**Project:** Liposomes loaded with Prodrugs of SYK Inhibitors (PSYKIs) for the treatment of NASH and NASH-HCC  

**Applicant:** Chilin Adriana

### General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project **scientifically significant**, original and innovative?  
- Is the project **built on a departmental know-how**? Has the project a significant impact for future development? Is the plan realistically feasible?  
- Are the research methods, materials, work packages, tasks, milestones and timeline appropriate and in agreement with deliverables?  
- Are the risk assessment and the contingency plan properly considered?  
- This project has perspectives for **international collaborations, applications, networking**?  
- Has the project the character of start-up research that can attract in the future competitive and non-competitive funds?

### Reviewer 1

The project is interesting, with a great impact and feasible in two years. A percentage of risk still remains even if the rationale is strong and the preliminary studies are encouraging. In particular, the possible troubles related to the targeting and the controlled release of the SKY inhibitor in mice cannot be neglected.

### Reviewer 2

The proposal concerns an area of relatively high unmet medical need, which could become even more important in the near future. The proposed work is based on a solid scientific rationale, with limited originality and great potential for innovation and industrial applications. The team possesses the required know-how, materials and methods are available and important international collaborations are already in place. The risk assessment is reasonable, but it may be underestimated for what concerns the WP2, as it is not trivial to anticipate the SAR induced by even minimal modifications to active structures; thus, the risk of low potency is not minimal. One open question concerns the publication strategy; in my opinion it should be considered the opportunity to patent the synthetic/medicinal chemistry work together with the formulation work.

### Reviewer 3

Relevant project, with potential developments as start-up research. There is a good complementary among the 3 RUs. However, the role of the proponent seems somehow not central for the research (activities will stop at month 13/24, accordingly to GANTT)

### Reviewer 4

The project is overall well written.

### Competence and expertise of the applicant

- What are the merits and scientific expertise of the applicant?  
- Are they appropriate and sufficient for the proposed project?

### Reviewer 1

The applicant has a great experience in the field of the nanopharmacology. However, no publications in the field of NASH have been reported in the CV.

### Reviewer 2

The applicant as a well solid experience and competence in the areas of interest and can support most of the proposed activities and properly manage and coordinate the team.
### Reviewer 3
Proponent expertise well covers TASKS 1 and 2.

### Reviewer 4
The strength of the applicant is high, but seems a little bit less for this specific project involving liposomes, although the group can certainly help.

### Competence and expertise of the research team.
- Does the research team bring complementary expertise to the project?
- Is the project involved in international research collaborations that can significantly contribute to the success of the project?

### Reviewer 1
The team is solid and well complementary but, as for the PI, no relevant experience in liver disorders is described.

### Reviewer 2
The team brings to required complementarity to the project, and members have solid experience in their area of competence. The current team could represent a nucleus for an enlarged group in case of success of the project.

### Reviewer 3
Research team provides required expertise to develop the project, involving researchers at DSF and international collaborators

### Reviewer 4
The team is definitely strong and internationally involved in the field.

---

**COMMISSIONE INTERNA**

**Project:** Liposomes loaded with Prodrugs of SYK Inhibitors (PSYKIs) for the treatment of NASH and NASH-HCC

**Applicant:** Chilin Adriana

**Punti di forza**
Il progetto è di notevole interesse in quanto accoppia l’identificazione di nuovi inibitori di SYK con un loro possibile sistema di delivery. Il PI ha una notevole esperienza nella sintesi di inibitori delle tirosin chinasi. Il gruppo comprende componenti sia interni che esterni al DSF e appare pienamente in grado di sviluppare il progetto.

**Criticità**
Il progetto appare sovradimensionato rispetto alle risorse di tempo e denaro. Appaiono numerosi i composti da analizzare (5 liposomi x 3 formulazioni), forse troppi per la durata del progetto. Scarsamente dettagliati sono la tipologia e il razionale della scelta dello scaffold molecolare, oltre che delle eventuali modifiche strutturali che verranno prese in considerazione per la sintesi della libreria di inibitori. La parte di sperimentazione biologica *in vitro* andrebbe implementata con analisi sullo stato di attivazione dei macrofagi e sul grado di fosforilazione dell’enzima. Il coinvolgimento della proponente è limitato al primo anno di progetto.
COMMISSIONE ESTERNA

Project: Amylothrombosis: Investigating the effect of pathogenic amyloid fibrils in the activation of blood coagulation

Applicant: De Filippis Vincenzo

General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how? Has the project a significant impact for future development? Is the plan realistically feasible?
- Are the research methods, materials, work packages, tasks, milestones and timeline appropriate and in agreement with deliverables?
- Are the risk assessment and the contingency plan properly considered?
- This project has perspectives for international collaborations, applications, networking?
- Has the project the character of start-up research that can attract in the future competitive and non-competitive funds?

Reviewer 1
The project is overall interesting and of relevant impact. The role of amyloidosis in blood coagulation, although not so innovative, is a hot topic. The lack of basic information, such as a Gantt chart, or a timesheet including potential delays or troubles makes difficult to consider the project feasible in the time given by the proposal, or at least really risky.

Reviewer 2
The proposed topics is of scientific interest and positive results could open to new therapeutic approaches in cardiovascular diseases; there is limited originality and a good level of innovation. The team’s know how is good and materials and methods available, as well as the integration with international researchers. On the other hand, the proposal is not clearly presented in terms of status of the art and proposed activities; most of the proposed work should be considered as already executed preliminary work and it’s not easy to understand the appropriateness of the proposed timelines and the feasibility (some parts are excessively detailed, while others appear minimal). Also, a risk analysis is missing. Finally, this proposal partially overlaps with a proposal presented for student’s support.

Reviewer 3
Project with significant potential impact, also from a translational point of view. The main limitation is the excessive research activity proposed as compared to the project time frame (24 m) and the budget available (30K€)

Reviewer 4
The project is certainly interesting but should have been written better than it is. Some work packages seem not inside a network.

Competence and expertise of the applicant.

- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

Reviewer 1
The CV of the proponent is good and appropriate for this study.

