## CORSO DI FORMAZIONE HORIZON 2020:

*Le azioni rivolte alla ricerca d'eccellenza: il programma ERC - European Research Council* 

Università degli Studi di Palermo, 11 luglio 2019

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## **OBIETTIVI**

- L'*ERC* incoraggia proposte che
  - superino le tradizionali barriere tra le discipline
    trattino settori nuovi ed emergenti
    high-risk, high-gain
    siano presentate da ricercatori Eccellenti







## **CARATTERISTICHE DEI GRANTS ERC**

- Sovvenzioni assegnate a ricercatori individuali
- 1 Progetto, 1 ricercatore, 1 istituto, 1 criterio di valutazione
- Unico criterio di selezione: eccellenza
- Borse sostanziose (1.5 mln € → 3.5 mln )
- Nessuna priorità tematica pre-definita ('su iniziativa dei ricercatori' <u>bottom-up</u>);
- Aperto a tutti i settori della scienza
- No network ma TEAM
- Portability del grant





## COSA SIGNIFICA «FRONTIER RESEARCH» ?

Today the distinction between 'basic' and 'applied' research has become blurred, due to the fact that emerging areas of science and technology often cover substantial elements of both. As a result,

the term 'frontier research' was coined for ERC activities since they will be directed towards fundamental advances at and beyond the 'frontier' of knowledge





# **ERC GRANTS - DOMINI**

## Quali settori?

### Tutti gli argomenti

Tranne energia nucleare e temi sensibili da un punto di vista etico

### Per motivi pratici divisi in:

- Scienze naturali, fisiche e ingegneria (PE)
- Scienze della vita (LS)
- Scienze sociali ed umanistiche (SH)





# INDIPENDENZA, RICONOSCIMENTO E VISIBILITÀ

L'ERC offre:

- Libera scelta dell'area di ricerca, dell'istituzione ospitante e dei membri del team (europei e non)
- Mobilità dei ricercatori ovunque in Europa (portability of grants)
- Un "marchio di qualità" per attrarre finanziamenti aggiuntivi e ottenere riconoscimento
- Procedure semplici e burocrazia "leggera"





## ERC Grants in Horizon 2020:

## Schemi di finanziamento e regole di partecipazione



### Schemi di finanziamento

#### **Starting Grants**

starters (2-7 years after PhD) up to € 1.5 Mio for 5 years

#### **Consolidator Grants**

consolidators (7-12 years after PhD) up to € 2 Mio for 5 years

#### **Advanced Grants**

track-record of significant research achievements in the last 10 years up to € 2.5 Mio for 5 years

Synergy Grants 2 – 4 Principal Investigators up to € 10 Mio for 6 years

#### **Proof-of-Concept**

bridging gap between research - earliest stage of marketable innovation up to €150,000 for ERC grant holders





## Elementi chiave di un progetto ERC

#### Principal Investigator (PI)

 Qualsiasi nazionalità, età, posto di lavoro/stato contrattuale

#### **Host Institution (HI)**

 Ente situato in un paese membro dell'Unione europea o paese associato a H2020

#### Team di ricerca individuale

 Il Principal Investigator ha libertà di scelta dei membri del suo team







## ERC Starting Grant (StG)





### **STG: BUDGET E DURATA**

- Quanto è grande un progetto?
- ✓ Durata fino a 5 anni
- ✓ Finanziamento fino a 1,5M€ (pro rata)
- ✓ Max 2,5 M€ a progetto\* (novità bando 2020)

\*In casi eccezionali e ben specificati: fino 2,5M€

- PI da Paese terzo e implementazione di una nuova attività di ricerca
- Acquisto di importante attrezzatura di ricerca
- Accesso a infrastrutture di ricerca





### PRINCIPAL INVESTIGATOR (PI)

- II PI non deve essere necessariamente "employed" o "strutturato" dall' Host Institution al momento della presentazione della proposta, ma impiegato/assunto ("engaged") dalla HI per tutta la durata del Grant
- II PI deve dedicare al progetto una parte significativa del suo tempo: almeno il 50% working time ed almeno il 50% speso in MS o AC.
- ✓ Unico responsabile del progetto, sia per l'attività scientifica che per il management





### PI STG: IL CANDIDATO COMPETITIVO

- ✓ Deve rientrare tra i 2 e i 7 anni post-doc
- ✓ Deve aver già dimostrato la capacità di svolgere la ricerca in modo indipendente
- Avere una certa maturità nella ricerca: almeno una importante pubblicazione senza il PHD supervisor
- Avere un "promettente" track record dei primi successi raggiunti nel proprio ambito di ricerca
- ✓ Pubblicazioni significative come main author nelle principali riviste internazionali
- ✓ Invited presentations in conferenze internazionali
- ✓ Brevetti, premi, concorsi







## ERC Consolidator Grant (CoG)





### CoG: budget e durata

Quant'è grande un progetto?

- ✓ Durata fino a 5 anni
- ✓ Finanziamento fino a 2 M€
- ✓ Max 3 M€ a progetto\*

\*In casi eccezionali e ben specificati: fino 3M€

- PI da Paese terzo
- Implementazione di una nuova attività di ricerca
- Acquisto di importante attrezzatura di ricerca/accesso a infrastrutture di ricerca

#### Principal Investigator

- Il PI non deve essere necessariamente "employed" o "strutturato" dall' Host Institution al momento della presentazione della proposta, ma impiegato/assunto ("engaged") dalla HI per tutta la durata del Grant
- ✓ Il PI deve dedicare al progetto una parte significativa del suo tempo: almeno il 40% workload
- ✓ Unico responsabile del progetto, sia per l'attività scientifica che per il management





### PI CoG: il candidato competitivo

✓ Deve rientrare tra i 7 e i 12 anni post-doc

- ✓ Deve aver già dimostrato la capacità di *svolgere la ricerca in modo indipendente*
- Avere grado avanzato di maturità nella ricerca: diverse importanti pubblicazioni senza il PHD supervisor
- Avere un *"promettente" track record* dei primi successi raggiunti nel proprio ambito di ricerca
- ✓ *Pubblicazioni significative* come main author nelle principali riviste internazionali
- Invited presentations in conferenze internazionali
- ✓ Brevetti, premi, concorsi







## ERC Advanced Grant (AdG)





### AdG: budget e durata

Quant'è grande un progetto?

- Durata fino a 5 anni
- ✓ Finanziamento fino a 2,5M€
- ✓ Max. 3,5M€ a progetto\*

\*In casi eccezionali e ben specificati: fino a 3,5 M€

- PI da Paese terzo
- Acquisto di importante attrezzatura di ricerca
- GIUSTIFICAZIONE NEL TEMPLATE



#### **Principal Investigator**

- ✓ Il PI non deve essere necessariamente "employed" o "strutturato" dall'Host Institution al momento della presentazione della proposta, ma impiegato/assunto ("engaged") dalla HI per tutta la durata del Grant
- ✓ Il PI deve dedicare al progetto una parte significativa del suo tempo: almeno il 30% del suo tempo lavorativo
- ✓ Unico responsabile del progetto, sia per l'attività scientifica che per il management





#### Principal Investigator: requisiti

- Almeno 10 pubblicazioni da autore senior nelle principali riviste scientifiche peer-reviewed del proprio settore
- Almeno 3 monografie (pref. una tradotta in un' altra lingua)

#### Altri elementi di valutazione:

- brevetti
- ✓ presentazioni da 'invited speaker/lecturer' in importanti conferenze/scuole avanzate internazionali
- conferenze internazionali organizzate / membro del comitato d' organizzazione o di indirizzo strategico
- Premi internazionali / membership accademie internazionali







## ERC Synergy Grant (SyG)





### Caratteristiche del Synergy

- 2,3 o 4 Principal Investigator
- Nessuna restrizione sulla location del PI
  - "PI can come from the same corridor in one HI, different HIs within one country, or from different countries (within EU or AC)"
- <u>Novità 2019</u>: Uno dei PI del gruppo può essere strutturato presso una Host Institution non europea





### Caratteristiche del Synergy

- PI considerati uguali, con lo stesso ruolo e la stessa importanza ma deve essere nominato un "corresponding PI" come contatto amministrativo con l'ERCEA per tutta la durata del progetto.
- Budget massimo per progetto: 10 M€
  - Con 4 M€ aggiuntivi e da ben giustificare se presente uno di questi casi:
    - "start-up' costs for Principal Investigators moving to the EU or AC and/or
    - the purchase of major equipment and/or
    - access to large facilities
- Time commitment: ≥50% of working time in EU or AC and ≥30% of working time on the ERC project
- Innovazioni scientifiche che possono essere raggiunte solo con il lavoro di team complementari e non da un unico PI.





