

**INTERNATIONAL DESIGN COMPETITION
CLUJ-NAPOCA CHILDREN'S HOSPITAL**

JURY REPORT

DATE: 13-17.06.2021

PLACE: CLUJ ARENA, CLUJ

1. JURY

Full Members

Arch. Dominic Hook

Arch. Claudiu Salanță

MD Aldea Cornel Olimpiu

MD Vasile-Florin Stamatian

Arch. Vlad Sebastian Rusu

Arch. Emil Burbea

2. ORGANIZATION OF THE JURY

Arch. urb. Bogdan Bogoescu recused himself from the full member of the Jury position on 26.02.2021. Therefore, the deputy member representing the profession of architect in accordance with the order of nomination on the Jury list, arch. Dominic Hook took over the role of full member of the Jury throughout the judging of the international design competition for the Children's Hospital, according to the Competition Rules, art. 1.5.4. Arch. Benedict Zucchi (on 31.05.2021) and arch. Jan de Vylder (on 10.06.2021) withdrew from the Jury for unpredictable personal reasons, independent of the conduct of this competition. In accordance with the Competition Rules, art. 1.5.4., arch. Emil Burbea took over the position of full member of the Jury, occupied by arch. Benedict Zucchi, during the entire period of the Jury sessions.

All the other members of the Jury were present for the Jury works.

Arch. Dominic Hook was unanimously elected President of the Jury.

The following persons were present next to the Jury, as:

- Professional advisor: arch. Andreea Tănase
- President of the Technical Committee: arch. Mirona Crăciun,
- Jury Secretary: arch. Ilinca Pop
- Technical assistance: arch. Silviu Vultureanu
- Competition Brief expert advisor: MD Alexandru Coman

The Reception Secretariat received a total number of **30 packages** containing projects for the competition. Two packages arrived after the deadline provided in the **Competition Rules of the International Competition "Cluj-Napoca Children's Hospital"** hereinafter referred to as **the Rules**. The deadline stated by art. 3.17 *Competition Schedule* is June 4th, 2021, 16:00 (official time of Romania). Therefore, a number of 2 (two) packages were rejected by the Reception Secretariat according to the Competition Rules (pursuant to art. 2.3.2, 2.3.3, 3.8.2, 3.8.4). The rest of the packages complied with the provisions of the Rules.

The Technical Committee was handed over a total of **28 projects** from the Reception Secretariat.

The president of the Technical Committee presented to the Jury the Technical Committee Report, containing the formal check of the requirements of the Competition Brief and Rules. Project 124 did not present the Financial Proposal and breached anonymity provisions (failure to cover the alphanumeric symbol with black paper for the competition materials, according to the Rules, art. 2.3.4, para. 2). Therefore, the Technical Committee proposed to the Jury the disqualification of project 124. The Jury unanimously decided in favor of the disqualification of project 124.

Therefore, **27** projects were accepted in the Jury sessions.

3. AWARD CRITERIA

In the assessment of the projects, there will be awarded scores between 0 and a maximum expressed on each criterion.

The maximum score is 100 points, the weights of the criteria being explained in detail as follows:

	Criterion	Max points
A	Complying with the spatial, functional and technical requirements	60 points
A1	Sustainability of urban intervention: Given the urban context in which we operate, the solution regarding the Emergency Clinical Children's Hospital cannot be evaluated outside a sustainable proposal for the systematization of the entire plot. Thus, the following aspects will be evaluated in particular: <ul style="list-style-type: none">• Sustainability of the proposed plot systematization (in terms of functions, proposed urban density or permeability of the resulting functional nuclei);	20 points

	Criterion	Max points
	<ul style="list-style-type: none"> The capacity of the proposed urban systematization stages to lead to a sustainable development of the plot; Sustainability of the landscaping proposal for the land area dedicated to the Emergency Clinical Children's Hospital (the occupation of the plot, the fluidization of the relationship between public, semi-public or private spaces, the relationship with the rest of the proposed functions at plot level). 	
A2	<p>Functionality of the proposed solution</p> <p>The project aims at a complex medical function, burdened by a series of regulatory constraints, generated by the existing legal framework. In order to lay the foundations for a feasible approach, it is essential that the proposed solution meets all the spatial and functional requirements imposed by the design theme and respects the existing legal framework. Thus, in the evaluation of the projects, the following sub-criteria will be followed:</p> <ul style="list-style-type: none"> Integration of all the functions required by the competition brief and judicious use of space; Correct resolution and optimization of the medical functions and flows by integrating innovative solutions; Volumetric and functional adaptation of the solution to the specific requirements resulting from the predominant use of space by children or adolescents. <p>The Competitors CANNOT change the total number of beds imposed by the design theme. Any change in the total number of beds, i.e., 510 continuous hospital beds, 65 beds for attendants and 50 outpatient hospitalization beds, results in a score of 0 (zero) for criterion A2 - Functionality of the proposed solution.</p>	30 points
A3	<p>Financial offer for design services</p> <p>The criterion quantifies the value of the design services provided by the bidder. As it is a complex medical function, financed from public funds, it is important that the ratio between the services provided and their value is correct.</p> <ul style="list-style-type: none"> The actual cost of the design and its inclusion in the maximum estimated cost threshold is a mandatory criterion. 	10 points

	Criterion	Max points
	<ul style="list-style-type: none"> • Failure to meet the maximum cost threshold results in a score of 0 (zero) for criterion A3 - Financial offer for design services. 	
B	The expressive attributes of the intervention	40 points
B1	<p>The quality of urban intervention</p> <p>The systematization solution of the plot dedicated to the competition brings with it the capacity of a development pole for an area in process of urbanization. The quality of the urban intervention thus plays an important role in defining the way in which the area located northeast of Borhanciului Street will be developed. Within this criterion, the following aspects will be evaluated:</p> <ul style="list-style-type: none"> • Ability of the systematization proposal of the plot to act as a development pole (quality of the proposed functional, spatial and volumetric relations); • The quality of the landscaping proposal dedicated to the Emergency Clinical Children's Hospital (quality of the functional, spatial and volumetric relationships proposed, quality and ergonomics of the resulting spaces, the way they meet the needs of different categories of users: medical personnel, patients, caregivers, visitors, etc). 	10 points
B2	<p>The plastic expressiveness of the proposed volume</p> <p>The architectural quality of the proposed volume brings added value both to the project, as a whole, and to the local community. With a correct approach, the project has the chance to become a landmark for this area of the city under development. The following aspects will be evaluated:</p> <ul style="list-style-type: none"> • The potential of the solution to establish a model of good practice in terms of medical architecture. • The representative / contemporary character of the proposed volume. 	15 points
B3	<p>The quality and atmosphere of the proposed spaces</p> <p>The criterion evaluates the project's ability to generate spaces centred around the patient's needs, using the proposed finishes and the relationships between spaces to create a therapeutic environment capable of reducing the stress generated by the medical act.</p>	15 points

