

# RPC first in N.B. to offer relationship analysis

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**D1** By Kyle Mullin  
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Rachael Ritchie says the same tools used to analyze the DNA evidence of poached moose and deer can also help map out family ties in DNA testing.

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STEPHEN MACGILLIVRAY PHOTO

Close to home: Rachael Ritchie of the Research and Productivity Council in Fredericton shows genotype information to a couple as part of a DNA-based relationship analysis processed locally.

"We've been doing wildlife forensics for almost a decade now. Once we had those systems in place, it was a very natural transition to look at similar use of DNA testing," said Ritchie, the head of food, fisheries and aquaculture at the Research and Productivity Council in Fredericton.

"We use DNA samples of poached meat to help with prosecutions. But we can use the same lab to do similar work with humans."

By comparing genotypes, the test can determine a near-99 per cent likelihood of relation between the child and parent. Ritchie said it's an issue that hits close to home.

"It's all about offering piece of mind," she said. "I can't speak for someone in that situation, but it provides a level of certainty that wasn't available locally before."

She said parents in this region traditionally would have to ship samples across the country or south of the border, where confidentiality laws are far more lax after post 9-11 security sweeps. Ritchie said having a local firm to offer that service is far quicker, and the smaller shipping distance can help ensure that the results will be kept safe and secure.

RPC can conduct the sampling in its lab or mail a sampling kit to users. Inside that kit is a buccal swab, made of foam in the shape of a tiny lollipop, used to gently extract DNA samples from inside the user's cheek after a 15-second rub.

"That's easier for kids or babies because it doesn't involve drawing blood," Ritchie said.

Separate kits are sent for each child and parent in question, and unlike other paternity tests, the father's DNA can be used alone as readily as the mother's. The samples are then shipped back to the lab, where technicians extract DNA with various solutions and amplify it to determine whether or not genotypes are shared. Results are sent back to the parents within weeks.

RPC DNA testing is accredited by the Standards Council of Canada. Ritchie said that equates to a national seal of approval, making it the first official relationship analysis centre in New Brunswick.

"That accreditation is important," she said. "It helps ensure the soundness and quality of our work, that people can trust us."

She said the testing would be irrefutable evidence in custody trials, helping to ensure that proper child support payments are made. Ritchie added DNA tests can ease the worries of parents who need fertility clinics to conceive.

"For some people it's important if they're raising their biological child, for some it's not - to each their own," Ritchie said.

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