

IL NUOVO PROGRAMMA ERC IN HORIZON EUROPE

2 settembre 2021, Università degli Studi di Foggia

Marco Ferraro



Agenda

9.45	APERTURA DELLA SESSIONE VIRTUALE & CONNESSIONE DEI PARTECIPANTI
10.00	Introduzione al seminario
10.05	European Research Council: struttura e novità del nuovo programma dedicato all'Excellence Science. Gli schemi Starting, Consolidator, Advanced e Synergy Grant
11.00	Quali caratteristiche deve avere un CV ERC?
11.45	Sessione di domande
12.00	Fine dei lavori

SESSIONE DOMANDE

- ¶ collegarsi (da computer o telefonino) a www.sli.do
- ¶ inserire il codice 033811 (in alto, al centro della pagina):



CARATTERISTICHE DEI FINANZIAMENTI ERC

- Finanziamenti assegnati a ricercatori **individuali**
- **1 Progetto, 1 ricercatore, 1 istituto, 1 criterio di valutazione**
- Unico criterio di selezione: *ecellenza*
- Finanziamenti sostanziosi (1.5 mln € → 3.5 mln)
- Nessuna priorità tematica pre-definita ('su iniziativa dei ricercatori' – bottom-up);
- Aperto a **tutti i settori della scienza**
- No network ma TEAM
- Portabilità del finanziamento



ERC - 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)

Principali novità

1. Revisione della struttura dei panel ERC (a partire dallo Starting 2021), mantenendo l'approccio pre-esistente:
 - *Garantire un carico di lavoro equilibrato tra i panel*
 - *Coerenza disciplinare all'interno e tra i panel*
 - Modernizzare per riflettere meglio la realtà scientifica
2. Introduzione delle interviste negli Advanced Grant per consentire ai ricercatori di difendere le loro proposte e di tenere uno scambio diretto con i membri del panel

Nuova struttura dei panel: <https://bit.ly/2MW3GBX>

[Nuovi panel \(track changes\)](#)

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"



Cos'è la ricerca di frontiera?

Oggi la distinzione tra ricerca "di base" e "applicata" è minima, poiché le aree emergenti della scienza e della tecnologia spesso coprono elementi di entrambe.

Di conseguenza, il termine "ricerca di frontiera" è stato coniato per le attività ERC in quanto saranno dirette verso progressi fondamentali e oltre la "frontiera" della conoscenza.

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 Horizon Europe*

Team di ricerca individuale

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

Host Institution



HOST INSTITUTION

- Ente di ricerca, Università ma anche Industria
- Situato in un Paese Membro o Associato
- 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

Team di ricerca



RE

Team di ricerca: chi ne può far parte?

- Costituzione flessibile: post-doc, PhD students, senior researchers. No limiti di età, nazionalità e paese di residenza.
- 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)



ADDITIONAL PARTICIPANT

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

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

Team vs Network

I progetti ERC dovrebbero concentrarsi sulle competenze del PI e non fare affidamento sulla collaborazione per le parti centrali della ricerca.

*focus sul PI \Rightarrow no ‘network’ o ‘consorzi’!
partecipazione di altri enti se necessario per fini
scientifici*

Quando possono essere rilevanti le collaborazioni in ERC?

Le collaborazioni sono consentite, a condizione che:

- ¶ portino competenze o capacità specifiche e uniche, diverse e/o complementari con quelle del PI;
- ¶ sono necessarie per un compito specifico e complementare (alla ricerca di base);
- ¶ non ostacolino la leadership scientifica del PI nel progetto in generale, e in particolare sulla ricerca di base.



Esempi di casi supporto o input esterno e come prevederli nell'applicazione ERC:

Collaborazione supplementare / complementare: nel caso in cui al PI manchi una competenza specifica, che è supplementare o complementare alla ricerca principale, può essere consentita una collaborazione. Ad esempio, aggiungere uno statistico a un progetto basato su dati di biologia. Il PI progetterà e realizzerà le attività di ricerca e poi analizzerà i risultati. Nel frattempo, lo statistico aggiungerà una competenza statistica unica e specifica, consentendo al PI di completare il lavoro, comprendere meglio i dati e contribuire all'eccellenza scientifica complessiva del progetto. In particolare, questo è vero e fattibile quando il nucleo della ricerca si riferisce alle domande e ai metodi scientifici legati alla biologia. Al contrario, se per esempio una parte dominante del nucleo del progetto è lo sviluppo e l'implementazione di nuovi approcci statistici, si potrebbe sostenere che questo non è più un supporto complementare o complementare. Piuttosto, è uno sforzo collaborativo, quindi indesiderato in ERC.

Accesso a siti / dati: in alcuni progetti ERC, il PI potrebbe dover coinvolgere ricercatori che concedono essenzialmente l'accesso a siti o dati specifici. Questo può essere, ad esempio, un sito archeologico unico, un habitat naturale, un set di dati unico da uno studio clinico, ecc. Tale accesso a siti o dati, a condizione che non richieda una ricerca effettiva effettuata dal gruppo che lo fornisce, non deve essere presentato come una collaborazione in ERC. Invece, il PI può semplicemente indicare che ha accesso ai siti o ai dati, descrivendo i dettagli logistici e tecnici.



Esempi di casi supporto o input esterno e come prevederli nell'applicazione ERC (2):

Accesso a strutture di ricerca esclusive: analogamente al precedente, l'accesso a strutture o attrezzature di ricerca uniche (in genere tramite la collaborazione esistente con ricercatori in tale struttura), non è considerato come una collaborazione in ERC di per sé.

Il PI dovrebbe solo indicare che ha questo tipo di accesso. In particolare, a differenza dell'accesso ai siti / dati sopra descritti, questo tipo di relazione è tipicamente più incline ad estendersi oltre il solo accesso alla struttura e in effetti include un lavoro condiviso sulla ricerca di base, che è meno "gradito" in ERC. Il richiedente deve quindi valutare in modo chiaro e onesto la natura del lavoro con il collega che consente l'accesso alla struttura di ricerca. Preferibilmente, l'attività dovrebbe comportare solo l'accesso alla struttura. Se questo è davvero il caso, non è necessario etichettarlo come "collaborazione". Tuttavia, se il collega contribuirà effettivamente al lavoro nei compiti di ricerca di base, questo dovrebbe essere definito come una collaborazione in ERC. Fatto ciò, il richiedente dovrebbe rendersi conto che questo potrebbe non essere il benvenuto in ERC.

Limiti di partecipazione

Call to which the Principal Investigator applied under previous ERC Work Programmes and proposal evaluation outcome	2021 ERC calls to which a Principal Investigator is <i>not</i> eligible
2019 and 2020 Starting, Consolidator, Advanced Grant or Synergy Grant	Rejected on the grounds of a breach of research integrity Starting, Consolidator and Advanced Grant
2019 Starting, Consolidator or Advanced Grant	C at Step 1 Starting, Consolidator and Advanced Grant
2020 Starting, Consolidator or Advanced Grant	A, or B at Step 2 B, or C at Step 1 Starting, Consolidator and Advanced Grant
2020 Synergy Grant	A, or B at Step 3 B at Step 2 C at Step 1 No restriction No restriction Advanced Grant

ERC Starting Grant

StG: budget e durata

Quant'è grande un progetto?

