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Imagine your blood streaming around your body. Now imagine what's in it; plasma, red blood cells, white blood cells, platelets, fats, proteins and nutrients are all there in very high amounts. But what else is floating around? Many chemical compounds are also in your blood but exist in such small amounts that they are hidden- similar to searching for a needle in a haystack. If we can find these "needles" it will give valuable information in the identification and understanding of important issues such as diseases.

So how do we see these compounds in a complicated blood sample when it's like looking for a needle in a haystack? We need to collect only the chemical compounds we want and wash away the rest and to do this we use the properties of the compounds. This provides a clean, pure sample ready for analysis. TV shows would trick you into believing it is a simple

process which can be completed in mere seconds. But in reality, this essential step takes hours. Because of this there is a real drive to develop technology to speed up this important step.

So what's my story? After completing year 12 I took a few years off to save money and to have a think about what I wanted to do with my life. When I started university I still wasn't sure, all I knew was that I was better at science than I was at English. I wanted to keep my options open so I did a Bachelor of Science and enrolled in a wide range of classes. Of all the subjects I took I finally realised that I kept going back to chemistry subjects. Although, it hadn't clicked to me that I kept doing it because I loved it! It all changed when I was awarded a summer research scholarship. For the entire summer I developed microchips in a real research lab. I was solving real problems and conducting real research. This was something entirely different from sitting in class listening and I was hooked!

Now I am in the third year of a PhD in the School of Chemistry developing tools to clean up samples faster and more efficiently.

For further information: www.utas.edu.au/chemistry