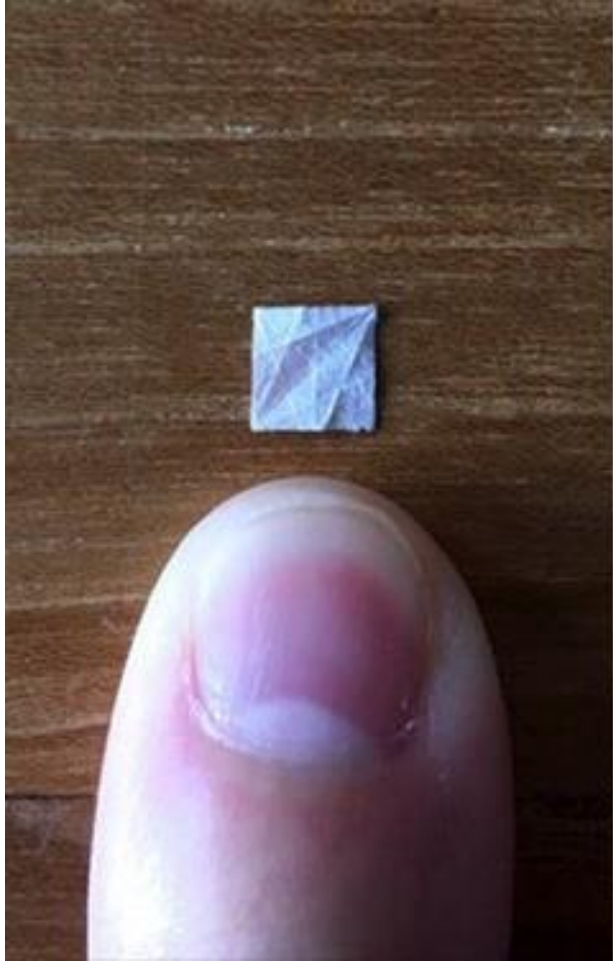




More practice.
Microscopic
sutures.

Laparoscopic
surgery
practice.