- ✓ Durata fino a 5 anni
- ✓ Finanziamento fino a 1,5M€
- ✓ Max. 2,5M€ a progetto*

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

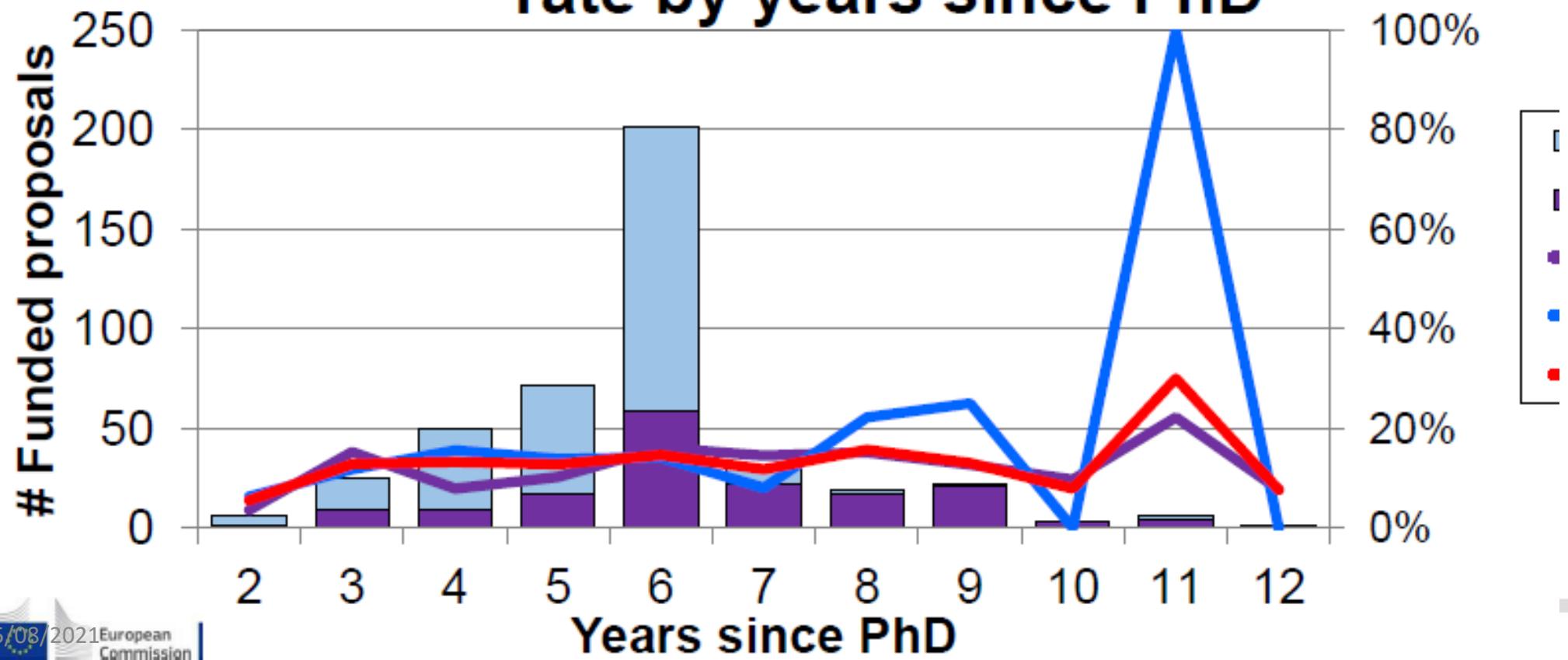
- PI da Paese terzo
- Acquisto di importante attrezzatura di ricerca
- Accesso ad infrastrutture di ricerca

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 50% del suo tempo lavorativo
- ✓ Unico responsabile del progetto, sia per l’ attività scientifica che per il management

STG 2020: Results by years since PhD

STG 2020 # Funded proposals and success rate by years since PhD





Principal Investigator: requisiti

- ✓ at least one important publication as main author or without the participation of their PhD supervisor.

Altri elementi di valutazione:

Early achievements track record

In the Track record (see “Proposal description”) the applicant Principal Investigator should list (if applicable):

- 1. Up to five publications in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided);***
- 2. Research monographs and any translations thereof;***
- 3. Granted patent(s);***
- 4. Invited presentations to internationally established conferences and/or international advanced schools;***
- 5. Prizes, awards, academy memberships.***



Principal Investigator: requisiti

Starting Grant

> 2 and \leq 7 years

prior to
1 January 2022

Cut-off dates:
PhD awarded from 1 January 2015 to 31 December 2019
(inclusive)

ERC Consolidator Grant

CoG: budget e durata

Quanto è grande un progetto?

- ✓ Durata fino a 5 anni
- ✓ Finanziamento fino a 2 M€
- ✓ Budget aggiuntivo 1M€ - Max. 3M€ a progetto*

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

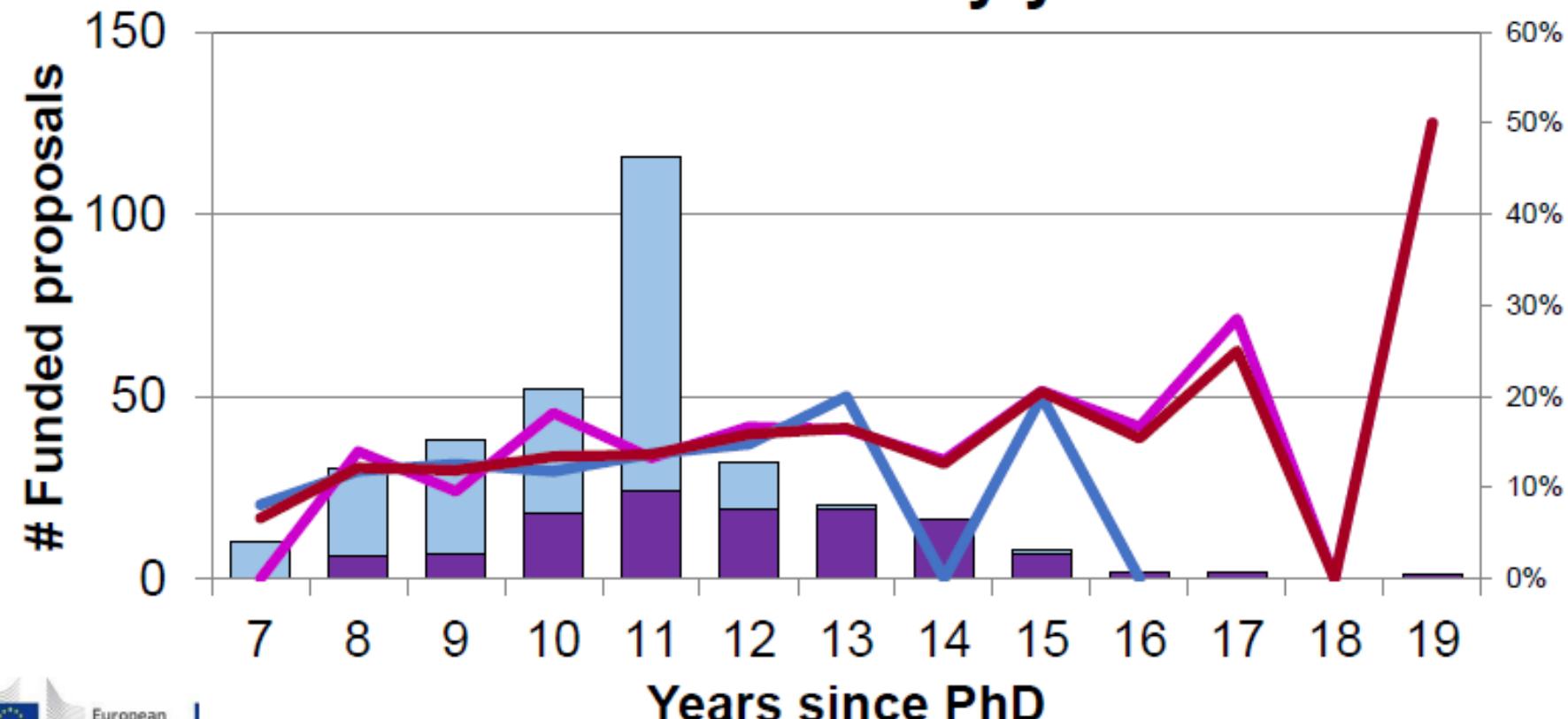
- PI da Paese terzo
- Acquisto di importante attrezzatura di ricerca
- Accesso ad infrastrutture di ricerca

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% del suo tempo lavorativo
- ✓ Unico responsabile del progetto, sia per l’attività scientifica che per il management

COG 2020: Results by years since PhD

COG 2020 Results by years since PhD





Principal Investigator: requisiti

- ✓ A competitive Consolidator Grant Principal Investigator must have already shown **research independence** and evidence of maturity, for example by having produced **several important publications as main author or without the participation of their PhD supervisor**.

