




SDU ERC-mentoring session

1½ hours dedicated the ERC StG and CoG 2021 calls







11:10  **Jan-Wilhelm Kornfeld**, ERC StG receiver
Professor at the Department of Biochemistry and Molecular Biology, SDU
Jan will give a talk about his ERC StG experience

11:35  **Don Canfield**, ERC AdG receiver, ERC AdG Panel member
Professor & Villum Investigator & D-IAS Chair, Nordcee, Department of Biology, SDU.
Don will give a talk about his experience with the ERC calls

12:00  **Susanne Mandrup**, Panel Chair of ERC PE10 StG panel 2020
Professor at the Department of Biochemistry and Molecular Biology, SDU
Susanne will give a talk about the ERC evaluation process

Q&A

mute & mark  

mark & speak & show    

11:30



Jan-Wilhelm Kornfeld, ERC StG receiver
Professor at the Department of Biochemistry and Molecular Biology, SDU
Jan will give a talk about his ERC StG experience



Jan-Wilhelm Kornfeld

Dept for Biochemistry and Molecular Biology

Functional Genomics and Metabolism Research Unit

ERC Starting Grant holder 2016 ('TransGenRNA')



My ERC Starting Grant - A Story of Failure and Success



Structure of my talk

- Brief introduction to myself and my research
- My ERC StG idea
- The ERC interview
- My 2 cents on what makes a successful pitch
- Your thoughts and questions

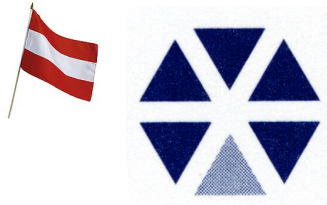
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Career path: Noncoding RNAs and Metabolic Disease

PhD thesis (Wien, AT)



Cytokine Signaling and Liver Metabolism

Kornfeld et al. J Clin Endocrinol Metab (2011)
Müller*/Kornfeld* et al. Hepatology (2011), *=equal contribution
Kornfeld et al. Br J Cancer (2011)
Blaas*/Kornfeld et al. Hepatology (2010), *=equal contribution
Engblom/Kornfeld* et al. Genes Dev (2007), *=equal contribution

Postdoc (Köln, DE)



MicroRNAs and Liver Glucose Homeostasis

Kornfeld et al. Nature (2013)
EMBO Longterm Fellowship 2010-12
Emmy-Noether Junior Group Leader (DFG) = Sapere Aude / NNF EI.

Principal Investigator (Köln)



Noncoding RNAs and Brown Adipose Tissue

13 invited talks since 01/2014
2 international conferences organized since 01/2014
1st corresponding author paper submitted

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My 'big question': Transgenerational effects of obesity

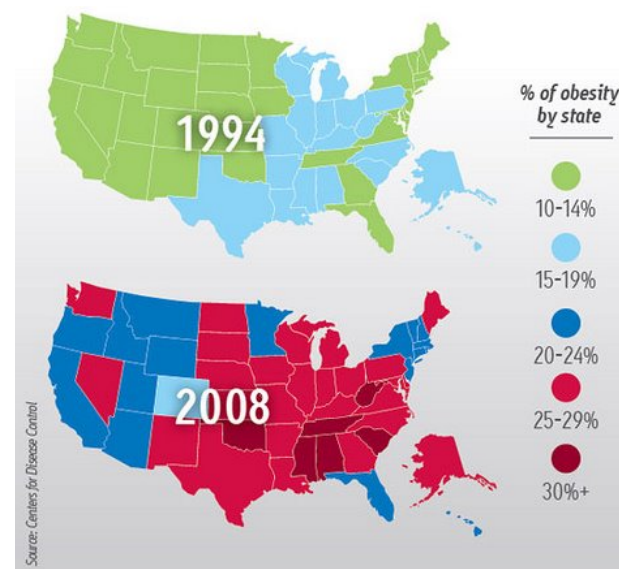
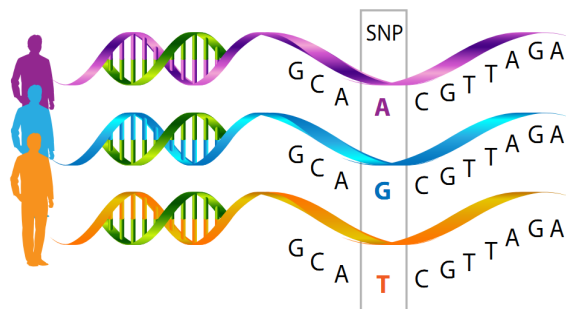
Lifestyle



