INTERVIEW NOTES: 5911

Donor 5911 struck us as a very practical and thoughtful individual. He arrived to our interview wearing a teal t-shirt and khakis, holding a black bicycle helmet. He has a soft, deep voice and big, almond-shaped blue eyes that crinkle when he smiles. He is clean cut, highlighting his strong jawline and shallow chin dimple. He has thin, straight, light brown hair, a strong nose, thin lips that have a natural upward curve and symmetrical features. Our staff feels he resembles James McAvoy, although his eyes tilt up at the corners.

Donor 5911 spent the first 18 years of his life in the same town in the Midwest with his parents and younger sister. Like most children in small Midwestern towns, he spent his time riding bikes around the cornfields with the neighborhood kids and playing board and video games. He describes himself as an introverted kid that loved reading, mostly science fiction and mystery books. Donor 5911 had a few pet cats growing up, a mixture of barn cats and spoiled indoor cats.

His love for science started in elementary school. Donor 5911 had a very hands-on science teacher that led the class to exploring new concepts through activities like building a volcano and assembling a water filtration system. This participatory style of teaching allowed him to learn through action and he continues to be a person who enjoys concrete activities. He eventually joined the Science Club in high school and is now a chemist.

Donor 5911 has a love for the outdoors and was also a part of the Boy Scouts for 7 years, making it all the way to Eagle Scout. He is most proud of earning his Nuclear Science Badge, which entailed, in part, being able to correctly explain key concepts pertaining to radiation and subatomic particles. Donor 5911 still enjoys camping, hiking, and kayaking on rivers and lakes. He thinks he would like to be a scout leader one day for his own kids.

Starting in middle school, donor 5911 played the trombone in the school band, jazz band, and orchestra. During college, he traveled nationally with his college marching band and still plays now that he's out of school. Donor 5911's favorite trombonist is Carl Lenthe, and he has ambitions to start a Big Band group with his friends. When asked, donor 5911 said that the child version of him would be most proud that he stuck with his interests and hobbies into adulthood.

Donor 5911's hobbies consist of music, hiking, and camping. He started salsa dancing classes in order to be more comfortable dancing at social events like weddings, and would like to take more classes after the Covid-19 pandemic restrictions end. He also misses attending symphony concerts.

If given 24 hours to spend \$1000, he would get new tires for his car and take his wife out to dinner and then to the opera!

In five years, donor 5911 aspires to start his own research laboratory as the Principle Investigator, own a home, and grow his family with children of his own. His family now consists of his wife and their two cats, one that he's had for a while and another that merged with his household when he and his wife started living together. They also recently got a Great Dane puppy named Thunder.

Donor 5911 was introverted but thoughtful and patient during our interview. We are excited to have this nature loving donor in our program!

Interviewed by Danielle L. and Iris R. on 08/10/21

DONOR PROFILE: 5911

The past and current personal and family medical history, physical examination, and laboratory test results determine that donor **5911** is eligible and approved for semen donation at The Sperm Bank of California. This profile was prepared in **September 2021**

Personal Information

• Identity-Release Program: Yes

• Month/year of birth: January 1991

• Education: B.S. Chemical Engineering, PhD Chemical Engineering

• Current occupation: Researcher

• Ethnic origin: German, English, Scottish, French, Welsh, Danish, Dutch, Cherokee

Religion born into: ChristianityReligion practicing: Christianity

PHYSICAL CHARACTERISTICS

Height: 5'10 ¾"Weight: 199

Hair color: Light BrownHair type: Straight, Thick

• Eye color: Blue

• Complexion: Fair/Creamy

• Body type: Endomorphic (large)

Blood group/Rh: O+Baby photo available: Yes

Other distinguishing features:

FAMILY MEDICAL HISTORY

KEY: D donor **Ch** child **F** father **M** mother **S** sister **B** brother

Co cousin A aunt U uncle MGF maternal grandfather MGM maternal grandmother

PGF paternal grandfather **PGM** paternal grandmother

Allergies: F: Allergies to hay, pollen, and pet dander at age 10, managed with OTC medication.