#### Profilo dei PI Synergy Grant

Ci si aspetta proposte presentate da gruppi di PI attivi ed innovativi nella ricerca:

 devono presentare un "early achievement track-record" oppure un track record degli ultimi 10 anni, qualunque sia il più appropriato alla fase della loro carriera (consultate I profili Starting, Consolidator e Advanced Grant).

Synergy Grants sono pensati per spingere la ricerca oltre le frontiere della conoscenza. Saranno necessarie nuove tipologie di collaborazione congiunta per consentire:

- nuove combinazioni di competenze e discipline;
- la collaborazione tra ricercatori di diverse istituzioni e diversi settori





#### Cosa viene valutato?

#### Simili agli altri schemi ERC:

- •Progetto: ground-breaking, ambition, feasibility
- •CV di tutti i PI : intellectual capacity, creativity, commitment

#### in più, aspetti di sinergia:

Complementarietà: profili dei PI, complementarietà dei settori di ricerca
organizzazione del lavoro e modalità di cooperazione tra PI: innovativa, collaborativa
Valore aggiunto scientifico dell'idea e della cooperazione





### PRINCIPAL INVESTIGATOR

Eligibility period: Principal Investigator shall have been awarded his or her first PhD						
Starting Grant	Consolidator Grant	Advanced Grant	Synergy Grant			
> 2 and $\leq$ 7 years	> 7 and $\leq$ 12 years					
prior to 1 January 2020	prior to 1 January 2020	No coocific				
Cut-off dates:	Cut-off dates:	No specific criteria	No specific criteria			
PhD awarded from	PhD awarded from					
1 January 2013 to 31 December 2017	1 January 2008 to 31 December 2012					
(inclusive)	(inclusive)					





### ESTENSIONE ELEGGIBILITÀ

#### Prima, durante e dopo il PhD:

- Maternità (18 mesi per figlio come minimo)
- Congedo paternità (tempo effettivo)

#### Dopo il PhD:

- Malattia (più di 90 giorni) del PI o dei membri della famiglia (child, spouse, parent or sibling).
- Servizio militare (tempo effettivo)
- Specializzazione medica (non oltre 4 anni)

"Proof of completion of clinical training will no longer make an MD applicant eligible. Clinical training will still count as reason for extension of the eligibility window when taking place after the eligibility date (date of MD award + 2 years or date of PhD award)."





	Starting Grant	Consolidator Grant	Advanced Grant	Synergy Grant	Proof of Concept Grant
Call identifier	ERC-2020-StG	ERC-2020-CoG	ERC-2020-AdG	ERC-2020-SyG	ERC-2020-PoC
Call Opens	17/07/2019	24/10/2019	14/05/2020	18/07/2019	15/10/2019
<b>Call closes</b> (cut-off dates for PoC)	16/10/2019	04/02/2020	26/08/2020	05/11/2019	21/01/2020 23/04/2020 17/09/2020
Indicative date for signature of grant agreements (by cut-off date for PoC)	05/12/2020	03/04/2021	21/08/2021	19/03/2021	30/08/2020 28/11/2020 17/04/2021





# **Expected Budget Distribution**

Grant	Budget %	Est. budget, M€	Est. funded projects
Starting Grant	31%	677	455
Consolidator Grant	30%	657	343
Advanced Grant	23%	492	209
Synergy Grant	16%	350	39
Total Frontier Research Budget	100%	2176	

**Key considerations by the Scientific Council:** Budget priority given to early career stages (StG and CoG)







# Host Institution





## **HOST INSTITUTION**

- Ente di ricerca, Università ma anche Industria
- Situato in un Paese Membro o Associato
- Risponde al criterio dell'eccellenza (ambiente di ricerca, capacità di management, contatti, know-how,..etc)
- Formalmente è il contraente con la CE
- Dovrà prendere un impegno formale nel concedere al ricercatore (PI) indipendenza nella gestione dei fondi per tutta la durata del progetto
- Accetta la "portabilità" del Grant
- Firma la letter of commitment





## **HOST INSTITUTION**

#### Condizioni di indipendenza del PI: cosa sono?

- Applicare per il finanziamento in modo autonomo
- ✓ Gestire la ricerca e il finanziamento del progetto e prendere decisioni sull'allocazione delle risorse
- Pubblicare come senior author in modo indipendente e invitare come co-authors solamente coloro che hanno contribuito al lavoro
- ✓ Supervisionare i team members
- ✓ Avere accesso a spazi e facilities adeguati per portare avanti la ricerca







# **ADDITIONAL PARTICIPANT**

In casi particolari, possono essere coinvolti nel progetto altri istituti:

- Partecipazione motivata e giustificata
- Costituiscono un chiaro valore aggiunto al progetto





# Team di ricerca




# TEAM DI RICERCA: CHI NE PUÒ FAR PARTE?

- Costituzione flessibile:,post-doc, graduate and PhD students, senior researchers. No limiti di età, nazionalità e paese di residenza (*no PhD supervisor nei team di StG e CoG*)
- Composizione nazionale o trans-nazionale: team members provenienti dal gruppo di ricerca del PI/stesso Ente, ma anche da altri Enti di differenti Paesi (additional participants -> eccezione)
- Per gli additional participants: valutazione caso per caso, partecipazione giustificata e essenziale in termini di competenze e capacità scientifiche





## **IL PROGETTO**





# PER COMINCIARE... (1)

- **Calcolare bene i tempi**, cominciare il prima possibile, almeno due mesi prima
- Scaricare e studiare i documenti (WP, IfA)
- Creare un account ECAS
- Utilizzare i **template ufficiali** (download da Part. Portal)
- Avviare procedure per documenti di supporto (HI letter, Annex Ethical Issues se applicabile)
- Verificare che eventuali Additional Participant abbiano il PIC
- In caso di dubbi, contattare subito gli NCP!







# PER COMINCIARE... (2)

Verificare i database di progetti finanziati, di brevetti, etc a livello internazionale

<u>http://erc.europa.eu</u>, sezione "funded project" o «stories» o «publications»

Verificare l'elenco dei valutatori: <u>https://erc.europa.eu/document-category/evaluation-panels</u>





# PER COMINCIARE... (3)

È molto importante capire il valore della propria proposta e rispondere in maniera sincere alle seguenti domande:

**1.What is the problem that needs to be solved?** 

2.Why is it significant?

3.What makes my solution/approach to the problem grounbreaking?

Ed inoltre è necessario descrivere chiaramente la natura groudbreaking del progetto: 4. Why will my project a decisive difference?





## **VALUTAZIONE: PROGETTO**

1. Research Project

Ground-breaking nature, ambition and feasibility

Starting, Consolidator and Advanced

Ground-breaking nature and potential impact of the research project

To what extent does the proposed research address important challenges?

To what extent are the objectives ambitious and beyond the state of the art (e.g. novel concepts and approaches or development across disciplines)?

To what extent is the proposed research high risk/high gain?

#### Scientific Approach

To what extent is the outlined scientific approach feasible (based on the Extended Synopsis)?

To what extent is the proposed research methodology appropriate to achieve the goals of the project (based on the full Scientific Proposal)?

To what extent does the proposal involve the development of novel methodology (based on the full Scientific Proposal)?



To what extent are the proposed timescales and resources necessary and properly justified (based on the full Scientific Proposal)?



## **VALUTAZIONE: PI**

2. Principal Investigator

Intellectual capacity, creativity and commitment

Starting and Consolidator

Intellectual capacity and creativity

To what extent has the PI demonstrated the ability to propose and conduct ground-breaking research?

To what extent does the PI provide evidence of creative independent thinking?

To what extent have the achievements of the PI typically gone beyond the state-of-the-art?

Commitment

To what extent does the PI demonstrate the level of commitment to the project necessary for its execution and the willingness to devote a significant amount of time to the project (min 50% of the total working time on it and min 50% in an EU Member State or Associated Country) (based on the full Scientific Proposal).





# LA PROPOSTA







# Parte B





# LA PROPOSTA







# SECTION B1

Cover page

Applicant's last name Part B1 ACRONYM ERC Starting Grant 2014 Research proposal [Part B1]1 (Part B1 is evaluated both in Step 1 and Step 2 Part B2 is evaluated in Step 2 only) Proposal Full Title PROPOSAL ACRONYM Cover Page: Name of the Principal Investigator (PI) Name of the PI's host institution for the project Proposal duration in months Proposal summary (identical to the abstract from the online proposal submission forms, section 1). The abstract (summary) should, at a glance, provide the reader with a clear understanding of the objectives of the research proposal and how they will be achieved. The abstract will be used as the short description of your research proposal in the evaluation process and in communications to contact in particular the potential remote referees and/or inform the Commission and/or the programme management committees and/or relevant national funding agencies (provided you give permission to do so where requested in the online proposal submission forms, section 1). It must therefore be short and precise and should not contain confidential information. Please use plain typed text, avoiding formulae and other special characters. The abstract must be written in English. There is a limit of 2000 characters (spaces and line breaks included). Explain and justify the cross-panel or cross domain nature of your proposal, if a secondary panel is indicated in the online proposal submission forms. There is a limit of 1000 characters, spaces and line breaks included.





