## Fortunate to be a Scientist



Prof. Irena Hausmanowa-Petrusewicz in her apartment

Academia: Let's start from the beginning, from when you first started practicing medicine in Kirghizstan...

I didn't have any internship. I was in the army; that's no training. I collected my diploma on the same day that the Nazis entered Lvov, in late June 1941. I had left Warsaw for Lvov in October 1939, just after the outbreak of the war. That's the last time I saw my parents. I made a vow that I'd never live under Nazi occupation, and, surprisingly enough, I managed to never get caught anywhere that was under German rule; I didn't spend a single moment in a ghetto. I managed to escape Warsaw, and I managed to escape Lvov. The only German soldiers I ever saw were the wounded in hospitals, or I simply thought of them as one does of an enemy – I knew that they were out there, somewhere.

#### How did you get out of Lvov?

I got on a train. I had no idea where it was going, and I just got off at the end of the line. It was near the Urals, in Perm – it was called Molotov at the time. I knew nothing about medicine – I really didn't! Before then, I'd only ever worked in laboratories. But they took me for a doctor – everyone was being mobilized. I later found out that my younger sister had been evacuated from Lvov to Frunze in Kirghizstan. So I managed to catch another train, and headed to Kirghizstan. Once I got there, I got another job in a hospital, although I still didn't know very much. We discovered that a Polish army was being formed, so I volunteered. They took me in reluctantly. Everyone knew that I wasn't much of a scientist or a medic, but I found a Polish doctor who'd been in the army for some time. He was a very well known and respected surgeon. He managed to get me in somehow, and later married me...

#### Was that still in Kirghizstan?

Yes, but we went straight into the army. I assisted during surgery; I worked at a frontline hospital; we travelled. We joined up somewhere near Moscow, and then we followed the front towards Białystok. We almost got as far as Berlin, and eventually came to Warsaw. The Nazis had left by then.

## You were really lucky. But didn't you have German patients?

If a prisoner of war was wounded or sick, he was taken to hospital. It wasn't a PoW hospital, but a military hospital, mainly full of alleged "Poles" with mostly Russian backgrounds. I'm still very emotionally tied up with that period.

#### You must have been very brave.

I was sort of "plucky," you know. I left home, I got my sister to go, and I had a boyfriend whom I also managed to convince to leave. He was killed, as it happens. I tried not to be a coward, but I was really scared; I was terrified throughout the war.

#### How did you cope with this fear?

I tried to hide it. I remember I hardly ever slept properly in those days. I was always expecting an air raid. Even much later, when I was back in Warsaw, I still couldn't sleep. I've seen some terrible human tragedies; I can't really talk about it.

#### But once you've gone through something like that, the rest of your life is affected. You have to keep going. How did you cope?

Initially I found it difficult to live among people whose experiences of the war were different. Of course they also had plenty of problems during the occupation; they also experienced tragedy, but I just couldn't understand it. I didn't realize that people were being killed here, too. They were being murdered, and how... Such experiences make you tougher, but I don't think that's necessarily a good thing. For a long time I couldn't understand people's everyday problems. They all seemed so laughable not having a flat, food rationing - it just seemed so irrelevant. I immediately recalled this hideous famine from back in the USSR. I never experienced it myself; I was young, and somehow it didn't seem to catch up with me. I didn't have anyone to support and I always managed to find something edible. But the things I witnessed were so horrific that when people here were complaining about rationing, it just felt trivial. That's the kind of thing that happens with people who had such extraordinary experiences. I managed to get over it; now I'm back to normal, and I fret over the smallest things.

I have this childhood memory about how my grandmother – I knew even then that she had gone through some terrible things and shouldn't be fazed by anything at all in life – was worried when she had to remove a splinter from my foot.

For example, my friend Dr. Zygmunt Grynberg used to really annoy me by telling work to forget, although I had always really loved my work anyway. I was involved in research as a student back in Lvov; I really missed it, and I didn't think I'd be able to get back into it, so I felt really fortunate when I started research work again.

#### But the 1950s were a difficult time.

Oh, very much so, but I wasn't a mother yet. We were adults, doctors, and we managed regardless of the situation. We only really thought of hardship in terms of the past, although we all had to face different difficulties.

### Did you discuss what happened during the war?

Of course! Not only was there a lot of talk, but we were even looking for people who'd be able to tell us about it. But it wasn't all that easy: not everyone wanted to talk, there were many contradictions, many people didn't want to speak to each other. Truth wasn't easy to find in those days. There was a lot of talk, but in reality I understand far more from reading about it now than I did at that time. We either didn't understand then, or we suppressed things.