S: Allergies (hay, pollen, animal dander) at age 15, managed with OTC medication. PGM: Allergies (hay, pollen, animal dander) in youth, managed with OTC medication. PU2: Allergies (hay, pollen, animal dander) at age 15, managed with OTC medication.

Blood: MGM: Anemia at birth, managed with supplements

Congenital Anomalies (Birth Defects): MGM: Stillborn twins at 16. MU1: Deformity of the ear (missing left ear

lobe) at birth. PCo1: Bifurcated penis and exposed bladder, treated with surgery, resolved

Gastrointestinal: M: Gall bladder stones at 24, resolved. M: Hiatal Hernia at 52, surgery to repair.

Genital/Reproductive: M: Ovarian Cysts at 34, monitored with no intervention required. MGM: Uterine Cancer at 44, non-chemotherapy treatments, returned later and resulted in death at 51

Heart: S: Heart Murmur/defect (Patent Ductus Arteriosis) at birth, resolved with surgery at age 8.

MGF: Hypertension at 21, managed with medication. MA: Hypertension at 30, managed with medication.

MCo2: Hypertension at 17, managed with medication. MCo2: Heart Murmur at birth, self-resolved.

PGM: Hypertension at 35, managed with medication. PGM: High Cholesterol at 53, managed with diet and statins. PGM: Heart Disease (smoker) at 66, treated with medication. PGM: Heart Attack at 76, resulted in death

Mental Health: S: Depression and anxiety at 18, managed with medication and therapy. MA: Bipolar Disorder at 35, managed with medication

Metabolic/Endocrine: M: Hypoglycemia at 27, managed with diet. M: Gestational Diabetes at 28, managed with diet. M: Type-2 Diabetes at 49, managed with diet. MGM: Type-2 Diabetes at 44, managed with insulin. MU2: Type-2 Diabetes at 42, managed with non-insulin medication.

Muscles/Bones/Joints: M: Gout at 54, managed with medication.

M: Ankylosing Spondylitis/ Soriatic Arthritis at 51, managed with medication. MU1: Sarcoma at 52, treated with medication, resulted in death

Neurological: MGF: Dementia at 75, treated with medication and assisted living community. MA: Brain Tumor at 29, surgically removed and resolved. MCo2: Speech Impairment at 2, treated with speech therapy, ongoing. Respiratory (Lungs): MGF: Asthma in youth, managed with inhaler

Sight/Sound/Smell: D: Left: 20/50 Right: 20/50. M: Nystagmus at 43, corrected. F: Red-green color blindness since birth. MGM: Cataracts at 40, improved with surgery. MU2: Retinal Dystrophy at 4, treated with strong glasses. PU2: Red-green color blindness since birth.

Skin: D: Acne at 15, treated with oral and topical medication, resolved after a couple years. M: Psoriasis at 21, managed with medicine. MGM: Psoriasis at 25, untreated and tolerated. MGF: Skin Cancer at 61, surgically removed and resolved. PGF: Skin Cancer at 58, surgically removed and resolved.

Substance use disorders: MGF: Alcohol Use Disorder at 26, sober since 31.

Cancer (see above): MGM: Uterine Cancer. MGF: Skin Cancer. MA: Brain Tumor. MU1: Sarcoma. PGF: Skin

Cancer. PGF: Throat Cancer.

Other: PGF: Throat Cancer (smoker) at 61, treated with chemotherapy, resulted in death.

DONOR LAB RESULTS

Chlamydia: **Not Detected** Gonorrhea: **Not Detected** Syphilis: **Non-Reactive** HIV 1 & 2: **Non-Reactive** CMV total antibody: ***Positive**

Hepatitis B: Non-Reactive Hepatitis C: Non-Reactive HTLV 1 & 2: Non-Reactive

Urinalysis: Normal Chem panel: Normal CBC: Normal

*CMV IgM is negative/IgG positive. This combination shows a historic CMV exposure and donor is presumed to currently be non- infectious

GENETIC SCREENING RESULTS

Genetic screening tests can significantly reduce, but never completely eliminate, the chance that a person is a carrier for a particular disorder.