# SECTION B1

#### **EXTENDED SYNOPSIS**

Applicant's last name

Part B1

ACRONYM

#### Section a: Extended Synopsis of the scientific proposal (max. 5 pages)

[The Extended Synopsis should give a concise presentation of the scientific proposal, with particular attention to the ground-breaking nature of the research project, which will allow evaluation panels to assess, in Step 1 of the evaluation, the feasibility of the outlined scientific approach. Describe the proposed work in the context of the state of the art of the field. References to literature should also be included.]

Please respect the following formatting constraints: Times New Roman, Arial or similar, at least font size 11, margins (2.0 cm side and 1.5cm top and bottom), single line spacing.





- La proposta deve essere comprensibile per valutatori del campo ma anche per i "generalisti"
- Prestare attenzione agli acronimi e ai termini non inglesi
- Grafici e tabelle sono raccomandati
- Le figure devono essere chiare anche in bianco e nero
- Includere le references più importanti
- Non superare il limite di pagine consentito





- 1a- Extended synopsis (max 5 pp)
- E' lo "specchio" della proposta, in 5 pp
- Presentazione breve ma completa della proposta, con particolare attenzione alla natura innovativa e di "rottura" della ricerca
- E' valutata durante il primo step di valutazione, insieme al CV
- Deve permettere ai valutatori di verificare la fattibilità scientifica (ed economica) della proposta





#### Allo step 1, la synopsis è l'unica fonte di informazione sulla proposta, pertanto:

✓ Deve dare informazioni sugli elementi principali della proposta come obiettivi, superamento dello stato dell'arte, metodologia di ricerca, qualità del team, sostenibilità economica del progetto,

Convincere i valutatori della fattibilità e innovatività del progetto





Alcuni suggerimenti:

#### **Breve introduzione**

Cominciare con la natura innovativa del progetto: "Problem X is going to be addressed by a novel approach Y and this will have a big impact Z in the field"

Spiegare perchè il problema deve essere affrontato

#### ✓ Non annoiare il valutatore già dalla prima frase





- ✓ Evitare l'articolo scientifico: dividere la synopsis secondo la struttura del B2
- Evidenziare l'impatto del progetto e la centralità del PI
- Descrivere quali nuovi orizzonti o opportunità per la scienza, tecnologia o lo studio il progetto potrebbe aprire rispetto allo stato dell'arte
- Specificare qualsiasi particolare aspetto non convenzionale o di sfida del progetto, inclusi aspetti multi o inter- disciplinari
- ✓ Dare evidenza di "chi fa cosa"
- ✓ Inserire un accenno al **budget totale**





- Presentare un progetto originale, di alta qualità e alto impatto che non sia la semplice prosecuzione di cosa si sta (o state) già facendo (la critica più comune è: incremental character)
- Inquadrare bene il progetto nello scenario internazionale evidenziando le differenze dai principali competitori
- Fornire dettagli che ne evidenzino la fattibilità e la colleghino alla vostra esperienza
- Fornire una breve analisi delle criticità





#### SECTION B1: CV

Applicant's la	st name	Part B1	ACRONYM	Applicant's la	st name	Part B1		ACRONYM
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## SECTION B1: FUNDING ID

Applicant's last name

Part B1

ACRONYM

#### Appendix: All ongoing and submitted grants and funding of the PI (Funding ID) <u>Mandatory information</u> (does not count towards page limits)

#### **On-going Grants**

Project	Title	Funding source	Amount (Euros)	Period	Role of the PI	Relation to current ERC proposal

Applications

	Project Title	Funding source	Amount (Euros)	Period	Role of the PI	Relation to current ERC proposal
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#### 3. LA PROPOSTA B1: IL PRINCIPAL INVESTIGATOR – CV

- ✓ Non riferirsi a se stessi come"Dr. Smith" ma "I", "myself", "my career"
- informazioni su risultati della carriera che provino capacità di leadership e indipendenza
- riconoscimenti da parte di altri (citazioni, premi...)
- ✓ gestione/partecipazione a progetti sottolineando contributi e risultati
- Menzionare supervisione di studenti





## 3. LA PROPOSTA B1: IL PRINCIPAL INVESTIGATOR – CV

- Fornite tutte le informazioni (es. indicare i coautori e autore corrispondente delle pubblicazioni che presentate, numero di citazione, IF, etc.)
- Spiegate il vostro ruolo e l'impatto delle pubblicazioni selezionate ma salvate un po' di spazio per menzionare anche le altre (evidenziando quelle senza PhD supervisor).
- Valutate con uno sguardo internazionale la rilevanza (es. awards locali) evitando di diluire informazioni importanti fra altre meno rilevanti.





#### 3. LA PROPOSTA B1: IL PRINCIPAL INVESTIGATOR – CV

Esperienze di mobilità internazionale e relativi miglioramenti/ avanzamenti nella carriera: where did you go and why? oppure

- Accento su collaborazioni internazionali
- ✓Interruzioni di carriera





## VALUTARE IL PROPRIO CV

Tenendo in considerazione i **precedenti lavori** e i principali **risultati**:

- ✓II PI è la **persona giusta** per portare avanti la ricerca proposta?
- ✓ Le pubblicazioni e i risultati ottenuti dimostrano che il PI:
- È capace di pensare in modo creativo e indipendente
- E' capace di andare oltre lo stato dell'arte
- E' capace di essere innovativo nel suo settore di ricerca

 Considerando le condizioni specifiche del PI nonchè la ricerca proposta, e considerando i finanaziamenti già ottenuti, il grant ERC permetterebbe al PI di avviare o consolidare la propria indipendenza?





Cosa NON è necessario

- Avere una posizione permanente (StG, CoG) o essere un professore ordinario (AdG)
- Presentare un progetto in un'area "alla moda"
- Avere un elevato numero di pubblicazioni
- Applicare per una Host Institution prestigiosa



enterpris



# What you need to prove

- you are fully independent
- you can carry out successful research as an independent PI

#### **Publications**

Selected Journal Articles (\* contributed equally) (# invited)

Rosselli BF\*, Alemi A\*, Ansuini A & Zoccolan D (2015). **Object similarity affects the perceptual strategy underlying invariant visual object recognition in rats.** *Front. Neural Circuits* 9(10). *doi:* 10.3389/fncir.2015.00010 [link] [pdf] (Frontiers Research Topic What can simple brains teach us about how vision works)

Zoccolan D# (2015). **Invariant visual object recognition and shape processing in rats.** *Behav. Brain. Res.* 285, 10-33 [link] [pdf] (Special Issue on *Object Recognition Memory in mice and rats*)

Baldassi C\*, Alemi-Neissi A\*, Pagan M\*, DiCarlo JJ, Zecchina R & Zoccolan D (2013). Shape similarity, better than semantic membership, accounts for the structure of visual object representations in a population of monkey inferotemporal neurons. *PLoS Comput. Biol.* 9(8): e1003167 [link] [pdf]

Alemi-Neissi A\*, Rosselli BF\* & Zoccolan D (2013). Multifeatural shape processing in rats engaged in invariant visual object recognition. J. Neurosci. 33, 5939-5956 [link] [pdf]

Dicarlo JJ, Zoccolan D & Rust NC (2012). How does the brain solve visual object recognition? Neuron 73, 415-434 [link]

Tafazoli S\*, Di Filippo A\* & Zoccolan D (2012). Transformation-tolerant object recognition in rats revealed by visual priming. *J. Neurosci.* 32, 21-34 [link] [pdf]

Zoccolan D, Graham JB & Cox DD (2010). A self-calibrating, camera-based eye tracker for the recording of rodent eye movement. *Front. Neurosci.* 4:193 [link] [pdf]

Zoccolan D\*, Oertelt N\*, DiCarlo JJ & Cox DD (2009). A rodent model for the study of invariant visual object recognition. *Proc. Natl. Acad. Sci. USA* 106, 8748-53 [link] [pdf] [Supp Inf]

Li N, Cox DD, Zoccolan D & DiCarlo JJ (2009). What response properties do individual neurons need to underlie object recognition in clutter? *J. Neurophys.* 102, 360-376 [link] [pdf]

