

My personal sports career began way back in 1982 when I started doing high jump. I was incredibly lucky to have been among the generation of the best junior high jumpers in the world of all times. In 1990 there were 5 juniors jumping over 220cm. One of them became the World junior champion and the world record holder, another won a bronze medal at the World junior championships.

My coaching career has started in 1995 by acquiring an extremely talented group of young jumpers. At the time I was too young and vain, I believed I was the smartest in the world and thought I knew it all. Fortunately I realised soon that I didn't know a thing and that I would need lots of help and assistance in the future. I strongly believe that this awareness had been crucial for my professional development.

I was born in Novi Sad which is where I used to train and where I coach my athletes today. Our stadium did not have a plastic athletic track until 2004 and the town got an indoor arena in 2012. Such training conditions led to frequent IMPROVISATION. Learning how to improvise has helped me a great deal in coaching Ivana Španović.

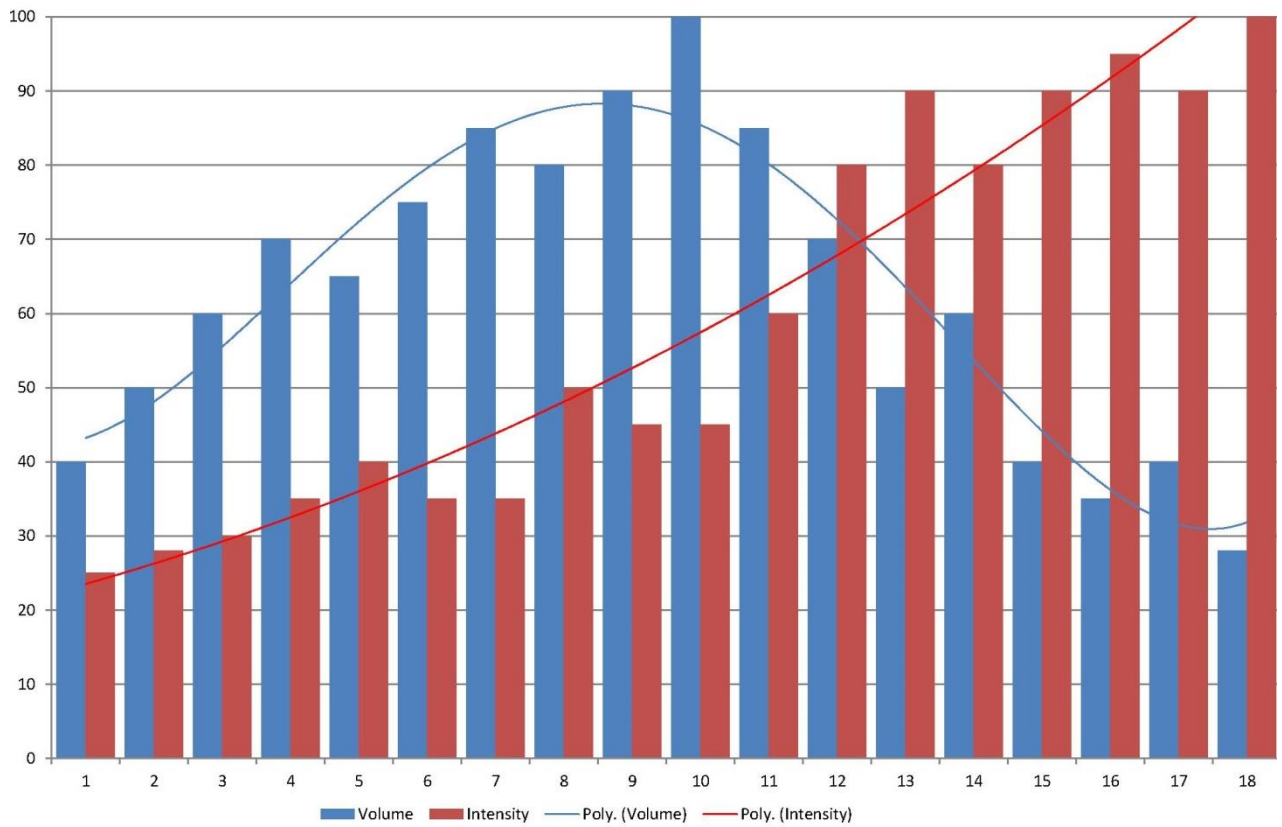
As a fifteen-year-old, Ivana jumped 6.43 and showed the potential she had in her. Before moving to Novi Sad in 2010, she became the World junior champion and set a new Serbian senior record of 6.71. Many people asked me how I had the courage to start coaching Ivana. I would say I was not afraid and that I was always up for a challenge.