Expanded carrier screening for 268 autosomal recessive conditions was completed by Invitae and reported on 8/25/2021.

The results were POSITIVE for congenital ichthyosis (TGM1-related) and MPL-related conditions. It is strongly recommended recipients who use donor 5911's sperm undergo carrier screening for these conditions. Please refer to the donor's Invitae expanded carrier test report for more information on congenital ichthyosis (TGM1-related) and MPL-related conditions as well as the carrier screening completed. Testing was negative for the remainder of genes screened.

Disease	Result	Residual risk to be a carrier (based on European & Native American ethnicity)
congenital ichthyosis (TGM1-related)	POSITIVE	n/a
MPL-related conditions	POSITIVE	n/a
Cystic Fibrosis	Negative	1 in 2,700
Spinal Muscular Atrophy	Negative: 2 copies exon 7 c.*3+80T>G variant not detected	1 in 880
HBB Hemoglobinopathies & Thalassemia	Negative	1 in 4,800
Alpha Thalassemia	Negative	1 in 241

Please refer to the donor's Invitae expanded carrier test report for more information on the testing completed and the donor's results.

The content of this narrative has not been altered by TSBC staff. It reflects the original written work of the Donor.

Describe your personality: introvert, extrovert, funny, serious, goal-oriented, curious, shy, etc.

My personality is appropriately described as introverted; I prefer smaller social gatherings and appreciate solitude, though I do not actively avoid others. I have a preference to listening over talking in conversation, in part because I digest more information that way. I tend to be serious, but this diminishes when I am with loved ones and readily reverts to joking, silliness, and light-hearted pranks. I am patient and generally handle criticism well. I am a goal/task-oriented individual with a curiosity for how things function.

What are your interests and talents?

I am interested in learning new skills, exploring new locations, and adapting new recipes. I try to visit new places on a regular basis, with preference towards less developed locales, and merge these trips with geocaching and radio operation. I tend to quickly adapt and become proficient at new activities but like to continue honing my skills at some of my favorite ones, such as playing trombone and salsa dancing.

What are some of your goals and ambitions in life? Where do you see yourself in 5 - 10 years?

Professionally, I am preparing to start a career leading a research team in chemical engineering. I expect to move to this stage in my career within the next five years. Personally, I hope to start a family, continue to improve my family's financial situation, and purchase my own home. I will certainly continue to acquire new skills and hone existing ones.

How would you describe your skills and interests in the following areas?

Math: Math skills have come naturally to me since I was young. I was particularly keen at finding my own methods to solve problems. In my leisure time, I occasionally listen to lectures/podcasts on math, though my current usage rarely extends beyond basic calculus.

Mechanical: These skills developed later in life due to inherent safety concerns by my parents, but my field of expertise involves the use of technical equipment that has a propensity to malfunction, requiring reparation. Through this, I have better learned how the machines operate and this has expanded my interest to repairing basic household items (e.g. computers, automobiles, and plumbing).

Athletic: I attempted to be athletic when younger, playing basketball, football, and running track, but I lacked the aptitude. The only sports I partake in recreationally are target shooting, racquetball, and squash. I am a proficient rower, enjoy hiking, and bike an average of 9 miles each day.

Musical, Artistic, Creative: My visual art skills are poor aside from very structured forms like cross-stitching. My performing arts skills (music and theater) are good considering my lack of formal training; I regularly perform. I continue to improve my brass instrument and salsa dancing skills.

Language (what languages besides English do you speak?): I have rudimentary Spanish reading, writing, and speaking skills which I occasionally practice with my wife and a mobile phone app.

Writing: I was naturally a poor writer until a teacher formally introduced and explained the rules of writing in an engaging way. My writing greatly improved when such structure was introduced, and I am now proficient and regularly publish original works.