Zoccolan D, Kouh M, Poggio T & DiCarlo JJ (2007). Trade-off between object selectivity and tolerance in monkey inferotemporal cortex. J. Neurosci. 27, 12292-12307 [link] [pdf] [Supp Inf]

Zoccolan D\*, Cox DD\* & DiCarlo JJ (2005). Multiple object response normalization in monkey inferotemporal cortex. J. Neurosci. 25, 8150-64 [link] [pdf]





# What you need to prove

di San Paolo

di San Paolo Grant

(2008)

#### - you are successful at getting grants

#### Funding

We are grateful for the following funding support: **Currently active** European Research Human Frontier Council (ERC) Science Program erc **Consolidator Grant** Grant (2013) (2013)Total amount of awarded Partners: Winrich Freiwald, Mathew Diamond, Rodrigo Q. Quiroga, Haim Sompolinsky grants: Marie Curie International **Reintegration Grant** ~665,000 € (2010)Former support FVG-R2B: Compagnia di San FRILLI Ricerca per la COMPAGNIA Paolo: Programma competitivita' di San Paolo Neuroscienze dell'impresa REGIONE AUTONOMA FRIULI VENEZIA GIULIA 2008/2009 Partner: Riccardo Zecchina Accademia Nazionale Young SISSA COMPAGNIA dei Lincei - Compagnia \*\*\*

Scientist Grant

(2011)

SISSA

enterprise

europe

network

\*\*\*\*

Rashess Support on Your Doors





# CV Analysis\*\*

- Publications without the PhD Supervisor VS Total number of publications
- International Mobility
- Examples of Prizes and Awards

\*\*Data collected for 20 ERC winners





## Publications without the PhD Supervisor: a comparison

#### Some Remarks:

- No researchers with zero publications without the PhD Supervisor
- Considering the CVs investigated on average the publications without the PhD Supervisor are **59,4**%
- More than half of researchers have more than 20 publications without their PhD supervisor

N° of publ. without PhD Supervisor	N° of researchers
0	0/20
1 to 20	8/20
> 20	12/20





## Mobility: some remarks

- 18/19\* Pls have at least one important international experience
- In 2 cases where there are few experiences abroad, this is offset by the mobility within the country of
- origin or by a huge participation in international events
- The minimum stay (1 case) is 2 months
- Experiences are mainly long periods (more than one year)





#### Ex.of Awards/Grants

- Marie Curie Grant
- European Physical Society
- European Young Investigator award
- European Contest for Young Scientist
- ANR Chair d'Excellence
- AFOSR Young Investigator Award
- Humboldt Foundation
- FIRB
- Rita Levi Montalcini
- SIF
- SIGRAV prize of the Italian society of General relativity and Gravitation





# **Positive evaluations of CV**/1

- Several publications are single authored showing <u>research</u> independence and creativity. Important research mobility, ex MC fellow
- The track record involves many publications in high end journals and the citations are very good and promising considering age of the applicant. Also the number of invited talks and supervision of students are above average and guarantee a high degree of scientific independence of the application
- World leading expert in his field with several important research achievements of wide impact in the community. He is a main player of his field.





Main Weaknesses (CV):

- Few important publications without the PhD Supervisor
- Scarce international mobility
- Lack of personal funding
- Low experience in participation/management of international projects





# Evaluations of CV (score B)

- It appears that the proposer has exclusively published with experimental consortia involving large (and alphabetic) author list. There is not a single research paper with would allow to access the ability of independent thinking to be clearly distinguished from the competence and expertise of the collaboration, a problem common to many applicants who work primarily or even exclusively under such circumstances. Yet, there are sufficient examples where collaborativework and individual competence develop on similar grounds, offering exceptional scientist to distinguish themselves.
- The PI has a long list of publications in refereed journal but with a low level of citations. Good past performance with the appropriate expertise
- Very good scientist in his field. The PI is very active in teaching activities and in participating to collective outreach, and popularizing sciences, etc... The PI has shown independent thinking by publishing number of articles without his supervisor. He is already an expert that has had a lot of responsibility. He already has a scientific reputation as shown by the numerous grants he has obtained





## SECTION B1: TRACK RECORD

 Applicant's last name
 Part B1
 ACRONYM

 Section c: Early achievements track-record (max. 2 pages)
 (see 'Information for Applicants to the Starting and Consolidator Grant 2014 Calls'- instructions for completing 'Part B' of the proposal)




# SECTION B1: TRACK RECORD

- 1c early achievement/ten years track record (2 pagine)
- ✓ Pubblicazioni (*StG e CoG: specificando quelle senza il PhD supervisors*) in importanti riviste internazionali
- ✓ Monografie
- Brevetti
- ✓ Invited presentations in conferenze internazionali
- Premi e concorsi





# LA PROPOSTA B1: IL PRINCIPAL INVESTIGATOR – TRACK RECORD (STG- COG)

- ✓ Introdurre le singole sezioni specificando che si elencano solo i lavori più rilevanti su un totale di *X*
- ✓ Mettere in risalto i lavori senza il PhD supervisor
- terminare con un' affermazione per giustificare che si è al punto giusto della carriera per intraprendere questo passo





# LA PROPOSTA B1: IL PRINCIPAL INVESTIGATOR – TRACK RECORD (STG- COG)

- È importante dimostrare la propria leadership. Inserire esempi nel track record:
  - ✓ Student supervision history → where they are now, their funding successes, etc
  - Experience in leading research collaboration (national and international)





Applicant's last name

ACRONYM

ERC Starting Grant 2014 Research proposal [Part B2)]1 (not evaluated in Step 1)

Part B2

Part B2: The scientific proposal (max. 15 pages)

Please respect the following formatting constraints: Times New Roman, Arial or similar, at least font size 11, margins (2.0 cm side and 1.5 cm top and bottom), single line spacing.

Section a. State-of-the-art and objectives

Section b. Methodology

Applicant's last name

ACRONYM

#### Section c. Resources (including project costs)

(Note: State and fully justify the amount of funding considered necessary to fulfil the objectives for the duration of the project. To facilitate the assessment of resources by the panels, the use of the following budget table is strongly suggested. All eligible costs requested, should be included in the budget. Please use + whole Euro values only.)

Part B2

Cost C	ategory	Total in Euro							
		PI3							
		Senior Staff							
	Personnel	Postdocs							
		Students							
		Other							
Direct	i. Total Direct co								
Costs <sup>2</sup>	Travel								
	Equipment								
		Consumables							
	Other goods and services	Publications (including Open Access fees), etc.							
		Other (please specify)							
	ii. Total Other D								
A-Tot	A - Total Direct Costs (i + ii) (in Euro)								
B-Ind	B - Indirect Costs (overheads) 25% of Direct Costs <sup>4</sup> (in Euro)								
C1 – Su	C1 - Subcontracting Costs (no overheads) (in Euro)								
C2 - Ot	her Direct Costs	with no overheads <sup>5</sup> (in Euro)							
Total E:	stimated Eligible	Costs $(A + B + C)$ (in Euro) <sup>6</sup>							
Total R	equested EU Con	tribution (in Euro) <sup>6</sup>							

The project cost estimation should be as accurate as possible. Significant mathematical mistakes may reflect poorly on the credibility of the budget table and the proposal overall. The evaluation panels assess the estimated costs carefully; unjustified budgets will be consequently reduced.

The requested contribution should be in proportion to the actual needs to fulfil the objectives of the project.

For the above cost table, please indicate the % of working time the PI dedicates to the project over the period of the grant:

Specify briefly your commitment to the project and how much time you are willing to devote to the proposed project in the resources section. Please note that you are expected to devote at least 50% of your total working time to the ERC-funded project and spend at least 50% of your total working time in an EU Member State or Associated Country.

(see 'Information for Applicants to the Starting and Consolidator Grant 2014 Calls' for details). \* These figures MUST match those presented in the online proposal submission form, section 3 - Budget



<sup>&</sup>lt;sup>2</sup> An additional cost category 'Direct costing for Large Research Infrastructures' applicable to H2020 can be added to this table (below 'Other Goods and services') for PIs who are hosted by institutions with Large Research Infrastructures of a value of at least EUR 20 million and only after having received a positive ex-ante assessment from the Commission's services (see 'Information for Applicants to the Starting and Consolidator Grant 2014 Calls' for more details). <sup>2</sup> When calculating the salary, please take into account the percentage of your dedicated working time to run the ERC

funded project (i.e. minimum 50% of your total working time).

<sup>&</sup>lt;sup>6</sup> Please note that the overheads are fixed to a flat rate of exactly 25%.