Criterion	Max points
<ul style="list-style-type: none">• The quality of the proposed spaces and the visual relationships generated, including the relationship with the natural environment;• Adapting the details and finishes to the specific needs of paediatric and / or adolescent patients, in order to reduce the physical and emotional discomfort related to the treatment and hospitalization period;• Easy in-hospital orientation (wayfinding) and ergonomic use of spaces to create a patient friendly environment.	

The calculation algorithm used for the final evaluation of the projects is the following:

Final score (maximum 100 points) = Criterion A score + Criterion B score

Criterion A score (maximum 60 points) = A1 + A2 + A3

Criterion B score (maximum 40 points) = B1 + B2 + B3

4. JURY SESSION – WORKING METHODOLOGY

The working sessions of the Jury were preceded by a visit to the competition site, guided by the Professional Advisor of the competition, arch. Andreea Tănase, and MD Alexandru Coman, epidemiology expert, consultant in drafting of the Competition Brief. Following the site visit, arch. Andreea Tănase held a presentation of the requirements of the Brief and particularities of the site.

The Jury agreed that the selection of projects should be done through several rounds of analysis.

The Jury agreed upon the following working method:

Round I

During the first round, the Jury firstly analyzed the 27 projects individually, both based on the Award Criteria and the requirements of the Competition Brief.

A collective discussion followed the Jury's individual analysis of the projects, highlighting the projects that responded optimally to both medical and architectural-urbanistic requirements, based on the Award Criteria.

Eleven projects were eliminated in this round of professional debates.

The sixteen projects selected after the first round to go further were:
101, 102, 103, 105, 106, 108, 109, 111, 112, 113, 115, 116, 119, 122, 125, 127

Round II

The Jury sessions continued with the analysis of each of the sixteen projects that successfully passed the first round. The Jury members continued with a collective analysis of the remaining projects, discussing the specific approaches of the projects in what concerns both the functional requirements of the medical program and the landscape integration of the proposal, according to the Award Criteria. Eight projects were eliminated in the second round of debates.

The projects selected for the third round were: **101, 102, 105, 109, 113, 115, 119, 125.**

Round III

The Jury continued discussing the eight remaining projects, with a focus on those projects which optimally address the requirements of the Competition Brief. Special consideration was given to the best functional responses in the architectural context proposed by each project, the best approaches on the interaction between architectural space and future users, and also, the most appropriate urbanistic solutions bringing added value to the entire competition area, according to the Award Criteria.

Three projects were eliminated in this round. The five projects selected for the fourth round are: **101, 102, 105, 119, 125.**

Round IV – Prize awarding

The Jury decided:

The **Ist prize**, consisting in the design contract with an estimated value of 31.721.928 LEI, without VAT, was awarded to **project number 119.**

The **IInd prize**, in the amount of 365.460 LEI, VAT included, was awarded to **project number 125.**

The **IIIrd prize**, in the amount of 219.276 LEI, VAT included, was awarded to **project number 105.**

1st Mention, in the amount of 48.728 LEI, VAT included, was awarded to **project number 101**.

2nd Mention, in the amount of 48.728 LEI, VAT included, was awarded to **project number 102**.

5. STATEMENT OF THE JURY

Cluj County represents a pole of excellence regarding the medical services provided in the region and the country and making a medical infrastructure that follows the European standards in the field represents both a need and a desire of the Cluj County Council.

The Architectural competition for the new Children's Hospital Cluj clearly captured the imagination of the 27 national and international Architectural practices that submitted an entry. The quality of a consistent part of the submissions was of a very high standard and a substantial amount of creative thinking had gone into their preparation.

The site for the new Children's hospital is substantial in area and can more than comfortably accommodate the brief / programme without constraint. The site is effectively a blank canvas. All the proposals however had to balance the need to establish an optimal footprint on the ground plane, the total site coverage and height / number of storeys required to accommodate the required brief areas. For instance, the site could more than easily accommodate all of the brief if the proposal was all single storey! Conversely a tower could have been proposed thereby retaining a substantial amount of site for future uses. The site is on the edge of the city and currently largely rural in character. A very urban intervention such as a tower regardless of functional / operational considerations would therefore not be appropriate (and would no doubt struggle to secure permission!) A sprawling single storey building whilst having a minimal impact would be squandering the available site and from an operational perspective would be extremely sub-optimal. The best proposals therefore struck the right balance between the site area commandeered for the proposal, overall height / mass, and land remaining for building out a future masterplan.

On the whole, the visual quality of the submitted drawings, diagrams and illustrations was applauded by the Jury making the process of assessing the submitted designs enjoyable and inspiring. The site for the new Children's hospital is substantial in area and can more than comfortably accommodate the brief / programme without constraint. The site is effectively a blank canvas. All the proposals however had the balance the need to establish an optimal footprint on the ground plane, the total site coverage and height / number of storey required to accommodate the required brief areas. For instance the site could more than easily accommodate all of the brief if the proposal was all single storey! Conversely a

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The best proposals therefore struck the right balance between the site area commandeered for the proposal, overall height / mass, and land remaining for building out a future masterplan. The jury carried out four rounds of formal assessment. The assessments constantly shifted from the big picture overall assessment of quality, to probing into a more detailed analysis to ensure the selected schemes stood up to scrutiny, ultimately to establish if they worked! In the final round 5 schemes remained. Heated discussions took place where each of the jurors expressed their views inevitably with a particular emphasis based upon their profession and specific discipline / expertise. The assessment therefore needed to be balanced to not prioritise one important consideration over another. In order to make it into the final 5 schemes selected the designs were subjected to 'stress testing' to ensure that each fulfilled the clinical functional requirements.