Reviewer 2
Applicant’s expertise and competence is of absolute value and can fully support the proposed activities; some important question mark concerns both the style and content of the proposal.

Reviewer 3
The proponent displays scientific merits that are fully scientific expertise of the applicant is appropriate and sufficient for the proposed project.

**Reviewer 4**
The applicant is undoubtedly expert in the field.

<table>
<thead>
<tr>
<th>Competence and expertise of the research team.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <em>Does the research team bring complementary expertise to the project?</em></td>
</tr>
<tr>
<td>- <em>Is the project involved in international research collaborations that can significantly contribute to the success of the project?</em></td>
</tr>
</tbody>
</table>

**Reviewer 1**
The team is young, mainly focused on biochemistry and physical chemistry. The inter-disciplinary aspect is not so strong and the lack of a clinical support could not be underestimated.

**Reviewer 2**
Team’s expertise and competence is good and complementary, there is at present no international collaboration involved, even though for sure the results could trigger some team expansion to other researcher. The role of one student should be checked in view of his involvement with another project proposal concerning a similar topic.

**Reviewer 3**
Research team is qualified to carry on proposed research. However no international collaborators are included (although apparently some activities required collaborations in UK, as stated for task 1.1). Moreover, a PhD student is inserted for 5 months in the first year, but if he will win the assignor he requested, there is an overlap in the months available.

**Reviewer 4**
A member of the team more focused in the medical aspects could be present.

---

**COMMISSIONE INTERNA**

**Project:** Amylothrombosis: Investigating the effect of pathogenic amyloid fibrils in the activation of blood coagulation

**Applicant:** De Filippis Vincenzo

**Punti di forza**
La tematica si inserisce nel filone di ricerca del PI la cui esperienza è elevata e che possiede metodiche consolidate per lo sviluppo del progetto.

**Criticità**
Il progetto non è particolarmente originale, e appare sovradimensionato nelle attività in relazione alla durata. La descrizione dello stato dell’arte è carente. E’ assente un’analisi del rischio. Uno dei partecipanti ha fatto richiesta di assegno. Non c’è nessuna collaborazione esterna coinvolta e la qualità della stesura non è in linea con il CV del proponente.
Project: 3D Melanoma co-cultures as improved models for delivering immunotherapies towards advanced melanomas

Applicant: Garofalo Mariangela

General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how? Has the project a significant impact for future development? Is the plan realistically feasible?
- Are the research methods, materials, work packages, tasks, milestones and timeline appropriate and in agreement with deliverables?
- Are the risk assessment and the contingency plan properly considered?
- This project has perspectives for international collaborations, applications, networking?
- Has the project the character of start-up research that can attract in the future competitive and non-competitive funds?

Reviewer 1
I found the project interesting, feasible, in line with the previous experience and impacting. It is sequential with a strong workplan and well described. The time correlation is good. It obviously lacks of an in vivo proof of principle but, it can be considered as a valid starting point in this field of interest

Reviewer 2
The treatment of advanced melanoma is still a difficult medical need; the research proposal is significant and has potential to bring some innovation. Almost all the required features are met, apart for the limited originality and underestimation of the risk for what concerns the time required for spheroid stabilization. Also, there is a substantial part of the work devoted to the evaluation of novel products/combinations, while the focus should be more on the model development.

Reviewer 3
Excellent project, preliminary results and proponent expertise support the feasibility. Results may favour further developments to obtain funding in competitive calls and possible translation to clinical settings.

Reviewer 4
The immunotherapy approach is worldwide considered successful against melanoma. This particular co-culture approach can open new, more precise targeting, although, as underlined also by the applicant, is ambitious.

Competence and expertise of the applicant.
- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

Reviewer 1
Although young the proponent has a CV that fits the aims of the project. In particular her experience in other labs and the bibliographic path in line with what proposed makes her profile reliable and consistent.

Reviewer 2
The scientific competence and training in different research group seems appropriate to support the proposed activities, even though the expertise appears in some way limited. Also, the managerial competence appears more than sufficient to coordinate the project.

Reviewer 3
The proponent displays scientific merits that are fully scientific expertise of the applicant is appropriate and sufficient for the proposed project.
Reviewer 4
The merits and scientific expertise of the applicant are high and appropriate for the proposed project.

Competence and expertise of the research team.
- Does the research team bring complementary expertise to the project?
- Is the project involved in international research collaborations that can significantly contribute to the success of the project?

Reviewer 1
The team is relatively restricted but multidisciplinary. The presence of a clinician-oncologist is for granted an added value, even if a dermatologist or would be preferable.

Reviewer 2
The team has high complementarity with an international composition; the know-how expressed by all members is of value.

Reviewer 3
Research team provides required expertise to develop the project, involving researchers of other UNIPD Departments, and international collaborators (National Institute of Public Health, Poland and University of Graz).

Reviewer 4
No particular concerns, since a strong pharmaceutical chemist seems not mandatory for this project.

COMMISSIONE INTERNA

Project: 3D Melanoma co-cultures as improved models for delivering immunotherapies towards advanced melanomas

Applicant: Garofalo Mariangela

Punti di forza
Il progetto è originale sia per il modello cellulare proposto, sia per l’utilizzo di virus oncolitici e per l’associazione degli stessi con gli inibitori di check point. L’esperienza del PI e i dati preliminari garantiscono la fattibilità del progetto e l’ottenimento di risultati interessanti. Buone le collaborazioni internazionali. Il progetto ha la caratteristica di start-up e quindi si presta bene a ricevere finanziamenti futuri.