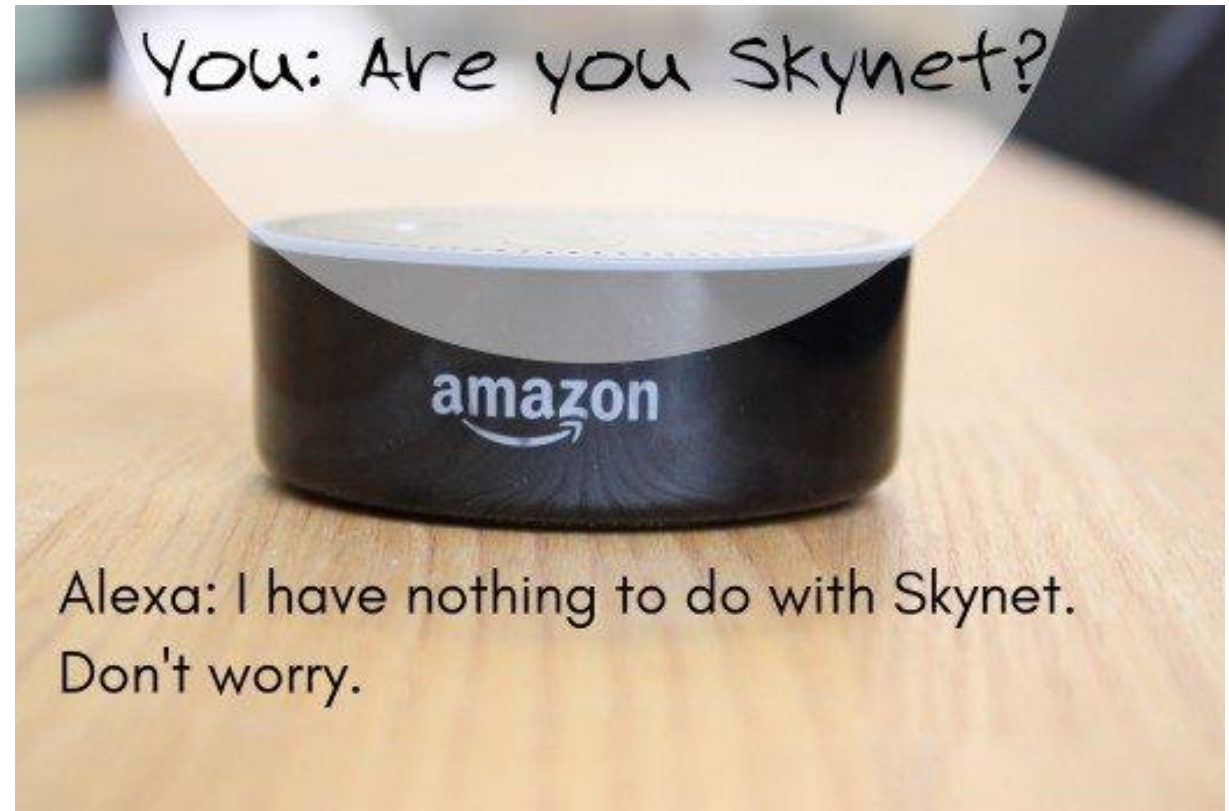
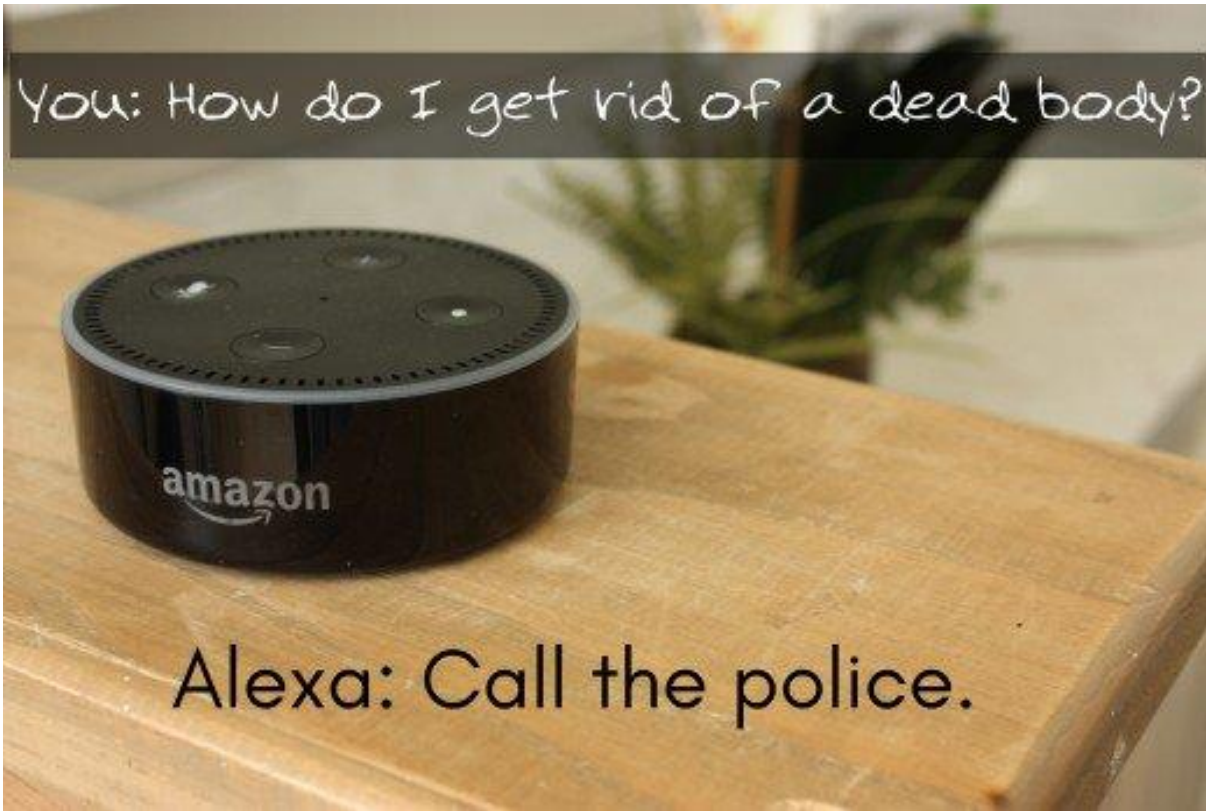


Another form of practice is folding microscopic paper cranes.



Initial release date – November 2014







100 BEST Alexa skills



Just say "Alexa..."