Whilst each of the finalist scheme had their strengths and weaknesses relative to each other and these points were debated, the jury were unanimous in selecting the winning scheme- one that stood out as a firm favourite from the beginning for many, from an overall impression, the quality of Architecture, and the quality of thinking that underpins this very creative response to the site and the brief and a skilfully executed piece of work.

Congratulations to the winners!

6. FINAL CONCLUSIONS AND RECOMMENDATIONS

1st Prize – Project no. 119

The winning project stood out as one of the firm favourites amongst the jurors from the initial viewing of the exhibited schemes. It was particularly pleasing that following the initial appraisal of the scheme it stood up very well to a much greater depth of scrutiny across a wide range of crucial considerations. The scheme is thoughtfully, professionally, and very beautifully presented. It was one of the submitted projects that gave the greatest consideration of it being experienced through the eyes of a child. It has skilfully considered the impact of scale to make the proposal friendly, approachable, and welcoming. It goes to some lengths to provide a positive impression as an antidote to the character of many hospitals which have been built historically around the world which present themselves as

little more than a functional factory for repairing the human body. It is particularly important that a children's hospital does not convey this impression and carefully considers the importance of looking after the mind and spirit as well as the body, in order to help reduce the anxiety of the children and their families that accompany them.

Sustainability of urban intervention (criterion A1)

The winning project strikes a very good balance between its site coverage and the area remaining available for future complimentary uses. It positions itself in its rightful prime commanding position as the site 'anchor tenant' toward the southern half of the site. The impression on the approach from the beltway will therefore be more of a hospital in a parkland rather than it being hidden from the approach by other masterplan development plots in the foreground, common amongst some of the other submitted schemes. The scheme creates a dedicated vehicular access to the south for the main entrance drop off rather than this access peeling off a main north-south axis thoroughfare shared with other traffic, again common amongst many of the other proposals. This will create a calmer safer environment for the main entrance, separate from general traffic, ambulances and service vehicles and a quieter setting for a range of south facing uses that address this space, such as the external play space proposed.

On a site wide masterplan level it was considered by the jury that the indicative proposal for the future development plots to the north could have had more consideration as this aspect of the proposal was deemed to be less successful than some of the other submissions. The overall network of road infrastructure with a multitude of roundabouts and slipways was also considered not to be completely convincing and has scope for improvement.

Functionality of the proposed solution (criterion A2)

The distribution of briefed accommodation and the horizontal and vertical circulation / communication strategy has been very carefully considered to achieve optimal relationships and adjacencies. The building blocking and stacking has adopted well founded principles. The more highly serviced and typically deeper plan diagnostic and treatment spaces have been located in the lower 'podium' of the building, along with the out-patient clinics which will attract the highest level of footfall therefore are ideally located close to the entrance public spaces. An elevated garden level caps the podium and shallower plan in-patient ward fingers are perched above this garden level. An 'interstitial' mechanical plant / technical zone is located at the garden level sitting below the wards and above the highly serviced spaces in the podium. This is an optimal solution as the air plant is situated directly above the ceilings of the operating theatres and intensive care unit, the two zones which have the highest required number of air changes / demand for mechanical ventilation. Locating the technical spaces directly above these department is the most space efficient solution, preventing the need to create more substantial service risers for mechanical ductwork penetrating the wards if, for instance, the air plant was located on the roof. This is also the most energy efficient solution. The length of ductwork

runs can therefore be minimised as the air plant is sandwiched into the middle of the building and it can serve the two levels of clinical space below and the three levels of wards above. Locating the plant at garden roof level also means that the accessible spaces are not immediately adjacent to the windows of private clinical space. It also means that the garden level is accessible from any zone of the hospital for either patients, families, visitors or staff without passing through clinical space.

The jury probed into detail to test some of the key clinical and logistical flows / circuits within the proposal. The clear organisational principles of the scheme which are very apparent comfortably stood up to such scrutiny. The strategy of having a front (south) and back (north) to the scheme to separate the public out-patient and visitor flow from the clinical bed and logistical movement works very well. The footprint successfully integrates the many points of access required all on one floor-main entrance drop off, ambulance drop off and private car walk-in wounded, services access for building logistics- supplies and waste as well as morgue access.

The proposal is also one of the few schemes which didn't propose the creation of a basement to accommodate any of the briefed area, whilst still enabling the separation of key flows to be achieved. Given the ample amount of space on the site, as the key flows could be successfully achieved without creating a basement it was considered by the jury to be a very positive scheme attribute as this will assist the affordability of the scheme. The ground floor footprint accommodates the key areas that are ideally co-located such as a main public entrance and concourse space, a substantial proportion of the out-patients, emergency department and diagnostic imaging / radiology. The ground floor plan however also successfully accommodates some of the core non-clinical support areas and technical spaces whilst benefiting from a simple strategy for discrete services vehicular access along a northern service road. The scheme proposes a technical centre as a pavilion to the north of the access road which can simply and economically accommodate a number of the support functions required for a hospital- medical gas stores, oxygen cylinders, stand-by generators, water tanks, substations, boilers etc. This is a key consideration in the design of hospital buildings and it was absent from a significant number of the competing schemes, including some that are within the top 5. This demonstrates a good understanding of some of the practical realities of hospital Architecture.

The access to the subterranean car park has been well considered with the public access being a natural continuation of the route from the drop off and the staff access being via the northern 'private' side of the hospital.

The quality of the urban intervention (criterion B1)

The proposed scheme as noted strikes a good balance between site coverage / land consumption, development density, scale / mass / height and place making for an important public building. The scheme is not urban in character but it doesn't

squander the valuable land asset by creating a low lying 'cottage' hospital. It confidently holds its ground, announces its presence and projects a striking impression and a strong, potentially iconic identity without dominating the landscape with an overbearing incongruous presence.

The plastic expressiveness of the proposed volume (criterion B2)

The panel were divided over the orientation of the ward pavilion 'fingers'. On one hand (no pun intended!), as with a number of other proposals it was considered that finger blocks would ideally be optimally orientated towards the east opening up the majority of bedroom views towards the hill and existing natural landscape. The proposed orientation of the fingers to this scheme however not only opens up the 'web' between the fingers to the south to enable a greater level of sunlight penetration than east facing, it also acts as a successful strategy for breaking down the perceptible mass of the building making it more human scale. This strategy also endows the building with a richer, more interesting silhouette / profile view from the approach.