Development
in utero



Genetics

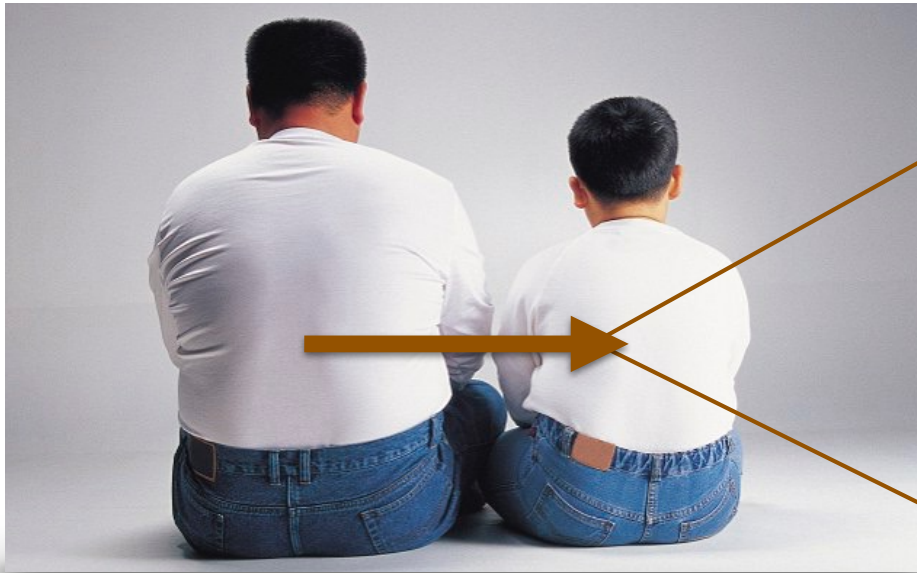


My specific question within the 'big question'