Looking at the athletic history of Serbia, there have always been highly talented athletes, but no one has ever won a medal at a World championships until Ivana has, and the Serbian nation has waited for an Olympic medal for 60 years. I believe you understand now the kind of pressure Ivana and I had to deal with.

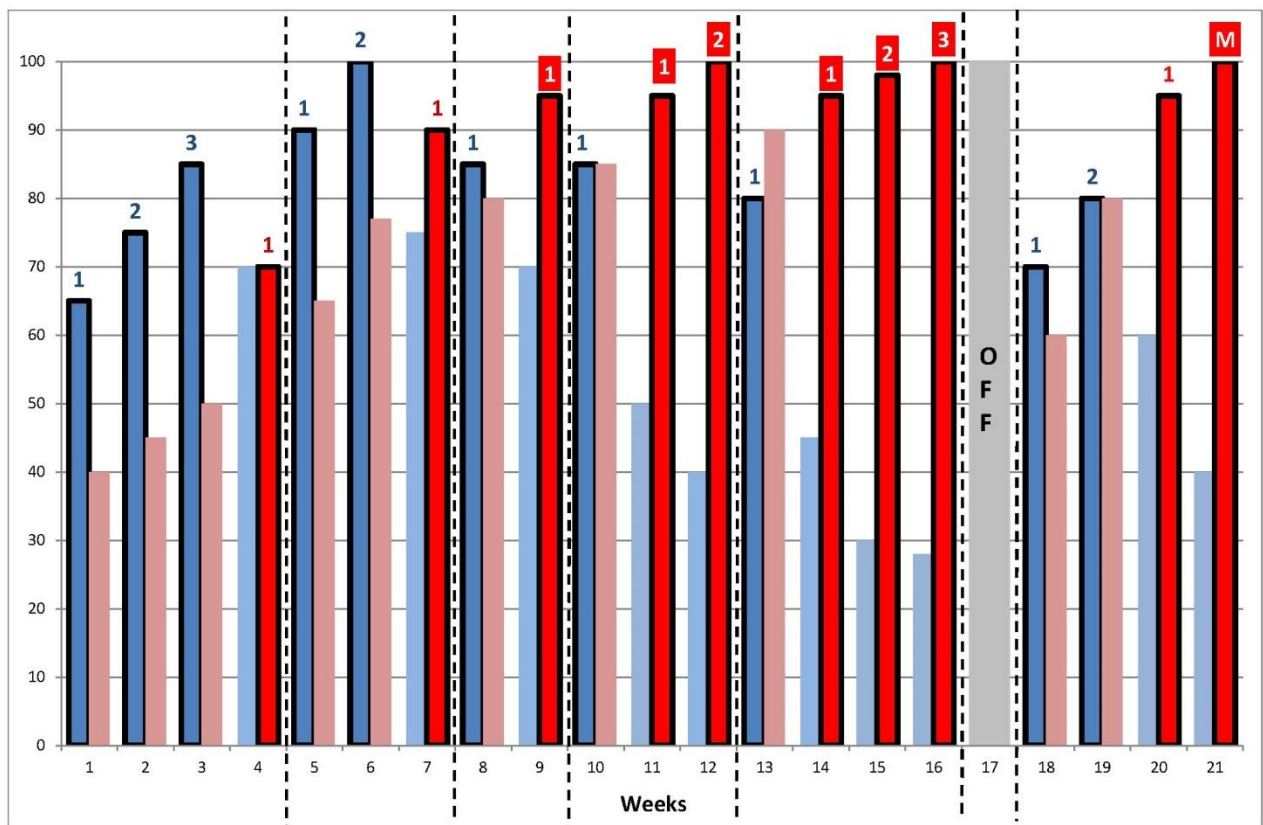
Before 2013 we had been through a lot: from European championships to Olympic games, including a serious injury that almost ruined Ivana's career. Sometimes it seemed as if we spoke different languages and we needed a translator. As she was developing and growing (maturing) as an athlete, so was I as her coach.