<sup>&</sup>quot;Such as the costs of resources made available by third parties which are not used on the premises of the beneficiary

### **Scientific Proposal**

E' la descrizione degli aspetti scientifici e tecnici della proposta, della natura innovativa e di rottura, il suo potenziale impatto e la metodologia di ricerca

#### Indicare:

- gli obiettivi della proposta
- ✓ il planning delle attività previste
- elementi circa l'esecuzione
- le risorse necessarie





- Indicare e descrivere il tempo del PI dedicato al progetto (almeno 50% del tempo produttivo per StG, 40% del tempo produttivo per CoG, 30% per AdG)
- ✓ Lunghezza massima: 15 pagine, incluso il budget





#### NON COPIARE O INCOLLARE PARTI DEL B2 NEL B1 E VICEVERSA!

- Non fare riferimenti al B2 nel B1 e viceversa.
- Ogni singola parte deve essere indipendente.





✓ Spiegare perchè il progetto "deve" essere finanziato e perchè in questo momento

✓II ruolo del PI deve essere centrale in ogni sezione

 La proposta deve essere dettagliata ma anche concisa, strutturata e chiara, NON NOIOSA





I progetti "rischiosi" sono molto apprezzati ma è necessario:

Evidenziare che si è consapevoli dei rischi e di come gestirli

- Evidenziarne i potenziali benefici e l'impatto
- ✓ Presentare un "Piano B"
- ✓La fattibilità deve essere chiara





Sottolineate:

- Differenze dalla vostra precedente ricerca
- Vantaggi rispetto ai vostri competitori
- La specificità della vostra preparazione e delle opportunità offerte dalla HI
- La rilevanza del contributo ERC





# SECTION B2 – PARAGRAFI

#### a. <u>State of the art and objectives</u>

- ✓ Specificare gli obiettivi del progetto
- Avanzamento rispetto allo stato dell'arte
- Spiegare in che modo e perché il progetto è importante per quel campo di ricerca, qualsiasi particolare aspetto non convenzionale o di sfida del progetto, inclusi aspetti multi o inter- disciplinari





# SECTION B2 – PARAGRAFI

# **b. METODOLOGIA**

- Descrivere la metodologia in modo dettagliato
- Indicare gli obiettivi intermedi della ricerca
- Spiegare e giustificare la metodologia scelta, evidenziando gli aspetti nuovi o non-convenzionali, la tempistica, le risorse
- ✓ Indicare gli step intermedi che potrebbero richiedere aggiustamenti al project planning





# LA PROPOSTA B2B: METODOLOGIA (2)

Strutturare l'attività di ricerca per "work package" o "Step" o "Phase", indicando anche:

✓le risorse (umane) coinvolte

✓i tempi di svolgimento

ed eventuali interazioni/sovrapposizioni con altri work packages





# LA PROPOSTA B2B: METODOLOGIA (3)

- 5 anni (durata più comune dei progetti) sono tanti e i valutatori sanno che non tutto quello che scrivete potrà essere realizzato
- Una pianificazione delle attività, meglio se dettagliata, rende evidente che avete chiaro come sviluppare il progetto
- Gli sviluppi successivi dipenderanno dai risultati ottenuti in una prima fase. Un'analisi del rischio ben fatta e la descrizione di possibili scenari è molto apprezzata
- Siate realistici negli obiettivi e nei milestones considerando le forze a disposizione





# LA PROPOSTA B2B: METODOLOGIA (4)

- Nessuno si aspetta (o crede) che facciate tutto da soli
- Le collaborazioni sono importanti ma non devono essere «indispensabili» e sminuire così il ruolo del Principal Investigator, vero perno del progetto
- Evitate la struttura a «network»; non è questo il programma di finanziamento adatto





# Panel recommendations 2018 – Format and CV

- The applicants should be reminded to respect the instructions about font size, margins and line spacing.
- The applicants should be instructed, through the national contact points, NOT to use wildly inflated and rhetorical language
- The applicants should refrain from use of bold and italics to highlight regular text, or at least not to overuse them. In some cases five to ten percent of the text is in bold, with words, phrases, or whole sentence put in bold in almost every paragraph. In other cases, bold is used thoughout proposals for gratuitous self-inflating, rather than substantive, points. It detracts, rather than enhances the ability of panellists and reviewers to follow the flow of argument.
- The publication lists are variable. Those including a description of the content and role of author are considered favourably....
- In case the applicants present citation metrics data of their publication record, the source should clearly be defined (like Web of Knowledge, Scopus, or Google Scholar), and also, whether the numbers refer to dependent or independent citations and at what date
- In case of patents mention the status
- State the origin of the pictures/figures used in their presentations (copyright)





# Panel recommendations 2018 – Project

- The applicants should identify who, from their current collaborators will collaborate on the project (the applicants should be reminded that the proposals are individual projects and not group efforts)
- The applicants should be encouraged to state their career breaks without fear of being somehow penalised. It should be seen as an advantage rather than a disadvantage
- Many projects could be of shorter duration to answer the research question or implement the research idea. Some budgets and proposals have been inflated to max out the amount of funds attainable. Candidates expand the project in order to make it fit a maximum.
- Justification for additional budget should be based on scientific reasons
- A strong justification shall be required for additional budget for major equipment, including elements such as an estimate of the fraction of time that the instrument will be used for the purpose of the project, unavailability of the instrument at the HI, waiting time compromising the successful implementation of the project etc.
- The panel would have liked to have more information on the extra major funding requested.... Including, for example, quotes/details on the price of instruments, cost analysis etc.
- Synergy or synergetic aspects not well understood by applicants: it was either presented as intedisciplinary or multidisciplinary collaboration or complementarity of methods or content, but it is meant for aplicants to go for something new, at least to open a new perspective of creating something new.





# **CONFEZIONAMENTO E RIFINITURE (1)**

**Opinione di un valutatore:** 

"Un proponente che non dedica abbastanza tempo alla redazione di una proposta chiara e piacevole, trasferisce tutto il lavoro ai valutatori, che devono lottare per scovarne l'essenza. Un PI che ha pensato a come far risparmiare tempo ai valutatori ha molte più chance "







Tips &

Tricks

# **CONFEZIONAMENTO E RIFINITURE (2)**

## Cosa significa?

## In termini di struttura:

- Suddivisione del testo: titoli, paragrafi, ecc.
- Elenchi puntati e numerati
- Inserimento di grafici e tabelle
- Formattazione per evidenziare i punti salienti
- Testo leggero e semplice da leggere





# CONFEZIONAMENTO E RIFINITURE (3)

## Cosa significa?

In termini di contenuto:

- Idea, obiettivi e metodi chiaramente strutturati e identificabili
- Dare evidenza della fattibilità attraverso una chiara descrizione della metodologia e delle risorse
- Evitare ripetizioni
- Non dare per scontata la conoscenza di acronimi





# PER FINIRE...(1)

- Focus sul PI: sa andare da solo e distinguersi dalla "massa"
- no 'network' o 'consorzi'! Partecipazione di altri enti se necessario e giustificato per fini scientifici
- Disseminazione dei risultati della ricerca: Open Access
- Attenzione agli aspetti etici





# PER FINIRE...(2)

Leggere la proposta "nei panni" del valutatore

- Acronimo accattivante!!! (<u>http://acronymcreator.net/</u>)
- Extended synopsis fornisce un quadro completo della proposta?
- La proposta- risponde alle domande "What, why, how, why now, why you?"
- Controllare le indicazioni relative al formato
- Non superare il limite di pp. consentito
- Non allegare documenti non richiesti
- Sottoporre il budget ad un amministrativo e all'NCP
- Sottoporre la proposta ad un madrelingua inglese





# ANNEXES





# H.I. SUPPORT LETTER

#### Print on paper bearing the official letterhead of the host institution

#### Commitment of the host institution for ERC Calls 2014<sup>1, 2, 3</sup>

The **Explassafill** in here the name of the legal antity that is associated to the proposal and may boat the principal investigator, and the project in case the application is successfully. Which is the applicant legal entity,

confirms its intention to sign a supplementary agreement with set in bere the name of the principal investigator>>]

in which the obligations listed below will be addressed should the proposal entitled

be retained.

Performance obligations of the applicant legal entity that will become the beneficiary of the grant agreement, should the proposal be retained and the preparation of the grant agreement be successfully concluded:

The applicant legal entity commits itself to engage the principal investigator for the duration of the grant to:

- a) ensure that the work will be performed under the scientific guidance of the principal investigator who is expected to devote:
  - in the case of a Starting or Consolidator Grant at least 50% of her/his total working time to the ERC-funded project and spend at least 50% of her/his total

working time in an EU Member State or associated country;

- in the case of an Advanced Grant at least 30% of her/his total working time to the ERC-funded project and spend at least 50% of her/his total working time in an EU Member State or associated country.