stress

famine

obesity



ncRNAs

~~**DNA**~~



D. melanogaster

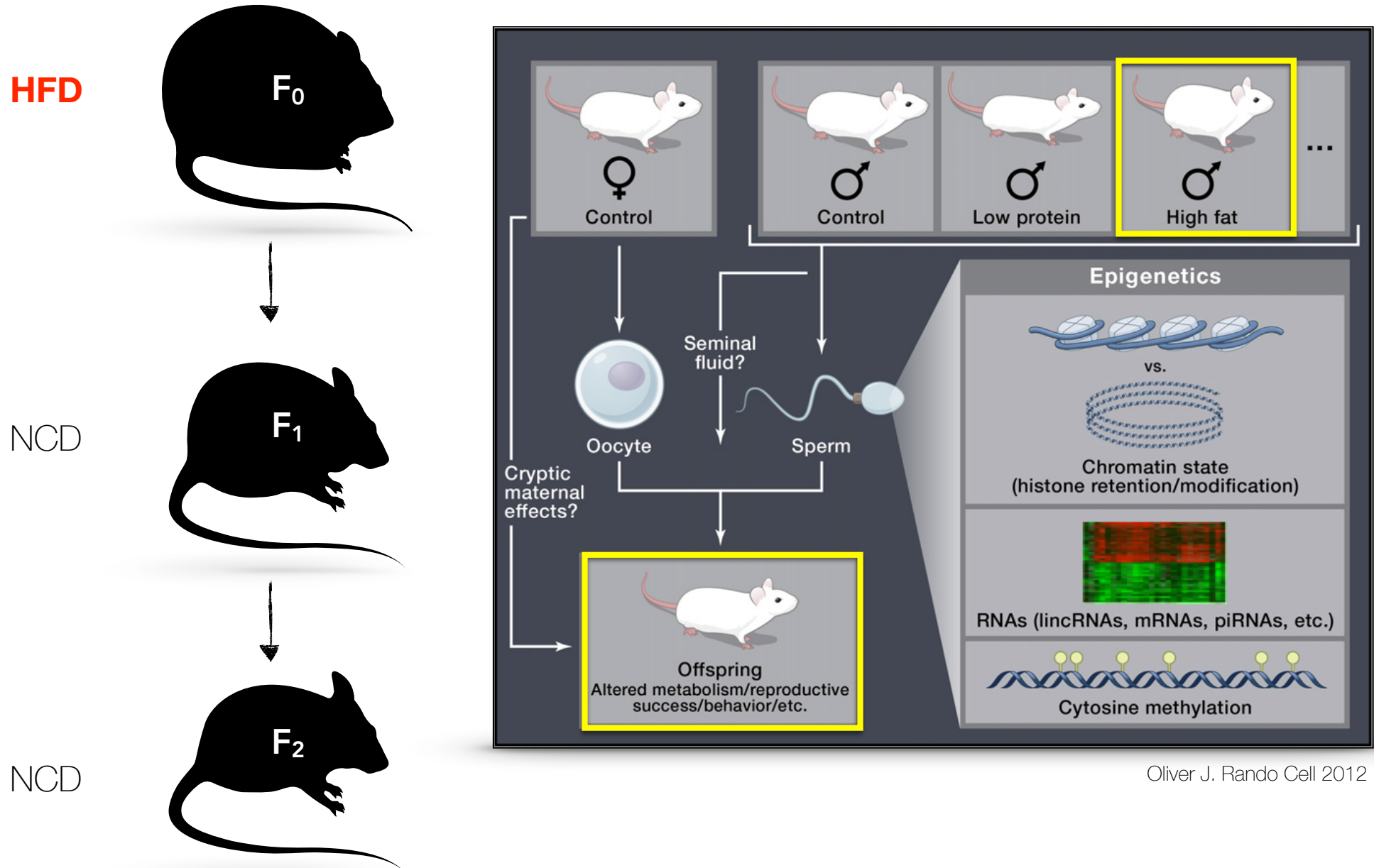


M. musculus (C57BL/6)



C. elegans

My methodological approach (quite low-tech)



Oliver J. Rando Cell 2012

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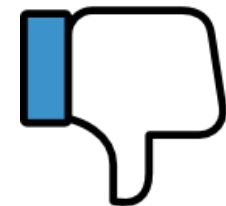
The interview - It is never the right time



My ERC interview 1.0 - I could have done better

- Successful in my postdoc (Kornfeld et al *Nature* 2013).
- Renowned hosting institution (Max Planck Society).
- Topic an emerging field of metabolism research.
- Tokens of scientific excellence in DE (Emmy Noether, DFG).

- Project less matured (submission deadline close).
- No preliminary findings.
- Overambitious proposal.
- Tense atmosphere at interview site / panel.



My ERC interview 1.0 - I could have done better

- Successful in my postdoc (Kornfeld et al Nature 2013)

The panel members felt that this was very exciting work and was convinced that the applicant is on the right path to uncover some ground-breaking results. However, the panel unanimously felt that despite the presentation of the preliminary lncRNA profile by the applicant, that there were **not sufficient preliminary data to demonstrate the feasibility of the proposal**. We encourage the applicant to consolidate the preliminary data to strengthen the project in support of his hypothesis. **The panel deemed that the proposed 3rd postdoctoral position is not sufficiently justified.**

- Received tokens of scientific excellence in DE (Emmy Noether)

PANEL SCORE AND RANKING RANGE

Final panel score : A (fully meets the ERC's excellence criterion and is recommended for funding if sufficient funds are available)

Ranking range *: 52%-54%

- Very tense atmosphere at interview site / panel

My ERC interview 2.0 - I did better

- Successful in my postdoc (Kornfeld et al *Nature* 2013).
- Renowned hosting institution (Max Planck Society).
- Topic an emerging field of metabolism research.
- Tokens of scientific excellence in DE (Emmy Noether, DFG).