The strategy of integrating a large playfully shaped overhanging roof at level 2 is also a clever device for horizontally breaking down the scale, layering the building, and again reducing the perceptible mass of the overall building. This is in contrast to a number of other schemes which, whilst similar in height (6 storeys in total) are an extrusion of the plan from the ground upwards. Whilst this is what you would expect in an urban context or a suburban business park, it isn't so compatible with the creation of an approachable 'through a child's eyes' 'friendly welcoming hospital.

The proposed building has a rich and varied contemporary character assisted through the adoption of a simple palette of materials and colours providing it with an optimistic presence without artifice which should appeal to children across the age range.

The out-patients clusters have been conceived as playful friendly freeform 'pebbles' visible upon the approach as an antidote to the more prescriptive spaces such as radiology and operating theatres beyond. Whilst it could be argued that these more complex organic forms are less suited to hospitals than orthogonal forms with square grids, as these are to accommodate less prescriptive spaces for out-patients rather than for theatres / radiology, it is not considered to be an unworkable onerous compromising constraint.

The quality and atmosphere of the proposed spaces (criterion B3)

It was considered by the jury that the illustration of the main public hospital concourse space did not do justice to the richness, variety and interest inherent in the geometry of the space. The double height volume which benefits from the interesting spaces in between the out-patient pebbles and orthogonal 'hot block', punctuated with rooflights and courtyards and populated with public stairs, lifts,

galleried balconies and bridges crossing the space has the potential to create a very dynamic uplifting space full of surprise and delight and a strong sense of orientation and that is enjoyable to move around. The colour and materials in the illustration convey the impression of a space principally orientated to the younger patient age groups.

With regard to the clinical spaces the patient bedrooms as designed / illustrated have a positive atmosphere and have the potential to support the idea of creating a 'home away from home' which is particularly crucial for children that may have a long length of stay. The interior design strategy for the more clinical spaces like the theatres and ICU could benefit from more creative thinking as they are currently very sterile and absent of anything to differentiate them.

Conclusion

The submitted design is conceptually very clear, based around strong organisational principles whilst still being architecturally rich and characterful and differentiated distinctively as a hospital designed for children. The scheme successfully integrates the many complex and often conflicting priorities that are inherent in the challenge of building a children's hospital. The competition design has obviously been developed without the benefit of engagement with the end user client. The jury however is confident that the concept is very robust and easily able to adapt and iteratively develop during a consultation process with the project clinical leads in the quest for an optimised solution.

Recommendations

The jury recommends that the integration of the hospital into the creation of the wider site masterplan is given greater consideration.

The jury also recommends that the potential of the public entrance space / concourse which geometrically is inherently rich is capitalised upon and that a child orientated interior design strategy is developed for all spaces that a child will experience, not just the front of house areas and bedrooms.

2nd Prize – Project no. 125

The jury were very impressed with the overall quality of this submission. The drawings, diagrams, supporting text and illustrations are very clear and concise and thoughtfully considered. The scheme is very rigorous and rational, displaying a high degree of capability and understanding of the complex issues involved.

Sustainability of urban intervention (criterion A1)

The masterplan for this scheme has been very skilfully considered and executed. The strategy adopted is largely urban in character but has clearly taken into account a deep understanding of the existing and future wider context. The strategy identifies a clear zone with breathing space for the hospital whilst reserving

considerable space for future complimentary uses, many of which have already been considered and reflected in the typologies of planned future building blocks. The hospital doesn't place itself in the foreground of the site, reserving those development blocks for future use. The perception of the approach from the beltway will therefore be a subtle gradual reveal as you pass urban blocks and head towards the main entrance public piazza located at the south west corner.

The linear configuration of the proposed design lends itself to natural future expansion and space has been consciously reserved on the site to the north to enable this- something which whilst not explicitly called for within the brief was applauded by the jurors.

Functionality of the proposed solution (criterion A2)

The concept design scheme has a very clear and rational organisational strategy. The building blocking and stacking broadly makes good sense ensuring an optimal strength of adjacency of key areas is achieved. The design is inherently extremely flexible therefore it is very capable of being simply adapted to fine tune to meet the optimal needs of the hospital if required. The logistics movement for supplies and waste movement can take place discreetly in the basement without conflicting with patient or visitor flows. The public / patient / logistics vertical circulation lift cores are well distributed throughout. The jury did comment however that there perhaps were more than necessary. This is partially because there is an upper-level conflict between bed / patient horizontal movement and upper level public / visitor access / waiting space. In order to facilitate the key flow of bed movement from all in-patient areas to / from the emergency department, ICU, Theatres and radiology, beds will need to transit through the upper level circulation spine. As currently indicated this space is not dedicated to clinical movement and beds would need to make a rather circuitous journey through what are otherwise very positive, attractive public waiting / play spaces. It is also not possible to progress from the range of ward blocks downwards in a lift to the ground level and horizontally along to radiology without transiting through the public concourse. It was considered by the jury that the conflict of these flows / circuits could be successfully addressed through some simple design alterations.

The proposed design integrates an energy / technical hub with a multi-storey car park close to the main entrance of the hospital. Whilst conveniently located this would need to be treated carefully to prevent it from being an unattractive distraction in the foreground dominating the approach to the hospital.

The quality of the urban intervention (criterion B1)

The building design has the potential to create a series of very positive civic experiences as you move between the buildings with a sequence of spaces which have a rich interplay between buildings and landscape. The boulevard which leads from the beltway on the west carefully choreographs the journey until the 'urban moment' when you are greeted by the set piece public square forming the new hospital entrance arrival space. The building has a good balance between site

coverage and overall building height. There is a clear logic and hierarchy to the points of access / entrances to the hospital.

The plastic expressiveness of the proposed volume (criterion B2)

The clear and highly rational logic that underpins the organisation of the scheme is very evident through the external expression of the proposal. The mass to the West is greater as the short finger blocks of space are joined together by the diagnostic and treatment spaces lower down in the building. The mass of the 2 storey base is relieved by the setback appearance of the three gable ends of the ward fingers on top of the deeper plan base with open suitably proportioned spaces in between. The step between the 2 storey base and the 3 storeys above helps break down the perceptible scale of the building.