Literature: I thoroughly enjoyed reading when I was younger, often reading into the morning to my parents' dismay, especially science fiction and fantasy novels. Unfortunately, I mostly read technical works now, but have taken to listening to books on tape (non-fiction and fiction) during my daily commute.

Science: My interest in science developed early and has sustained through my career in chemical engineering. My primary interests lie in physical sciences, but I appreciate other branches as well.

Please list a few of your favorite:

Movies: Aladdin, Saw, Star Wars (Rogue One is my favorite), The Cat from Outer Space

Books/Authors: Vonnegut, Crichton, Salvatore, Orwell, Lowry, Carle, Harari

Albums/Musicians/Performances: Paul Simon, Lori McKenna, Richard Shindell, George Straight, Marc Anthony,

Meat Loaf, Dean Martin, Sonata Arctica

What are a few of your reasons for becoming a sperm donor?

If my genetic material is suitable and helpful to those who need a donor, I am happy to assist so others can experience the joys of parenthood. Less altruistic reasons include the monetary incentives, the innate desire to express one's genes in future generations, and the opportunity to learn about my personal and familial health in the process.

You have joined the Identity-Release® Program. What appeals to you about this program?

There is often a natural curiosity to know one's genetic history. I have started exploring my own genealogy in the last few years out of personal interest and it is always discouraging when a roadblock prevents further exploration. This program would allow adult offspring to explore such information and have the option to directly contact the donor for a better sense of genetic origin and updated familial health information, if desired. Research suggests that a significant portion of offspring would like such information and enabling this contact seems like the moral thing to do.

Is there anything else you would like to share with participating families and offspring?

Good luck to you on this journey! Enjoy family time and find activities you thoroughly appreciate.

Cat v. Dog: Though I typically prefer cats, I adore our Great Dane.

Misc. Advice: I recommend asking many questions to continually learn from the experiences of others. Seek to understand other viewpoints and do not subscribe to only one source of information. There is much incorrect/misleading information available in places ranging from news media to top-tier scientific literature. Just do the best you can to make your own judgements; do not be afraid to change your view when presented with new information and experiences. Try to not find personal offense in criticism; it helps us grow.

HEALTH PROBLEMS LIST DONOR 5911

DONOR

Problem/Diagnosis: Acne

Age at Onset: 15

Treatment: Oral and topical medication

Outcome: Temporarily managed with medication and started clearing up naturally after a couple of years

MOTHER

Problem/Diagnosis: Gall bladder disease/stones

Age at Onset: 24

Treatment: Stones removed Outcome: Issue resolved

Problem/Diagnosis: Hiatal Hernia

Age at Onset: 52

Treatment: Surgery to repair

Outcome: Repaired

Problem/Diagnosis: Type-2 Diabetes

Age at Onset: 49

Treatment: Managed with diet

Outcome: Blood sugar managed with diet

Problem/Diagnosis: Gestational Diabetes

Age at Onset: 28, pregnancy #2 with donor's sister

Treatment: Managed with diet

Outcome: Managed

Problem/Diagnosis: Hypoglycemia

Age at Onset: 27

Treatment: Managed with diet

Outcome: Managed

Problem/Diagnosis: Ovarian Cysts

Age at Onset: 34

Treatment: Needle draining or self-rupture

Outcome: Occasionally occur again. Monitored, but no apparent risk to health or intervention required.