- Project scope with two (more realistic) questions. Synergistic but independent!
- POC / preliminary findings showing feasibility.
- Mentally prepared for the situation / procedure.
- Affable ERC panel and interview.
- Close mentorship and recurrent rehearsals.



My ERC interview 2.0 - I *did* better

- Successful in my postdoc (Kornfeld et al *Nature* 2013)
- Renowned hosting institution (Max Planck)

The panel was impressed by this ambitious project combining two distinct subprojects in a hot topic. The applicant has a broad and appropriate track working with microRNAs and metabolism, which provides an adequate background for the project. The project was mostly well described, but it is somewhat unclear how the all NGS data will be analyzed and integrated and a large portion will be handed over to various collaborators. Aims1-2 are supported by preliminary data whereas aim 3, which is considered most novel, was not as well supported by preliminary data. Overall, this project is high risk/high gain, but since it is based on a more 'safe' and a more 'risky' part the panel found the project appealing.



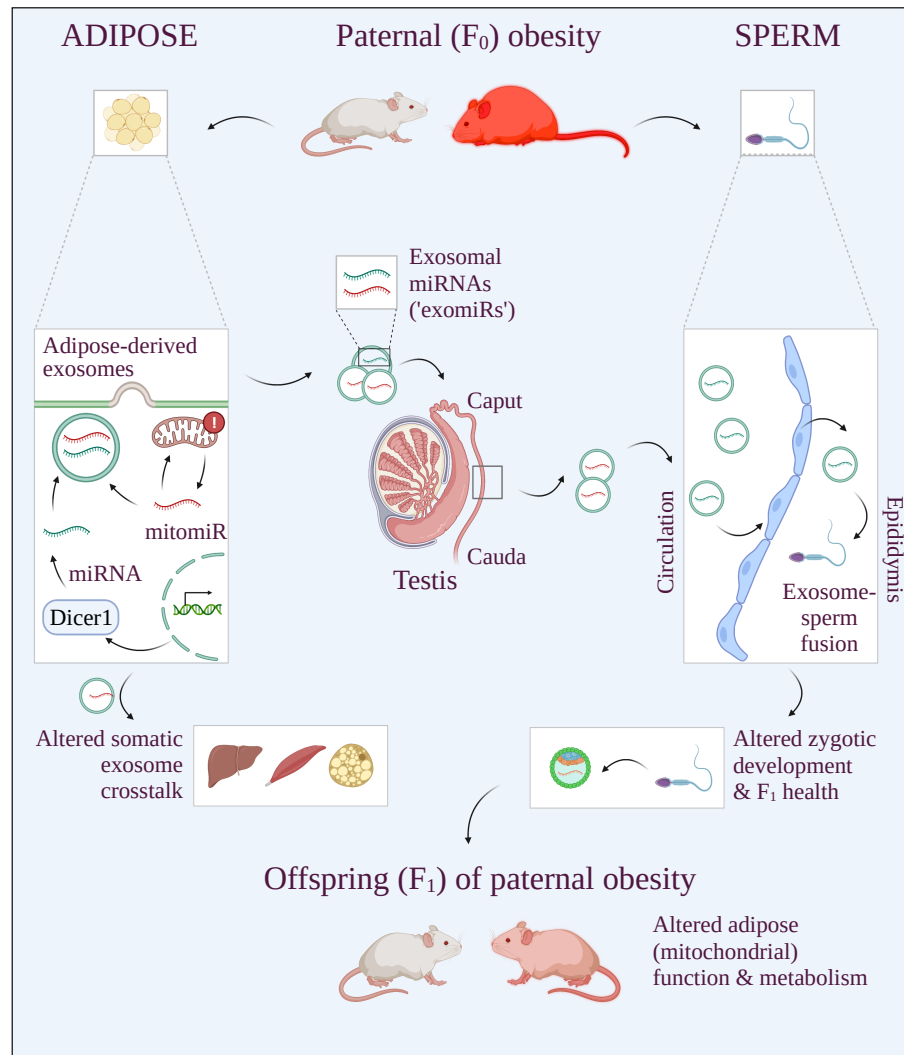
- Prepared for the situation / procedure
- Affable ERC panel and interview
- Close mentorship and recurrent rehearsals