The mass of the buildings and their proportions are well composed and feel balanced. The rational form however is rather uncompromising and very formal with the only relief provided by the clear glazed gap between the first two western finger blocks forming the entrance. From its outward appearance there is little clue that suggests that it is a hospital for treating children. Whilst it has the potential to make a positive contribution to the city and be a notable piece of architecture, the jury felt that the scheme could have made some concessions to its formality and offer an outwardly projected sense of the purpose of the building. The façade of the scheme is very uniform from top to bottom with little variation relative to its changing orientation.

The quality and atmosphere of the proposed spaces (criterion B3)

Once the entrance threshold is crossed the well-mannered and rather formal grown up appearance is relaxed. The public entrance hall conveys a very positive impression. It is uplifting and modestly playful whilst still being clear and elegant. The dual sided nature to the space is also very positive as upon entry the glazed wall on the opposite side faces onto the rich external landscape that flows between the clinical blocks and to the natural beauty of the hill to the east. The space uses warm natural materials and thoughtfully integrates 'pops' of colour. The illustrative indication of artwork populating the scheme's interior was applauded by the jury appreciating that the consideration of such interventions can make a meaningful difference by appealing to the curious mind of a child and creating a positive distraction. The child friendly interior character of the building does not suddenly stop once leaving the public spaces. The vision for the quality and character of the children's bedrooms was one of the most compelling of all competition entries. The right balance has been struck between being homely whilst still recognising the need to efficiently fulfil the functional objectives. The spaces conceived for ICU, theatres and radiology were also considered to be very well thought through and transformed from the utilitarian norm just through a few subtle design moves.

Conclusion

The submitted scheme has a very high degree of rigour, elegance and simplicity. The concept is clear and robust and skilfully handled. Hospitals are inherently

challenging buildings to successfully design but this scheme has a clarity which belies the complexity.

Recommendations

The jury recommends that the Architects review all of the key operational clinical flows / circuits to address the conflict between bed movement and public space. The jury also recommend that the external character and façade is reviewed and perhaps by adopting some of the subtle moves deployed internally, the scheme could more successfully convey a clearer impression of it being a hospital for children.

3rd Prize – Project no. 105

This project was especially appreciated for its disposition on the site, which would give the future ensemble a clear position towards the city, but still making good use of the natural landscape of the eastern hill. Thus, its urban qualities, favourable to a possible inclusion of the hospital in the metropolitan fabric, were counterbalanced by the more intimate areas, dedicated to patients.

Sustainability of urban intervention (criterion A1)

The jury appreciated the density of the proposed building, which would leave enough space for possible further developments, but criticized that no longer-term scenario was sufficiently developed. Even if it is reasonable to position the housing for the medical staff to the south and to propose possible extensions for medical functions to the north (maternity), it is not clear to whom the design of a large park arranged on the rest of the site is addressed.

Functionality of the proposed solution (criterion A2)

The jury criticized several of the functional options presented by this project. First, the decision to have a second basement, dedicated exclusively to car parking, was not justified related to the land availability. Moreover, the jury considered inappropriate the placement of the Medical Imaging and Operating Theatre in the basement. The positioning of the Medical Imaging and Emergency Unit on different floors can produce dysfunctions in the medical act. Also, the placement of the Operating Theatre and Medical Imaging on one side of the plan implies very long distances from some of the other wards. The circuit from the patient room to the Operating Theatre or Medical Imaging, by the elevators marked "E", intersects the main hall proposed for each level, a space used also by the visitors. Moreover, the project did not propose a clear strategy for the technical equipment necessary for the entire hospital.

The quality of the urban intervention (criterion B1)

The project stood out for the clarity of the spaces determined by its disposition on the site: a luminous plaza, which clearly marks the entrance area and emphasizes the building towards the city. The public square is configured by two parallel rectangular shapes, with different lengths, which invites towards the access area positioned between them. The connecting volume, a potential empty space dedicated mainly to public access, seems a bit massive in this composition. At the same time, the building orients four secondary volumes to a more intimate area, towards the natural landscape. Only one volume in this series is slightly rotated to make room for a secluded garden / playground area for children.

The plastic expressiveness of the proposed volume (criterion B2)

The jury commented upon the possible austere expression in relation to the functions dedicated to children. In this sense, the complexity of the proposed architectural plastic was argued, which appeals to a timeless architecture, configured only by simple elements, rhythm and proportions, with a nuanced response to contact with the ground or to the last cornice. The elegance of the volumetric accent that marks the access to the square was also appreciated. Also, the simple facades of the secondary volumes are in line with their less public vocation.

The quality and atmosphere of the proposed spaces (criterion B3)

The jury appreciated the existence of a large intermediate space, located on each level, which would make it easy for visitors to access and wait near each ward, as well as the possible controlled promenade of some patients. Unfortunately, these important spaces in the hospital's economy were not detailed in the presentation and, moreover, it turned out that they can be crossed by patients flow on their way to Medical Imaging or Operating Theatre. The patient rooms were remarked for their simplicity, a quality that can also involve easy maintenance.

Conclusion and recommendations

The jury appreciated two essential qualities of this project, the configuration of a sun-oriented plaza and the arrangement of the accommodation volumes orientated towards the hill. Overall, the project has a compelling layout, setting up a multitude of valid outdoor spaces in direct correlation with the building itself. Thus, the presented project manages to combine the programme of a hospital with the urban vocation of such a building.

Given this strong qualities of the project, the jury has the following recommendations: rethinking the whole scheme so that there is only one basement, both with parking areas and some hospital functions; functional reorganization so that Medical Imaging and Emergency Unit wards are on the same level, close to each other; functional reorganization so that the Medical Imaging and Operating Theatre would be positioned in the center of gravity of the building, possibly overlapping each other; keeping the space configured for visitors on each floor outside the medical flows. Furthermore, the evident

volumetric qualities and the configuration of the southern plaza would benefit from a less present connecting volume.