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jokes about the occupation, based on his own experiences. I used to think, "Dear God, has he really got nothing better to laugh at?" But that was just his way of getting through it.

# After you got back to Poland, you quickly started developing a career in science.

To begin with, I didn't realize my parents had been killed, and the news came as a huge blow. We had no idea what had been going on here; there was no correspondence. In the army there was a cultural officer, whose job was to read the papers and tell us what was going on. Russian news hardly reported anything about the West. I turned to So how did you come to head the hospital (chair the department)?

I started working in 1946. We had one professor – Adam Opalski – and the three of us doctors. And of course there were the patients.

I was working, but I really wanted to get a PhD. The professor became ill, and we didn't really have a supervisor. There was a neurosurgeon, Prof. Jerzy Choróbski; he accepted to supervise my PhD. I defended my dissertation in 1949.

Followed by your DSc (habilitation) in 1951...

How did you know that?

#### Interview with Prof. Irena Hausmanowa-Petrusewicz

From the "History of the Faculty of Medicine", published by the Medical Academy in Warsaw.

When the professor passed away, I took over because I was the only person who had a habilitation.

#### Was research difficult?

There was no research. We picked up some things from books; some we overheard, others we learned from talking to older, more experienced colleagues. I became interested in muscles. I wanted to find a tissue in which objective biological research didn't depend on other factors. Like most young doctors I also went through a phase of being interested in psychiatry. After several months I realized that each patient is different, but not because of their illness as such, but because of their circumstances or environment. Disorders manifest themselves differently in intellectuals, in people who have no skills, or in those who are life-long alcoholics. It's all interconnected, so it's impossible to say that a given disease will take such and such a course. I thought that the only tissue we all have in common is muscle; it does the work. I started looking for contacts and corresponding with scientists at home and abroad. Soon after completing my PhD, I was invited to join Prof. Fritz Buchthal in Denmark. This was already after 1956, so it was possible to arrange something like that. I spent a year in Denmark and France at laboratories studying electrophysiology of muscles. When I came back, I established the first similar lab in Poland. It got easier after that; I had patients with muscular disorders from all over the country. Soon after, my younger colleagues were able to travel abroad, too. We formed a team studying muscular disorders.

#### When I asked your colleagues about you, they told me you've always been a visionary. The center in Konstancin was established under your leadership.

It was managed extremely well by Dr. Stefania Zielińska. At that time residential properties in Konstancin that had been confiscated by party officials were being returned and we could establish the Center there. I felt it was very important, while patients were recuperating, for them to be observed and cared for a longer time. It was beneficial for science in terms of data collection, and of course for the patients as well – it meant that they weren't being sent home too soon



Prof. Irena Hausmanowa-Petrusewicz started working at the Medical Academy in 1946

after surgery. Muscles are heavily enervated; they depend on the nerve which in turn depends on the spinal cord, and that got me interested in neurons. New areas of research were established later. After the war, we got some specialist equipment, very modern in those days, which came to us from the army. This helped us study physiology, microphysiology, biochemistry. We also started studying genetics, which had been casting a shadow over medicine since the Nazi-era experiments. Still, since muscle disorders are frequently heritable, we really needed to introduce genetics into miology. This meant training large numbers of people.

### But that must have been later – in 1950s, genetics was practically forbidden...

Oh yes, it was much later, but in general things weren't as bad in Poland that we all had to do the same thing in science. I can't say that research was halted because of the political situation. Of course, there were people working on issues which were, shall we say, disapproved of by the authorities, seen as pointless. The lack of trust was the worst. We all knew that each team had a snitch among them, so things weren't like they are today where anyone can come to work and talk about what they were up to yesterday, with whom, and so on. That had a real impact on people, on our research, and on our work. It was especially bad in medicine, as it is so hierarchical. Of course the hierarchy was very useful to the authorities, since they didn't have to worry about dealing with everyone individually; it was enough to sort out the manager, who then dealt with everyone else on the authorities' behalf. I myself had quite a hard time because of this. There were many people in my team who protested and who were active in the opposition movement; an exceptional number. You're asking why?

# I've heard you had quite the knack for finding talented people and pushing them further.

It wasn't me so much; such people kept joining my team. Some of them are still working with me.

### And of course you yourself are still working. You have amazing endurance.

I am still working, but only in spirit. I find it very difficult to give it up. I know it's silly, but I can't imagine anything else. I struggle with walking, it takes me a long time to get to work, but I'm just fascinated by science. And there's so much going on in my field at the moment.

#### What's your formula for success?

I don't have one. I can only look back and say that I've always had a great team. It was a new field, so the people involved were naturally interested in innovation. There was a lot of young people who were eager to contribute something new. Of course, there are always talented people, and now they have good scholarships and they can travel abroad. But the others had something today's young people don't have – difficult lives.