Criticità
Il titolo non rispecchia l’obiettivo del progetto che si propone di utilizzare le colture 3D come mezzo, e non come fine, per la valutazione di un nuovo approccio di immunoterapia basato su virus oncolitici. E’ assente la caratterizzazione delle co-culture. Non risulta definito il ruolo dei singoli partecipanti nella parte di co-culture 3D e immunomodulatory analysis presente nel project flow chart dove sono presenti tutte e 4 le RU.
# VALUTAZIONI PROGETTI DI RICERCA DI DIPARTIMENTO PRID – ANNO 2023

## COMMISSIONE ESTERNA

**Project:** Myelin and gut during early life: potential partners in crime in gender-related neuropsychiatric disorders (MINDINGUT)

**Applicant:** Giron Maria Cecilia

<table>
<thead>
<tr>
<th>General assessment of scientific quality and innovation - Assessment of scientific plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <em>Is the project scientifically significant, original and innovative?</em></td>
</tr>
<tr>
<td>- <em>Is the project built on a departmental know-how? Has the project a significant impact for future development? Is the plan realistically feasible?</em></td>
</tr>
<tr>
<td>- <em>Are the research methods, materials, work packages, tasks, milestones and timeline appropriate and in agreement with deliverables?</em></td>
</tr>
<tr>
<td>- <em>Are the risk assessment and the contingency plan properly considered?</em></td>
</tr>
<tr>
<td>- <em>This project has perspectives for international collaborations, applications, networking?</em></td>
</tr>
<tr>
<td>- <em>Has the project the character of start-up research that can attract in the future competitive and non-competitive funds?</em></td>
</tr>
</tbody>
</table>

**Reviewer 1**
The project is interesting although not so innovative. This version is shortened and well calibrated and realistically feasible. Some points of weakness still remain. In particular, the lack of a strong control of dosage may generate a high variability that need an increase of the sample size (less precision and a countertendency respect with ethic guidelines).

**Reviewer 2**
The proposal concerns an interesting area of research and may have important impacts on the managements of critical pathologies at both gastrointestinal and neurological levels, particularly affecting children, and young human beings. It fits almost all the relevant requirements, with limited originality and innovation. The potential output could generate further developments from both a diagnostic and therapeutic standpoint; the proposed work is based on well-established experimental procedures and the team’s expertise is very solid, so minimising the risk of failure, but there is some doubt on the feasibility within the given timelines.

**Reviewer 3**
Well-structured project, preliminary results and previous research by proponent render likely a successful conclusion of the activities. (Potential overlap with ADR by Faggin).

**Reviewer 4**
Maybe the project is too much multidisciplinary and ambitious. However, it is well presented and the team is numerous and with expertise in each field.

<table>
<thead>
<tr>
<th>Competence and expertise of the applicant</th>
</tr>
</thead>
<tbody>
<tr>
<td>- <em>What are the merits and scientific expertise of the applicant?</em></td>
</tr>
<tr>
<td>- <em>Are they appropriate and sufficient for the proposed project?</em></td>
</tr>
</tbody>
</table>

**Reviewer 1**
Dr Giron's publications are valuable and focused on the topic (in particular the relationship of the intestine, microbiota and inflammation). The percentage of first and last names that clearly delineate the leadership of the project is remarkable. The training and work experiences are also in line with what is required for a good coordination of the research project.

**Reviewer 2**
The applicant’s experience and competence around proposed research is well certified by her scientific production and international networks. She has already been involved with the use of proposed techniques of investigation and this minimise the risk of failure.
### Reviewer 3
The proponent displays scientific merits that are fully scientific expertise of the applicant is appropriate and sufficient for the proposed project.

### Reviewer 4
The merits and scientific expertise of the applicant are good and appropriate for the proposed project.

<table>
<thead>
<tr>
<th>Competence and expertise of the research team.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Does the research team bring complementary expertise to the project?</td>
</tr>
<tr>
<td>- Is the project involved in international research collaborations that can significantly contribute to the success of the project?</td>
</tr>
</tbody>
</table>

### Reviewer 1
The group is heterogeneous, supporting the multidisciplinary activity and well complementary in each role. Great experience covering the whole area of the study and CV-publication lists high ranked.

### Reviewer 2
The team involves very complementary competence and expertise and has an international composition. This for sure will allow to evaluate the results from different angles and to better understand the difficulties which could arise during the experimental work due to the complexity of the biology under exploration.

### Reviewer 3
Research team provides required expertise to develop the project, involving researchers of other UNIPD Departments, and several international collaborators (USA, Spain, Germany).

### Reviewer 4
The applicant proposes to involve a large national and international team.

---

### COMMISSIONE INTERNA

**Project:** Myelin and gut during early life: potential partners in crime in gender-related neuropsychiatric disorders (MINDINGUT)

**Applicant:** Giron Maria Cecilia

**Punti di forza**
Il progetto è ben scritto e di facile lettura ed il tema è di attualità. La proponente possiede un’elevata esperienza della tematica oggetto di studio e l’ampia rete di qualificati partecipanti sia interni che esterni al DSF assicura il completo svolgimento del progetto. Interessante è la valutazione delle differenze di genere.

**Criticità**
La mole di sperimentazione appare sovradimensionata per durata e finanziamento del progetto nonostante la numerosità dei partecipanti (9 strutturati di università italiane e straniere e 1 dottorando). Il finanziamento richiesto appare insufficiente per portare a termine il progetto, considerando anche la richiesta di un assegno. Non è ben chiarito il ruolo dei diversi partecipanti alle varie attività proposte nella ricerca. Uno dei partecipanti risulta aver fatto richiesta di assegno. Inoltre, il principale end-point non è chiaramente definito.
Project: Exploiting Mannose Receptor-blockers to prevent and treat metaflammation

Applicant: Mastrotto Francesca

General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how? Has the project a significant impact for future development? Is the plan realistically feasible?
- Are the research methods, materials, work packages, tasks, milestones and timeline appropriate and in agreement with deliverables?
- Are the risk assessment and the contingency plan properly considered?
- This project has perspectives for international collaborations, applications, networking?
- Has the project the character of start-up research that can attract in the future competitive and non-competitive funds?

Reviewer 1
The role of CD206 in inflammation has been theoretically reported and in this present project there is an interesting and innovative way to reduce the prolonged inflammation. The aims are well designed and also the temporal scale, although a little bit ambitious looks like feasible. In addition, the preliminary data are robust and strongly support the workplan. The only perplexity stems from a real fast application in clinics. However, its impact is also important to better understand the role of these key-players on the triggering and propagation of inflammatory states.