In 2012, at a conference held in Serbia there was a discussion about periodisation and tapering of one of the greatest female high jumpers ever, Blanka Vlašić. After the lecture I noticed that the periodisation presented does not explain how Blanka jumped 2.04 in May and 2.05 in August. I realised that such periodisation does not show how things are in real life. That is the main reason why I spent the following year working on a system that would put Ivana on a high performance level early in the season (in May) and maintain the same level until the main competition of the season.

Winter Macrocycle



Summer Microcycle



As you can see, this is the periodisation applied during the years of Ivana's greatest success. It is neither classical nor block periodisation but hybrid, the fusion of the best of both periodisations. I applied the classical periodisation during the winter macrocycle and in the summer macrocycle I applied the block. In classical periodisation we worked on developing motor skills up to the maximum and in block periodisation everything was directed (subordinate) to the upcoming competitions.

It is important to mention that I succeeded in making a balance between trainings and competitions in block periodisation.

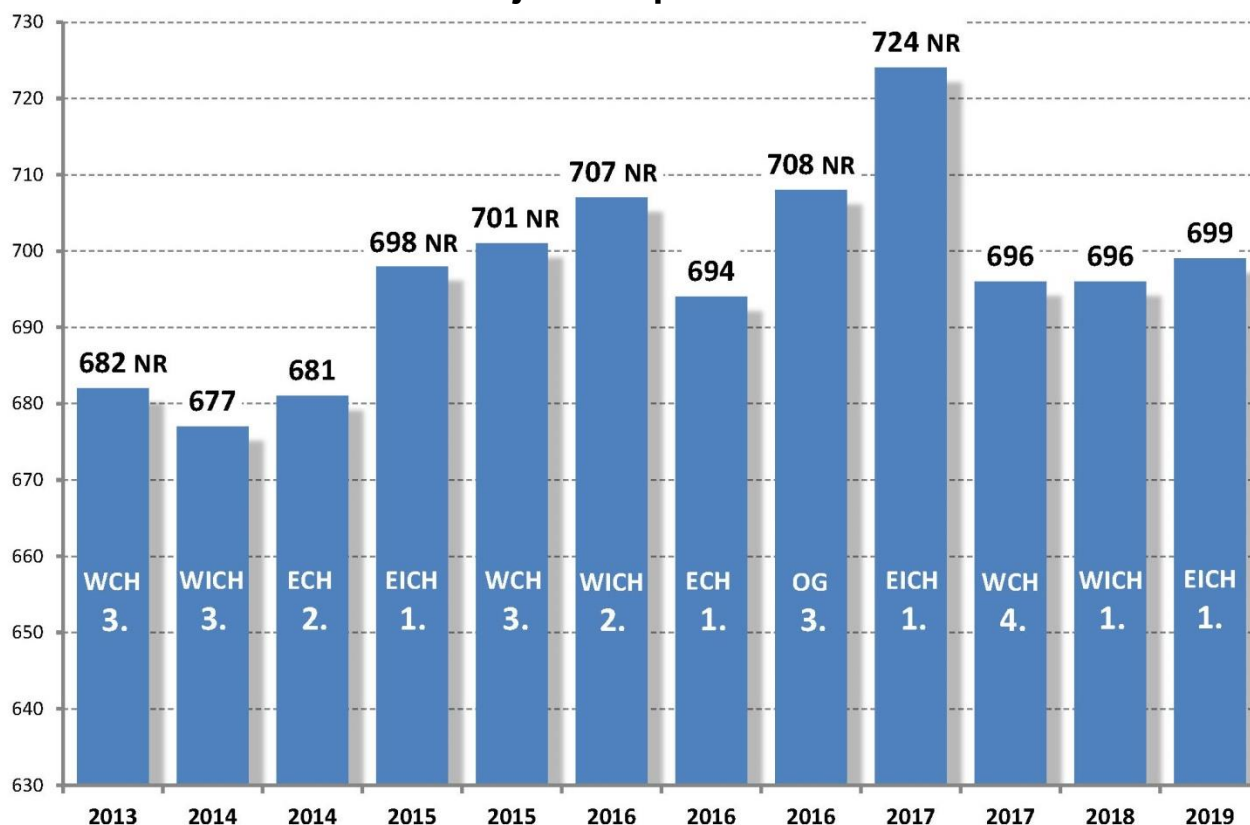
The first medal was pure luck. 45 days before the World championships in Moscow Ivana got ill and had to rest for 10 days. Our medical team gave her the green light for training precisely 5 weeks before the qualification date. Ivana won the bronze medal with the result of 6.82 and a new personal best. That medal made us both smarter and wiser.