Altri elementi di valutazione:

Early achievements track record

In the Track Record (see “Proposal description”) the applicant Principal Investigator should list (if applicable):

- 1. Up to ten publications in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided);*
- 2. Research monographs and any translations thereof;*
- 3. Granted patent(s);*
- 4. Invited presentations to internationally established conferences and/or international advanced schools;*
- 5. Prizes, awards, academy memberships.*



Principal Investigator: requisiti

Consolidator Grant

> 7 and \leq 12 years

prior to
1 January 2022

Cut-off dates:
PhD awarded from 1 January 2010 to 31
December 2014 (inclusive)



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
- Accesso ad 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 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

Caratteristiche del Synergy

- ¶ Budget indicativo previsto per il 2022: 297 M€
 - Per finanziare 33 progetti
- ¶ 2 ,3 o 4 Principal Investigator
- ¶ Nessuna restrizione sulla location del Principal Investigator (P.I.)
 - “PI can come from the same corridor in one HI, different HIs within one country, or from different countries (within EU or AC)”
- ¶ Uno dei PI del gruppo può essere strutturato presso una Host Institution non europea (ma non può essere Corresponding P.I.)

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: $\geq 50\%$ of working time in EU or AC and $\geq 30\%$ 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.



Come il termine “Synergy” si applica agli obiettivi dello schema?

Ogni progetto deve dimostrare che gli obiettivi saranno raggiunti solo tramite specifiche combinazioni di conoscenze e competenze dei PI.

Ogni progetto deve evidenziare gli effetti sinergici, cioè che il risultato finale sia notevolmente maggiore rispetto alla somma dei singoli elementi.



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

Criteri di valutazione

☒ 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

Overview of 2019 Frontier Research Calls



European Research Council
Established by the European Commission

2019	StG	CoG	AdG	SyG	Total
# Evaluated	3060	2425	1836	285	7606
Change from 2018	-2%	+2%	-9%	-1%	-2%
# Grants	408	318	185	38	949
Success rate	13%	13%	10%	13%	12%
Amount awarded EU (M€)	620	636	451	374	2081
Female participation	38%	32%	19%	23%	30%
Avg. size grants (M€)	1.52	2.00	2.43	9.8	
% of total spending	30%	30%	22%	18%	
Median age Grantee	35	40	52	51	





Ricercatori con laurea in medicina

A first degree in medicine will not be accepted by itself as equivalent to a PhD award. To be considered an eligible Principal Investigator, applicants holding a degree in medicine need to provide the certificates of both the medical degree and the PhD or proof of an appointment that requires doctoral equivalency (e.g. post-doctoral fellowship, professorship appointment), in order to further show the equivalence of their overall training to a PhD.

In these cases, the certified date of the medical degree completion plus two years (4-9 from MD for StG and 9-14 for CoG) is the reference date of the actual award used for the calculation of the eligibility period established for Starting and Consolidator Grants.



Breve guida per il calcolo della finestra di eleggibilità

- **If you have an MD degree but not a PhD:** you are eligible only if you held research positions (e.g. post-doctoral fellowship, professorship appointment) as well. In that case, your eligibility window will be 4 - 9 years, and 9 - 14 years past the MD award date for StG and CoG, respectively.
- **If you have both an MD and a PhD:**
 - If the PhD is first - your eligibility window will be 2 - 7 years past the PhD award date for Starting Grant, and 7 - 12 years past the PhD award date for Consolidator Grant.
 - If the MD is first – this will depend on whether you held research positions after your MD but before receiving your PhD. If so, the first eligible degree is the MD. In that case your eligibility window will be 4 - 9 years past the MD award date for the Starting Grant, and 9 - 14 years past the MD award date for the Consolidator Grant. However, if you have held no such positions between the MD and PhD, the MD will not be considered eligible and your first eligible degree will be your PhD. In that case, your eligibility window will be 2 - 7 years past the PhD award date for the Starting Grant, and 7 - 12 years for the Consolidator Grant



Principal Investigator: possibilità di estensione della finestra di eleggibilità

The date of the first PhD considered for the calculation of the eligibility period shall be the date of the actual award according to the national rules of the country where the degree was awarded.

The eligibility periods set out in the table above can be extended beyond 7 and 12 years for the Starting and Consolidator Grants respectively for the following properly documented circumstances¹, provided they started before the call deadline:

- **Maternity:** 18 months extension for each child born before or after the PhD award. If the applicant can document a longer maternity leave, the eligibility period will be extended by the documented amount of actual leave taken until the call deadline.*
- **Paternity:** extension by the documented time of paternity leave taken until the call deadline for each child born before or after the PhD award.*
- **Long-term illness² or national service:** extension by the documented amount of leave taken by the Principal Investigator until the call deadline for each incident which occurred after the PhD award date.*
- **Clinical training:** extension by the documented amount of clinical training received by the Principal Investigator **after** the award of the first eligible degree and until the call deadline, up to a maximum of 4 years.*

2021-2022 Calls Calendar

	Starting Grant		Consolidator Grant		Advanced Grant		Synergy Grant
WP	2021	2022	2021	2022	2021	2022	2022
Open	25/02/2021	23/09/2021	11/03/2021	19/10/2021	20/05/2021	20/01/2022	15/07/2021
Closure	08/04/2021	13/01/2022	20/04/2021	17/03/2022	31/08/2021	28/04/2022	10/11/2021
Budget	619 M	757 M	633 M	784 M	626 M	561 M	300 M

	Proof of Concept	
WP	2022	2022
Open	15/07/2021	16/11/2021
Cut-off dates or closure		15/02/2022
	14/10/2021	19/05/2022
		29/09/2022
Budget	EUR 25 M	EUR 25 M

- **ERC WORK PROGRAMME 2022:**
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2022/wp_horizon-erc-2022_en.pdf

Il cv e il track record



VALUTAZIONE: PI

Intellectual capacity and creativity

Starting and Consolidator

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

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

To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?

Advanced Grant PI

- To what extent has the PI demonstrated the ability to conduct ground-breaking research?
- To what extent does the PI have the required scientific expertise and capacity to successfully execute the project?
- To what extend has the PI demonstrated sound leadership in the training and advancement of young scientists?

Cosa NON è necessario

- ☒ Avere una posizione permanente o essere un professore ordinario
- ☒ Presentare un progetto in un'area “alla moda”
- ☒ Avere un elevato numero di pubblicazioni
- ☒ Applicare per una Host Institution prestigiosa
- ☒ Articoli su riviste top di settore (per esempio, Science o Nature)
- ☒ h-index astronomico

Cosa è necessario

- Essere indipendenti ed avere successo nella ricerca
- Esperienza nel gestire laboratori e/o progetti di ricerca (fondamentale nei Consolidator, Advanced)
- Avere finanziamenti
- Interessante e/o originale percorso di carriera nella ricerca

Chi è "materiale ERC"?

Gli elementi principali di un profilo di Principal Investigator (PI) competitivo sono:

- ¶ Pensiero creativo
- ¶ Curriculum e pubblicazioni ad alto impatto (a seconda del proprio stato di carriera e dello schema al quale si applica)
- ¶ Leadership e tutoraggio
- ¶ Orientato alla ricerca di base



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 **research 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**

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

INDIPENDENZA – PUBBLICAZIONI CON E SENZA PHD SUPERVISOR

- ↳ Considerazioni su 20 cv esaminati di ricercatori StG finanziati:
- Nessuno dei ricercatori finanziati aveva 0 pubblicazioni senza il supervisore di dottorato
 - Considerando i CV esaminati, mediamente le pubblicazioni senza i supervisori del PhD sono il 59,4% (del totale delle loro pubblicazioni)
 - Più della metà dei ricercatori esaminati ha più di 20 pubblicazioni senza il loro supervisore di dottorato

N° PUBBLICAZIONI SENZA PHD SUPERVISOR	N° DI RICERCATORI
0	0/20
Tra 1 e 20	8/20
> 20	12/20

ESPERIENZE DI MOBILITÀ

CONSIDERAZIONI:

- 18/19 ricercatori (per uno questa informazione non era disponibile) avevano almeno 1 esperienza di mobilità internazionale
- In 2 casi in cui ci sono poche esperienze all'estero, questo è compensato dalla mobilità all'interno del paese di origine o da una grande partecipazione a eventi internazionali
- Il soggiorno minimo (1 caso) è di 2 mesi
- Le esperienze sono principalmente di lunghi periodi (più di un anno)



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

- you are successful at managing a lab and heading a research group

Postdoctoral Fellows

Rosilari Bellacosa Marotti, PhD



PhD in Exp. Psychology,
University of Padova, Italy

E-mail: rbellacosa@sissa.it
Office: +39 040 3787 628
Lab: +39 040 3787 723

Natalia Grion, PhD



PhD in Cognitive Neuroscience,
SISSA, Italy

E-mail: grion@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Alessio Ansuini, PhD



PhD in Physics, University
Sapienza, Rome, Italy

E-mail: ansuini@sissa.it
Office: +39 040 3787 777

Federica Rosselli



PhD in Neurobiology, SISSA,
Italy.