Final panel score : A (fully meets the ERC's excellence criterion and is recommended for funding if sufficient funds are available)

Ranking range *: 47%-49%



ERC - What was is all good for?



- Unique scientific freedom unlike other grants.
- Great instrument for finding faculty positions.
- High visibility (News Outlets, EU Consortia).
- Great PhD / PD recruitment opportunity ('ERC-funded group is looking for a ...').
- Seal of Excellence from the EU.
- DFF ERC Support Program (24m à 35k DKK).
- Access to unique EU follow-up grants (ERC Proof-of-concept).
- ERC Consolidator afterwards?

Structure of my talk

- Brief introduction to myself and my research
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- [My 2 cents on what makes a successful pitch](#)
- Your thoughts and questions

What makes a successful ERC pitch?

- Talk to successful grantees - Q: Why did *they* get the grant?
- Ask yourself: Q: Why should *you* get the grant (CV, idea, host inst., techniques)?
- By that: Understand the 'unwritten' ERC rules. Whom do they really support?
- Develop a scientifically bold idea, not a research grant proposal.
- Pitch your idea to junior / senior PIs: You want enthusiasm ***and*** hard criticism.
- Are you excited about your idea or is it geared around 'hot topics'?
- Is the question behind your project relevant even if your hypothesis proves wrong?
- Tricky part: Is it still feasible to achieve in 5y time with 2-3 people?
- Find somebody that chaperones you during your application (and has time!).
- Prepare well but expect to apply twice.

Structure of my talk

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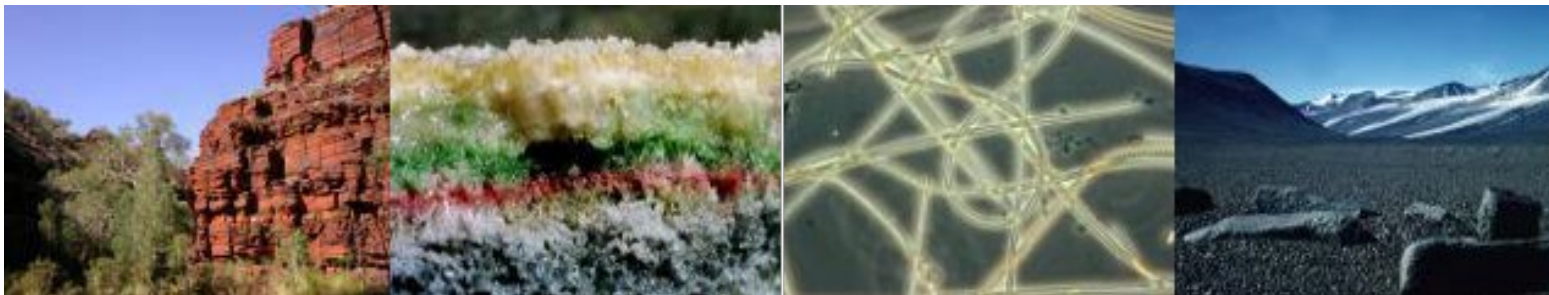
janwilhelmkornfeld@bmb.sdu.dk

www.kornfeldlab.com

11:50



Don Canfield, ERC AdG receiver, ERC AdG Panel member
Professor & Villum Investigator & D-IAS Chair, Nordcee, Department of
Biology, SDU.
Don will give a talk about his experience with the ERC calls