ENTERTAINMENT

1. Open the Tonight Show.
2. What movies are playing nearby?
3. Find me a nearby sushi restaurant.
4. What is the IMDB rating for Breaking Bad?
5. Who stars in the TV show Justified?
6. Did the Diamondbacks win?
7. Give me my sports update.
8. Open StubHub for upcoming events.
9. Ask Fantasy Football nerd for headlines.
10. Ask TV Guide what time the Price is Right is on.

SMART HOME

1. Turn on Christmas tree.
2. Turn family room lights blue.
3. Tell Harmony to turn on the TV.
4. Ask Trackr to find my phone.
5. Tell Rachio to water the lawn for 15 minutes.
6. Lock the front door.
7. Set the thermostat to 70.
8. Tell Garageio to close my garage door.
9. Arm away mode in my security system.
10. Turn on the family room fan.

LEARNING

1. Tell me a dog fact.
2. Play the Dave Ramsey Show.
3. What's in the news?
4. Play my audio book.
5. What's 12 times 24?
6. Tell me a Chuck Norris Fact.
7. Open on this day.
8. Ask Aurora for Northern Lights forecast.
9. Open translator. Translate "bathroom" in Chinese.
10. Alexa, open the Bible. Read Genesis 1.

KITCHEN

1. How many quarts are in a gallon?
2. How many calories are in a cheeseburger?
3. Start a timer for 10 minutes.
4. Open AllRecipes. (guides you through recipes)
5. Open Campbell's Kitchen skill.
6. Reorder Life cereal.
7. Add milk to my shopping list.

GAMES

1. Play rock, paper, scissors
2. Play 20 questions.
3. Play Jeopardy!
4. Open bingo.
5. Open the name game.
6. Open the magic door.
7. Open amazing word master.
8. Play guess the animal.
9. Open bean jar.
10. Launch crystal ball.

HOBBIES

1. Open metronome.
2. Open acoustic tuner.
3. Start 7-minute workout.
4. Open today's horoscopes.
5. Ask FitBit my step count.
6. Open yoga trainer.
7. Open Potterhead.
8. Wikipedia Lin-Manuel Miranda.
9. Launch stock exchange.
10. Open NASA Mars.

EASTER EGGS

1. Where do babies come from?
2. Where is Carmen San Diego?
3. Self-destruct.
4. Ask fortune cookie.
5. Magic trick.
6. Start meow skill.
7. Ask boo. (can also ask applause)
8. Open demotivate me.
9. Who you gonna call?
10. Use the force.

ORDERING

1. Open Starbucks.
2. Open Pizza Hut.
3. Open Dominos.
4. Ask 1-800-Flowers for an order.
5. Add an iPhone case to my cart.
6. Where's my package?
7. Ask Uber to request a ride.
8. What are your deals?
9. Ask Kayak for flights.
10. Open Capital One.

KIDS

1. Open bedtime story.
2. How many days until Christmas?
3. Ask my world capitals.
4. Open animals sounds.
5. Open knock knock jokes.
6. Ask math mania to play.
7. Sing happy birthday.
8. Ask PokeyFinder to find Charizard.
9. Start sheep count.
10. Ask for a fart.

CONVENIENCE

1. What's traffic like?
2. Play thunderstorm.
3. Start white noise.
4. Calendar.
5. Remind me to take out the trash.
6. What time is it in Shanghai?
7. Ask area code.
8. Set an alarm for 8 am.
9. How old is someone born June 12, 1987?
10. Ask Kayak to track a flight.



Roll over image to zoom in

Echo (2nd Generation) - Charcoal Fabric

by Amazon



1,550 customer reviews | 319 answered questions

Amazon's Choice

for "alexa"

List Price: ~~CDN\$ 129.99~~

Deal Price: **CDN\$ 109.99** & **FREE Shipping.** [Details](#)

You Save: **CDN\$ 20.00 (15%)**

In Stock.

Want it tomorrow, Aug. 22? Choose **One-Day Delivery** at checkout.

Ships from and sold by Amazon.ca. Gift-wrap available.

1 new from **CDN\$ 109.99**

Color Name: **Charcoal Fabric**



CDN\$ 109.99



CDN\$ 109.99



CDN\$ 109.99

Configuration: **Echo**

- Echo connects to Alexa—a cloud-based voice service—to play music, make

The echo dots are about \$40.