E-mail: frossell@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Graduate Students

Alessandro Di Filippo



M.Sc. in Cognitive
Neuroscience, University of
Trieste, Italy.

E-mail: difilippo@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Vladimir Djurdjevic



M.Sc. in Molecular Biology,
University of Belgrade,
Serbia.

E-mail: djurdjevic@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Nader Nikbakht



B.Sc. in Biology, University
of Isfahan, Iran.

E-mail: nikbakht@sissa.it
Office: +39 040 3787 227

Liviu Soltuzu



M.Sc. in Neurobiology,
University of Bucharest,
Romania.

E-mail: lsoltuzu@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Lab Manager and Technical Assistants

Margherita Riggi



PhD in Neuroscience,
University of Trieste, Italy.

E-mail: mriggi@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Federica Buffalo



M.Sc. in Neuroscience,
University of Trieste, Italy.

E-mail: fbuffolo@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Hardware and Software Developers

Daniele Bertolini



M.Sc. in Biomedical
Engineering, University of
Bologna, Italy.

E-mail: dbertolini@sissa.it
Office: +39 040 3787 628
Lab: +39 040 3787 723

Walter Vanzella



M.Sc. in Computer Science,
University of Udine, Italy.

E-mail: vanzella@sissa.it
Office: +39 040 3787 628
Lab: +39 040 3787 723

Undergraduate Students & Research Fellows

Luca Godenzini



M.Sc. in Neuroscience,
University of Trieste, Italy.

E-mail: lgodenzini@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Simone Vigano'



Candidate M.Sc. in
Neuroscience, University of
Trento, Italy.

Office: +39 040 3787 777
Lab: +39 040 3787 723

Mattia Orru'



Candidate M.Sc. in
Neuroscience, University of
Trieste, Italy.

E-mail: morru@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

Giulio Matteucci



Candidate M.Sc. in Physics,
University of Torino, Italy.

E-mail: gmatteuc@sissa.it
Office: +39 040 3787 777
Lab: +39 040 3787 723

What you need to prove

- you are successful at managing a lab and heading a research group

Alumni

[Sina Tafazoli](#), PhD Student (2010-2013). next position: Postdoctoral Fellow, Princeton Neuroscience Institute, Princeton University (USA)

[Alireza Alemi-Neissi](#), PhD Student (2010-2012), next position: Postdoctoral Fellow, Politecnico di Torino, Torino (Italy)

[Houman Safaai](#), Postdoctoral Fellow (2011-2012). next position: Center for Neuroscience and Cognitive Systems, Italian Institute of Technology, Rovereto (Italy)

[Sahitya Chetan Pandanaboina](#), Postdoctoral Fellow (2010-2014)

[Gioia De Franceschi](#), M. Sc. Student (2013), next position: Ph.D. student, Faculty of Life Sciences, University College London (UK)

[Laura Riontino](#), M. Sc. Student (2013), next position: PhD student in Neuroscience (University of Trieste, Italy)

[Silvia Rossi](#), M. Sc. Student (2013), next position: Student at the Faculty of Medicine of Insubria University, Varese (Italy)

[Dario Campagner](#), M. Sc. Student (2012), next position: PhD student, Faculty of Life Sciences, University of Manchester (UK)

[Matilde Fiorini](#), M. Sc. Student (2012). next position: PhD student, Werner Reichardt Centre for Integrative Neuroscience, University of Tübingen (Germany)

[Francesca Pulecchi](#), Technical Assistant (2011-2012), next position: Lab Manager, Tactile Perception and Learning Lab, SISSA (Italy)



What you need to prove

- you are successful at managing a lab and heading a research group

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

- you are successful at getting grants
- you can carry out successful research as an independent PI

Funding

We are grateful for the following funding support:

Currently active



European Research
Council (ERC)
Consolidator Grant
(2013)



Human Frontier
Science Program
Grant (2013)

*Partners: Winrich Freiwald, Mathew Diamond,
Rodrigo Q. Quiroga, Haim Sompolinsky*



Marie Curie International
Reintegration Grant
(2010)

Former support



Partner: Riccardo Zecchina

Compagnia di San
Paolo: Programma
Neuroscienze
2008/2009



FVG-R2B:
Ricerca per la
competitività
dell'impresa



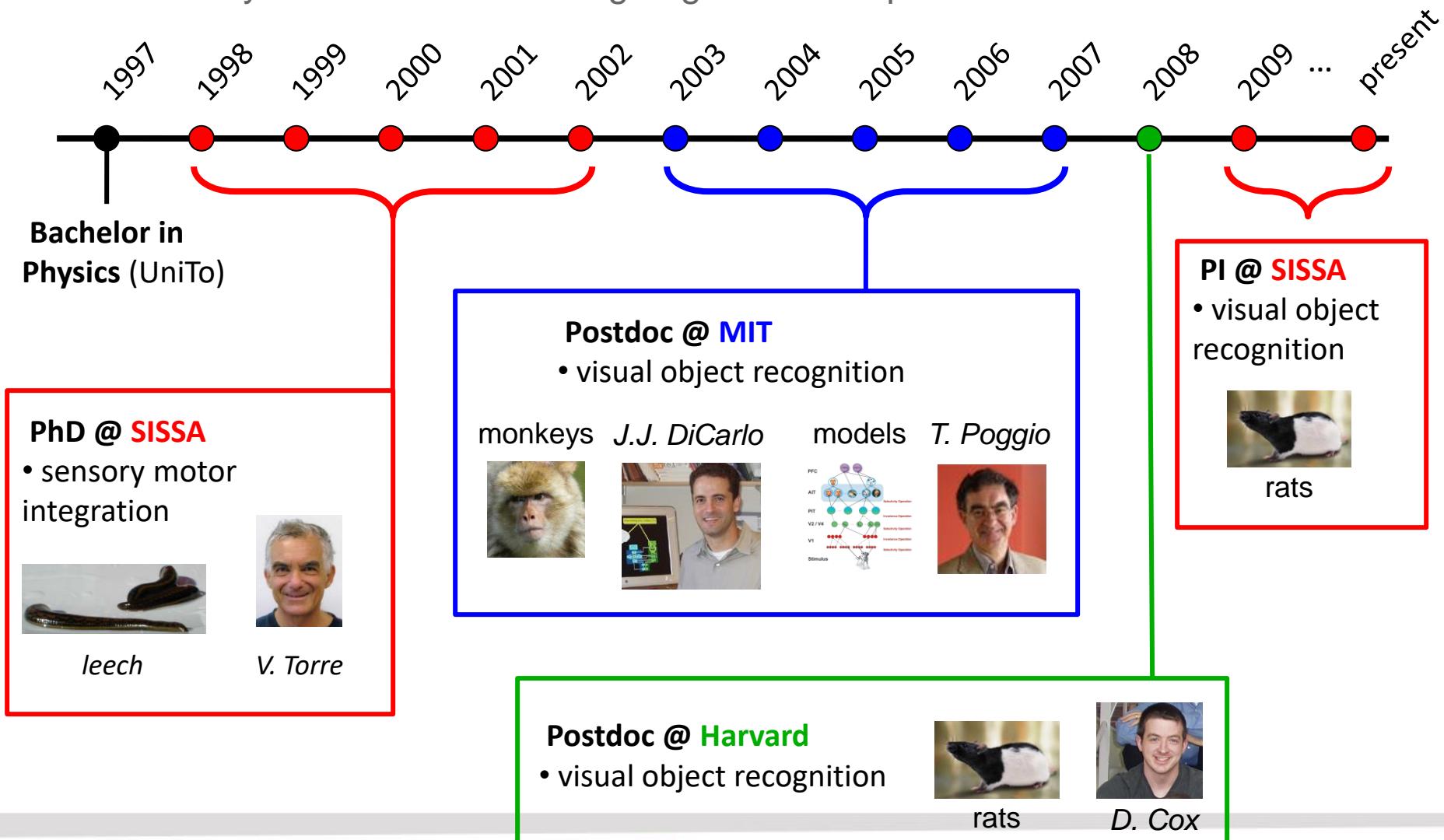
Accademia Nazionale
dei Lincei - Compagnia
di San Paolo Grant
(2008)