Reviewer 2
All the requirements are essentially met for the proposed project. The proposed approach has been already undertaken by the same group and a patent has been filed to cover the preliminary results, so this limits the originality of the proposed work. A question mark concerns the risk estimation re the objective 2 (is a structure-activity plan in place in case of low affinities are obtained?).

Reviewer 3
Basically this is the same 2022 PRID project proposal (which dampen a bit the enthusiasm for the study). The study is relevant and its plan seems feasible; the description is adequate and the interaction within units allows a full development of specific competence of collaborators.

Reviewer 4
The project is principally focused in one aspect affecting metaflammation, although with a clear multidisciplinary approach. This is an advantage in terms of the precise goal to reach, but it could become a weakness in case of scarce results requiring a convincing B-plan.

Competence and expertise of the applicant.

- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

Reviewer 1
Dr Mastrotto has an impressive CV with a high number of publication/year and a relevant expertise for the proposed project.

Reviewer 2
The applicant has the appropriate competence and expertise to support the proposed project, supported by a good scientific network.

**Reviewer 3**
The proponent displays scientific merits that are fully scientific, expertise of the applicant is appropriate and sufficient for the proposed project.

**Reviewer 4**
The merits and scientific expertise of the applicant are good and appropriate for the proposed project.

**Competence and expertise of the research team.**
- Does the research team bring complementary expertise to the project?
- Is the project involved in international research collaborations that can significantly contribute to the success of the project?

**Reviewer 1**
The research team has a great value and covers all fields necessary to accomplish this project. Many publications regarding the main topic of the proposal represent a reliable point to guarantee a successful process of advancement.

**Reviewer 2**
The team has an international composition and bring the complementary expertise required to run all the proposed activities.

**Reviewer 3**
Research team provides required expertise to develop the project, involving researchers of other UNIPD Departments, and international collaborators (University of Nottingham).

**Reviewer 4**
The multidisciplinary and international group involved is clearly presented.

**COMMISSIONE INTERNA**

**Project: Exploiting Mannose Receptor-blockers to prevent and treat metaflammation**

**Applicant:** Mastrotto Francesca

**Punti di forza**

**Criticità**
I mesi uomo messi a disposizione dal PI appaiono insufficienti. La parte *in vivo* è carente di informazioni, quali indicazioni sulla durata di trattamento e sui time points presi in considerazione. L’approccio terapeutico suggerito è difficilmente selettivo, i sistemi proposti potrebbero avere più effetti oltre che bloccare l'inflammazione. Il recettore targettato è, infatti, pleiotropico e, di conseguenza, il rischio per una traslazione può risultare elevato.
**VALUTAZIONI PROGETTI DI RICERCA DI DIPARTIMENTO PRID – ANNO 2023**

**COMMISSIONE ESTERNA**

**Project:** Circadian Rhythms and mitochondrial alterations: innovative perspectives in cisplatin-resistant ovarian cancer

**Applicant:** Montopoli Monica

<table>
<thead>
<tr>
<th>General assessment of scientific quality and innovation - Assessment of scientific plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Is the project <strong>scientifically significant, original and innovative?</strong></td>
</tr>
<tr>
<td>- Is the project built on a departmental know-how? Has the project a significant impact for future development? Is the plan realistically feasible?</td>
</tr>
<tr>
<td>- Are the research methods, materials, work packages, tasks, milestones and timeline appropriate and in agreement with deliverables?</td>
</tr>
<tr>
<td>- Are the risk assessment and the contingency plan properly considered?</td>
</tr>
<tr>
<td>- This project has perspectives for international collaborations, applications, networking?</td>
</tr>
<tr>
<td>- Has the project the character of start-up research that can attract in the future competitive and non-competitive funds?</td>
</tr>
</tbody>
</table>

**Reviewer 1**
The project is appealing and the previous evidence of a mitochondrial dependent chemoresistance in many types of cancer, not only OC, makes it extremely impacting. The WP description is well written. The main perplexity stems from the poor evidence on a strong correlation between CR and mitochondrial morphology and the passage from an acute study in vitro and a chronic situation in vivo.

**Reviewer 2**
Some of the requirements are not completely met by the proposed project. There is a limited originality and medium level of innovation. The plan seems feasible but the potential impact for future development could be limited due to high risk of obtaining not clear results. Materials and methods are appropriate, but it’s hard to evaluate the timelines (also the PI missed to state her committed time).

**Reviewer 3**
Very original and innovative project with high development perspectives. Many of the tools required for the research (e.g., cybrids) are already available by the proponent, supporting the feasibility of the experiments.

**Reviewer 4**
The main concern is underlined first by the applicant: if no correlation between the circadian cycle and mitophagy emerges, the two aspects will be analysed individually. Yes, but the main goal of the project will be not reached. This is a high risk considering the individual behaviour of the circadian cycle.

<table>
<thead>
<tr>
<th>Competence and expertise of the applicant.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- What are the merits and scientific expertise of the applicant?</td>
</tr>
<tr>
<td>- Are they appropriate and sufficient for the proposed project?</td>
</tr>
</tbody>
</table>

**Reviewer 1**
The CV and the expertise of the applicant seem to be adequate to undertake this project. Dr Montopoli has recently published studies tightly related to the aims of the present study.

**Reviewer 2**
Applicant competence is valid and supportive for most of the proposed activities, but due to the limitation in the team composition I wonder whether her technical expertise is sufficient for the whole project.
### Reviewer 3
The proponent displays scientific merits that are fully scientific, expertise of the applicant is appropriate and sufficient for the proposed project.

### Reviewer 4
The merits and scientific expertise of the applicant are good enough and appropriate for the proposed project.

### Competence and expertise of the research team.
- Does the research team bring complementary expertise to the project?
- Is the project involved in international research collaborations that can significantly contribute to the success of the project?

### Reviewer 1
The team supporting the activity of the applicant is surely reliable but there is not a so relevant interdisciplinarity and its number is quite limited.