- b) carry out the work to be performed, as it will be identified in Annex 1 of the ERC Grant Agreement, taking into consideration the specific role of the principal investigator;
- establish a supplementary agreement with the principal investigator which specifies that the applicant legal entity shall:





<sup>&</sup>lt;sup>1</sup> Ascanned copy of the signed statement should be uploaded electronically via the Participant Portal Submission Service in PDF format.

<sup>&</sup>lt;sup>2</sup> The statement of commitment of the host institution refers to most obligations of the host institution, which are stated in the ERC grant agreement. The ERC model grant agreement is available on the ERC website at <u>http://erc.europa.eu\_and via</u>

http://ec.eur.op.a.e.u/research/particilplants/portal/desktop/en/funding/reference\_docs.html,

<sup>&</sup>lt;sup>3</sup> This statement (on letterhead paper) shall be signed by the institution's legal representative and stating his/her name, function, email address and stamp of the institution.

# ALTRI ALLEGATI

- ✓ Annex Etico(se applicabile) <u>https://bit.ly/1Br5nYi</u> «How to complete your ethic self-assessment»
- ✓ certificato di dottorato
- ✓ Eventuali documenti comprovanti interruzioni di carriera (maternità, paternità e malattia)





# Il «nuovo» budget nei progetti ERC





# IL BUDGET E LA PROPOSTA

Tabella del budget da compilare direttamente online

Sezione del Form A dedicata al budget: tabella + giustificativo PART A – online forms A1 :Proposal and PI info A2 :HI info A3 : Budget PART B1 – pdf Extended Synopsis : 5 pp CV :2 pp Track Record : 2pp

Nessuna sezione dedicata al budget. SI suggerisce di includere un breve paragrafo/frase sintetica.

enterprise

Nessuna sezione dedicata al budget.

<u>PART B2 –pdf</u>

Proposal: 15 pp

<u>Annexes – pdf</u>

Support letter HI Annex Ethical Issues (if applicable)



# Novità bando 2019 e Work Programme 2020

- Resources section submission form A
- Resources description and budget table
- AdG 2019 first call with new section 3
- Replaces former Part B2 section c. Resources
- Will be made available to experts as a separate document in Step 2





# Il nuovo template



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# Le novità:

ec.europa.eu/research/participants/data/ref/h2020/other/guides\_for\_applicants/h2 020-guide19-erc-adg\_en.pdf

**Version 2.0** clarifies the page limit of the "Scientific Proposal" as set out in the ERC WP 2019. Changes were introduced on page 16, 18 and 19 of Information for Applicants to the Advanced Grant 2019 version 1.0. The **15 pages limit** includes sections (a) and (b) of the Part B2 template and section (c) – Resources present in the online submission form.

The limit of 15 pages applicable to the 'Scientific Proposal' as per the ERC WP 2019 will apply to Part B2 and the descriptive part of the resources (Section C. Resources). The budget table will not count against this page limit.

Section 3 – Budget (included in the submission form)

PLEASE NOTE: The budget table and description of resources are now part of the online submission form (Section 3 – Budget). The description of resources (Section C. Resources) counts towards the page limit of 15 pages for the Scientific Proposal.





# Why?

# Structured collection of data Less mistakes, clarifications and corrections Figures will be propagated to granting system





# The new online budget table

	Direct costs													A. Total Direct Costs	B. Indirect	C1. Subcontracti	C2. Costs of inkind	Total Estimated	Requeste EU	
	Personnel					Other direct costs A.3 Internally									Costs	ng Costs	contribution s not used	Eligible Costs	contribution	
	PI	Senior Staff	Postdocs	Students	Other Personnel	A.1. Total direct costs	Travel	Equipment - including		Other goods	and services		A.2. Total Other Direct	invoiced goods and				on the beneficiary's		
Beneficiary Short Name				costs	costs for personnel		major equipment		Consum- ables incl.         Publications (incl. Open additional Access fees)         Other additional services         Total other goods and services           and animal         and         and         irrect costs         services			Costs	Costs services				premises			
	?				2				costs	disseminatio n	?			2				2		
The Chancellor, Masters And Scholars Of The University Of Oxford	150000	152000	365000	123000	0	790000.00	60000	395000	106000	35000	0	141000.00	596000.00	96000	1623000.00	405750.00	10000	25000	2063750.00	(
Total	150000	152000	365000	123000	0	790000.00	60000	395000	106000	35000	0	141000.00	596000.00	96000	1623000.00	405750.00	10000	25000	2063750.00	

- ONE **budget line** per beneficiary / linked third party
- Include other third parties' costs in the budget of the beneficiary paying them
- All costs and the Pl time commitment have to be described and justified in the text box below the budget table



3 - Budget



# **Resources – the narrative part**

Proposal Submission Forms European Research Council Executive Agency
Proposal ID SEP-210591201 Acronym vivarc
Section C. Recources
Important: This section replaces the former section 'C. Resources' of the Part B2. The information explaining your resources and the budget should not appear in your Part B2 document.
State and fully justify the amount of funding considered necessary to fulfil the objectives for the duration of the project. The project cost estimation should be as accurate as possible. The evaluation panels assess the estimated costs carefully; unjustified budgets will be consequently reduced. Maximum 5000 characters allowed.
Please specify the cost items covered by your 'Other personnel costs' category if applicable. Please also specify the cost items covered by your 'Other additional direct costs' category if applicable.
Request for additional funding if applicable (All items MUST be included in the overall budget table above): (Cost in EUR) Justification:
Please indicate the % of working time the PI dedicates to the project over the period of the grant: %

1. Organize cost justification per legal entity involved:

HI (3rd parties) / Additional beneficiaries (3rd parties)

- 2. Organize explanations heading by heading (use terminology of the budget table)
- **3.** If you request **additional funding** you must describe and justify this request clearly in a separate paragraph

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**4.** Remember to list the **PI's time commitment**!

Maximum 8000 charachters (corresponding to 2 pages)



# Esempio Budget

		200,000
	Personnel	300.000
	Travel	10.000
	Equipment	400.000
	Other goods and services	50.000
Somma Costi personale + equipment + travel + other costs	A – Total Direct Costs (i + ii) (in euro)	760.000
25% dei costi diretti esclusi i subcontratti	B – Indirect Costs (overheads) 25% of Direct Costs (in euro)	190.000
Subcontratti, se presenti	C1 – Subcontracting Costs (no overheads) (in euro)	10.000
Parti terzi che non usano le sedi del beneficiario	C2 – Other Direct Costs with no overheads (in euro)	30.000
Totale di tutti i costi eleggibili	<b>Total Estimated Eligible Costs (A + B + C)</b> (in euro)	990.000
Totale del contributo richiedibile (100%) Solitamente uguale a voce <i>Total Estimated Eligible Costs</i>	Total Requested Grant (in euro)	990.000

# Previous recommendations from panels on proposal budgets

• Reliable estimates (General feeling that some applicants are under pressure to try to max out the attainable funds

• No attempt to maximise funds (Applicants should only ask the necessary funds to achieve a successful implementation of the project)

- Team management/size of team
- Justify expected project duration
- Strong justification for additional budget





# I PUNTI DI CONTATTO NAZIONALE






# Grazie dell'attenzione

### **APRE**

Agenzia per la Promozione della Ricerca europea via Cavour, 71 00184 - Roma <u>www.apre.it</u> Tel. (+39) 06-48939993 Fax. (+39) 06-48902550







# ERC Grants in Horizon 2020: Punti di forza e debolezza





# **ESR ERC-STG-2016, STEP 1: VOTO B** SH5 Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, arts, philosophy PANEL COMMENT

This evaluation report contains the final score awarded by the ERC review panel during the first step of the ERC Starting Grant review and the ranking range. The discussion of the panel was conducted within the context of the individual reviews submitted by ERC panel members.

The panel closely examined all the individual review reports and, while not necessarily subscribing to each and every opinion expressed, found that they provide a fair overall assessment. The comments of the individual reviewers were the basis for the discussion and the final recommendation of the panel, and are included in this report.

The panel is impressed by the qualifications of the PI. What is more, this proposal shows a lot of creativity and spirit. However, the proposal evokes the relevance of neuroscience, while in what form or in what ways neuroscience might be mobilised is insufficiently developed. In addition, a large part of the proposal is dedicated to applying findings from the theatre to health care. It is not clear if this is new research or valorisation. The panel also misses considerations relating to the movement treatments currently existing in health care.

Overall the panel considers this proposal to be of reasonably good quality. However, based on the combined set of criteria used in the assessment it was not ranked highly enough to be retained for Step 2. The panel therefore recommends that the proposal should not be retained for Step 2 and should not be considered for funding.