After this success, we had to come up with a strategy for the future. We talked a few times and decided to continue in the way that would make her sports career last as long as possible. This means we decided not to chase results in numbers immediately, but to raise (increase) the level of her sports result step by step (gradually, slowly). On the other hand, Emir Bekrić, an athlete from Serbia who had also won a bronze medal in Moscow, decided with his team to try to break the European record in 400m hurdles the following year. But after Moscow, Ivana won 10 more medals and Emir didn't win anything else. This example shows how important it is to think about everything (to think outside the box) and to have the right strategy because both teams wanted to do what was best for their athletes.

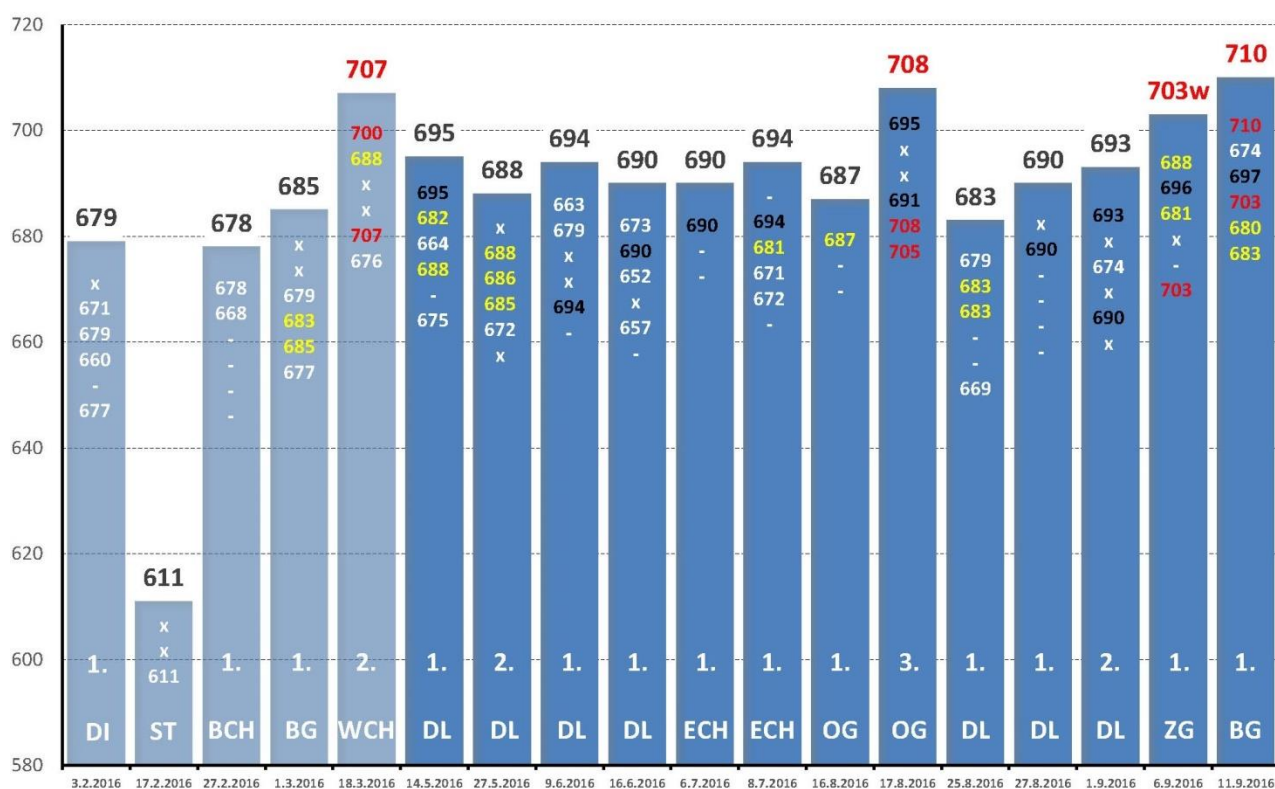
We realised that resting period is as important as training. Ivana has the personality of a lioness – never complains about pain or being exhausted (tired) at times.

So, the above-mentioned periodisation has been applied and since 2013 we have won 11 medals from both World and European championships as well as from the Olympic Games. In 9 out of 12 competitions Ivana has jumped either her personal best or the best result of the season. In 2014 in Zurich at European championships she jumped 6.81m not season best but she competed in extreme weather conditions, 12 C and headwind 1,6m/s. The only case of not winning a medal in a competition was in London 2017 at the World championships, the incident known as "the bib (start) number".