### Reviewer 2
The team composition is minimal and, in my opinion, it should include some in-vivo expertise in order to anticipate how the collected data can translate in in-vivo settings.

### Reviewer 3
Research team is rather small for the activities proposed including only a UNIPD PhD student and an international collaborator (Polish Academy of Science).

### Reviewer 4
The research group seems not numerous enough and strong.

---

### COMMISSIONE ESTERNA

**Project:** Circadian Rhythms and mitochondrial alterations: innovative perspectives in cisplatin-resistant ovarian cancer

**Applicant:** Montopoli Monica

**Punti di forza**
La tematica del progetto è abbastanza originale. Il background del PI è pienamente adeguato allo sviluppo del progetto.

**Criticità**
La descrizione dei tasks è poco chiara e mancano dettagli sul timing del trattamento e sulla scelta della metodica di sincronizzazione. Il progetto appare sovradimensionato anche in relazione al basso numero di mesi uomo dedicati, in particolare non dichiarati per il PI. Progetto non innovativo in base alla letteratura scientifica presente. Sebbene Il piano appaia fattibile, il suo possibile sviluppo è messo a rischio dalla possibilità di ottenere risultati grigi. Non risulta definito il ruolo di ciascun componente delle unità di ricerca. Il team è buono ma minimale e l'esperienza tecnica è questionabile. Mancano i test *in vivo*, che sarebbero utili.
Project: Exploring new pharmaceutical approaches to target the West Nile virus genome

Applicant: Rigo Riccardo

General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how? Has the project a significant impact for future development? Is the plan realistically feasible?
- Are the research methods, materials, work packages, tasks, milestones and timeline appropriate and in agreement with deliverables?
- Are the risk assessment and the contingency plan properly considered?
- This project has perspectives for international collaborations, applications, networking?
- Has the project the character of start-up research that can attract in the future competitive and non-competitive funds?

Reviewer 1
I personally found this project really interesting, innovative, feasible and impacting. The only criticism was the WPs description that is redundant for some details and too short for important points. Anyway this is a very little defect in a convincing proposal.

Reviewer 2
The project is scientifically important and show elements of originality and innovation, is feasible and most of the activities are based on lab’s know-how. In case of positive results this early phase project could be extended with the involvement of a larger team, either at a national or international level, targeting a lead optimization phase and the identification of a therapeutic treatment. The overall risk however is partially underestimated as well as the proposed timelines. Also, the individuals’ time commitment seems not completely aligned with the reported timelines (see the related table and chart).

Reviewer 3
Project scientifically significant, original, and innovative, clearly described and correctly divided in task with a feasible timeline. The development of potential new approaches for WN infection may, possibly open the path to novel collaborations and funding.

Reviewer 4
The project is well presented. The same for the risks for failure, that is many. However, it is very interesting.

Competence and expertise of the applicant.

- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

Reviewer 1
This CV is in line with what expected from an intermediate researcher.

Reviewer 2
The applicant has a good competence and expertise to support most the proposed activities, but apparently lacks some experience concerning the whole drug discovery process, and this may explain some limitations concerning the risk analysis.

Reviewer 3
Scientific expertise of the applicant is appropriate and sufficient for the proposed project.
Reviewer 4
The merits and scientific expertise of the applicant are good and appropriate for the proposed project.

Competence and expertise of the research team.
- Does the research team bring complementary expertise to the project?
- Is the project involved in international research collaborations that can significantly contribute to the success of the project?

Reviewer 1
The team is strong and has all requisites to support the applicant.

Reviewer 2
The team bring complementary expertise to the proposed project, but I think that the early involvement of a biological/virological competence would add, particularly in anticipating potential difficulties and running a better risk analysis.

Reviewer 3
Research team provides required expertise to develop the project, involving diverse UNIPD Departments. No external or international collaborators.

Reviewer 4
The team is good, although maybe a molecular biologist is lacking.

COMMISSIONE INTERNA

Project: Exploring new pharmaceutical approaches to target the West Nile virus genome

Applicant: Rigo Riccardo

Punti di forza
Il progetto è scritto in modo chiaro e risulta di facile lettura. La tematica del progetto è originale e innovativa. Il progetto appare ben dimensionato in relazione alle risorse finanziarie.

Criticità
Si evidenziano alcune parti ridondanti nella descrizione dettagliata del progetto. La timeline non risulta del tutto coerente con il numero di mesi uomo dedicati dai partecipanti al progetto.
## General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how? Has the project a significant impact for future development? Is the plan realistically feasible?
- Are the research methods, materials, work packages, tasks, milestones and timeline appropriate and in agreement with deliverables?
- Are the risk assessment and the contingency plan properly considered?
- This project has perspectives for international collaborations, applications, networking?
- Has the project the character of start-up research that can attract in the future competitive and non-competitive funds?

### Reviewer 1
The project is well designed. Tightly calibrated and balanced.

### Reviewer 2
The proposed project brings a good level innovation and low originality, is scientifically solid and the team has a great experience and know-how for what concerns the area of research. Proposed timelines and methods are appropriate, apart perhaps the timeline for task 3.3. In case of success, the project could be expanded both in terms of activities and collaborations, particularly with the objective of identifying new treatments in different therapeutic areas.

### Reviewer 3
Scientifically sound project, extremely relevant and timely. Its only limitation is the limiting the pharmacological analysis to biochemical interaction (BRET studies) and not evaluating physiological in vivo effects. However, time frame of the project call limits this extension that could be addressed in follow-up studies. The proposal is based on solid Department know-how and external collaborations.

### Reviewer 4
The project is very well presented; the risks are listed but seem to be overall low.

## Competence and expertise of the applicant

- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

### Reviewer 1
The CV is consistent with the experience of the applicant and well fits the aims of the project.

### Reviewer 2
The applicant has a well document expertise in the main proficiency required by the project as well as the competence to coordinate the multidisciplinary team. Some more experience in medicinal chemistry would be of help, particularly in the second part of the project.