But what do you mean? I guess I'm a bit like a doctor myself – I need to know everything.

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Take my daughter, for example. She was always very rebellious, she went to all the demonstrations. She got thrown out of the university. It was very difficult for me; I even once lost a job because of her activity. Although it was all very Polish, you know not quite thoroughly done. She was arrested in 1968, at the time of the student antigovernment protests. Anyway, the authorities had had enough of me, too. A minister I was on friendly terms with, Jerzy Sztachelski, warned me that there was nothing more he could do; that I should have a word with her. But I couldn't do it. She was very determined and very bold. Eventually, I was suspended from my job, but they didn't yet manage to tell me before Sztachelski himself was also suspended. The new minister was Prof. Jan Karol Kostrzewski, the first one to be appointed from outside the party's inner circle. His background was in the Home Army resistance movement. He was a completely different person - kind and honest. One day he called me to ask what was happening with ANOPS (a machine for physiology research, which I helped design). He said he was interested because he was into computers. It turned out he was asked to sign my dismissal from the Medical Academy. So Kostrzewski, this extraordinary man who suddenly found himself in the middle of all these party dealings, went to Józef Kepa. You know who Kępa was, don't you?

#### I know the name...

He was the party secretary for Warsaw, who organized all the purges at the time. Can you imagine? But Kepa, who basically didn't listen to anyone, agreed to see someone of Kostrzewski's stature straight away. Kostrzewski insisted that this was all a big misunderstanding, and my dismissal was cancelled. But it was all very unpleasant. My daughter was still restless, and ended up leaving the country in 1969. She's still working abroad. At the time she kept asking, "What should I do then? Give up my views?" It was hard.

#### I can imagine.

Most people weren't allowed to leave the country; that finally changed once Edward

Gierek became the general party secretary. Many of my colleagues had terrible problems; I had had it slightly easier, until Marta became politically active. My husband was the secretary for science in the Communist party's Central Committee, and later the secretary at the II Department of the Polish Academy of Sciences. He protected me. But when Marta was going through her rebellious phase, he was far more tolerant than me. He felt she shouldn't give up her views, and he supported them. It was quite something, even though he had to give up work for a year and leave.

#### Did many people leave?

No, the majority survived and stayed. For example, during demonstrations at the university, Janina Rafałowska came forward saying that students must not be beaten. She was dismissed immediately; but she was an excellent specialist, so we said that without her we'd have to close the department. In the end, she was given a clinical position. It wasn't very good, she was paid less money, and she could have been sacked at a moment's notice. After four years she was able to come back, but there were others who lost their jobs permanently. The Polish Academy of Sciences did well: at the time when universities were expelling people for their views, it was willing to take them on. It was established at the same time the Polish state was being recreated, and when other academies of sciences, drawing together various learned institutions were being formed around the world. In those days, people were selected for their excellence rather than party affiliation.

#### I was about to ask about the Academy.

The PAS institutions are well-regarded worldwide, while even the best Polish university faculties are ranked further down. Hence the question: why dismantle such valuable institutes? Why reduce the Academy in size? The recent reform has shifted all the power to the administrative section, which goes against the obvious direction for its development as an elected body of scholars? Now there are supervisers, deans, there's conflict between the younger and older academics. Everything seems to be going against the true spirit of the Academy, so as to show that it's all for nothing.

## So when do you think the Academy makes sense?

When it works on major scientific problems which cannot be studied at universities – such as similar academies in France, the US, Italy, or the UK do.

> Interview by Patrycja Dołowy Warsaw, November 2011

Prof. Irena Hausmanowa-Petrusewicz, neurobiologist, specializes in electrophysiology and clinical genetics. Corresponding member of the PAS since 1986, full member since 1998. Chair of the Nerve and Muscle Disorders Unit at the PAS Experimental and Clinical Medicine Institute (IMDK). Member of scientific committees at the PAS IMDK and Institute of Biology. Between 1958-1989, chair of the Neurology Faculty and Clinic at the Warsaw Medical Academy. Founding member of the Nerve and Muscle Research Committee at the World Neurology Federation: member and honorary member of numerous research associations in Poland and around the globe. Holder of an honorary doctorate degree from the Louis Pasteur University in Strasbourg; winner of numerous science awards including the Polish Prime Minister's Award in 2010. Awarded the Officer's Cross of Polonia Restituta, the Commander's Cross of Polonia Restituta, the Commander's Cross with a star to commemorate the 50 year anniversary of the PAS, and the Medal of the Commission of National Education.