Donald E. Canfield
OXYGEN
A Four Billion Year History

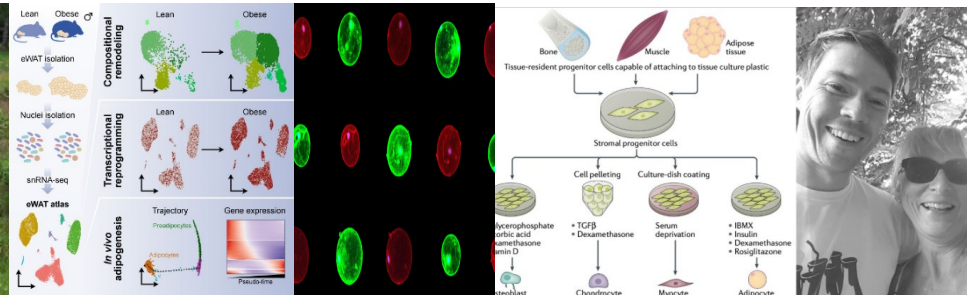


Nordcee Group
Department of Biology

12:10



Susanne Mandrup, Panel Chair of ERC PE10 StG panel 2020
Professor at the Department of Biochemistry and Molecular Biology, SDU
Susanne will give a talk about the ERC evaluation process





Writing (ERC) grant applications

Susanne Mandrup

ERC – Mentoring session

September 24, 2021

Experiences with grant review panels

Governmental

Danish Natural Science Research Council (2005-2010)

Novo Nordisk Foundation

Medical and Natural Science Committee (2009-2016)

Committee on Bioscience and Basic Biomedicine, Chair (2017-2018)

Laureate Research Grant Review Committee (2017-2018)

VILLUM Foundation

Committee on Young Investigator Grants (2018-)

International

Various panels under FP6, FP7 (2003-2012)

ERC LS2 Starting Grant panel (2013-2014)

ERC LS2 Consolidator Grant panel, Chair (2015-2017)

A large number of ad hoc evaluations

EMBO Membership Committee (2019-)





Stage I

Remote evaluation of B1:

- Each proposal is assigned to specific panel based on request by applicant.
- Potential transfers may take place if both Panel Chairs agrees.
- Cross panel reviews by request by applicant, scientific officer, Panel Chair.
- Each proposal is reviewed is by 4 panel members (possibly cross-panel review) → **prepanel ranking**

First panel meeting:

- Ranking of proposals
 - **A** Proposals that should go forward to the second step
 - **B** Proposals of high quality but not sufficient to pass to step 2
 - **C** Proposals of lower quality that are far from passing to step 2
- Panel selects proposals for stage II review (A and top B) ~2 x expected budget
- Panel writes compiled panel reviews to rejected proposals (B and C)

LS2 CoG panel 2015

67 proposals submitted to panel

10-12 expected to be funded

First rating: 11 A + 14 A/B

25 B

17 C

25 called for interview

LS2 CoG panel 2017

65 proposals submitted to panel

(transfer in 5/11, out 1) → 69 proposals reviewed

8 expected to be funded

First rating: 11 A + 10 A/B

33 B

15 C

21 called for interview



PROPOSAL REVIEW (Hide full criteria descriptions)

CRITERION 1: RESEARCH PROJECT

Ground-breaking nature, ambition and feasibility

Score: 4.0 (Outstanding) 3.5 3.0 (Excellent) 2.5 2.0 (Very Good) 1.5 1.0 (Non-competitive)

Criterion 1

Ground-breaking nature, ambition and feasibility

Ground-breaking nature and potential impact of the research project

Comments: (minimum 50 - maximum 3500 characters)

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)?

How much is the proposed research high risk/high gain?

Scientific Approach

(Comments: (minimum 50 - maximum 3500 characters)

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

Important:

The project should be ambitious, exciting, beyond state-of-the-art, and lead to important new biological insight.

The scientific approach should appear feasible for the applicant but may have elements of high risk.