Problem/Diagnosis: Gout

Age at Onset: 54

Treatment: Medication/uric acid

Outcome: Managed

Problem/Diagnosis: Psoriasis

Age at Onset: 21

Treatment: Periodic medical injections

Outcome: Managed

Problem/Diagnosis: Nystagmus

Age at Onset: 43

Treatment: Corrective lenses

Outcome: Corrected, no continued growth

Problem/Diagnosis: Ankylosing Spondylitis/Soriatic Arthritis

Age at Onset: 51

Treatment: Biologic injectables
Outcome: Managing with medication

FATHER

Problem/Diagnosis: Allergies (hay, pollen, animal dander)

Age at Onset: 10

Treatment: OTC medicine as needed

Outcome: Ongoing

Problem/Diagnosis: Red-green color blindness

Age at Onset: Birth Treatment: N/A Outcome: N/A

SISTER

Problem/Diagnosis: Heart Murmur/defect (Patent Ductus Arteriosis)

Age at Onset: Birth

Treatment: Misdiagnosed at birth, requiring surgery at 8 years

Outcome: Issue resolved

Problem/Diagnosis: Allergies (hay, pollen, animal dander)

Age at Onset: 15

Treatment: OTC medicine as needed

Outcome: Ongoing

Problem/Diagnosis: Depression

Age at Onset: 18 after traumatic event

Treatment: Medication/therapy

Outcome: Improved situation, occasional periods of depression

Problem/Diagnosis: Anxiety Disorder

Age at Onset: 18 after traumatic event

Treatment: Medication/therapy

Outcome: Improved situation, occasional periods of anxiety

MATERNAL GRANDMOTHER

Problem/Diagnosis: Anemia

Age at Onset: Birth

Treatment: Iron Supplements

Outcome: Managed

Problem/Diagnosis: Type-2 diabetes

Age at Onset: 44
Treatment: Insulin

Outcome: Managed with Insulin

Problem/Diagnosis: Uterine Cancer

Age at Onset: 44

Treatment: Non-chemotherapy treatments

Outcome: Returned later, resulting in death at Age 51

Problem/Diagnosis: Psoriasis

Age at Onset: 25

Treatment: No treatment Outcome: Tolerated

Problem/Diagnosis: Cataracts before age 50

Age at Onset: 40 Treatment: Surgery Outcome: Improved

Problem/Diagnosis: Stillborn Babies

Age at Onset: 16, stillborn twin girls delivered 2 month premature

Treatment: N/A

Outcome: Stillborn Twins

MATERNAL GRANDFATHER

Problem/Diagnosis: Hypertension

Age at Onset: 21
Treatment: Medication

Outcome: Managed with medication

Problem/Diagnosis: Asthma

Age at Onset: Youth

Treatment: Inhaler as child, tolerated later

Outcome: Managed

Problem/Diagnosis: Alcohol Use Disorder

Age at Onset: 26

Treatment: AA support group for 4 years, took up farming as an outlet

Outcome: Sober at 31 years old and no drinking since

Problem/Diagnosis: Dementia

Age at Onset: 75
Treatment: Medication

Outcome: Now living in an assisted living community

Problem/Diagnosis: Skin Cancer

Age at Onset: 61

Treatment: Surgically removed

Outcome: Resolved

MATERNAL AUNT

Problem/Diagnosis: Hypertension

Age at Onset: 30
Treatment: Medication

Outcome: Managed with medication

Problem/Diagnosis: Bipolar Disorder

Age at Onset: 35
Treatment: Medication

Outcome: Managed with medication

Problem/Diagnosis: Brain Tumor

Age at Onset: 29

Treatment: Tumor surgically removed

Outcome: Issue resolved

MATERNAL UNCLE #1

Problem/Diagnosis: Deformity of the ear (missing left ear lobe)

Age at Onset: Birth Treatment: N/A Outcome: N/A

Problem/Diagnosis: Sarcoma

Age at Onset: 52
Treatment: Medication
Outcome: Death

MATERNAL UNCLE #2

Problem/Diagnosis: Type-2 diabetes

Age at Onset: 42

Treatment: non-insulin medication
Outcome: Managed with medication

Problem/Diagnosis: Significantly Impaired vision (retinal dystrophy)

