ERC Consolidator grant RHEA: the story of my application

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ERC infosession, 23rd October 2017.
Background

1. PhD in biological sciences (V.U.B.)
2. Postdoc at Harvard University (BAEF and Fulbright fellowship)
3. Postdoc Marie-Curie fellowship in Montpellier
   ⇒ 4 year postdoc (2003-2007)
4. Assistant Professor in Sept 2007 at the University of Namur (UNamur)
   ⇒ Head of the Laboratory of Evolutionary Genetics and Ecology
   ⇒ Applied in 2008 for a GIS IBISA grant for a long-term (sequencing) project on an important scientific question (I invested all my resources in this project)
5. Professor in Sept 2009 at UNamur
6. Full Professor in Sept 2017 at UNamur
### Milestones towards ERC CoG submission

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
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<tbody>
<tr>
<td>2009</td>
<td>Consolidated my CV postdoc period:</td>
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<td>2 publications in high impact journals</td>
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<td>2009</td>
<td>Start of the genome sequencing project</td>
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<td>2009</td>
<td>Publication in Nature (IF: 38) as last author</td>
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<td>2013</td>
<td>Publication in Nature (IF: 38) as last author</td>
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<tr>
<td>2014</td>
<td>Consolidating CV with last author papers</td>
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<td></td>
<td>Many great ideas</td>
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<td>ARC grant obtained</td>
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<td>ERC?</td>
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<td>2015</td>
<td>MIS FNRS grant obtained</td>
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<td>Sept: 1st infosession ERC</td>
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<td></td>
<td>⇒ Strategy of application</td>
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<td></td>
<td>⇒ Discuss with ERC grantees</td>
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<td>2015</td>
<td>Sabbatical Q2:</td>
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<td>write several ERC drafts with different ideas</td>
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<td>2016</td>
<td>Publication in Current Biology (IF: 38) as last author</td>
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<td>⇒ Consolidated CV</td>
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<td>Application deadline: February 2016</td>
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**Strategy:**
Submit ERC in 2016!
CV & original ideas

1. My CV had some high-impact journals and first and last author papers
   ⇒ I did not had a very high H-index or google scholar index
2. I have a unique biological system within my research group, international recognition, expertise and databases, original ideas
3. Some ERC grantees and international colleagues at conferences encouraged me to apply
4. I obtained some projects of successful ERC CoG grantees
   ⇒ I decided to give it a try
   ⇒ Nothing to loose, everything to win
   ⇒ High competition forced me to give the best I can
Writing process

1. I had different original ideas but also different ongoing projects (ARC and MIS FNRS)
   ⇒ Why an ERC?
   ⇒ Used my sabbatical to do a literature study on some new topics
2. I wrote distinct preliminary ERC projects
3. I decided to write a project closest to the ongoing research in my group but integrating all the different aspects to answer the general question and I added some high risk/high gain ideas
   ⇒ don’t go too far away from your main expertise, be coherent but original, innovative and add high risk/high gain scenarios
4. Be fully dedicated to the writing
Writing process

Febr => June 2015

Develop all my ideas
⇒ write some ERC draft proposals

Sept – Oct 2015

Consolidated the outline of my ERC proposal

Nov => Febr 2016

Full dedication to the writing of my ERC

ERC project writing (B1 + B2):

- Started with the B1, wrote the B2, re-wrote the B1
- Zero redundancy in B1
- Mention all ongoing grants in B1
- CV of B1: mention your MAIN accomplishments
- Make overview figures in B1 and B2
- I always add figures to summarize the experimental design of each WP
- Main questions clearly outlined

- Take time to think about your ERC team and budget

- Involve your team/collaborators during the writing process (frequent discussions)

- External top scientists have to read and critically comment on your proposal
Figures of the RHEA project

Part B1 and interview

WP1
Genome Sequencing

WP2
Molecular Assays

Contact Genomics

RHEA

WP3
DNA Labelling
RAD Sequencing
Genome Sequencing

WP4
CRISPR/CAS-9

Post-doc 1

Post-doc 3

PhD student 1
Post-doc 2
Technician
Figures of the RHEA project

Part B2

WP1: comparative genomics

WP3: horizontal genetic exchanges

WP2: DNA DSB repair pathways may induce genomic variations

WP4: role of Spo11 in generating genomic variation?
Figures of the RHEA project

Bdelloid rotifers: another gift from Nature?

Asexual evolution

Interview

HGT

Desiccation

DNA repair

Genome breakage
Milestones towards ERC interview

May 2016
Feedback: invited to step 2

June => Aug 2016
Get ERC examples
Prepare your presentation

Sept 2016
ERC interview training
(Yellow research)
Exercise with international top scientists

Oct 2016
Interview date: October 6th

ERC interview LS8:

- Concise and clear – **10min** maximum
- 6 slides introduction, including my main publication results
- 1 slide with the main questions
- 1 slide overview figure of all the WPs
- 3 slides: main experiments of the project
- 1 slide: why innovative
- 1 slide: overview figure with ERC team
- Write a text accompanying ppt
- Prepare back-up slides
- **Exercise often with specialists and non-specialists**
1. It is a **fascinating process** with long-term thinking
2. You can “recycle” **each WP** in a future project if not funded
3. The **reviewer feedback** is great: very helpful and 8 in total + panel comment