CRITERION 2: PRINCIPAL INVESTIGATOR

Intellectual capacity, creativity and commitment

Score: 4.0 (Outstanding) 3.5 3.0 (Excellent) 2.5 2.0 (Very Good) 1.5 1.0 (Non-competitive)

	Fully agree	Agree partially	Disagree partially	Strongly disagree
The PI has demonstrated the ability to propose and conduct ground-breaking research and his/her achievements have typically gone beyond the state of the art.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The PI provides abundant evidence of creative independent thinking.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ERC Grant would contribute significantly to the establishment and/or further consolidation of the PI's independence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

For StG: Excellent productivity and drive in postdoc, mobility

For CoG: Strong track record of independent and creative research is important

Contacting panel experts before or after evaluation can lead to exclusion!!



Stage II

Remote evaluation:

- Same scoring system but more extensive review of full proposal (B1 and B2).
- Each proposal is reviewed by 4 panel members (possibly cross-panel review) + 3-6 external reviewers.

Second panel meeting:

- Interviews 10+15+5 min
 - Panel Chair act as moderator
 - Lead reviewer opens the questioning
 - Other panel reviewers and panel members ask questions
 - Provisional ranking of applicant
- Final numbered ranking
 - **A** proposals which fully meet the ERC's excellence criterion and are recommended for funding if sufficient funds are available
 - **B** those proposals which meet some but not all elements of the ERC's excellence criterion and therefore will not be funded
- Lead reviewers draft panel comments for rejected proposals

LS2 CoG panel 2015
25 called for interview

LS2 CoG panel 2015
21 called for interview
9 A (all As in stage 1)
8 funded

Why did grant applications fail?

Applicant

- Non-competitive CV for the call / relative to other applicants
- Lacks background in the field
- Lacks seniority /independence
- Too little demonstrated leadership
- Too high PhD age relative to achievements

Project

- Incremental contribution to science
- Suggested experiments are unrealistic or will not answer the questions addressed, claims are not justified
- Unclear or badly written proposal

The importance of applicant versus project?

Notes!

Panel dynamics and review processes are *very* different between panels and can change over time with change of panel members

With low success rates, the style and CV become more important

Be considerate of reviewers and imagine reading your own proposal with a lot of time pressure.

Easy to read, well-structured applications fare better.

Scientific content

- The project should be exciting, ambitious, beyond state-of-the-art and address an important scientific question
- The scientific approach should appear feasible for the applicant (highlight competitive advantage of applicant).
- Research strategy should develop expertise of applicant (not just more of same)
- Research strategy should be crystal clear, if needed at the expense of details. Make sure to describe the overall strategy and “decorate” with a few details to show that you know what you are talking about. Avoid stuffing the application with details.
- Use figures but make them simple.
- Risks and challenges should be well outlined, and appropriate contingency plans included.

Structure and style

- Generally a good idea to follow the suggested structure
- Address (and highlight) specific aspects mentioned in call, reviewers are asked to look for them
- Don't be afraid of repeating and highlighting an important point
- Never expect the reviewer to read up on references – write out what point you need to make
- Emphasize the major contributions to science
- Highlight aims and sub-aims
- Abbreviations are generally disturbing
- Boss words don't work

Writing a grant proposal

1 Preparation phase

Should I apply?

Careful study of the call and the evaluation criteria

Who obtained the grant previously?

Who is on the panel?

Which project?

Think, read and conceive ambitious project addressing important challenge(s) in the field.

Shape your idea to fit the call, and synergize with but clearly go beyond on-going research in the group.

2 Writing

Aim + specific aims

Introduction:

Current state-of-the art

Gap in knowledge

Introduction to overarching aim

Preliminary data

Experimental plan:

WPs/subprojects aligned with specific aims

Clear questions and hypotheses in each WP

Clearly formulate expected outcome

Risk assessment and contingency plan

Consider background of evaluators

Make it easy to read!!

3 Reviewing and polishing

Work with people in your immediate environment (PhD students and postdocs) on the application and get their feedback.

Send proposal to colleagues that represent the level of expertise of the evaluators.

Questions?

Q&A contact: ert@sdu.dk

Slides & recordings
Will be shared
Thankk you!
Best of luck"



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