



# EFORT FOUNDATION

## Visiting Fellowship Report

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<b>Country of residence:</b>	Italy
<b>Country of visiting fellowship:</b>	Switzerland
<b>Host centre:</b>	Balgrist University Hospital
<b>Name of the host:</b>	Prof. Patrick Zingg
<b>Dates of visiting fellowship:</b>	01/06/2023 – 30/09/2023

*It is recommended that the report is 3-4 pages including the cover page.*

The following paragraphs should be addressed:

1. Description of clinical activities during the fellowship
2. Description of scientific activities during the fellowship
3. Description of social aspects of the fellowship
4. Technical skills that I learnt during the fellowship
5. Theoretical knowledge that I learnt during the fellowship
6. New knowledge and skills that I can implement in my own practice
7. Overall reflective statement over how the fellowship contributed to my professional development
8. What are your plans for the future?

### Expenses:

Travel: EUR 500/600 overall  
 Accommodation: EUR 1610 ca (1536 CHF) monthly  
 Other expenses: EUR 253 public transport pass, 200/250 food (monthly)

Topic	Please tick one of the boxes <input checked="" type="checkbox"/> 1 (poor) to 5 (very good)					Your comments, thoughts, recommendations
	1	2	3	4	5	
<b>Education</b>						
Could you improve your knowledge and gain new experiences?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Host Department</b>						
How was your communication with your host centre (regarding accommodation, programme, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Did they offer you a social programme?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



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## Report to EFORT:

I attended to an EFORT-funded fellowship at the Universitätsklinik Balgrist of Zurich from 1<sup>st</sup> June to 30<sup>th</sup> September 2023. Unfortunately, I was not able to completely fulfil the fellowship (6 months were initially planned), due to organizational issues by my Orthopaedic Unit, that wanted me back in Rome.

Talking about my expectations before leaving for Zurich: I am an hip surgeon, focusing mainly on primary and revision hip arthroplasty by posterolateral approach; by coming to Balgrist University Hospital I expected to gain an all-round deeper knowledge of hip pathology, in term how to recognise and treat young adults pathologies, how to manage a total hip replacement via anterior approach, and a better understanding of revision surgery.

After attending to all the activities, I would summarize that my experience articulated over three main aspects: a strictly clinical, a radiological and a surgical one.

## CLINICAL PERSPECTIVE

I really enjoyed the possibility to attend to an "only-hip" outpatients clinic, I found it very useful for an orthopaedic surgeon wanting to focus on this specific branch. I took part to hip outpatients clinic two times a week and that offered me opportunity to see every sort of hip pathology, from dysplasia, borderline dysplasia and femoral rotation issues, to primary and secondary osteoarthritis, hip deformities, outcomes of every kind of hip surgery. It was interesting to watch how to approach patients with different pathologies, above all from the point of view of clinical examination: I better learned how to evaluate the function of periarticular hip musculature, how to properly evaluate the range of motion (flexion, internal and external rotation, abduction and adduction) and its variations, and above all how to search for specific and pathognomonic signs and symptoms (femoral acetabular impingement, hip instability). Not least, it was useful to notice the proper therapeutic indications, both as for conservative strategies (physiotherapy, wait and watch, articular and periarticular injections) and for surgical indications: surely, one of the most important and challenging issues for a surgeon is to give a right surgical indication – it is the first step to a successful operation.

## RADIOLOGICAL PERSPECTIVE

I must say that there is a great advantage in having a radiology department completely focused on orthopedics. It means that both radiologists and technicians are trained to work on specific protocols and pathologies, and the quality of imaging is really high. For instance, they elaborated an ultra-low dose CT scan protocol, that accounts for the same radiation of two plain radiographies and allows to gain much more infos about patients anatomy.



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Above all, here I actually learned a lot better how to properly evaluate the radiographic anatomy of the pelvis, starting from the evaluation of the features of a well-done radiography. I understood the main importance of a correct and thorough analysis of the pelvic radiographic parameters (rotation, tilt...) and thus how to perform the examination of the acetabular morphology. As a consequence, I've better understood the role of preoperative planning in hip surgery, from the placing of the calibration ball, to the problems with magnification, to the use of some tricks to correct abnormal pelvic or femoral rotation and tilt.

Lastly, here I appreciated the use of magnetic resonance imaging, which I saw being exploited for the study of every pathological condition: soft tissue analysis, native joint examination (labral tears or hypertrophy, cartilage features), femoral antetorsion measurement, loosening of prosthetic components, those are just some of the aspects that I learned to evaluate.

### SURGICAL EXPERIENCE

I attended to:

96 total hip arthroplasties via anterior approach

17 hip revisions (anterior and posterolateral approach)

11 hip arthroscopies with or without labrum refixation and derotational femoral osteotomy

11 periacetabular osteotomies w/wo femoral osteotomy

6 femoral rotational osteotomy

2 hamstring refixations

2 pelvic ORIF

2 hip surgical dislocations with femoral osteotomy

First of all, I gained a very good understanding of hip anterior approach, since I was able to scrub on a lot of primary hip replacement operations. I learned the correct patient positioning and how to move the particular surgical bed (Medacta AMIS traction bed); I learned the soft tissues management (muscle sparing, capsulotomy and capsular release, opening and closure of the fascia...) and the right way to implant the prosthetic components. Overall, I think I'm now definitely able to perform a THA via anterior approach by myself.

Then, I gained a better visual understanding of the pelvic and femoral bony anatomy mostly watching at periacetabular and femoral osteotomies, technically demanding operations that could be really life-changing for young patients.

Lastly, I enjoyed the possibility to participate on some hip arthroscopies: I learned its right indications for femoral-acetabular impingement (FAI), and technically the correct positioning of arthroscopic portals, the arthroscopic anatomy of the hip, the way to perform an impingement correction, how to diagnose and fix labral tears.



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### FINAL CONSIDERATIONS

I must spend some words on scientific activity. The Balgrist is one of the most research-focused centre I've ever seen, in which every doctor is strongly pushed to produce original research. Thus, there is indeed a great possibility to get involved in scientific activities, for who's willing to do it. Nonetheless, I managed to come to Switzerland with my family and I didn't want to spend all of my time in hospital, so I decided to focus on clinical and surgical activity, giving research work up.

The same consideration works for social aspects too: I've had my family here in Switzerland with me, so I didn't need to participate to activities to keep me busy in free time. However, it didn't seem that Balgrist offered structured social programmes for fellows – or, anyways, no one told me anything about that.

Differently, I think I've built some interesting working relationships and I'm actually often exchanging advices, infos and pieces of knowledge with some members of Balgrist's hip team.

Concluding, this fellowship definitively provided for a strong contribution to my education as an orthopaedic surgeon. My theoretical knowledge of hip pathology increased a lot, as well as my practical surgical skills, above all those concerning minimally invasive anterior approach THA, so that now I'm able to perform it – and I will do it soon on my own patients. Nevertheless, the Balgrist doesn't allow fellows to directly operate, which I think is a strong limitation; possibly, for the future they should elaborate some protocol to address this issue.

As for my plans for the future, I will go back to my usual work in Rome, with a much greater knowledge and awareness of all-round hip anatomy, biomechanics and pathology, which I think shall represent a dramatic improvement for my clinical practice.