Young SISSA
Scientist Grant
(2011)

What you need to prove

- you have an interesting/original career path and track record





Comparative scientometric assessment of the results of ERC funded projects

Bibliometric assessment report (D5)

https://erc.europa.eu/sites/default/files/document/file/ERC_Bibliometrics_report.pdf

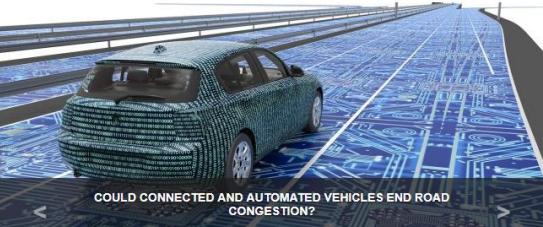
Link utili

The screenshot shows the official website of the European Research Council (ERC). The header features the 'erc' logo, the text 'European Research Council', and 'Supporting top researchers from anywhere in the world'. It includes a search bar and links for 'FUNDING', 'PROJECTS & FIGURES', 'NEWS & EVENTS', 'MANAGING YOUR PROJECT', and 'ABOUT ERC'. The main content area has a dark background with orange text. A large image of a car on a road made of circuit boards is used to illustrate the theme of connected and automated vehicles. Below the image, the text 'COULD CONNECTED AND AUTOMATED VEHICLES END ROAD CONGESTION?' is displayed. To the right, there's a section titled 'OPEN CALLS' for 'Proof of Concept' with details about the deadline (25 Apr 2019, 19 Sep 2019) and support from National Contact Points. At the bottom, there are news items and a 'Magazine' section.

European Research Council
Supporting top researchers from anywhere in the world

FUNDING ► PROJECTS & FIGURES ► NEWS & EVENTS ► MANAGING YOUR PROJECT ► ABOUT ERC ► Search the website

SUPPORTING TOP RESEARCHERS FROM ANYWHERE IN THE WORLD


COULD CONNECTED AND AUTOMATED VEHICLES END ROAD CONGESTION?

NEWS > MORE NEWS

01-04-2019
Media Advisory: Press conference on first results from the Event Horizon Telescope

15-03-2019
ERC's 2018 annual report is out

13-02-2019
New opportunities for top Australian talent

28-03-2019
222 scientists win the European

OPEN CALLS

Proof of Concept | ERC-2019-PoC
Information for applicants
Instruction guide for using HTML5
Deadline: 25 Apr 2019, 19 Sep 2019

The official deadlines are only those indicated on the [Funding and Tenders Portal](#)

Get support from your [National Contact Point](#)

Magazine
MARCH 2019

This month we follow scientists roaming the seven seas, understand why a USA researcher would choose to work in the EU, see what the

<https://erc.europa.eu/>

ERC Team contacts – erc@apre.it



Marco Ferraro

ferraro@apre.it



Serena Borgna

borgna@apre.it



Angelo D'Agostino

dagostino@apre.it

Sessione di domande

ESEMPIO DI CV STARTING DOMINIO PHYSICAL SCIENCES AND ENGINEERING (PANEL PE 8)

PAOLA SACCOMANDI,
PROGETTO LASER OPTIMAL
FINANZIATO NEL 2017

• EDUCATION

- 2014 PhD in Biomedical Engineering,
Università Campus Bio-Medico di Roma, Rome, Italy. Supervisor: Prof. Sergio Silvestri
2010 Master Degree in Biomedical Engineering (110/110 cum laude),
Università Campus Bio-Medico di Roma, Rome, Italy

• CURRENT POSITION(S)

- 2016-current Post doctoral fellow
IHU (Institute of Image-Guided Surgery), Strasbourg, France
2016 Research Engineer
IHU (Institute of Image-Guided Surgery), Strasbourg, France

• PREVIOUS POSITIONS

- 2014-2016 Post doctoral fellow
School of Engineering, Università Campus Bio-Medico di Roma, Rome, Italy.

• FELLOWSHIPS

- 2013-2014 Visiting PhD Student
Institute for Biophysics of the J. W. Goethe-University, Frankfurt am Main, Prof. W. Mäntele;
Clinic of the J. W. Goethe-University, Frankfurt am Main, Prof. T. J. Vogl.
3 papers with results obtained during these fellowships were published.

• SUPERVISION OF GRADUATE STUDENTS

- 2009-current Bachelor (10) and Master (22) Graduation thesis in Biomedical Engineering.
10+ publications co-authored by the candidates.
Università Campus Bio-Medico di Roma, Rome, Italy.

• TEACHING ACTIVITIES

- 2012-current Teaching assistant – Laboratory of Measurements and Bioengineering, Università Campus Bio-Medico di Roma, Rome, Italy.
2012-2016 Teaching assistant – Acceptance Tests of Medical Devices, Università Campus Bio-Medico di Roma, Rome, Italy.

• ORGANISATION OF SCIENTIFIC MEETINGS

- 2017 Chair and organizer of Special Session "Measurement in healthcare: applications in industry and in clinical settings" for 2017 IEEE International Instrumentation and Medical Technology Conference (I2MTC), Torino, Italy.
2016 Chair and organizer of Special Session "Fiber Optic Sensors for medical applications" for 2016 IEEE International Symposium MeMeA, Benevento, Italy.

• INSTITUTIONAL RESPONSIBILITIES

- 2016 Contact person, responsible and supervisor of students in the frame of the project "Torno Subito" funded by Regional Department for Training, Research, Schools and Universities of Lazio region, IHU (Institute of Image-Guided Surgery), Strasbourg, France.
2014-2016 Vice-chairman of Commission of Biomedical Engineering at Order of Engineers, Rome



- **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2016-current Member of IEEE Instrumentation and Measurement Society
2011-current Member of IEEE Engineering in Medicine and Biology Society
2011-current Member of IEEE Women in Engineering

- **EDITORIAL DUTIES**

Reviewer for several scientific International journals (among others: International Journal of Hyperthermia, IEEE Sensors Journal, Medical Engineering and Physics, Medical Physics, Journal of Medical Photonics, Optics and Laser Technology, Optics and Laser in Engineering, Review of Scientific Instruments, Sensors) and conferences (e.g. EMBC, MeMeA, Imeko).

- **MAJOR COLLABORATIONS**

- Prof. Thomas Josef Vogl, Diagnostic and Interventional Radiology, "Johann Wolfgang Goethe Universität Frankfurt am Main", Frankfurt am Main, Germany.
-Prof. Werner Mäntele, Institute for Biophysics, Department of Physics, "Johann Wolfgang Goethe-Universität Frankfurt am Main", Frankfurt am Main, Germany.
-Prof. Guido Costamagna, Digestive Endoscopy Unit, Faculty of Medicine and Surgery, "Università Cattolica del Sacro Cuore", Rome, Italy.
-Prof. Jacob Berlin, Department of Molecular Medicine, Beckman Research Institute, "City of Hope", Duarte, CA, United States.
-Prof. Daniele Tosi, School of Engineering, "Nazarbayev University", Astana, Kazakhstan.
-Dr. Michele Arturo Caponero, the Photonics Micro- and Nano-structures Laboratory (PMNL), "Centro Ricerche ENEA Frascati", Rome, Italy.