### Reviewer 3
Scientific expertise of the applicant is appropriate and sufficient for the proposed project.

### Reviewer 4
The merits and scientific expertise of the applicant are good and appropriate for the proposed project.
Competence and expertise of the research team.
- Does the research team bring complementary expertise to the project?
- Is the project involved in international research collaborations that can significantly contribute to the success of the project?

Maximum score: 15

Reviewer 1
The team is adequate to support the activities.

Reviewer 2
The team brings the required complementary expertise and competence, with involvement of foreign researchers.

Reviewer 3
Research team provides required expertise to develop the project, involving diverse DSF researcher and both external (UBIFE) and international collaborators (Univ Lodz).

Reviewer 4
It is a multidisciplinary and internationally involved strong team.

COMMISSIONE INTERNA
Project: Structure-Based Characterization and Design of mu opioid receptor biased agonists

Applicant: Salmaso Veronica

Punti di forza
Il progetto è scritto in modo chiaro e puntuale. La proponente possiede una adeguata esperienza della tematica oggetto di studio ed il team coinvolto, sia interno che esterno al DSF, assicura il completo svolgimento del progetto. Il progetto appare ben dimensionato in relazione alle risorse di tempo e denaro.

Criticità
È assente l’analisi del rischio riguardo la caratterizzazione dell’attività farmacologica.
**Project:** Vimentin-DNA interaction as a potential novel target for the reprogramming of alternatively polarized tumour-associated macrophages

**Applicant:** Ceschi Silvia

### General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how?
- Has the project a significant impact for future development?
- Are the objectives and hypotheses clearly presented?
- Is the plan realistically feasible?
- Are the research methods, materials, work packages and timeline appropriate and in agreement with deliverables?
- Has the project perspectives for international collaborations, applications, networking?

### Reviewer 1
The project is extremely interesting, innovative and takes a great role on the potential modulation of macrophages and TAM. The plan is feasible also due the previous experience of both applicant and their team.

### Reviewer 2
The plan fits almost all the required criteria, with a limited originality. The proposed work is a valid exploration and expansion of an area of great Group’s expertise and competence. Some questions concern the proposed timelines, which appear a bit longer than effectively required.

### Reviewer 3
Interesting hypothesis, although highly risky. There is no preliminary evidence that vimentin interaction can modify gene transcription in any manner and, even more, the cell phenotype. The lack of any preliminary evidence reduces the enthusiasm for the project. The contingency plan is a completely different project.

Research proposed is based on Dept. know-how and is structured to foster novel collaborations. Research is feasible and aims and methods clearly described.

### Reviewer 4
The project is interesting and overall well presented, although alternatives seem to be weak if it would be not successful.

### Competence and expertise of the applicant

- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

### Reviewer 1
Although Dr Silvia got her PhD quite recently, I strongly believe She could be able to move quite well in this project. Mainly because the topic falls into her previous lines of competence.

### Reviewer 2
The applicant has already a specific experience in the field of the proposed project from both a scientific and a technical point of views. Her expertise and competence appear appropriate for e proposed tasks.

### Reviewer 3
The applicant shows scientific expertise appropriate and sufficient to carry on the project
VALUTAZIONI ASSEGNI DI RICERCA DI DIPARTIMENTO DI TIPO B ARD-B – ANNO 2023

Reviewer 4
The merits and scientific expertise of the applicant seem to be high and are appropriate and sufficient for the proposed project.

**Competence and expertise of the supervisor and of the research team.**
- Does the research team bring complementary expertise to the project?

Reviewer 1
The expertise provided by the supporting team is enough robust to guarantee a good work plan during the research.

Reviewer 2
The same comments as above apply to the supervisor; on the other hand, I wonder whether the presence of a molecular biology could strengthen the discussion within the team.

Reviewer 3
Supervisor and research team are adequate to support the research.

Reviewer 4
The team is good and has international connections.

COMMISSIONE INTERNA

Project: Vimentin-DNA interaction as a potential novel target for the reprogramming of alternatively polarized tumour-associated macrophages

**Applicant:** Ceschi Silvia
Il progetto proposto dalla dott.ssa Ceschi, anche se a rischio elevato, è altamente innovativo e fattibile grazie alla expertise scientifica della candidata. Il testo è ben articolato; tuttavia, alcune parti andrebbero implementate, mettendo soprattutto in evidenza i vantaggi dell’approccio proposto rispetto ad altri presenti in letteratura. Durante il colloquio la dott.ssa Ceschi ha presentato il progetto in modo chiaro con buona conoscenza della tematica.
Project: Development of gold nanoparticles as sonosensitizers for targeted Cancer treatment

Applicant: Daniele Raffaella

General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how?
- Has the project a significant impact for future development?
- Are the objectives and hypotheses clearly presented?
- Is the plan realistically feasible?
- Are the research methods, materials, work packages and timeline appropriate and in agreement with deliverables?
- Has the project perspectives for international collaborations, applications, networking?

Reviewer 1
The project is overall interesting and the use of sonodynamic sounds quite innovative. Although the potential impact could be really strong, the rationale is not so well focused on a single type of experimental subject and also the workplan should be improved. The timesheet is too concentrated, it seems quite difficult to perform all project in that interval of time.

Reviewer 2
The proposed project has a great potential and fits most of the required features reported above, including some good perspective for future developments and collaboration. However, there is an important question mark for what concerns the synthetic chemistry expertise, which may in turn reflect on the probability to fit the task 1, which is not well described and detailed.

Reviewer 3
This is a further development of previous research form the applicant. Project is well described, although some parts appear a little bit superficially addressed.

Reviewer 4
The project is certainly interesting but is difficult to foresee if sono-sensitization would be actually successful to reach the goal. Is maybe too optimistic to write a paper within the one-year project.

Competence and expertise of the applicant.

- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

Reviewer 1
The CV of the applicant is interesting. The very long description of the activities undertaken by Dr Daniele in these last years documented her strong determination. The lack of a robust bibliometric index (1 publication) is a little drawback, but two other manuscripts are going to be published. The connection with the items of the proposal is evident.

Reviewer 2
The competence and expertise of the applicant are wide from a technological and biological point of view, but the synthetic chemistry expertise appears quite limited, and this may negatively impact on the project.

