This is a detailed guide for donor-conceived offspring and adoptees who would like to learn more about their paternal genealogy. The first part describes a basic approach. The second part is more advanced. Saliva-based DNA testing could allow people a chance to find siblings, half-siblings, cousins, aunts or uncles on their “unknown” paternal lines.

I started DNA testing with Ancestry.com, where I ended up building a very large family tree for both my mother and stepfather’s families. Then I tried Family Tree DNA. Finally, having joined 23andme, I’ve firmly concluded that this site is far superior as a tool for donor-sibling offspring.

Testing could result in no matches at first, and matches can come up years later. As the 23andme user base grows, so will the likelihood of connection between close relatives. In fact, when half-siblings are tested on 23andme they immediately appear as either “Aunts” and “Uncles”, or “Nieces” and “Nephews” in each other’s matches.

This whole process can take as little or as much time as you’re willing to spend on it. The first step can be done at a minimum cost of $99, at the time of this writing. However, if your mother is tested, you can get you a lot more information. This additional test costs $79 if you order it simultaneously, for a total of $178. Here is a break down of the process:

**BASIC STEPS**

1. Order DNA test kits from 23andme for you and possibly other relatives, especially your biological mother, if possible. Whatever you can afford, since additional kits are discounted.
2. Create as detailed a family tree, for your biological mother’s family, as you can. Ancestry.com is a great tool. Try to trace your lineage back past your grandparents and make a list of all of your ancestors’ surnames.
3. When test results are in, complete your profile on 23andme. Set privacy settings as low as you feel comfortable if you want to make contact with relatives. Be sure to type in all of your known ancestral surnames.
4. If you’ve tested your mother, share genomes with her through the 23andme “Matches” interface. Import your family tree from ancestry.com or any other site using a gediom file. Or at least build a family tree with you and your tested relatives. If your mother is tested, link her profile with her record in your family tree.
5. Provided you’ve successfully tested on 23andme along with your mother, you should be able to view your “ethnicity estimate” in “split” view. This means you’ll see an estimate of your father’s ethnicity. It’s a glimpse of your biological, or at least a “picture” of his ethnicity.

You can now study all of your matches. If any half siblings, cousins or other relatives are tested on the site, they will appear in your matches. If your mother was tested all maternal matches will be labeled with an “M”. All of those without an “M” are paternal relatives. There’s a high likelihood of finding 4th to distant cousins,
which are quite remote. There’s a less likelihood of finding 3rd, 2nd and 1st cousins. You either get lucky at this stage or you don’t.

The results could be discouraging depending on your expectations. But if you’re able to spend time digging, you can dig very deep. The next steps depend on how much time you have to spare and how much you want to find out:

**ADVANCED STEPS**

1. If you can afford it, test on Family Tree DNA and Ancestry.com. They also have nice websites. The only reason I don’t recommend them off the bat is simply because they can’t parse out your paternal relatives from maternal ones. You can often deduce through family tree comparisons if they are maternal, if your match has a family tree.
2. Family Tree DNA offers a “big Y” test, which implies “big bucks”. It’s a high stakes bet of $575. If you have a direct paternal relative who also took the big Y-DNA test, i.e. biological father, grandfather, paternal uncle, paternal cousin, nephew, etc... you’ll match each other and potentially connect. If you found such a match who had adequate family tree knowledge, it would be a big find. But the odds of a match at the “high marker” level are extremely low.
3. Any test results from 23andme or other sites should be downloaded and registered on Gedmatch.com for free. Make your results public and people on Gedmatch who match you will contact you through the email you provide. That community is very active and savvy, and are often very helpful.
4. Looking at your DNA Relatives List, select “Show: not mother’s side”. You’ll be left with a list of all of your paternal relatives. You’ll likely see any and all relatives that are tested on 23andme.
5. Investigate the close paternal relatives, especially those within a 1st to 5th cousin range. Try contacting them. They’ll automatically be sorted by relationship, so the closer relatives will be on top.
6. Find out as much about the families of your paternal matches as possible. Note common ancestral surnames and places. Look for the city you were born. Find matches who share your paternal Y-DNA haplogroup. Find patterns! They’re right in front of you.
7. Export your “matches” list to excel or some other database and massage the data. Sort or group all of your relatives by Paternal or Maternal side. Then delete the maternal matches. You’re left with delimited list of all of your paternal relatives.
8. Try to gather as much information about your relatives’ family trees. Some of them won’t have a clue about their ancestry and some will be expert genealogist. It’s a coin flip. Copy down details from your closest matches’ family trees. Try to find where they might intersect.