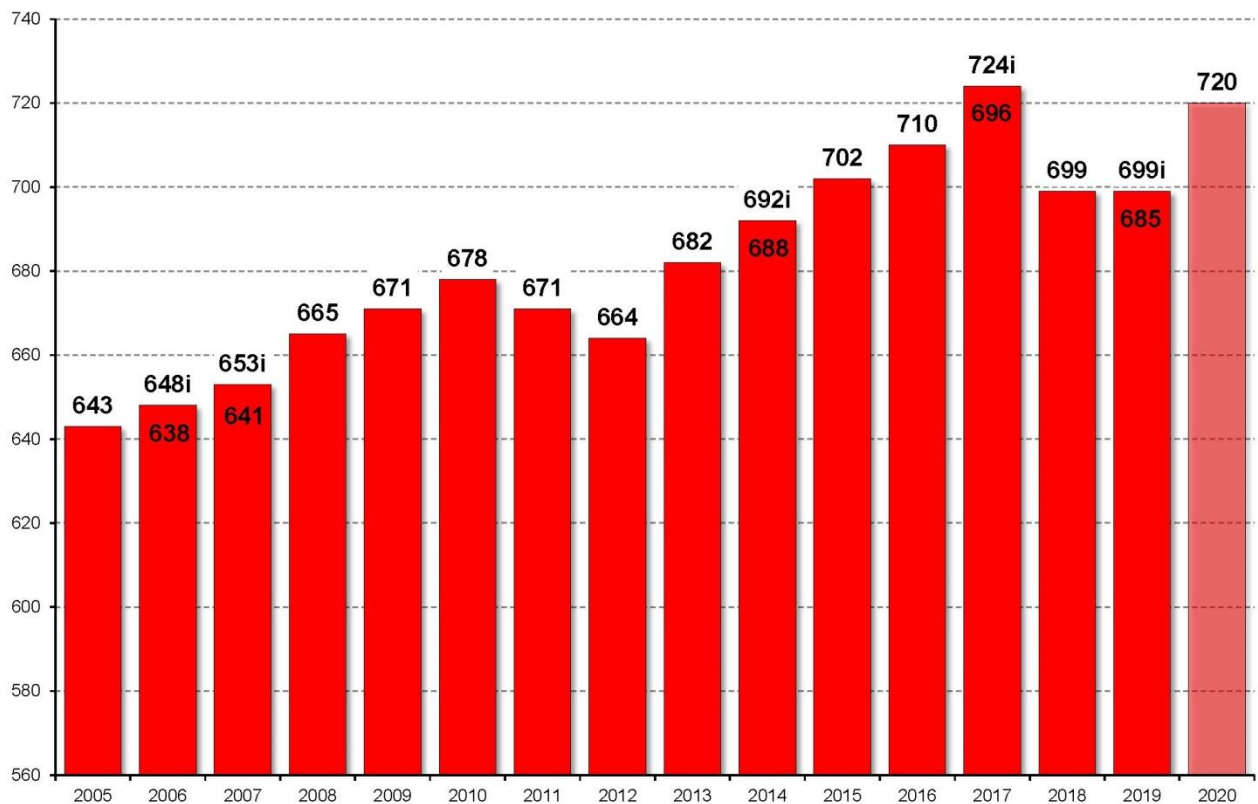
Major Competitions



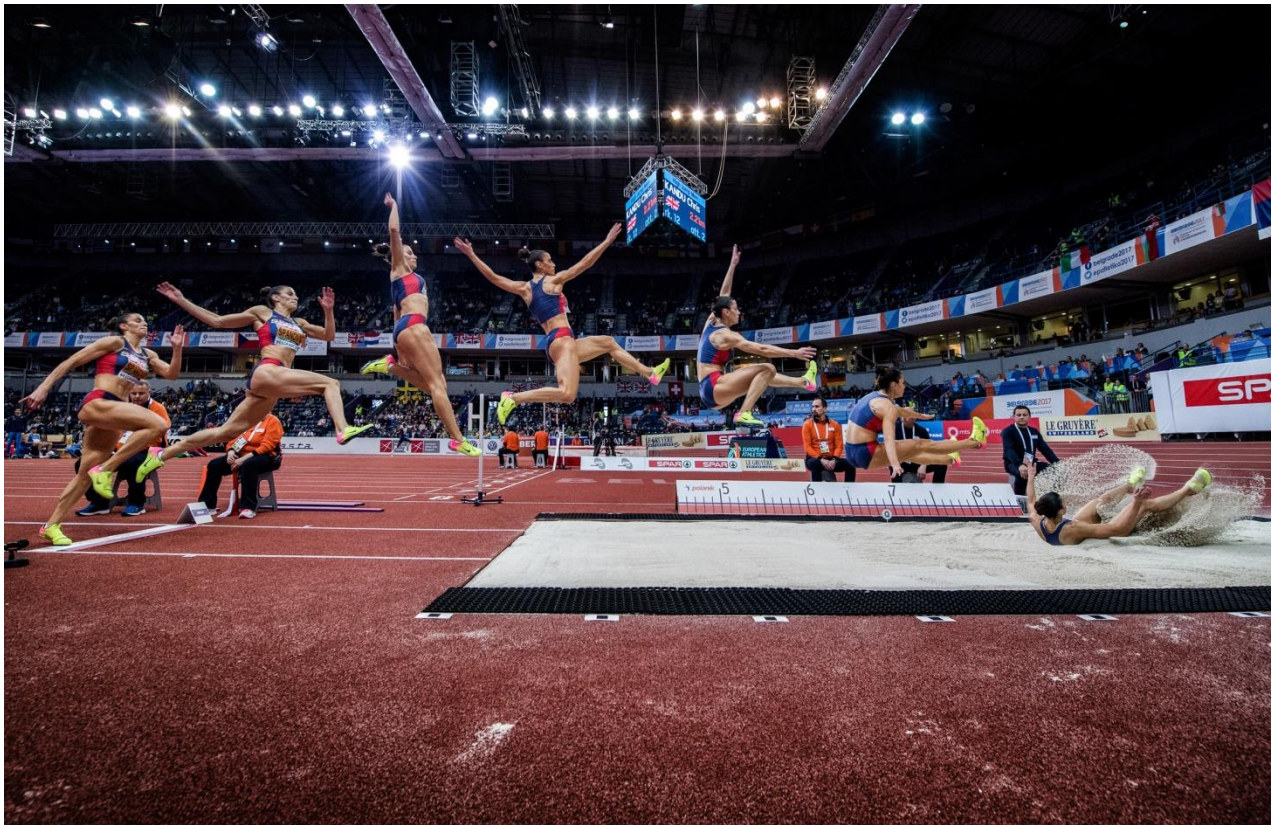
The Olympic year 2016 has been Ivana's most successful year in competitions. She has won 3 medals: the European gold, the World Indoor championships silver and the Olympic bronze. The average results calculated from the competitions throughout the entire season (both indoor and outdoor) were 6.92m.



Naturally, after a season like this it was planned for Ivana to have a long resting period and skip the whole indoor season of 2017. This is exactly how we planned the four-year cycle from 2012 to 2016. However, to our misfortune or fortune Belgrade was elected as the host of European Indoor championships in 2017. The ultimate dream of all athletes and people involved in sport is to win a gold medal in a major competition held in their homeland and to sing the national anthem with pride. At that moment I had to compromise. I tried to get Ivana to the European championships with only few competitions before the championships to save her from possible injuries.



The story of the European championships is like a fairy tale. I managed to apply what had been written in training plans but the most important factor was that we were able to train in Belgrade Arena (which was the Championships venue) for the final 30 days which helped Ivana to adapt to the surface. As you know, the surface was made of wooden boards and the most important thing for Ivana was to feel the boards vibrate and use this for timing her take off. That is why we avoided training and competing on hard base (surface) at that time. Ivana competed in Berlin at the ISTAF meeting (also on board surface) and at the Balkan Championships which took place 7 days before the European Championships in Belgrade Arena. Everything was ready for the spectacle. There was no doubt that, with the support of 10.000 spectators, Ivana would do what she was getting ready for her whole life. She defended her European champion title and became the third best jumper of all times indoor with the result of 7.24m



In the years following the Championships I reduced the number of competitions and I modified trainings but unfortunately injuries started happening. Soon after the European championships in Belgrade Ivana suffered gastrocnemius injury, in 2018 Achilles tendon and in 2019 hamstring injury.