Reviewer 3
Expertise and publication record are sufficient for a PhD student.
### Competence and expertise of the supervisor and of the research team.

- Does the research team bring complementary expertise to the project?

| Reviewer 4 |
The merits and scientific expertise of the applicant are good and are appropriate and sufficient for the proposed project. |
| --- |

| Reviewer 1 |
The expertise of the supporting team is consistent with the project and the applicant formation and deserves a great evaluation. |
| --- |

| Reviewer 2 |
The team has a large and well documented experience and competence, however, again, it would be recommendable to include a synthetic chemist as team member due to the nature of the proposal. |
| --- |

| Reviewer 3 |
Supervisor and research team are adequate to support the research. Appropriates the collaborations with UNITO. |
| --- |

| Reviewer 4 |
The team and the supervisor are internationally known and in a good network. |
| --- |

### COMMISSIONE INTERNA

**Project:** Development of gold nanoparticles as sonosensitizers for targeted Cancer treatment

**Applicant:** Daniele Raffaella

Il progetto della dott.ssa Daniele è di facile lettura e fattibile. Tuttavia, alcuni punti, relativi soprattutto alla parte biologica, dovrebbero essere maggiormente dettagliati. Il progetto prevede che una parte consistente della sperimentazione (dal mese 6 al mese 11) venga svolta a Torino: le vie di segnale studiate e la tipologia di analisi molecolari utilizzate dovrebbero essere specificate. La candidata ha già esperienza nel settore oggetto di studio e ha presentato, durante il colloquio, il progetto in modo chiaro. Tuttavia, nella discussione non ha dimostrato un elevato grado di sicurezza ed esaustività nelle risposte.

Applicant: Faggin Sofia

<table>
<thead>
<tr>
<th>General assessment of scientific quality and innovation - Assessment of scientific plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Is the project scientifically significant, original and innovative?</td>
</tr>
<tr>
<td>- Is the project built on a departmental know-how?</td>
</tr>
<tr>
<td>- Has the project a significant impact for future development?</td>
</tr>
<tr>
<td>- Are the objectives and hypotheses clearly presented?</td>
</tr>
<tr>
<td>- Is the plan realistically feasible?</td>
</tr>
<tr>
<td>- Are the research methods, materials, work packages and timeline appropriate and in agreement with deliverables?</td>
</tr>
<tr>
<td>- Has the project perspectives for international collaborations, applications, networking?</td>
</tr>
</tbody>
</table>

**Reviewer 1**
The project is really interesting, with solid bases, preliminary studies and a robust rationale. However, it is not realizable in a so short interval of time. The aims proposed by the applicant are too ambitious both in terms of effort and also in terms of budget. Maybe the project is an appendix of a greater project. In this case it should be indicated. Otherwise, I found difficulties in considering it feasible in 12 months.

**Reviewer 2**
The proposal is well written and covers most of the required parameters; it is completely biologically driven and do not consider any probe-driven approach, so limiting the potential for a large mechanistic comprehension (scope limitation). Originality and innovation seem limited.

**Reviewer 3**
Interesting and well described project. A limitation is the excessive number of experimental activities to be performed in one year only (to complete each task in 4 months is a little bit unrealistic).

**Reviewer 4**
The microbiota role is widely studied in many biological processes. Although interesting, this is not a very innovative project and is very difficult to be completed in one year. However, it is well written.

**Competence and expertise of the applicant.**
- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

**Reviewer 1**
The CV of Dr Faggin is appropriate for the project and the previous activities are in line with that proposed in the project. It is not clear if the proponent got the approval for the laboratory animal handling and there are not yet first name articles in her bibliography.

**Reviewer 2**
The proponent has the required skills and competence to carry on the work plan activities; however, the proposed activities rely too much on the knock-out models and this may be due to a limited strategic view.

**Reviewer 3**
Appropriate expertise for a PhD student with a significant publication record.

**Reviewer 4**
The merits and scientific expertise of the applicant seem to be good and are appropriate and sufficient for the proposed project.

**Competence and expertise of the supervisor and of the research team.**

- Does the research team bring complementary expertise to the project?

**Reviewer 1**
Dr Giron's publications are valuable and focused on the topic (in particular the relationship of the intestine, microbiota and inflammation). The percentage of first and last names that clearly delineate the leadership of the project is remarkable. The training and work experiences are also in line with what is required for a good coordination of the research project.

**Reviewer 2**
High competence and expertise for the team members’ area of interest, but the presence of an analytical pharmacologist would add a lot to the project strategy.

**Reviewer 3**
Supervisor and research team are adequate to support the research.

**Reviewer 4**
The supervisor and the team are internationally involved in the field.

---

**COMMISSIONE INTERNA**

**Project:** Intestinal neuroimmune responses in multiple sclerosis: the role of microbiota-gut-brain axis

**Applicant:** Faggin Sofia

Il progetto è stato presentato in modo chiaro e, durante il colloquio, la dott.ssa Faggin ha risposto in maniera esaustiva alle domande, dimostrando conoscenza della tematica ed esperienza nel settore oggetto di studio. Il progetto è fattibile, grazie anche alla rete di collaborazioni a cui vengono demandate molte valutazioni, e che mette in ombra, almeno in parte, il contributo dell’assegnista. L’originalità non è elevata e la descrizione del progetto manca di alcune informazioni (per esempio sul modello animale e sulla scelta e composizione della miscela di probiotici), che ne avrebbero aumentato la comprensione e la qualità.
Project: Targeting the hyaluronan metabolism as a novel strategy to treat Prostate cancer

Applicant: Giacomini Isabella

General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how?
- Has the project a significant impact for future development?
- Are the objectives and hypotheses clearly presented?
- Is the plan realistically feasible?
- Are the research methods, materials, work packages and timeline appropriate and in agreement with deliverables?
- Has the project perspectives for international collaborations, applications, networking?