Ground-breaking nature and potential impact of the research project

This original proposal has the laudable aim of bringing neurosciences into the frame of performance studies, as an equal partner. It challenges an existing dichotomy in theory of embodiment, which pitted mind against body. The long introduction identifying this and other gaps and flaws in the scholarship surrounding embodiment, although somewhat descriptive, is generally persuasive about the gains to be made from this conjoining of perspectives.

A key objective and a very important potential gain from this research would be the extension of the findings for actors to enhance wellness of non-actors. This is a high risk-high gain area, the main risk being that transferability might be difficult to establish, or only nebulous results might emerge. It would be interesting to have an indication of the PI's preliminary expectations/suppositions in this regard (see below).

Scientific Approach

Further precision would be helpful when it comes to how exactly the research can be conducted. Although general research questions are outlined and the emphasis is squarely put on 'entangled' collaboration, more information conveying what might take place in workshops, some idea of what experiments are tentatively envisaged (recognizing that their design would be the fruit of collaboration) and how they would be conducted, would be welcome, given the emphasis on practice-based investigation. The relative difficulty of managing research across disciplines is a potential risk, especially when the disciplines are set rather far apart. The PI shows good awareness of the risk of superficial engagement and has experience of working in this kind of team. Overall this work appears feasible.

Principal Investigator	
To what extent has the PI demonstrated the ability to propose and conduct ground- breaking research?	Excellent
To what extent does the PI provide evidence of creative independent thinking?	Very good
To what extent have the achievements of the PI typically gone beyond the state of the art?	Very good

### ESR ERC-STG-2016, STEP 2: FINANZIATO

### SH5 Cultures and Cultural Production: Literature, philology, cultural studies, anthropology, arts, philosophy PANEL COMMENT

This evaluation report contains the final recommendations and score awarded by the ERC review panel during the second step of the ERC Starting Grant review and the ranking range. The discussion of the panel was conducted within the context of prior reviews submitted by ERC panel members and external referees and the interview with the applicant.

The panel closely examined all the individual review reports and, while not necessarily subscribing to each and every opinion expressed, found that they provide a fair overall assessment. The comments of the individual reviewers are included in this report.

The presentation given by the applicant during the interview and the answers to the questions that were addressed greatly contributed to build the panel's view about the proposal's strengths and weaknesses.

Both the individual reviews and the interview were the basis for the discussion and the final recommendation of the panel.

The panel is impressed by the PI's work and his proven ability to work across different languages in fieldwork, and his publications. The panel also appreciates the PI's international academic network and the interesting way in which colleagues from diverse institutions are brought in to do the collaborative work envisaged in the proposal. There is some concern about the possibilities for the junior team members to carve out their own projects but overall the collaborative organisation of the project appears to be well planned. The PI convincingly argues for the intellectual relevance of the proposed research, although some key terms (e.g. practice or culture) could be defined more clearly. However, overall the proposal clearly outlines its ambition to study political vocabularies, that is to say the shifting possibilities for articulating what it is to be a political subject, and their relations to changing versions of Islam across different field sites in the Western Sahara.



The panel therefore recommends the proposal to be retained for funding with a grant not exceeding 1 192 144.00 Euro.

prise be ork

### Ground-breaking nature and potential impact of the research project

The key feature of this proposal is that it will add ethnographically to our knowledge of an area of the world that is not well known but is of considerable geo-political significance. It is a difficult area to access because of the geographical, political and social challenges it presents, but the PI and the proposed team have or would have the necessary knowledge and contacts to gain access. The claim to be ground-breaking is the ambition to engage ethnographically with 'the plural dialogues established between different political imaginations currently in place across the whole region'. The claim is that in an area of 'social and geographical permeability' close ethnographic readings of particular areas and communities are necessary in order to gain an accurate insight into the politics, cultural identities and social dynamics of this vast region of the Sahara and West Africa. The proposal wishes to both engage in local ethnographers and to understand the vertical social structures across the region in a way that will allow comparison. Most studies to date have focused on the lower and higher ends of the social spectrum rather than on the middle, majority, of the population. This is a deficit the proposal wishes to address. The proposal is ambitious in wishing to cover and compare several regions and communities. Historical data, regional politics and state ideologies will all be considered as part of the data base. The risk is less that the researchers will not come up with interesting and original data, but that the comparative aspects of the project might not be fully realised. The inclusion of international experts and locally recruited researchers should make this an interesting and potentially fruitful piece of research.

### Scientific Approach

The scientific approach looks feasible, with a combination of an established scholar in the PI who has previously carried out research in the region, junior researchers, some of whom will be recruited from the areas concerned, and <u>senior academics who will be directly involved for a smaller percentage of time, and act as advisors. Each new</u> researcher will be introduced to their area by someone with previous experience there, which should help gaining access and allowing the researcher to settle in quickly. The methods are largely standard anthropological ones, combining participant observation, historical and archival research with interviewing and scanning secondary literature. The timescale and resources look reasonable although it is not clear when the doctoral and post-doctoral students will actually write up their research. It is stated that junior researchers will spend time at named international centres for the study of West Africa but it is not clear whether they will all spend time at all these institutions, or whether each will be assigned an institution to act as a base for their activities.





# ESR ERC-COG-2017, STEP 1: VOTO B LS7 Applied Medical Technologies, Diagnostics, Therapies and Pu

### PANEL COMMENT

This evaluation report contains the final score awarded by the ERC review panel during the first step of the ERC Consolidator Grant review and the ranking range. The discussion of the panel was conducted within the context of the individual reviews submitted by ERC panel members.

The panel closely examined all the individual review reports and, while not necessarily subscribing to each and every opinion expressed, found that they provide a fair overall assessment. The comments of the individual reviewers were the basis for the discussion and the final recommendation of the panel, and are included in this report.

The Panel agreed on the value of having transplantable scaffolds where human follicles can survive. offering novel reproductive opportunities to female cancer patients, and appreciated the importance of the proposed advances in an arena for which there are few alternative solutions. The panel also recognized the breadth and expertise of the PI in the relevant arenas. However, the Panel also felt that while the proposal is novel in its application to follicle viability, these basic challenges have been faced more broadly in tissue engineering and the approach and methodology is not very novel. The Panel also felt that the proposal seemed so ambitious that it is unclear if it could be encompassed within a single project. The panel had several specific concerns, for example the approach to determination of the biomechanical micro-environment lacks sufficient discussion to estimate its feasibility and it was also felt that the description of key risks and contingencies was still lacking.

Overall the panel considers this proposal to be of reasonably good quality. However, based on the combined set of criteria used in the assessment it was not ranked highly enough to be retained for Step 2. The panel therefore recommends that the proposal should not be retained for Step 2 and should not be considered for funding.





Ground-breaking nature and potential impact of the research project

The proposal attempts to address a key challenge in ovarian replacements. The PI uses the expertise in biomaterials, biofabrication and matrix biology to propose an approach to construct a transplantable artificial ovary. This is an extremely ambitious objective and the approach is classical in the tissue engineering context. The individual elements do not have much novelty, however the collective in this application is indeed novel. The proposed research is risky, but the gain will be high if successful. One needs to commend the PI to embark on such a complex clinical target.

### Scientific Approach

The scientific approach is simplistic in nature which follows a classical path: deconstruction of the tissue and then reconstruction. The complexity is oversimplified by assessing the protein composition, mechanical properties and

basing the construct on these known parameters. The disease state is underestimated and the underlying pathology needs to be understood before any approach is proposed. Decellularisation approach is proposed, which itself is not trivial as there have been several immunological failures in the field and complete decellularisation without any residues is extremely difficult. Although contingency plans are indicated, the PI is not thorough in assessing the bigger risks (i.e-denaturation of proteins etc).

More fundamentally the biology and basic science in the field is relatively unknown, hence a reconstruction approach has its inherent fallacies at the start.