- **INVITED TALKS**

- 2016 NANOTECHNOLOGY FOR INSTRUMENTATION AND MEASUREMENT Workshop (NANOIM) 2016, Chemnitz, Germany;
2015-2016 Institut de Recherche contre les Cancers de l'Appareil Digestif (IRCAD), Strasbourg, invited by Prof. J. Marescaux;
2014 Lecture at Università Politecnico di Torino. "Interaction between laser light and biological tissue during laser ablation for cancer removal".
2014 Master II level "Smart Solutions - Smart Communities", Scuola Superiore Sant'Anna di Studi Universitari e di Perfezionamento, Pisa (SSSA). "Fundamental Principles of Metrology in Engineering"
2014 Lecture at Hospital "Umberto I" of Rome. "Software as medical device: regulatory principles according to 2007/47/CE"

- **AWARDS**

- 2016 Best Paper 2015 of School of Engineering of Università Campus Bio-Medico di Roma, evaluated by National Agency of University and Research (ANVUR).
2013 Scholarship for International Mobility from Università Campus Bio-Medico di Roma Alumni Association;
2013 2nd classified, "EUS-guided Nd:YAG laser ablation of a pancreatic neuroendocrine tumor" IOS 2013 Interventional Oncology Sans Frontieres, Villa Erba-Cernobbio, Italy, 2013;
2004 Princeton University (New Jersey, USA) Gran Sasso-Princeton Physics Summer School 2004, at patronized by Istituto Nazionale di Fisica Nucleare of Gran Sasso (Italy).

Project Title On-going Grants	Funding source	Amount (Euros)	Period	Role of the PI	Relation to current ERC proposal
I-Thermo LAP	IHU Strasbourg	50 k€	18 Febr 2016-31 Oct 2016	PI	The aim of this feasibility project is to investigate the thermal sensitivity of imaging diagnostic systems (MRI, CT and US) to understand their applicability as thermometric tool during Laser Ablation on Pancreas. The study is performed in both ex vivo and in vivo porcine pancreas.
Torno Subito	Laziodesu Organisation for the Right to University Education in Lazio	13 k€	1 Oct 2016-30 Apr 2017	Supervisor	Design and development of needle-like probes embedding fiber optic sensors for thermometry during ablation procedures.

Section c: Early achievements track-record (max. 2 pages)

-Scopus ID: 37034949200; number of citations= 347; h index=10; number of records= 80.

-Scholar (<https://scholar.google.com/citations?user=VBOinLAAAAAJ&hl=it>):

number of citations=422; h index=11; number of records=75

Main scientific interest of Paola Saccomandi are: Lasers and optical fibers for medical applications; Optical sensors equipment; Metrology; Thermal, mechanical and optical measurements; Laser-, microwave- and radiofrequency- thermal ablation for cancer removal; Images-based diagnostic tools; In vivo and ex vivo studies; Physical models and simulations; MR-compatible sensors; Fiber-optic based sensors; Tactile sensing; Mechanical ventilators and gas humidifiers; Test of medical devices.

Since 2011, she has: 32 papers on international peer-reviewed journals, 53 papers on proceedings of international conferences, 27 papers (13 on journals and 14 on conferences) without the supervisor of PhD, 41 publications as lead author (19 as first author and 22 as second author).

She actively contributes to the following scientific programs: i) PRIN “HandBot” funded by MIUR (Post-doc fellowship); ii) “Development of novel fiber optic sensors for mechanical and thermal measurements in medicine” funded by FILAS (PhD program); iii) “A new approach for cardiac output monitoring by Fick method” funded by FILAS (Participant).

She was speaker in the following ORAL SESSION: NANOTECHNOLOGY FOR INSTRUMENTATION AND MEASUREMENT Workshop (NANOflIM), the IEEE Measurement and Instrumentation Society, 2nd ed. 2016, Chemnitz, Germany; The International Symposium on Medical Measurements and Applications (MeMeA), The IEEE Measurement and Instrumentation Society, ed. 2016 (Benevento, Italy); Engineering in Medicine and Biology Conference, (EMBC), the IEEE Engineering in Medicine and Biology Society 36th ed. 2014 (Chicago IL, USA), ed. 35th 2013 (Osaka, Japan), 34th ed. 2012 (San Diego CA, USA).

Selected publications related to the proposal topic (* produced without the participation of the tutor of PhD). Total of 270 citations (from Scholar) since 2011

*1) Schena E, Mooney R, Saccomandi P, Zhumkhawala A, Aboody K, Berlin J. Gold nanorod-mediated near-infrared laser ablation: in vivo experiments on mice and theoretical analysis at different settings.

INTERNATIONAL JOURNAL OF HYPERTERMIA, *just-accepted*
2016:1-26.

2) Saccomandi P, Larocca ES, Rendina, Schena E, D'Ambrosio R, Crescenzi A, Di Matteo FM, Silvestri S. Estimation of optical properties of neuroendocrine pancreas tumor with double integrating sphere system and inverse Monte Carlo model. LASER IN MEDICAL SCIENCE, 2016:1-10.

4) Saccomandi P, Massaroni C, Silvestri S, Giurazza F, Frauenfelder G, Beomonte Zobel B, Schena E. Feasibility assessment of magnetic resonance-thermometry on pancreas undergoing laser ablation: sensitivity analysis of three sequences. MEASUREMENT JOURNAL 2016;80: 21-28.

*5) Tosi D, Saccomandi P, Schena E, Duraibabu DB, Poeggel S, Leen G, Lewis E. Intra-tissue pressure measurement in ex vivo liver undergoing laser ablation with fiber-optic Fabry-Perot probe.

SENSORS, 2016;16: 544. (cit. 1)

ESEMPIO DI CV ADVANCED DOMINIO SOCIAL SCIENCES AND HUMANITIES (PANEL SH 6)

**PAOLA BUZI, PROGETTO
PATHS FINANZIATO NEL 2015**

2002: PhD in Coptic Literature, Sapienza University of Rome.

Current Position

Sapienza University of Rome, Department of History, Cultures, Religions, Assistant Professor of Egyptology and Coptic Studies (permanent position), with Habilitation as both Associate Professor and Full Professor obtained in February 2014 (Abilitazione Scientifica Nazionale sector 10/N1).¹⁷ In my capacity of teacher of Egyptology and Coptic Studies, I am allowed to use the title of 'Professore aggregato'.

Previous Positions

2004–2009: research fellow ('Assegnista di Ricerca') at Bologna University, Department of Archaeology.

2009–2010: research fellow at Hamburg University, Hiob Ludolf Center for Ethiopian Studies, on behalf of the Akademie der Wissenschaften zu Göttingen for the 'Katalogisierung der Orientalischen Handschriften in Deutschland' project.

Awards

1999–2002: PhD scholarship.

1997: 1-year scholarship of the Italian Ministry of Foreign Affairs to attend an advanced course in Egyptology and Coptic Studies in Cairo.

2002–2003: 2-years post-doc scholarship of the "Michele Pellegrino" Foundation, Turin, for Coptic Studies.

Teaching Activities

2007–2009: Course of Egyptology, Bologna University ('Assegnista di ricerca'/*pro tempore* research fellow).

2009: Course of Coptic Language and Literature, Master programme in Egyptology, II level, Turin University (invited professor).

2010: Course of Coptic Language and Literature, Master programme in Egyptology, I level, L'Orientale University, Naples (invited professor).

2010–pres.: Regular courses of Coptic Language, History of Christian Egypt and Egyptology, Sapienza University of Rome, BA and MA degree (Assistant professor/'Professore aggregato').

Institutional Responsibilities

2010–pres.: Member of the Dept. Committee for the Internationalization, Sapienza University of Rome.

2010–2013: Member of the board ('collegio dei docenti') for the PhD programme in History, Anthropology, Religion, Sapienza University of Rome.

2014–pres.: Member of the Department Didactic Committee.

2014–pres.: Member of the board for the Master programme in "Religioni e Mediazione Culturale", Sapienza University of Rome.

2014–pres.: Member of the board for the PhD programme in Philology and History of Ancient World, Oriental curriculum, Sapienza University of Rome.

Commissions of Trusts

2013–pres.: Member of the referees for the scientific research projects for the Ministry of the University ('Revisori per la Valutazione di progetti per conto del Ministero dell'Istruzione, dell'Università e della Ricerca').