If you can find a precise common ancestor between two or more of your paternal matches, that’s likely to be YOUR common ancestor. Most distant cousin matches will have hundreds of ancestors who are NOT your ancestors. The only way to rule them out is to find correlations between the trees of your matches. This part
is extremely time consuming and not for those with short attention spans. Results may be limited.

23andme no longer offers health reports. But for those who are still curious, you can download your DNA data from 23andme and upload it to promethease.com for a fee of $5, at the time of this writing. The resulting report will tell you a bunch of positive, negative and neutral things about your DNA and what it could mean about your “health” or the health of your offspring. Hypochondriacs need not order such a report!

Before testing on 23andme the identity of my biological father was nearly a complete mystery. Now I can see a genetic picture of him in my own DNA. I've made contact with several paternal cousins and learned about their ancestry. They've shared old photographs of great grandparents who may or may not be my ancestors. I've also learned a great deal about my mother's side of the family and her ethnicity as a result of the research. I have a much clearer picture about my roots. Even if I completely stop searching, I could eventually be contacted by an even closer relative; even a sibling, perhaps.

SEE SCREENSHOTS BELOW:
Split View shows the maternal and paternal contributions to an individual's ancestry. This visualization requires at least one genotyped parent.

Ancestry Composition results have been computed using one parent.
### DNA Relatives

**List View** | **Map View** | **Surname View**

| Search matches | **Show: not mother's side** | Sort: relationship | 25 per page | 1 - 25 of 558 (983 total) |

#### Paternal Relatives

<table>
<thead>
<tr>
<th>Closest Paternal Relative</th>
<th>3rd to 5th Cousin</th>
<th>0.74% shared, 2 segments</th>
<th>United States, Virginia, West Virginia, Boone, Virginia, 8 more, Northern Europe, McClure, Clark, Ramsey</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd Closest Paternal Relative</td>
<td>3rd to 5th Cousin</td>
<td>0.38% shared, 2 segments</td>
<td>United States, Gilbert, Arizona, Chandler, Arizona, Northern Europe, Lacy, Willis, Hoffman, Wilkinson</td>
</tr>
<tr>
<td>Male</td>
<td>3rd to 5th Cousin</td>
<td>0.36% shared, 2 segments</td>
<td>United States, Smith, Bankhead, ---, Neff, J1c, R1b1b2a1</td>
</tr>
<tr>
<td>Male</td>
<td>3rd to 5th Cousin</td>
<td>0.35% shared, 2 segments</td>
<td>United States, Smith, Bankhead, ---, Neff, J1c, R1b1b2a1</td>
</tr>
<tr>
<td>Female</td>
<td>3rd to 5th Cousin</td>
<td>0.32% shared, 2 segments</td>
<td>United States, Smith, Bankhead, ---, Neff, J1c, R1b1b2a1</td>
</tr>
<tr>
<td>Female</td>
<td>3rd to 5th Cousin</td>
<td>0.32% shared, 2 segments</td>
<td>United States, H1</td>
</tr>
<tr>
<td>Male</td>
<td>3rd to 5th Cousin</td>
<td>0.30% shared, 3 segments</td>
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<td>3rd to 6th Cousin</td>
<td>0.51% shared, 1 segment</td>
<td>United States, Smith, Bankhead, ---, Neff, J1c, H3g, R1b1b2a1a2d</td>
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</table>

**SHARED PATERNAL HAPLOGROUP (direct paternal relatives)**