1st Mention – Project no. 101

The Jury appreciated the project for its ability to become an architectural landmark for the area, while also using the available land judiciously. The proposal presents a complex urbanistic approach, imagining a possible strategy for the future development of the area without proposing a high-density scheme. At the same time, the proposed general scheme of the project ensures a high functional efficiency, opting for a compact typology which manages to create an iconic image, while maintaining a scale that is friendly towards future users.

Sustainability of urban intervention (criterion A1)

The project proposes a compact typology that allows a consistent part of the land allocated for the hospital for other uses and complementary functions. The jury appreciated the proposed urbanistic strategy, which creates a clear and balanced future usage of the plot.

Functionality of the proposed solution (criterion A2)

This scheme has great clarity and elegance in plan and section. The clustering of 4 repeatable ward templates into the butterfly form was considered by all of the jurors to be a sophisticated response to a very important and significant component of the brief. The public lift access via the 'epicentre' of the butterfly connecting to the social heart space public concourse at ground floor was considered particularly successful as it was recognised that it would contribute to a rich and interesting spatial experience and support a clear intuitive sense of orientation for easy wayfinding. The scheme however has not fully resolved the key clinical flows / circuits in order to prevent the need for bed movement passing through this public entrance / reception / waiting space. As the scheme is split into two distinct wings of the building at ground level by the public concourse the key horizontal clinical flow at this alternative level would also therefore not be possible without bed movement passing through public space. It was considered by the jury however that by adopting some simple adjustments these conflicts could be resolved.

Whilst the brief is relatively quiet on the subject of mechanical plant / technical spaces serving the hospital, this scheme does not demonstrate a clear understanding of these core requirements which are required for any hospital. Area has been allocated at the basement level for some of the key technical spaces that are typically required low down in the building, but the scheme does not seem to have resolved the requirement for integrating air handling equipment for mechanical ventilation, particularly for highly serviced areas requiring a lot of air changes such as the Operating Theatres and Intensive Care Unit. The scheme does indicate 4 technical space zones within the triangular zones established by the typical ward template on level 2 above the theatres. This however would not be a workable

solution as they are in-board of the building perimeter and would therefore not be able to get any external free area for air supply and exhaust.

The flows within the Theatre department are currently sub-optimal, although it was considered by the jury that the geometry of the space could comfortably accommodate an improved reconfigured layout.

The quality of the urban intervention (criterion B1)

The project has the merit of proposing a compact form that benefits from a welcoming gesture through the opening angle of the two hospital wings. Through this gesture, the building becomes open both to the public and the entrance area, and to the natural landscape to the East. Additionally, the proposal offers multiple access possibilities arranged in a hierarchy depending on users categories.

The plastic expressiveness of the proposed volume (criterion B2)

The proposed image is iconic and recognisable. Although developed in height more than the majority of the projects, the proposal manages to relate to the human scale due to the treatment of the first two levels above ground. Those establish a pleasant relationship at the public space level, offering a friendly ambiance that invites exploration and immersion.

The quality and atmosphere of the proposed spaces (criterion B3)

The jury appreciated the welcoming and friendly atmosphere of the main entrance area. This area further directs a pleasant and intuitive pathway, subtly adapting to the land's elevation difference. The jury appreciated the project's concern to achieve circulation comprehensibility through hierarchical relationships and intuitive use, both at the level of the common spaces designated to the patients and the medical flows.

Conclusions

The project stands out through its urbanistic and volumetric qualities. The Jury appreciated the concern for obtaining an iconic image, which highly manages not to compromise the good operation of the hospital. However, the jury remarked on a series of functional vulnerabilities, such as the intersection of public and medical flows, the incorrect configuration of the Operating Theatre and the lack of functional feasibility of the technical spaces that are not connected to the building's exterior.

2nd Mention – Project no. 102

The project stands out firstly through the quality achieved at the level of the interior and exterior proposed spaces, which contribute substantially to bringing the future users closer to this function. The pavilionary typology deployed by the project

proposes both a series of interstitial spaces adapted to the human scale, and a delicate insertion in the existent natural landscape. The jury appreciated the maturity of the functional and volumetric solutions, as well as the quality of the unequivocal and comprehensive graphic support by which the information was transmitted.

Sustainability of urban intervention (criterion A1)

The project proposes a pavilionary typology, which is developed horizontally. This approach creates a friendly and invitational ambiance that is achieved through the quality of the exterior courtyards and that of the interior common spaces. However, this option substantially consumes the available land, leaving too little space for future developments or complementary functions and public spaces.

Functionality of the proposed solution (criterion A2)

The jury appreciated the maturity of the functional proposals, which demonstrate a thorough understanding of the medical program. The organization of the medical flows within the Operating Theatre meets the requirements of the specific function. The spaces designated to the intensive care unit are thought out in a welcoming ambiance, which leads to a lower stress level associated with the medical procedures. The general image of the wards induces a familiar ambiance and comfort, as well as a feeling of ease in operation. However, the pavilion system, paired with a low rise built regime, does not ensure an optimal exploitation from the point of view of the medical act efficiency, due to the long distances between the pavilions.

The quality of the urban intervention (criterion B1)

The Jury appreciates the way in which the ensemble addresses the two main elements of the site: the natural landscape and the built or under development area. The ensemble relates to the two neighbouring areas in a nuanced manner, by orienting the medical units towards the natural landscape and by placing a semi-compact volume which protects them visually and acoustically from the future metropolitan belt. The achieved quality of the interstitial public spaces, which offer intimacy in relation to the surrounding landscape, is a remarkable merit of this project. However, apart from an area designated to developments complementary to the hospital, the project loses the opportunity to become a new development pole for the city.

The plastic expressiveness of the proposed volume (criterion B2)

The project stands out through the coherency of the ensemble, displaying a delicate and reserved contemporary architecture. The ensemble's expressivity stems from its ability to work with relationships between interior and exterior spaces, and to deploy rhythmical elements which contribute to the configuration of a graceful compositional scale.

The quality and atmosphere of the proposed spaces (criterion B3)

The jury appreciated the project's concern for creating friendly spaces for all future users of the hospital, without an overdesign approach. The general familiar and welcoming atmosphere is achieved by working subtly with materiality and the use of natural light to this effect. At the same time, the visual relationship between interior spaces and landscape is permanently explored through circulations that are open to the exterior, whenever possible. However, the jury notes that the length of interior circulations constitutes an inconvenience, leading to reduced efficiency in the current operation of the hospital. Not least, the proposed typology leads to raised costs for the hospital's functioning, due to the high percentage of common spaces and circulations.