Membership of Scientific Societies

2012–pres. Member of the scientific board of the International Association for Coptic Studies (IACS). Regular member since 2002.

2014–pres. Member of the scientific board of the Istituto Italiano per la Cultura Egizia (IICE). Regular member since 2004.

2015– *Academicus* (scientific member) of the *Accademia Ambrosiana*, Classe di Studi Africani.

2015– Member of the International Association of Egyptology.

Research record and major collaborations

Main activities and projects (participation and coordination)

2000–2001: direction of a project for young researchers on the geography of Coptic Egypt ('CNR Progetto giovani ricercatori, Agenzia 2000'); 2002–2003: Cataloguing of literary Coptic manuscripts preserved in the Vittorio Emanuele III Library, Naples, funded by the Michele Pellegrino Foundation, Turin; 2004–2009: Coordinator the research 'L'archeologia del Fayyum in età tardo antica. Strutture insediative, necropoli, cultura materiale', Bologna University; 2007–pres.: co-Direction of the archaeological expedition to Bakchias (Fayyum); 2009–2010: Cataloguing of literary Coptic manuscripts preserved in the Staatsbibliothek zu Berlin, Orientabteilung, within the *Katalogisierung der Orientalischen Handschriften in Deutschland* project (KOHD), funded by the Akademie der Wissenschaften zu Göttingen; 2010: invited applicant, as coordinator of one of the research units, for the SFB 950 project 'Manuskriptkulturen in Asien, Afrika und Europa' (Universität Hamburg);¹⁸ 2010–2012: Member of the project "Elaborazioni ideologiche cristiane e codificazioni istituzionali tra III e VII secolo", PRIN project ('Progetti di rilevante interesse nazionale') funded by the Italian University Ministry; 2011–pres.: Collaborator of the Hiob Ludolf Zentrum für Äthiopistik as a member of the CMCL; 2011–2014: (co)Leadership of Team 4 ('Cataloguing') of the *Comparative Oriental Manuscript Studies* project funded by the European Science Foundation; 2012–pres.: Member of the project 'Spazi sacri e percorsi identitari. Testi di fondazione, iconografia, culto e tradizioni nei santuari cristiani italiani fra Tarda antichità e Medioevo', FIRB project ('Fondo per gli Investimenti della Ricerca di Base') funded by the Italian University Ministry; 2014–pres.: Vice-Direction of the archaeological expedition to Manqabad (Assyut, Middle Egypt).

General scholarly contribution

- I have contributed to the field of Coptic Studies with two catalogues of Coptic manuscripts (both published by renown institutions: Accademia Nazionale dei Lincei and Akademie der Wissenschaften zu Göttingen), and several studies on literature, hagiography, manuscripts studies, codicology, and archaeology.

- Since 1999, I am a scientific collaborator of the *Corpus dei Manoscritti Copti Letterari* (CMCL), contributing to the identification of texts and the reconstruction of fragmentary codices (above all, those of the White Monastery of Shenoute, at Sohag). The results of such a research converge in the CMCL database that is a point of reference for the community of Coptologists (all those working with manuscripts fragments from the White Monastery, for instance, refer to the *sigla* attributed to the manuscripts by the CMCL).

- I am a specialist of Coptic paratexts (title and colophons), also in relation to multiple-text manuscripts.¹⁹ My monograph *Titoli e autori nella tradizione copta. Studio storico e tipologico*, in particular, is quoted as a shared and appreciated point of reference in this specific field of Coptic literary studies. Codicology is also well represented in my research activity and production.²⁰

- One of the most significant features of my research activity, however, is probably that of combining philological/literary studies with the active research on the field, since I have been trained also as an archaeologist and I have a long experience in the direction of excavation works. About one third of my scientific production concerns archaeology. This is not a common characteristic among Coptologists. With my team of collaborators I have discovered (in Bakchias, Fayyum) and published two previously unknown churches, belonging to one of the earliest Egyptian monasteries. I have experience also in surveys.

- In the last 10 years I have published: 5 monographs as author; 11 articles as main author in peer-

reviewed journals; 41 contributions in miscellaneous volumes and conferences/congresses proceedings; 3 articles in leading encyclopedias; 9 volumes as co-editor (two more are in preparation: see 'Ten years track-record' section); some reviews in international journals. In the same period I have presented 15 papers at international conferences and 20 at national conferences. No citation index exists in my field, but I am quoted as a specialist of Coptic literature, also in a 'technical' sense (paratexts, catalogues) and codicology, and as an archaeologist.

Career Breaks Not applicable in my case.

On-going Grants

Project Title	Funding source	Amount (Euros)	Period	Role of the PI	Relation to current ERC proposal	Archaeological work in Bakchias (Fayyum) and survey of the Christian sites of the region	MAE – Italian Ministry of Foreign Affairs Bologna University	€ 5,500* (*€ 3,000 MAE; € 2.500 Bologna University)	2015	co-Director (with Dr. Enrico Giorgi, Bologna University) of the archaeological mission	There is a strong relationship between the ERC proposal and fieldwork, since the latter permits to acquire new data useful to the project and to collect relevant information from other archaeological missions
Sacred spaces and identity paths. Foundation texts, iconography, religion and traditions in Italian Christian between Late Antiquity and Middle Ages (http://www.firbspaziacari.unib.it/)	FIRB – Italian Fund for Basic Research	€ 594,769.42	2012-2017	Member of the research project (Director of the project: Dr. Laura Carnevale, Bari University; Local Coordinator at Sapienza University: Dr. Tessa Canella.	Although the project focuses mainly on Italy, I have been involved in it in order to compare the late-antique dynamics of creation of sacred spaces and related literary hagiographical texts in Italy with similar phenomena in Egypt. In this respect my role in the project is strictly related to PATHs (archaeological spaces, production of culture, hagiographical texts). I have already produced 3 articles on this subject and participated to 2 international congresses.	Testi e contenitori	Sapienza University of	€ 8,000	2015-2016	Coordinator, with Dr. Giuseppe Camplani	Manuscripts and material objects and
Prospettive sulla scuola tardoantica: libri, testi, storia e società nel Mediterraneo	Sapienza University of Rome	€ 7,000	2014-2015	Coordinator, with Dr. Daniele Bianconi (general coordinator), Dr. Gianfranco Agosti, Dr. Giuseppe La Bua and Prof. Alberto Camplani	It also deals with Coptic manuscripts.	Buzi di testi: interazioni tra scrittura letteraria e supporti materiali nell'antichità	Rome	Part B1	PATHs	Lentini (general coordinator), Dr. Gianfranco Agosti, Dr. Daniele Bianconi, Prof. Alberto Camplani	the relation between book format and texts are some of the topics dealt with in this project, that therefore is strongly related to the ERC proposal

10

Prospectiva sulla scuola tardoantica: libri, testi, storia e società nel Mediterraneo

Section c: Ten years track-record (max. 2 pages)

A list of the top 10 publications in peer reviewed journals or proceedings (chosen in the different fields of my research activity, where I am sole or first author)