Can be used to enable the
IOT, including a smart home.



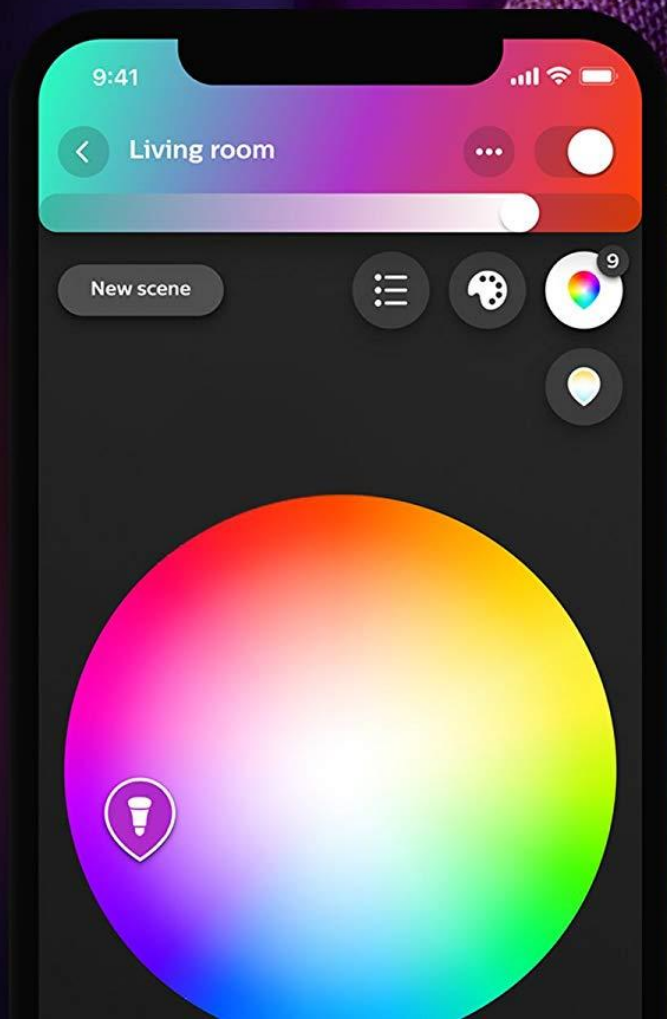
IOT = Internet of Things

Objects like thermostats
are attached to the
internet.



A smart home is one that can be monitored and controlled remotely using the IOT.





Control your lights with **your voice**



"Alexa..."



"Hey Siri..."



"Ok Google..."



IFTTT is a service that lets you create powerful connections with one simple statement:

