

# iPS Cell Technology

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ENTRE 509

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## Recent Parent



## Julie Shi

**“My baby’s safety is my primary concern.”**

Julie gave birth to healthy baby Henry 8 weeks ago. Because she has a background in life science and medical research, Julie has an understanding of the risk of disease in her child. She opted for pre-natal genetic testing of her child, as well as completed a series of genetic testing after Henry was born. She herself has also used the genome sequencing service, 23andme.

While pregnant, Julie considered freezing and storing Henry’s cord blood as a means of “insurance” in case anything were to happen to him. Ultimately, Henry’s tests were all normal and the cost of freezing his cord blood was prohibitively expensive.

## User on behalf of her child

Female, 28 years old, Recent Parent

Post-doctoral Fellow In the Medical Sciences

**Julie has life science knowledge and understands how iPS cells are generated. She is concerned about the well-being of her 8-week old baby, Henry.**

### Needs:

- 1) Keep Henry safe. Allow him to grow up happy and well-adjusted.
- 2) Provide him the medical care he needs, including genetic testing to predict the occurrence of future disease.

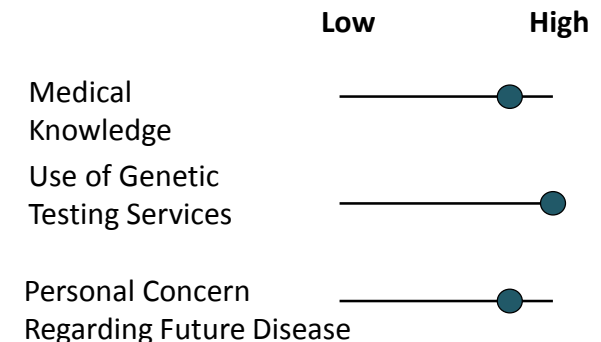
### Ideal Features:

- Service not only comes doctor recommended, but is included in the discussion when you receive your baby’s genetic testing results.
- Low cost service so that even parents who babies are at low risk of disease feel they can afford it.
- Ease of regulatory issues surrounding tissue transport.

### Frustrations:

- Doctor did not discuss the possibility of freezing cord blood with her. She had to do research in this area on her own.
- Cost to freeze and store the cord blood was prohibitively expensive. i.e. \$100-\$200 per year.
- Lives in Canada, so transferring cord blood back for use in the United States would have been difficult.

### Key Attributes



## Techie Yuppie



# Alex Kawrykow

**“I feel like the big innovative breakthroughs aren’t accessible to the public.”**

Alex is a young techie with an interest in cutting edge technology. He has heard about stem cell technology through outlets such as reddit, but has not been sure if this is a hypothetical cell or a technology which is actually available to the public. He likes the concept of the smaller startup disrupting the slower moving, big corporations, especially in healthcare. He also is intrigued by the health and insurance aspects of banking his own iPS cells. For technology in fields he is unfamiliar with, he will often do his own research and read reviews online before committing himself to a purchase or investment, however his passion for the cutting edge has him often adopting technologies before mainstream consumers.

## Would-be early adopter

Male, 25 years old, single

Software development engineer

**Alex is interested in cutting edge technology. He keeps himself informed via reddit, Wikipedia, and hackernews. He has heard of stem cell technology before but is unfamiliar with the details.**

### Needs:

- 1) Banked stem cells in case of catastrophic need in the future
- 2) Peace of mind (not worried about genetic predispositions or health history)

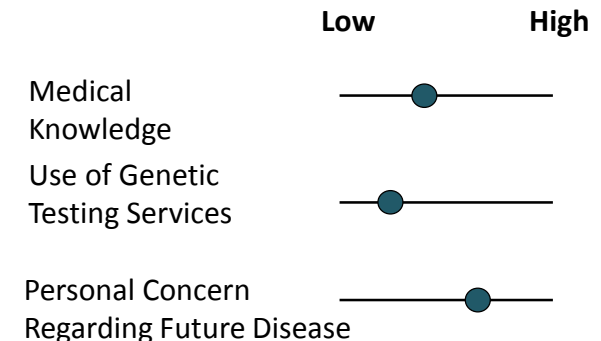
### Ideal Features:

- Modern web client/app with information such as current cell balance, online billing, and ability to schedule appointments
- Periodic, curated articles relevant to iPS technology to keep informed of the cutting edge

### Frustrations:

- Current online health portals feel old, outdated, and are buggy
- Anecdotes about exorbitant cost in healthcare, as well as slow-moving healthcare technologies

### Key Attributes



# Healthy Older Generation

## Ken and Karol Uratsu

**“I could use this.”**

Ken is a former accountant and is retired. He focuses on investing which have important personality traits in deciding whether or not to use IPS cell banks as a way to insure their organs. He likes the idea of investing his organs because of his investing personality.

Karol works on cancer and has a medical background. She knows very little about this medical breakthrough even though she has a medical background and has no interest for herself. They did come to the same conclusion however: they would use this service to insure their children's organs.

## User for personal health

Male, 65 years old, long-time parent  
Female, 63 years old, long-time parent

**Middle Class Family, no prior health problems or past family diseases**

**Both are interested in insuring their children.**



### Needs:

- 1) Wants children to be insured if parents insurance not used.
- 2) Concerned about length of wait time for organ donation lists

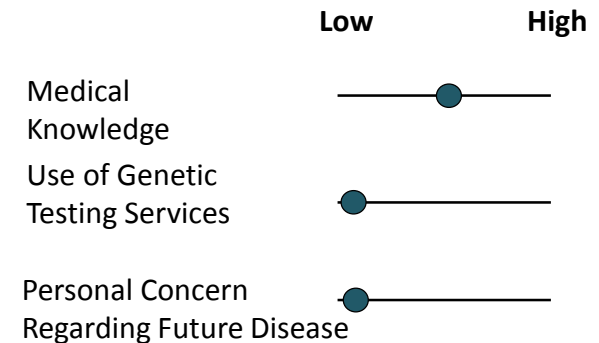
### Ideal Features:

- Low cost service so parents can afford it.
- Ease of regulatory issues surrounding tissue transport.
- Cheap for retired middle class parents.

### Frustrations:

- Uninformed regarding iPS cells technology

### Key Attributes



## Gen-Y Parents

# Sundas Khalid

**“Reaping benefits may not be eventual, thus making it not a necessity.”**

Sundas is a young mother-of-two who has “heard” about stem cells, though hasn’t seen too many people from general public who strongly approve of it.

She feels that spending a huge amount of money on iPS technology won’t be feasible, and may not yield any benefit. She is content with having health insurance as she sees that as something that she would be definitely utilizing. Though she mentions that she would be totally up for iPS tech. if the price was reduced and/or it came (partial/complete) within her health insurance.

## User for personal health

Female, 26 years old, parent.

She’s an Information Systems student, and would most be joining Amazon as a full time employee.

She is interested in the iPS technology, though doesn’t see it as being indispensable.

### Needs:

- 1) Wants her family to be healthy along with herself – not having to deal with anything “serious”.
- 2) Would want to know the exact list of things possible/curable by this technology, and its effectiveness.



### Ideal Features:

- Lower cost service so she can afford it for herself and her family.
- Accurate list of the type of medical problems that can be taken care off with this technology.
- Proven effectiveness.

### Frustrations:

- Uninformed regarding iPS cells technology.
- Unsure if she’s ever going to use it after putting so much money in it. Also she already has health insurance.
- “Why would people want to invest so much into the future instead of making their lives healthier now?”

### Key Attributes