Age at Onset: 4

Treatment: Strong glasses

Outcome: Poor vision with correction

MATERNAL COUSIN #2

Problem/Diagnosis: Hypertension

Age at Onset: 17
Treatment: Medication

Outcome: Managed with medication

Problem/Diagnosis: Heart Murmur

Age at Onset: Birth Treatment: None

Outcome: Self-resolved

Problem/Diagnosis: Speech impairment

Age at Onset: 2

Treatment: Speech therapy
Outcome: Ongoing impairment

PATERNAL GRANDMOTHER

Problem/Diagnosis: Heart Attack

Age at Onset: 76 Treatment: Outcome: Death

Problem/Diagnosis: Heart Disease (smoker)

Age at Onset: 66 Treatment: Medication Outcome: Heart attack

Problem/Diagnosis: Hypertension

Age at Onset: 35
Treatment: Medication

Outcome: Managed with medication

Problem/Diagnosis: High Cholesterol

Age at Onset: 53

Treatment: Diet + statins

Outcome: Managed to lower levels

Problem/Diagnosis: Allergies (hay, pollen, animal dander)

Age at Onset: Young

Treatment: OTC medicine as needed

Outcome: Ongoing

PATERNAL GRANDFATHER

Problem/Diagnosis: Skin Cancer

Age at Onset: 58

Treatment: Surgically removed

Outcome: Resolved

Problem/Diagnosis: Throat Cancer

Age at Onset: 61, smoker Treatment: Chemotherapy

Outcome: Death

PATERNAL UNCLE #2

Problem/Diagnosis: Allergies (hay, pollen, animal dander)

Age at Onset: 15

Treatment: OTC medicine as needed

Outcome: Ongoing

Problem/Diagnosis: Red-green color blindness

Age at Onset: Birth Treatment: N/A Outcome: N/A

PATERNAL COUSIN #1

Problem/Diagnosis: Other birth defect – bifurcated penis and exposed bladder

Age at Onset: birth

Treatment: Reconstructive surgeries
Outcome: All organs now fully functional

CONCLUSION:

The above family medical history information has been self-reported by the donor. We work with each donor to obtain as complete and accurate information as possible, but we are unable to completely rule out the existence of other health information that is not known, or that remains unreported to us.

As a board certified genetic counselor, I have reviewed this donor's family medical history for identifiable patterns of inheritance that may place the donor or his biological offspring at increased risk for certain health problems. ("Increased risk" is risk that is greater than the risk in the general population).

As reported, DIS 5911's family medical history is notable for bipolar disorder, type 2 diabetes, hypertension and psoriasis.

The donor reports one aunt (second degree relative) with Bipolar. The risk for the donor to also be affected with Bipolar (or serious psychiatric illness) is about 5% (2-3 percentage points above the population risk). The risk to donor offspring would approach the baseline population risk of about 2-3% in the general population. However, if the donor were to develop Bipolar (or serious psychiatric illness) then the risk to offspring would be significantly increased to about 15%.

DIS 5911 has several family members on both his paternal and maternal sides with hypertension starting in their 20s or 30s. Hypertension can run in families and it's thought genetic factors play a role in the development of hypertension. The donor has no first degree relatives who are affected with hypertension. Based on his family history, it's possible the

lifetime risk for hypertension may be increased over the general population. This condition can be managed though diet and/or medications.

The donor's mother, maternal uncle and maternal grandmother are all affected with type 2 diabetes. The risk for diabetes is increased when there is a family history. Some studies have seen this risk is increases to around 30% if a first degree relative is affected. Second degree relatives likely are also at increased risk, but the magnitude of the risk has not been as well studied. The general population risk is about 10% in America. It is possible the lifetime risk for diabetes to offspring of DIS 5911 may be increased over the level seen in the general population. This risk would increase if the donor is ever diagnosed with this condition himself.

DIS 5911's mother is also affected with psoriasis. It's estimated people who have a grandparent affected with psoriasis have a risk 2.5 times greater than the general population to also develop the condition. The incidence of psoriasis is about 2-3% of people worldwide.

Please also see this donor's Expanded Carrier Screening documents for results of screening for 268 autosomal recessive conditions.

Sincerely,

Janine Mash LCGC Certified Genetic Counselor San Francisco Genetic Counseling