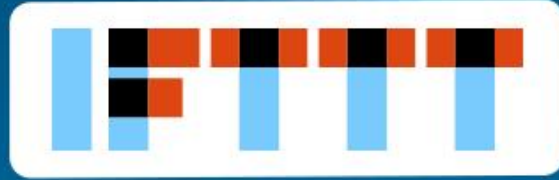
Recipe

if this then that

Trigger

Action

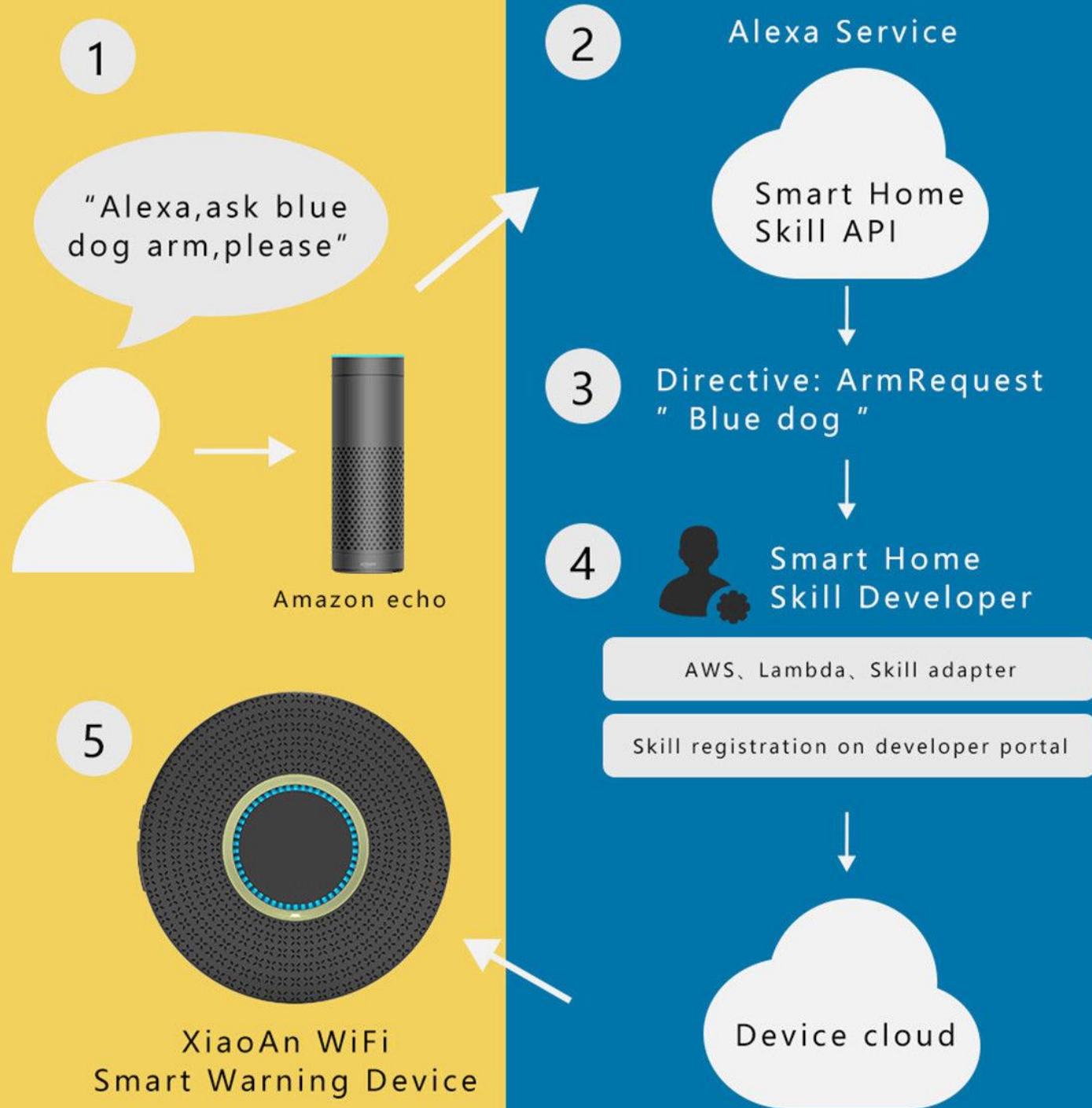
IFTTT is pronounced like “gift” without the “g.”



“Alexa trigger water my roses”