Conclusion

The project presents remarkable qualities concerning the contemporary medical program and proposes an innovative approach regarding the relationship between the medical act and users. However, the jury notes this solution's lack of adaptability to the existent climate conditions and a high, unjustified expense of the available land.

7. FINAL RANKING

COMP. NO.	POINTS	COMMENTS
119	95	1ST PRIZE
125	89	2ND PRIZE
105	84	3RD PRIZE
101	79	1ST MENTION
102	77	2ND MENTION
109	71	The jury debated this project intensely, trying to distinguish between its urban qualities and correct functionality. The sustainability of the proposal was appreciated, given the possibility of complementing the hospital itself with related functions, which would meet the wider metropolitan needs: student dormitory, senior care centre, school or community centre. Also, the disposition of the volumes was appreciated, which allows the configuration of a possible plaza dedicated to the entrance, as well

		<p>as the configuration of an intimate park towards the hill - understood here as a landscape resource. The serene atmosphere presented by the images was, however, contradicted by the positioning of the parking lots in the entrance area, as well as by the canopy that brings you from the long-term parking.</p> <p>From a functional point of view, the intersection of medical and public flows was considered problematic, for example the circuit between patient rooms and the imaging area, an area accessible for the entire hospital. It was also considered that those inner courtyards, which were proposed to give quality to the corridors, could become rather unpleasant areas in case of such a high volume.</p> <p>As a whole, the promises generated by the clarity of the proposal and the simplicity of the volumes were somewhat contradicted by the way this hospital would operate.</p>
<p>113</p>	<p>69</p>	<p>From the beginning of the sessions, the jury found the proposed idea as seductive, in accordance with both the use by the children and the surrounding green landscape. The soft lines and the relatively small height of the building ensured an image related to the human scale, delicately marking the three areas of contact with the outer space: the main entrance, the technical entrance to the basement on the south side and the possible connection with the park on the northeast side. Also, the positioning of a secluded garden, completely separated from the city flows, seems a favourable gesture for the children.</p> <p>The closed, amoebic shape gave the impression of a compact project, which could easily solve inside all the necessary flows. However, it was considered that very long corridors would complicate communication between the different wards. Also, the clearly determined exterior shell does not seem to withstand any extensions, apart from pavilions outside the building itself. Moreover, the strategy of using the site is based on the placement of pavilions in a park, using the entire land without leaving any possibility of including this ensemble in the current flows of the city.</p> <p>The jury appreciated this project for the proposed scale and its possibility of integration into the landscape but considered that the use of the land and the efficiency of its functioning could be much improved.</p>

115	64	<p>This project seemed convincing due to the quality of the presentations, being discussed by the jury for several of its qualities. With regard to feasibility, it was appreciated the proposal of an extension of the main function, but it would have been desirable that this possibility was not contradicted in the internal organization of the hospital. It was also considered that the possible crossing of the public waiting areas with the circuits of patients, from the rooms to the imaging or operating theatre, should have been judiciously minimized.</p> <p>The volumetric configuration, with pavilions without a dominant orientation, generated the existence of intermediate spaces, some courtyards interspersed vertically, to interpose a pleasant atmosphere with intensely functional areas. Unfortunately, this strategy was redundantly doubled toward public space, by proposing adjacent covered areas, without structuring connection with the main volumes and the possible perception of an ensemble.</p>
116	62	<p>The jury noted the bright image of this project, extremely rigorously developed, but also the efficiency that was sought throughout the approach. The compact volume of the hospital allowed the masterplan to envisage related land uses, with possible research centres and housing built at a later stage. However, the proposal for an extended multi-storey car park cannot give an urban quality to the street near the hospital. The constitutive scheme, based on the configuration of inner courtyards for natural light and ventilation, does not contain a clear hierarchy, necessary for the orientation between the different functions. The project could also have been improved by marking the entrance, in spatial correlation with the proposed urban spaces nearby.</p>
111	59	<p>This project proposes the implant of a very large building, which would determine all the relationships on the site. This strategy was criticized in terms of urban connectivity, but also regarding the possibility of expanding the hospital with possible related medical or educational functions. The jury appreciated the vertical fragmentation of the mass, in order to diminish the scale of the proposed volume. Also, the jury highlighted the proposal of smaller yards, perceived differently by their geometric configuration, but considering them not sufficiently justified. This subdivision strategy caused the medical functions to be diluted in the entire mass of the building, the long distances weakening the necessary functional relationships.</p>

108	59	<p>The project was considered an ambitious one, which tries to reorder the entire land through an essential gesture: the positioning of a rotated square in relation to the geometry of the site. In this way, four outdoor spaces with different character are configured: the covered entrance, the technical access area, the area with playgrounds facing the hill and the area with orchards toward the metropolitan belt way. The rotated arrangement of the rooms gives the volume a dynamic expression, monumental at the same time, without conferring a special quality to the rooms themselves. The scheme, although seductive in its clarity, was considered quite rigid for the needs and flows required in such a hospital.</p>
127	57	<p>The project tried to answer the topic through a conventional scheme, a tripod with the middle dedicated to the public areas of the hospital. The jury appreciated the intention of efficiency and the possibility of expanding the hospital with complementary functions in a later phase. Although such, the three proposed volumes (hotel, research centre, new section of the hospital) are not envisaged in the best relationship with each other. The core of the building was dedicated to an atrium area, quite conventional in expression. Above this area was placed an intimate garden, which, unfortunately, was not sufficiently related to the adjacent floor. Regarding the volumetric expression, the vertical fragmentation strategy was appreciated, but the resulting image did not gain sufficient conceptual clarity.</p>
106	56	<p>The jury appreciated the judicious use of the available land achieved by proposing a relatively compact typology. The project proposes a rational and balanced functional scheme in terms of the disposition of major functional medical units. Unfortunately, however, the project is vulnerable in terms of dealing with the relationship between the proposed interior and exterior spaces. The jury appreciates that the distances between the proposed buildings of the hospital are insufficient, and that the quality of the interstitial spaces is questionable. With regard to accessibility, the jury considers that it would have been beneficial for the project to thoroughly explore some effortless and easy-to-intuit links between the entrance area and the major median circulation of the hospital. Additionally, the general architectural image proposed is debatable regarding the provision of an identity for a hospital for children.</p>
122	52	<p>The project asserts a strong visual identity, both formally and compositionally. The jury appreciated the proposed typology, which allows for proper functionality, as well as an opening of the areas dedicated to the medical units towards the surrounding</p>