Coaching the best athletes is always stressful because we try to make our athletes give their maximum. That is not easy at all, especially because of many factors which affect our athletes and throw them out of balance: medical conditions, micro traumas, family issues, love and relationships, the press... These are situations when coaches have to become masters of improvisation and correct the training process immediately.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Gym	Speed endurance	Jumping session	Gym	Speed endurance Hills	Jumping session	Off

When we talk about training, this is an example of how I organise trainings within one microcycle in basic period. Monday is gym day. Tuesday is for speed endurance and Wednesday is for jumps. This three-day cycle repeats so Thursday is for gym, Friday for speed endurance and Saturday for jumps.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
clean and full squat 5 sets from 6 to 10 reps	6-10 reps 200m ~30sec	Elements of long jump technique and plyometrics – hurdle jumps 6 to 10 reps over 10 hurdles	snatch and half squat 5 sets from 6 to 10 reps	Hill running up to 100m, 6-10 reps	Long jump technique again and plyometrics – ten-step jumps and ten-step jumps on one leg, 6-10 reps.	Off

This table shows the structure of trainings in the basic microcycle. On Mondays we do clean and full squat and on Thursdays we do snatch and half squat. On Tuesdays we do 6 to 10 reps of 200m low intensity 30 seconds, and on Fridays we do hill running up to 100m, 6 to 10 reps. On Wednesdays we work on elements of long jump technique and plyometrics – hurdle jumps 6 to 10 reps over 10 hurdles. On Saturdays we work on elements of long jump technique again and plyometrics – ten-step jumps and ten-step jumps on one leg, 6 to 10 reps.

I call this kind of microcycle THE THREE-PHASE SYSTEM because it looks like the three phased alternating current. The sum of all the phases is always 0, which means that everything is in perfect balance. We also try to keep all the elements in balance, both in microcycle, in mezo and macrocycle.

This is how one microcycle looks in a pre-competition period:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
high intensity half-squat in 5 sets from 5 to 3 reps maximum intensity clean 4 sets from 3 to 1 reps	High intensity sprint session up to 60m distance from 6-4 reps	Long jump with shorter approach of 10-14 steps plus plyometrics – high intensity jumps over 6 hurdles	one leg half-squat, 5 sets from 5 to 3 reps maximum intensity snatch 4 sets from 3 to 1 reps	full long jump approach, 6-10 reps	short approach long jumps of 12 to 16 steps plus plyometrics- Quintaple jumps and one leg only, 4 sets with 4 to 6 steps runway	Off

On Mondays we do high intensity half-squat in 5 sets from 5 to 3 reps, maximum intensity clean 4 sets from 3 to 1 reps. On Tuesdays we do high intensity sprint session up to 60m distance. Wednesdays are for long jump with shorter approach of 10-14 steps plus plyometrics – high intensity jumps over 6 hurdles. Thursdays are for gym: one leg half-squat, 5 sets from 6 to 3 reps. On Fridays we do full approach long jump. Saturdays are for short approach long jumps of 12 to 16 steps plus plyometrics – quintaple jumps, and one leg only, 4 sets with 4 to 6 steps runway.

The microcycle in competition season looks like this:

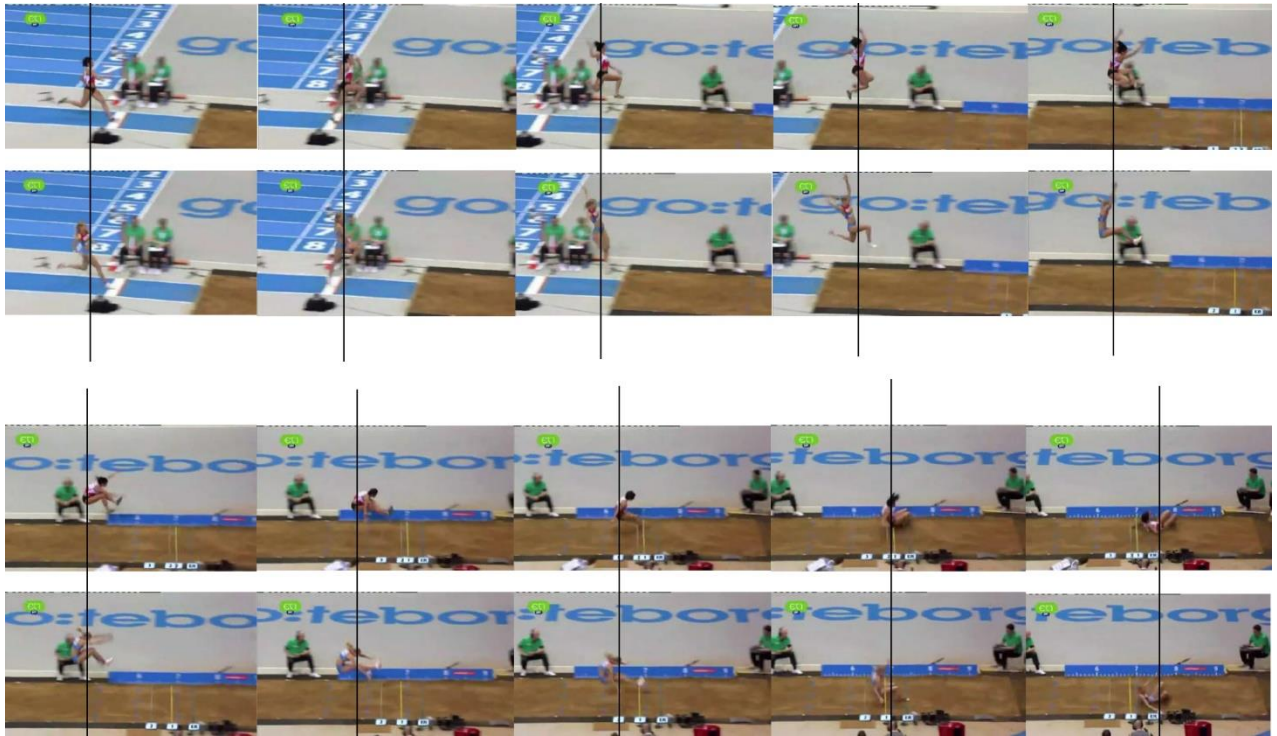
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
shot put	standing long, triple and quintuple jumps elements of long jump such as the penultimate step	approach	Off	Tonus	Competition	Off

On Mondays we do shot put instead of gym. On Tuesdays we do standing long, triple and quintuple jumps and we work on elements of long jump such as the penultimate step. Wednesdays are for approach practice. Thursday is rest day and Friday is for muscle tone exercises. Saturday is competition day.

One of the most important factors of competitions preparation are muscle tone exercises. These are specific weightlifting exercises which I usually do 24 hours before a competition. I never repeat the same set of exercises-tonus more than 2 times. The body gets used to the existing muscle tone easily and that is why the exercises have to be changed. If the target exercise is the half-squat, by changing the angle, the amount of weights or the number of reps, the stimulance on the body is changed as well. So the most important thing for all types of jumpers is to have the right muscle tone – stiffness before the competition. Sometimes it is better to lose a little speed in order to gain the right stiffness at the take-off.

I never plan muscle tone exercises in advance because all my athletes know their bodies very well and they recognise if their legs feel light or heavy. Depending on their feedback I choose the exercises on the spot.

One of the biggest steps forward in my work with Ivana was practicing and improving the landing technique because she used to lose about 20-30 centimetres at the landing. That was not an easy task. Ivana watched hundreds of her videos and videos of other long jumpers and still could not understand what she had to change. After the European championships in Gothenburg in 2013 I did a comparative analysis of Ivana's and Daria Klisina's jumps.



Daria was much superior than Ivana at that time. I used TV recordings of both jumps to put the jumpers in the same space and time frame and I followed the movement of Ivana's pelvis during the jump. From the take-off point I took a photo of every third frame of the video until the landing point. As you can see, Ivana's angle at the take-off is less negative than Daria's. Ivana's technique is hang but Daria uses hitch-kick technique. After the take-off Daria puts her take-off leg in the position which helps her stabilise her body. Ivana lowers her swinging leg and begins rotating her body too early. In the next phase Klisina is in the gliding phase and that helps her landing to be perfect. Ivana's arms movements show that she is preparing to land. In the end, the difference in the result is in Daria's favour. Seeing this analysis, Ivana finally got the point and corrected her landing quickly.

To finish off, I would like to say that there is no formula for a magic potion which creates champions who win medals at the biggest competitions. Theoretical knowledge is just a base that needs to be upgraded with practice. Practice means you have to learn and understand how the body reacts and adapts to external impact – trainings. Discussions

and experience exchange are very important, but finally it is your task to identify tips and tricks to help you become the master chef and cook the speciality of the house your athlete will enjoy.