Reviewer 1
The idea proposed by Dr Giacomini is quite interesting and really innovative. The silencing of immune activity by the proliferation of infiltrated myeloid-derived suppressor and its possible link to disassembling of the microenvironment is of great impact. More realistically I would suggest to the applicant to stop the research to the basic studies avoiding hypothesizing an immediate possibility to find a new therapy. Indeed, the last feasibility of the task 2B within the first year of study is, in my opinion, a little bit ambitious. However, the study is worthy to take into consideration also because applicable to other cases.

Reviewer 2
The scientific plan does not completely respect the required criteria, or, at least, some of the ground information is not correctly reported. It is not possible to assess the level of originality and innovation due to lack of key information concerning the state of the art. Most of the references and comments refer to basic technology, but little is presented on the work already performed (?) by the same as well as other research groups. Also, the objectives do appear too ambitious for the given timelines and the risks are not completely expressed.

Reviewer 3
High value project with relevant external collaborations. Solid scientific bases and preliminary results. Too ambitious for a 12-month research.

Reviewer 4
The possible limits of the role of the hyaluronic acid do not emerge well, since in the extracellular matrix many other actors are involved and could result crucial. Hence, a B plan is difficult to be deduced. In particular, part of the Aim could be anticipated in the State of the Art that should be in turn enriched.

Competence and expertise of the applicant.

- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

Reviewer 1
The CV is appreciable and demonstrated a consolidated scientific experience and a good correlation to the proposal topics.

Reviewer 2
The applicant has the required skills and knowledge for most of the proposed activities, with exception of computational chemistry and drug discovery competences, which are complemented by the team. However, the relevant lack of expertise may explain the underestimated difficulties.

**Reviewer 3**
Good CV and publication record.

**Reviewer 4**
The merits and scientific expertise of the applicant are good and appropriate for the proposed project.

**Competence and expertise of the supervisor and of the research team.**
- Does the research team bring complementary expertise to the project?

**Reviewer 1**
The experience of the main supervisors and of the other participants (e.g. Prof. Cavalli) is a guarantee for a strong support to the research.

**Reviewer 2**
Despite the clear experience and competence of the team members, the underestimation of difficulties should have been highlighted to the applicant.

**Reviewer 3**
Supervisor and research team are adequate to support the research.

**Reviewer 4**
The leader is certainly competent, but the team seems less strong for the project.

**COMMISSIONE INTERNA**

**Project: Targeting the hyaluronan metabolism as a novel strategy to treat Prostate cancer**

**Applicant:** Giacomini Isabella

Il progetto presentato dalla dott.ssa Giacomini presenta alcuni tratti di innovatività. Tuttavia, appare sovradimensionato rispetto al periodo dell’assegno e con molteplici obiettivi a scapito di una maggiore focalizzazione e produttività. Un obiettivo è l’identificazione di terapie innovative rivolte in modo selettivo verso il metabolismo dello ialuronano, di contro una gran parte del progetto si focalizza su un target (Has2) già predefinito. Durante il colloquio, la dott.ssa Giacomini dimostra esperienza della metodologia proposta, ma appare abbastanza elusiva alle domande poste.
Project: Elucidating the Structural basis of the amyloidogenic potential of pathogenic mutations in human transthyretin by limited proteolysis and HDX-MS (StAmP-HDX)

Applicant: Pierangelini Andrea

General assessment of scientific quality and innovation - Assessment of scientific plan

- Is the project scientifically significant, original and innovative?
- Is the project built on a departmental know-how?
- Has the project a significant impact for future development?
- Are the objectives and hypotheses clearly presented?
- Is the plan realistically feasible?
- Are the research methods, materials, work packages and timeline appropriate and in agreement with deliverables?
- Has the project perspectives for international collaborations, applications, networking?

Reviewer 1
The study proposed by Dr Pierangilni aims at deeply investigating the possible link between transthyretinin and amiloid formation in peripheral amyloidoses. The project sounds interesting, has a real impact and, it is well balanced.

Reviewer 2
Good fit with the required features; I envisage a limited originality and innovation, but the potential results may have a good impact on future applications, maybe also involving international collaborations. The area of research is of high value and the proposed plan is feasible in the given timelines, with limited risks.

Reviewer 3
Excellent project, as far as focus on a specific theme, feasibility, and scientific relevance

Reviewer 4
The project is overall well written and the strategy and results expected are clearly presented. The not rich bibliography presented is the only concern I found.

Competence and expertise of the applicant.
- What are the merits and scientific expertise of the applicant?
- Are they appropriate and sufficient for the proposed project?

Reviewer 1
The CV of the proponent is in line with the items of the project. There is only a publication but he has a sufficient experience to carry out the present project.

Reviewer 2
The applicant has a good expertise, which seems sufficient for the proposed activities. A question mark is due to the very minimal number of publications.

Reviewer 3
Appropriate expertise for a PhD student.

Reviewer 4
Since the project is well written and the applicant foresees his total employment, merits and expertise can be considered coherent with the possibility of success.

Competence and expertise of the supervisor and of the research team.
- Does the research team bring complementary expertise to the project?

**Reviewer 1**
The team has enough experience to support the applicant of the project.

**Reviewer 2**
The supervisor has a good experience to support the applicant however I wonder whether the presence of a pharmacologist would add to the quality of discussion within the team.

**Reviewer 3**
Supervisor and research team are adequate to support the research.

**Reviewer 4**
The supervisor and the team are strongly expert in the field.

**COMMISSIONE ESTERNA**

**Project:** Elucidating the Structural basis of the amyloidogenic potential of pathogenic mutations in human transhyretin by limited proteolysis and HDX-MS (StAmP-HDX)

**Applicant:** Pierangelini Andrea

Il progetto è ben strutturato e scritto in modo semplice e chiaro. I dati preliminari e le tecnologie utilizzate ampiamente consolidate lo rendono fattibile. L’originalità non è elevata, in quanto i protocolli proposti sono già stati utilizzati per lo studio di altre proteine. Buona è la prospettiva di pubblicazione e di risultati. Durante il colloquio il dott. Pierangelini ha dimostrato un’ottima conoscenza della tematica oggetto di studio ed elevata esperienza delle metodiche proposte.