Principal Investigator	
To what extent has the PI demonstrated the ability to propose and conduct ground- breaking research?	Very good
To what extent does the PI provide evidence of creative independent thinking?	Very good
To what extent have the achievements of the PI typically gone beyond the state of the art?	Very good



### ESR ERC-COG-2017, STEP 2: FINANZIATO

## LS7 Applied Medical Technologies, Diagnostics, Therapies and Public Health

### PANEL COMMENT

This evaluation report contains the final recommendations and score awarded by the ERC review panel during the second step of the ERC Consolidator Grant review and the ranking range. The discussion of the panel was conducted within the context of prior reviews submitted by ERC panel members and external referees and the interview with the applicant. The panel closely examined all the individual review reports and, while not necessarily subscribing to each and every opinion expressed, found that they provide a fair overall assessment. The comments of the individual reviewers are included in this report.	
The presentation given by the applicant during the interview and the answers to the questions that were addressed greatly contributed to build the panel's view about the proposal's strengths and weaknesses.	
Both the individual reviews and the interview were the basis for the discussion and the final recommendation of the panel. The panel acknowledged that understanding the different steps of blood cell formation is necessary for improving treatments in multiple haematological malignancies and conditions from infants to adults, and that the project aims to address this by modelling of data from extensive immunological phenotyping and genome-wide genetic variations determined in umbilical cord blood, bone marrow and peripheral blood in	
individuals, followed by functional assessments and disease associations. The panel finds that the project is quite extensive in terms of sample analyses and data that will be generated, but at the same time that the PI and his team have clearly demonstrated their ability in genetic studies of comparable extent, and that the PI has clear plans for screening of functional effects of a large number of candidate variants. The panel recognised the expertise of the PI for leading the project and, especially in haematology and genetic variants, as well as the expertise of his team to carry out the proposed project. The panel finds that the PI has an excellent track record with high-impact publications revealing genetic variants associated with haematological disorders. The panel concluded that the project is high risk/high gain including unique sample series and genetic resources and has a large potential to generate important findings.	

The use of human embryonic stem cells is necessary in order to achieve the scientific objectives set forth in the proposal.



The panel therefore recommends the proposal to be retained for funding with a grant not exceeding 2,000,000 Euro.



Ground-breaking nature and potential impact of the research project.

The project addresses the important issue of drug-resistance development in chronic lymphocytic leukaemia (CLL), the most common leukaemia in adults. Through two clinical trials, which the applicant has already designed and initiated, the mechanisms of development of the resistance to ibrutinib will be investigated. The objectives are ambitious and the applicant is aiming both to analyse the mechanisms of the resistance in the course of treatment of the patients (and to overcome the resistance by application of another compound - venetoclax) as well as to investigate the mechanisms of clonal evolution of resistance in the animal model.

The projects aims to elucidate the mechanisms of the ibrutinib resistance which is not known, however, in the current state does not offer well specified hypothesis which can be investigated besides looking for the changes using global

NGS approach. The novelty in the proposed approach relies on presumption that so far performed analysis of the blood of CLL patients are not sufficient for demonstrating the entire complexity of the ibrutinib-treated CLL. To this end the applicant is aiming to analyse the tumour DNA isolated from the plasma, which might reflect the analysis of the tissue compartments.

The execution of the project will provide the data which can deliver more information on the mechanisms of CLL resistance to the treatment. However, although the study is designed as mechanistic and aims to elaborate on the mechanisms of the resistance, the mechanistic approach to target the potential culprits responsible for the resistance is not sufficiently proven. This may be provided by executing the objective 2; however, overall, it is not sufficiently clear how this proposal can provide the data which will improve the effectiveness of the therapy.

Scientific Approach.

The extensive laboratory and clinical preparations of the applicant makes the project feasible, although the planned extent of work is really challenging. The clinical trials have been already designed and initiated what increases the chances for the effective project execution.

Strengths

Methodology is very well explained and the numerous details (maybe too numerous) are provided in part B2.

Extensive molecular characterization of the changes occurring during the development of clonal evolution will be performed and the significance of mutations already detected by the applicant in CLL and playing a role in resistance (NOtch1, SF3B1 and BIRC3) will be investigated.

 Animal xenograft models will be used to verify the observations from human studies. This part of the study will be crucial for elucidating the potential pathways which can be additionally targeted in CLL resistant to ibrutinib. Weaknesses

1. The drawbacks and limitations of the proposed approaches are not sufficiently discussed and the contingency plan is not outlined.

2. It is not sufficiently clear how the cellular programs promoting clonal evolution will be targeted and how this analysis can be applied to find the new models of treatment of CLL.

enterprise



# ESR ERC-ADG-2014, STEP 1: VOTO B

# PE7-Systems and Communication Engineering

### PANEL COMMENT

This evaluation report contains the final score awarded by the ERC review panel during the first step of the ERC Advanced Grant review and the ranking range. The discussion of the panel was conducted within the context of the individual reviews submitted by ERC panel members.

The panel closely examined all the individual review reports and, while not necessarily subscribing to each and every opinion expressed, found that they provide a fair overall assessment. The comments of the individual reviewers were the basis for the discussion and the final recommendation of the panel, and are included in this report.

The proposed research is very interesting and has a potential social impact of great relevance. It extends previous research by the PI to a different group of subjects, building on past successful experience. The disruptive character of the proposal is not sufficiently explained.

The PI is an undisputed leader in her field, and she enjoys wide international recognition for her past work. She has already demonstrated the capability of accomplishing research programs very similar to the one proposed here.

Overall the panel considers this proposal to be of reasonably good quality. However, based on the combined set of criteria used in the assessment it was not ranked highly enough to be retained for Step 2. The panel therefore recommends that the proposal should not be retained for Step 2 and should not be considered for funding.





Ground-breaking nature and potential impact of the research project:

First of all, the proposed work addresses relevant issues namely helping people with autism by means of a home companion. It is furthermore highly appreciated that the interdisciplinary approach combines fields as different as computer science and autism intervention. But all in all the proposal remains too broad and little concrete which makes it hard to clearly identify and assess both the novel concepts and high risk/gain issue.

#### Scientific Approach:

In the last years there have been an increasing number of projects on robots as home companions for the said target group. From this, - apart from general objectives - it is not clear what makes this proposal unique. Also, it does not become clear what has been achieved in the earlier project and what added value is unique to this proposal. Regarding potential risks, there is just a sentence indicating that these can be tackled by the great experience of both the PI and her team. While this might in fact be the case such statement does not convince with regards to a somewhat transparent view on risks and their potential mitigation.

Principal Investigator		
To what extent has the PI demonstrated the ability to propose and conduct ground- breaking research?	Very good	
To what extent does the PI provide evidence of creative independent thinking?	Excellent	
To what extent have the achievements of the PI typically gone beyond the state of the art?	Very good	
To what extent has the PI demonstrated sound leadership in the training and advancement of young scientists?	Very good	



### **Comments (Optional for reviewers)**

The PI is very active in the field and shows a strong commitment to the research aims. However, the academic CV lacks a little truly novel and unique concepts, methodologies or solutions.



# ESR ERC-ADG-2014, STEP 2: finanziato

# PE7-Systems and Communication Engineering PANEL COMMENT

This evaluation report contains the final recommendations and score awarded by the ERC review panel during the second step of the ERC Advanced Grant review and the ranking range. The discussion of the panel was conducted within the context of prior reviews submitted by ERC panel members and external referees.

The panel closely examined all the individual review reports and, while not necessarily subscribing to each and every opinion expressed, found that they provide a fair overall assessment, indicating the proposal's strengths and weaknesses. The comments of the individual reviewers are included in this report.

The individual reviews were the basis for the discussion and the final recommendation of the panel.

This proposal addresses the challenging integration of magnetic and electronic functions into a single system platform having digital, analog/RF and sensing capabilities, beyond the state-of-the art. The proposal is at the forefront of research in the respective area. The proposed scientific approach is high-risk/high-gain, and it has been considered feasible based on the detailed work plan with very well coordinated technological and design solutions, starting from the innovative STT-MRAM technology.

The PI has an impressive track-record in publications, patents, startups and grant applications in the field of magnetic devices and technologies. He is recognized internationally, with many invited talks.

The budget is considered appropriate.



The panel therefore recommends the proposal to be retained for funding with a grant not exceeding 2 500 000.00 Euro.



Ground-breaking nature and potential impact of the research project:

The project proposal is excellent. If successful the expectation is that this will help the European semiconductor industry to catch up with their international competitors. The project is clearly beyond state of the art and high risk /high gain. However, it appears not to be 100% clear from the proposal in how far some parts of the work may be based on the PI's earlier research work.

Scientific Approach:

The scientific approach is clear and appears well organized. Additionally, even in case the project team will not succeed in all set goals, even covering a part of them would lead to a significant increase in knowledge (which should be exploited in any case).

Principal Investigator	
To what extent has the PI demonstrated the ability to propose and conduct ground- breaking research?	Excellent
To what extent does the PI provide evidence of creative independent thinking?	Outstanding
To what extent have the achievements of the PI typically gone beyond the state of the art?	Outstanding
To what extent has the PI demonstrated sound leadership in the training and advancement of young scientists?	Excellent
To what extent does the PI demonstrate the level of commitment to the project necessary for its execution and the willingness to devote a significant amount of time to the project (min 30% of the total working time on it and min 50% in an EU Member State or Associated Country) (based on the full Scientific Proposal)?	Excellent



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The PI is an excellent expert and an internationally renowned scientist.	etwork