		<p>natural environment. However, the jury did not appreciate the proposed strategy for the evolution and development of the area surrounding the hospital, which was assessed as lacking an adequate scale for children and relatives. At the same time, the location of the above-ground car parks was not appreciated, as it qualitatively affects the visual relationship between the hospital interior and the green neighbourhood to the east.</p>
112	51	<p>The proposed solution offers a good functional organization and well thought out connections between the different components of the hospital. The jury appreciated the clarity of the general scheme of the project and the judicious distribution of the important hospital functional groups. From a volumetric point of view, the project proposes a true landmark for the area, which, however, relies on a monumentality considered inappropriate for a hospital dedicated to children. From an urbanistic point of view, the project does not clarify the choice regarding the proposed building typologies for the vicinity. Their shape and the relationship they establish with the hospital ensemble and its vicinity seem arbitrary. Excessive use of glass facades has also been considered a generator of high energy consumption and resources to ensure interior thermal comfort.</p>
103	49	<p>The project proposes an airy typology and a suitable scale for the volumes, in the context of the hospital's addressability, generating a series of generous common spaces on the outside. The jury also appreciated the opening of the hospital's departments to the nearby natural setting. However, the solution was assessed as having a fairly high degree of land use, without providing sufficient information on the actual use of the remaining unbuilt space. The jury was reserved in assessing the volumetric repetitiveness, which does not clearly offer a functional and accessibility hierarchy within the hospital.</p>
118	46	<p>The jury positively evaluated the general scheme of the project, which clearly expresses the proposed mode of operation for the hospital. The human scale of the ensemble and the preoccupation with creating an urban arrangement with public spaces and new complementary functions are aspects that were also appreciated. However, the jury considers the project vulnerable due to a spatial and volumetric rigidity, which is later also found in the strategy for the evolution of the area. From the point of view of the hospital's addressability to paediatric patients, the jury did not identify consistent project concerns for relevant internal configurations that are specific to this type of users.</p>

104	46	<p>The project presents a courageous and challenging proposal. The jury appreciated the openness to the innovation of the children's hospital program and the project's concerns related to the integration of a fluid volume in the context of the neighbouring natural areas. The project also assumes the quality of a landmark of the area, being memorable and uplifting to future users. However, the project remains fragile in terms of functionality and usage efficiency, due to the lack of rapid and intuitive connections, the possibility of grouping complementary functions, the lack of flexibility and the need for very high implementation and maintenance costs.</p>
114	43	<p>The project aims to bring the whole ensemble to a human scale, a purpose which is also found in the proposed architectural language. The jury appreciated these aspects, but the high occupation of the land and the rigidity of the whole ensemble were considered not viable. The project also proposes lengthy interior circulations and connections, which will involve inefficiencies at the level of medical activities. At the same time, the jury considers that the general typology and the proposed architectural language deployed by the project are more appropriate for residential architecture rather than for healthcare.</p>
100	42	<p>The jury retained the referential component of the project and has appreciated usage as a generative principle of architectural form, based on the various spatial, modular units of functions. Unfortunately, the project remains in the status of a formal search, without the possibility of convincingly responding to the requirements and activities of a functioning hospital.</p>
117	40	<p>The merit of the project is to ensure an interesting visual relationship with the existing natural context, through the proposed cut through at the level of the hospital volume. They allow various accessibilities between interior and exterior spaces, and the orientation of interior spaces towards the natural landscape. However, the project did not offer enough information to understand the formal options underlying these resulting openings and volumes. Their configuration compromises the proper internal functioning of medical activities. Also, the project does not provide enough information related to possible future flexibility, both at the functional and urban level, due primarily to the proposed formal options. The jury did not note any concern of the solution to provide an indoor and outdoor environment dedicated to children.</p>

120	37	The project proposes a rigid scheme, which in principle can function and be adapted in terms of medical activities. However, the jury did not notice a concern for the insertion of the hospital as a whole in a context with various intrinsic qualities, to which the answer offered by the project could have been nuanced. At the same time, the scale and the architectural image of the proposal are neutral and restrained. Although this approach was appreciated by the jury, the project does not aim to present a friendlier identity towards future users.
126	36	The design of the project is a rational, clear and monumental one. Unfortunately, the proposed building consumes much of the land intended for it, without allowing for the existence of functions or external spaces complementary to the hospital, which can be developed after its implementation. At the same time, the very long distances between the different functional components of the hospital leads to difficult accessibility of the hospital.
121	34	The compact shape may possibly lead to higher efficiency regarding both energy efficiency and land use, it being a limited resource. The volumetric concept barely finds it's transposition within the urban design of the plot. The two aspects are conceptually conflicting.
123	33	The project shows a great deal of involvement on functional solving of the well-structured medical flows, especially for the vertical flows. Despite this, the resulting volume does not visually belong to the program prompted by the competition.
107	32	On an urban scale, the project tries to negotiate the relation with the proposed beltway by emphasizing the directions it imposes, but the relation with the neighbouring area is lacking. The courageous plan scheme lends itself to spectacular architecture and to an innovative approach on the classic pavilion design for this function. The patio opening towards the entrance area represents a plus for ensuring high quality medical services.
110	31	The project focuses on presenting the functionality of the hospital in high detail. This led the project to a volumetric approach that fails to be convincing.

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Full members:

Arch. Dominic Hook – President of the Jury

Arch. Claudiu Salanță

MD Aldea Cornel Olimpiu

MD Vasile-Florin Stamatian

Arch. Vlad Sebastian Rusu

Arch. Emil Burbea

Professional Advisor

Arch. Andreea Tănase

Competition Brief Expert Consultant

MD Alexandru Coman

Jury Secretary

Arch. Ilinca Pop

Competition Coordinator

Arch. Mirona Crăciun