if **amazon** **echo** then  **rainmachine**







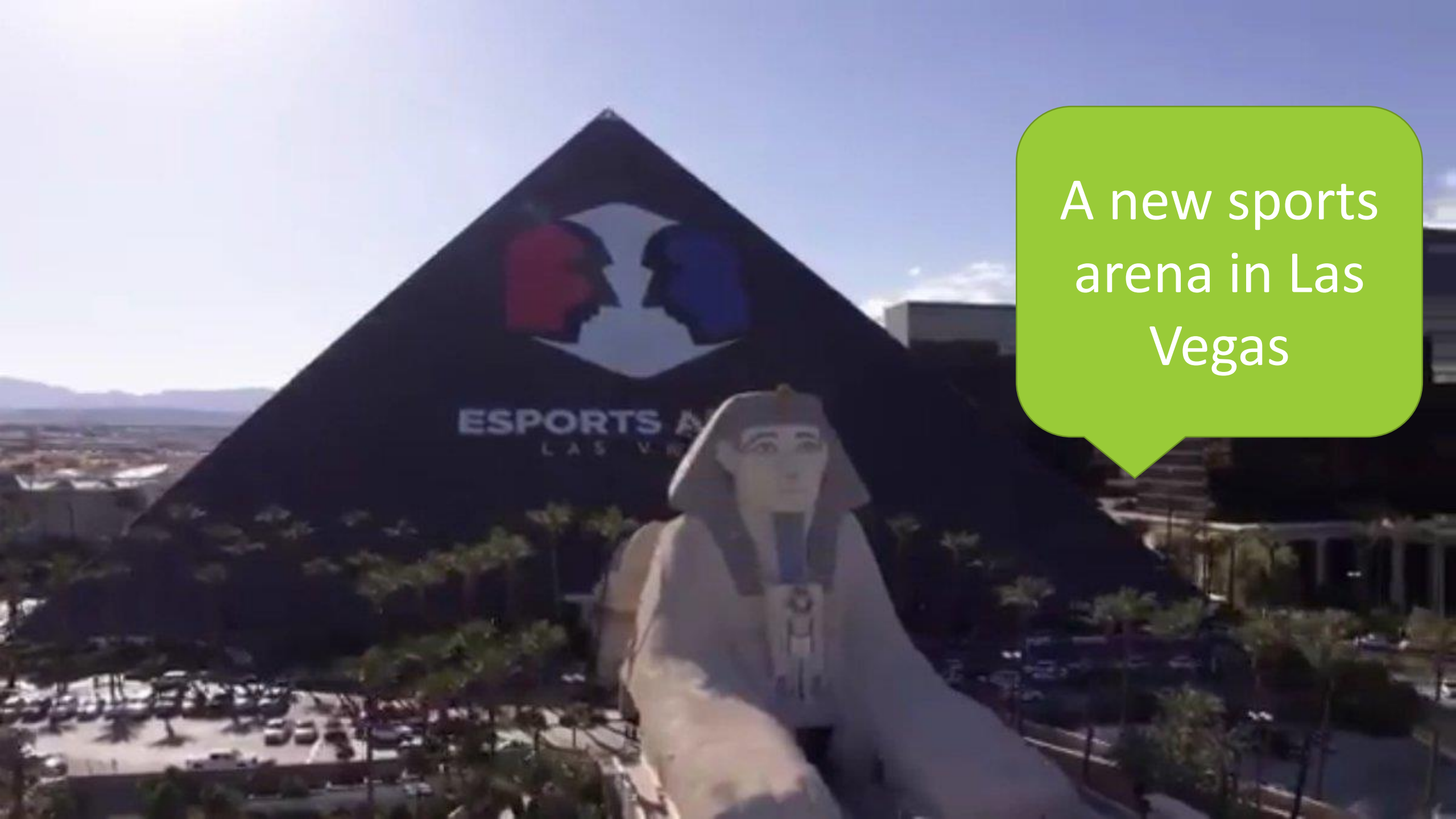




E-Sports players stream games on media like Twitch in North America

In South Korea, there have been 3 National E-sports networks since about 2002.





A new sports
arena in Las
Vegas



The image shows the five members of the OG Dota 2 team celebrating their victory at The International 2019. They are wearing their team's blue and black jerseys. The background is dark with purple flowers and gold confetti. The text 'THE INTERNATIONAL 2019' is at the top, followed by 'GRAND CHAMPIONS' in large gold letters. Below the team, it says 'FIRST EVER TWO-TIME TI WINNERS' and 'OG 15.6 MILLION++' in large white and gold letters.

THE INTERNATIONAL 2019 GRAND CHAMPIONS

FIRST EVER TWO-TIME TI WINNERS

OG
15.6 MILLION++

OG won the Valve's The International Dota 2 Competition in 2019

won \$15,603,133
each player won \$3.1 million
Tiger Woods, 'only' pulled in
\$2.07 million at the 2019
Masters.

Wimbledon singles champs
Novak Djokovic and Simona
Halep 'only' won \$2.9 million
each.



Nationality	ID	Name
 Australia	ana	Anathan Pham
 Finland	Topson	Topias Taavitsainen
 France	Ceb	Sébastien Debs
 Finland	JerAx	Jesse Vainikka
 Denmark	N0tail (captain)	Johan Sundstein

Twitch Viewership:
Fortnite's 1.3
million concurrent
viewers is the new
Twitch record for an
esports event,
beating out CS:GO's
ELEAGUE Boston
Major (1.15 million)
and League of
Legends peak of
1.14 million.



Google's Listing of Top E-Sports Players



League of
Legends
2009



PlayerUnkno...
Battlegrounds
2017



Dota 2
2013



Overwatch
2016



Counter-
Strike: Glob...
2012



StarCraft II:
Wings of Lib...
2010