- [1] "Tra ascetismo e cenobitismo: gli insediamenti monastici fayyumici", in «*Aegyptus*» 85 (2005 [2007]), 279-296; [2] "Bakchias tardo-antica: la chiesa del *kom sud*" in «*Aegyptus*» 87 (2007), 377-392; [3] "The Borgia Coptic Manuscripts Collection preserved in Naples: a new catalogue", in N. Bosson, A. Boud'hors (éd.), *Actes du huitième congrès international d'études coptes*, Paris 2007, 41-50; [4] "Beyond the papyrus. The writing materials of Christian Egypt before the X century. Ostraka, Wooden Tablets and Parchment", in *Comparative Oriental Manuscripts Studies Newsletter* 2 (2011), 10-16; [5] "Bakchias: Urban Peculiarities and Preservation Problems", in R. Pirelli (ed.), *Natural and Cultural Landscapes in the Fayoum. The Safeguarding and Management of Archaeological Sites and Natural Environments, Proceedings of the conference, 31 Oct.-2 Nov. 2010*, Cairo 2011, 86-95 (with E. Giorgi et al.). [6] "Stefano Borgia's Coptic manuscripts collection and the "strange case" of the *Borgiano copto* fund in the Vatican Library", in P. Buzi, D.V. Proverbio (eds.), *Coptic treasures from the Vatican Library. A selection of Coptic, Copto-Arabic and Ethiopic manuscripts. Papers collected on the occasion of the Tenth International Congress of Coptic Studies, Rome, September 17th-22nd, 2012*, Studi e Testi 472, Città del Vaticano 2012, 21-26; [7] "Introduzione" in *Oracoli, visioni, profezie. L'Egitto da Alessandro il Grande all'Alto Medioevo. Atti del convegno, Roma 12 marzo 2012* («SMSR» 79/1 [2013]), 15-25; [8] "Editoriale", *ibid.*, 7-12; [9] "The Catalogus codicum copticorum manu scriptorum qui in Museo Velitris adservantur. Genesis of a masterpiece", in K. Ascani, P. Buzi, D. Picchi (eds.), *Proceedings of conference: The Forgotten Scholar: Georg Zoëga (1755-1809). At the Dawn of Egyptology and Coptic Studies*, Bologna-Roma 27-30 Oct. 2013, Brill, Leiden 2015, 216-223; [10] "Coptic Codicology", in A. Bausi et al., *Comparative Oriental Manuscript Studies. A Handbook*, Hamburg 2015, 137-153 (with S. Emmel).

Research monographs (besides monographs, I have also (co)edited 9 miscellaneous volumes)²¹

- [1] *Titoli ed autori nella tradizione copta. Studio storico e tipologico*, Giardini Editore, Pisa 2005; [2] *Manoscritti latini nell'Egitto tardo-antico. Con un censimento completo dei testi letterari e semi letterari* (a cura di S. Cives), La Mandragora, Imola 2005; [3] *Il Cristianesimo copto: Egitto, Etiopia e Nubia. Storia, letteratura e arte*, Edizioni Studio Domenicano, Bologna 2006 (reprinted and updated as *La Chiesa copta. Egitto e Nubia*, Edizioni Studio Domenicano, Bologna 2014); [4] *Catalogo dei manoscritti copti Borgiani conservati presso la Biblioteca "Vittorio Emanuele III" di Napoli, con un profilo scientifico del cardinale Stefano Borgia e Georg Zoëga*, Accademia dei Lincei Classe di scienze Morali, Storiche e Filologiche – Memorie, Serie IX, Volume XXV, Fascicolo 1, Roma 2009; [5] *Coptic Manuscripts 7. The Manuscripts of the Staatsbibliothek zu Berlin Preußischer Kulturbesitz. Homiletic and Liturgical Manuscripts from the White Monastery. With two documents from Thebes and two Old Nubian Manuscripts*, Verzeichnis der Orientalischen Handschriften in Deutschland XXI.7, Franz Steiner Verlag, Wiesbaden 2014.

International Editorship

2007-2012: Member of the editorial board of the series *Archeologia e Storia della Civiltà Egiziana e del Vicino Oriente Antico, Materiali e Studi* (Bologna University); 2009-pres.: Member of the editorial board of the journal *Studi e Materiali di Storia delle Religioni* (Sapienza University of Rome); 2011-pres.: Sub-editor for Egypt and Nubia for the *Encyclopaedia of Manuscript Cultures of Asia and Africa* (Hamburg University); 2012-pres.: Member of the scientific board of the series *Collana di studi di Egittologia e Civiltà Copta* (Egyptian Museum, Florence); 2012-pres.: Member of the editorial board of the journal *Adamantius*; 2012-pres.: Member of the scientific board of the *Journal of Coptic Studies*; 2011-2015: co-Editor of the chapters on "Cataloguing" and "Palaeography" of *Comparative Oriental Manuscript Studies. A Handbook*,

edited by A. Bausi et al., and of the handbook itself; 2013–pres.: collaboration with the editorial project *Literature, A World History: Afrika*, directed by Karin Barber, Biodun Jeyifo, Eileen Julien, Blackwell; 2014–pres.: Member of the editorial board of *Bulletin of Comparative Oriental Manuscripts Studies*.

Invited presentations to peer-reviewed, internationally established conferences and/or international advanced schools (a selection)

[1] *I Colloquio di Egittologia e Antichità Copte: Il coccodrillo e il cobra. Aspetti dell'universo religioso egiziano nel Fayyum e altrove*, Bologna University, 20-21 April 2005; [2] COMSt Workshop: Cataloguing Projects of Oriental Manuscripts: evolutions and descriptive criteria, Uppsala 22-23 Sept. 2010; [3] One-volume libraries: Composite manuscripts and Multiple Text Manuscripts, Centre for the Study of Manuscript Cultures, Hamburg University, 7-10 Oct. 2010; [4] COMSt Workshop: Book materials in Oriental Cultures, Pisa 26-27 Nov. 2010; [5] COMSt Workshop: Towards an ideal chapter on Oriental MSS cataloguing, Frankfurt University, 14 June 2011; [6] *Neg/Otia nostra. Le Vite dei santi e le domande dello storico. Lo studio del discorso agiografico in una prospettiva interdisciplinare*, Rome, 10 March 2011; [7] Structuring Text via Paratexts, Centre for the Study of Manuscript Cultures, Hamburg University, 5 May 2012; [8] COMSt Workshop: *The Shaping of the Page, the Scribe and the Illuminator at Work. The Making of Oriental Bookbindings and their Conservation*, Arles, 9-11 Oct. 2012; [9] *Cofoni armeni a confronto. Le sottoscrizioni dei manoscritti in ambito armeno e nelle altre tradizioni scrittorie del mondo mediterraneo*, Bologna University, 12-13 Oct. 2012; [10] COMSt Workshop: "Towards a final version of the chapter on cataloguing", Athens, National Hellenic Research Foundation, 6-7 June 2013; [11] *The Second(ary) Life of Manuscripts*, Centre for the Study of Manuscript Cultures, Hamburg, 11-13 July 2013; [12] *Beyond Conflicts. Cultural and religious Cohabitations in Alexandria and in Egypt between the first and the sixth century AD*. Napoli, Università Federico II, 17-22 Sept. 2014; [13] *Book Titles and other Paratexts in Ancient Literature*, Heidelberg University, Heidelberg 6-7 Oct. 2014; [14] *I Dies Academicus, Accademia Ambrosiana, Classe di Africanistica*, Milano, Biblioteca Apostolica Ambrosiana, 22-23 Oct. 2014.

Research expeditions led by the applicant in the capacity of Principal Investigator

2007–pres.: co-Director of the archeological expeditions to Kom Umm el-Atl/Bakchias, Fayyum (Egypt), a project by Bologna University and Sapienza University of Rome (annual campaigns).

2014–pres.: vice-Director, of the archeological expeditions and surveys to the Monastery of Abba Nefer at Manqabad, Assyut (Egypt), a project of the "L'Orientale" University of Naples (annual campaigns).

Prizes/Awards/Academy Memberships

See the *Curriculum vitae* section.

Major contributions to the early careers of excellent researchers

I follow, as a tutor, the formation of the PhD candidates of the "Dottorato di Filologia e Storia del Mondo Antico". In particular Dr. Angelo Colonna (PhD 2014, Rome) is now an active collaborator of my courses of Egyptology and Coptic Studies and formally an 'expert' in the field ('cultore della materia'). I have also collaborated with other PhD programmes, supervising for instance the research of Dr. Valentina Gasperini (PhD 2013, Bologna; now Marie Curie research fellow in Liverpool University), Dr. Ilaria Rossetti (PhD 2015, Siena; now Postdoc research fellow in Bologna University), who are specialists of the archaeology of the Fayyum. I supervise the students of the "Scuola di Specializzazione in Archeologia", Sapienza University of Rome. I have been tutor of several Summer/Winter Schools (2007–pres., Egyptian archaeology and papyrology) for graduated and PhD students and post-doc fellows in Egypt (Fayyum). I am Director of the 'Corso di Alta Formazione in Egittologia'. I am also tutoring several MA students (about 8/10 per year).



Email: segreteria@apre.it

Tel. +39 06 48 93 9993

www.apre.it

